



*Paynes Creek*

Southwest Florida  
Water Management District

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# Peace River Basin Board

## *Information and Budget Notebook*

*Friday,  
April 4, 2008  
9:30 a.m.*

*Bartow Service Office  
170 Century Boulevard  
Bartow, Florida  
(863) 534-1448*

## **PEACE RIVER BASIN BOARD**

C. A. "Neil" Combee, Jr., *Co-Chair Ex Officio*

Patsy C. Symons, *Co-Chair Ex Officio*

H. Paul Senft, Jr., *Co-Chair Ex Officio*

J. Kenneth Harrison, *Vice Chair*

Rufus C. Lazzell, *Secretary*

James L. Hageman, *Member*

Paul G. Samuels, *Member*

Fred W. Trippensee, III, *Member*

Patricia Crisman, *Member*

### **Committee Members:**

#### **Basin Board Land Resources Committee:**

Ken Harrison - primary

Fred Trippensee - alternate

#### **Basin Board Education Committee:**

Paul Samuels- primary

Fred Trippensee - alternate

#### **Charlotte Harbor National Estuary Program Policy Committee:**

Rufus Lazzell

# Agenda

## PEACE RIVER BASIN BOARD MEETING

Bartow, Florida

April 4, 2008

9:30 a.m.

<u>Item</u>	<u>Presenter</u>
1. Call to Order and Roll Call	Neil Combee/Phyllis Young
2. Pledge of Allegiance to the American Flag and a Moment of Silence	Neil Combee
3. Additions/Deletions to the Agenda	Lou Kavouras
4. Oath of Office for Newly Appointed/Re-Appointed Board Members	Phyllis Young
5. Consent Items:	
a. Minutes of the December 14, 2007, Meeting [ <i>Exhibit 1</i> ]	Lou Kavouras
b. Facilitating Agricultural Resource Management Systems	Eric DeHaven
i. The Groves of Peace River, Inc. (H552) – Hardee County [ <i>Exhibit 2</i> ]	
ii. Las Lomas Holdings, Inc. (H553) – Hardee County [ <i>Exhibit 3</i> ]	
iii. I.M.G. Enterprises, Inc. (H551) – Polk County [ <i>Exhibit 4</i> ]	
iv. Running W Citrus, Limited Partnership (H554) – Highlands County [ <i>Exhibit 5</i> ]	
6. Discussion Items:	
a. Election of Officers and Committee Representatives	Neil Combee
b. Consumer Fertilizer Task Force Report [ <i>Exhibit 6</i> ]	Veronica Crow
c. Fiscal Year 2009 Budget Preparation [ <i>See Budget Tab</i> ]	Bruce Wirth
7. Reports:	
a. Basin Board Education Committee [ <i>Exhibit 7</i> ]	Fred Trippensee
b. Charlotte Harbor National Estuary Program Policy Committee	Rufus Lazzell
c. Governing Board Activities	Neil Combee/Pat Symons
8. Announcements:	Lou Kavouras
a. Volunteer Appreciation Day: Saturday, April 26, 2008, 11:00 a.m., Nature's Classroom, Thonotosassa	
b. All Day Field Trip Upriver: Wednesday, April 16, 2008; 7:30 a.m., Punta Gorda	
c. Next Basin Board Meeting: Friday, June 6, 2008, 9:30 a.m., Bartow Service Office	
d. Tentative Basin Board meeting: Friday, July 18, 2008, 9:30 a.m., Bartow Service Office	
e. Other	
9. Adjournment	Neil Combee

\*\*\*Information Items are located at the end of the Summary Agenda\*\*\*

# Summary Agenda

## PEACE RIVER BASIN BOARD MEETING

Bartow, Florida

April 4, 2008

1. **Call to Order and Roll Call**

Presenters: Neil Combee, Co-Chair Ex Officio  
Peace River Basin Board

Phyllis Young, Senior Administrative Assistant  
Boards and Executive Services

2. **Pledge of Allegiance to the American Flag and a Moment of Silence**

Presenter: Neil Combee

3. **Additions and Deletions to the Agenda**

Presenter: Lou Kavouras, Deputy Executive Director  
Outreach, Planning and Board Services

4. **Oath of Office for Newly Appointed/Re-Appointed Board Members**

Presenter: Phyllis Young

5. **Consent Items:**

a. **Minutes of the February 6, 2008, Meeting**

Basin Board members were provided minutes of the February 8 meeting for review.

Staff Recommendation:

See Exhibit 1

Approve the February minutes, as presented.

Presenter: Lou Kavouras

b. **Facilitating Agricultural Resource Management Systems**

i. **The Groves of Peace River, Inc. (H552) – Hardee County**

*Purpose*

To request approval for a Facilitating Agricultural Resource Management Systems (FARMS) project with The Groves of Peace River, Inc., and approval to reimburse FARMS eligible costs up to a not-to-exceed limit of \$12,500. Of this amount, the 2008 State Appropriations will be used for \$6,250 of the reimbursement, the Governing Board is requested to fund \$3,125, and the Peace River Basin Board is requested to fund \$3,125. Total project costs are estimated at \$25,000.

*Background/History*

The District's FARMS Program, developed by the District and Florida Department of Agriculture and Consumer Services, is a public/private agricultural Best Management Practices (BMP) cost-share reimbursement program. FARMS is intended to expedite the implementation of production-scale agricultural BMPs that provide water resource benefits. Resource benefits of the FARMS Program include reduced Floridan aquifer withdrawals, water quality improvements (both from ground water and surface water sources) and/or conservation, and restoration and augmentation of the area's water resources and ecology. The District's emphasis through the

FARMS program is on reductions in Upper Floridan aquifer withdrawals that will improve ground water conditions as documented in the Southern Water Use Caution Area (SWUCA) recovery strategy. In addition, the District also provides funding for projects that improve water quality affected by the use of mineralized ground water as documented in the Shell and Prairie Creek Watershed Management Plan – Reasonable Assurance Documentation. Reimbursement cost-share rates are capped at 50 percent for water quantity withdrawal reductions from the Upper Floridan aquifer **or** water quality improvements realized from decreasing the use of mineralized ground water, and at 75 percent for both water quantity **and** water quality improvements.

FARMS program staff received a project proposal from The Groves of Peace River, Inc. for their 444-acre citrus grove, located approximately 7 miles southeast of Zolfo Springs, in Hardee County. The annual average groundwater withdrawal authorized by the Water Use Permit is 589,700 gpd to irrigate the grove by using low volume under tree spray. Since January 2003, an average of 80 percent of the total permitted quantities was used to irrigate the grove. The primary goal of the project is to reduce Upper Floridan aquifer withdrawals by monitoring two soil moisture probes and a weather station that will be installed within the grove to reduce frequency and duration of irrigation events. The proposed project is expected to offset a minimum of 5 percent of the permitted quantities of the grove, which is equivalent to about 29,500 gpd.

*Benefits/Costs*

The proposed project involves water quantity BMPs which qualifies for a 50 percent cost-share reimbursement rate under the FARMS Program. Using an estimated 5 percent savings of permitted quantities yields a daily cost of \$0.53 per thousand gallons of groundwater reduced over the proposed five-year contract term, and \$0.16 per thousand gallons of groundwater reduced over a thirty-year term. Both values are within the guidelines for the generally accepted average cost savings per thousand gallons for the implementation of alternative supplies and improved irrigation techniques for flatwood citrus operations. The fiscal year 2008 State Appropriations to the Governing Board will be used for one-half of the reimbursement, with the remainder divided evenly between the District Governing Board and the Peace River Basin Board. Upon approval, the Governing Board and Peace River Basin Board will have \$1,486,672 and \$261,845 respectively, remaining in their FARMS Program budgets.

Staff Recommendation:

See Exhibit 2

- 1) Approve The Groves of Peace River, Inc., FARMS project for a not-to-exceed project reimbursement of \$12,500 with \$3,125 provided by the Peace River Basin Board, \$3,125 provided by the Governing Board, and \$6,250 provided from 2008 State Appropriations;
- 2) Authorize the transfer of \$3,125 from Fund 020 H017 Peace River Basin Board FARMS funds; \$3,125 from Fund 010 H017 Governing Board FARMS funds; and \$6,250 from the 2008 State Appropriations allocated to Fund 010 H017 FARMS funds to H552, The Groves of Peace River, Inc., FARMS project fund;
- 3) Authorize the Executive Director to sign the agreement.

Presenter: Eric C. DeHaven, P.G., Director  
Resource Data and Restoration Department

ii. **Las Lomas Holdings, Inc. (H553) – Hardee County**

*Purpose*

To request approval for a Facilitating Agricultural Resource Management Systems (FARMS) project with Las Lomas Holdings, Inc., and approval to reimburse FARMS eligible costs up to a not-to-exceed limit of \$20,000. Of this amount, the 2008 State Appropriations will be used for \$10,000 of the reimbursement, the Governing Board is requested to fund \$5,000, and the Peace River Basin Board is requested to fund \$5,000. Total project costs are estimated at \$40,000.

*Background/History*

The District's FARMS Program, developed by the District and Florida Department of Agriculture and Consumer Services, is a public/private agricultural Best Management Practices (BMP) cost-share reimbursement program. FARMS is intended to expedite the implementation of production-scale agricultural BMPs that provide water resource benefits. Resource benefits of the FARMS Program include reduced Floridan aquifer withdrawals, water quality improvements (both from ground water and surface water sources) and/or conservation, and restoration and augmentation of the area's water resources and ecology. The District's emphasis through the FARMS Program is on reductions in Upper Floridan aquifer withdrawals that will improve ground water conditions as documented in the Southern Water Use Caution Area (SWUCA) recovery strategy. In addition, the District also provides funding for projects that improve water quality affected by the use of mineralized ground water as documented in the Shell and Prairie Creek Watershed Management Plan – Reasonable Assurance Documentation. Reimbursement cost-share rates are capped at 50 percent for water quantity withdrawal reductions from the Upper Floridan aquifer or water quality improvements realized from decreasing the use of mineralized ground water, and at 75 percent for both water quantity and water quality improvements.

FARMS Program staff received a project proposal from Las Lomas Holdings, Inc. for a project in their citrus grove located approximately ten miles southeast of Zolfo Springs, in Hardee County. The annual average groundwater withdrawal authorized by the Water Use Permit is 910,300 gpd to irrigate 1,170 acres of citrus using low volume undertree spray. Since January 2003, an average of 57 percent of the total permitted quantities was used to irrigate the grove. The primary goal of the project is to reduce Upper Floridan aquifer withdrawals by monitoring four soil moisture probes and two weather stations that will be installed within the grove to reduce frequency and duration of irrigation events. The proposed project is expected to offset a minimum of 5 percent of the permitted quantities of the grove, which is equivalent to about 45,500 gpd.

*Benefits/Costs*

The proposed project involves water quantity BMPs which qualifies for a 50 percent cost-share reimbursement rate under the FARMS Program. Using an estimated 5 percent savings of permitted quantities yields a daily cost of \$0.55 per thousand gallons of groundwater reduced over the proposed five-year contract term, and \$0.17 per thousand gallons of groundwater reduced over a thirty-year term. Both values are within the guidelines for the generally accepted average cost savings per thousand gallons for the implementation of alternative supplies and improved irrigation techniques for flatwood citrus operations. The fiscal year 2008 State Appropriations to the Governing Board will be used for one-half of the reimbursement, with the remainder divided evenly between the District Governing

Board and the Peace River Basin Board. Upon approval, the Governing Board and Peace River Basin Board will have \$1,471,672 and \$256,845 respectively, remaining in their FARMS Program budgets.

Staff Recommendation:

See Exhibit 3

- 1) Approve the Las Lomas Holdings, Inc., project for a not-to-exceed project reimbursement of \$20,000 with \$5,000 provided by the Peace River Basin Board, \$5,000 provided by the Governing Board, and \$10,000 provided from 2008 State Appropriations to the Governing Board;
- 2) Authorize the transfer of \$5,000 from Fund 020 H017 Peace River Basin Board FARMS funds; \$5,000 from Fund 010 H017 Governing Board FARMS funds; and \$10,000 from the 2008 State Appropriations allocated to Fund 010 H017 FARMS funds to H553, Las Lomas Holdings, Inc., project fund;
- 3) Authorize the Executive Director to sign the agreement.

Presenter: Eric C. DeHaven

iii. **I. M. G. Enterprises, Inc. (H551) – Polk County**

*Purpose*

To request approval for a Facilitating Agricultural Resource Management Systems (FARMS) project with I.M.G. Enterprises, Inc. and approval to reimburse FARMS eligible costs up to a not-to-exceed limit of \$15,000. Of this amount, the 2008 State Appropriations will be used for \$7,500 of the reimbursement, the Governing Board is requested to fund \$3,750, and the Peace River Basin Board is requested to fund \$3,750. Total project costs are estimated at \$30,000.

*Background/History*

The District's FARMS Program, developed by the District and Florida Department of Agriculture and Consumer Services, is a public/private agricultural Best Management Practices (BMP) cost-share reimbursement program. FARMS is intended to expedite the implementation of production-scale agricultural BMPs that provide water resource benefits. Resource benefits of the FARMS Program include reduced Floridan aquifer withdrawals, water quality improvements (both from ground water and surface water sources) and/or conservation, and restoration and augmentation of the area's water resources and ecology. The District's emphasis through the FARMS Program is on reductions in Upper Floridan aquifer withdrawals that will improve ground water conditions as documented in the Southern Water Use Caution Area (SWUCA) recovery strategy. In addition, the District also provides funding for projects that improve water quality affected by the use of mineralized ground water as documented in the Shell and Prairie Creek Watershed Management Plan – Reasonable Assurance Documentation. Reimbursement cost-share rates are capped at 50 percent for water quantity withdrawal reductions from the Upper Floridan aquifer **or** water quality improvements realized from decreasing the use of mineralized ground water, and at 75 percent for both water quantity **and** water quality improvements.

FARMS Program staff received a project proposal from I.M.G. Enterprises, Inc. for their 62-acre container grown and in-ground tree nursery known as the Cherry Lake Tree Farm, located off Walk in Water Road in eastern Polk County. The primary goal of the project is to reduce Upper Floridan aquifer withdrawals by efficiently controlling their irrigation events through the automated operation of hydraulic irrigation valves controlled by a weather station. The Water Use Permit authorizes

an annual average groundwater withdrawal of 272,000 gallons per day (gpd) to irrigate 60-acres of the nursery with undertree sprinklers. Since January 2004, an average of 33 percent of the permitted quantities were used to irrigate the grove, although permitted quantities were recently increased to allow the nursery to expand tree production. The proposed project is expected to offset 27,200 gpd, or 10 percent, of the permitted quantities.

*Benefits/Costs*

The proposed project involves water quantity BMPs which qualifies for a 50 percent cost-share reimbursement rate under the FARMS Program. Using an estimated 10 percent savings of permitted quantities yields a daily cost of \$0.69 per thousand gallons of groundwater reduced over the proposed five-year contract term, and \$0.21 per thousand gallons of groundwater reduced over a thirty-year term. Both values are within the guidelines for the generally accepted average cost savings per thousand gallons for the implementation of alternative supplies and improved irrigation techniques for container nursery operations. The fiscal year 2008 State Appropriations to the Governing Board will be used for one-half of the reimbursement, with the remainder divided evenly between the District Governing Board and the Peace River Basin Board. Upon approval, the Governing Board and Peace River Basin Board will have \$1,496,047 and \$264,970 respectively, remaining in their FARMS Program budgets.

Staff Recommendation:

See Exhibit 4

- 1) Approve the I.M.G. Enterprises, Inc. project for a not-to-exceed project reimbursement of \$15,000 with \$3,750 provided by the Peace River Basin Board, \$3,750 provided by the Governing Board, and \$7,500 provided from 2008 State Appropriations to the Governing Board;
- 2) Authorize the transfer of \$3,750 from Fund 020 H017 Peace River Basin Board FARMS funds; \$3,750 from Fund 010 H017 Governing Board FARMS funds; and \$7,500 from the 2008 State Appropriations allocated to Fund 010 H017 FARMS funds, to H551, I.M.G. Enterprises, Inc. project fund;
- 3) Authorize the Executive Director to sign the agreement.

Presenter: Eric C. DeHaven

iv. **Running W Citrus, Limited Partnership (H554) – Highlands County**

*Purpose*

To request approval for a Facilitating Agricultural Resource Management Systems (FARMS) project with Running W Citrus, Limited Partnership and approval to reimburse FARMS eligible costs up to a not-to-exceed limit of \$40,000. Of this amount, the 2008 State Appropriations will be used for \$20,000 of the reimbursement, the Governing Board is requested to fund \$10,000, and the Peace River Basin Board is requested to fund \$10,000. Total project costs are estimated at \$80,000.

*Background/History*

The District's FARMS Program, developed by the District and Florida Department of Agriculture and Consumer Services, is a public/private agricultural Best Management Practices (BMP) cost-share reimbursement program. FARMS is intended to expedite the implementation of production-scale agricultural BMPs that provide water resource benefits. Resource benefits of the FARMS Program include reduced Floridan aquifer withdrawals, water quality improvements (both from ground water and surface water sources) and/or conservation, and restoration and augmentation



of the area's water resources and ecology. The District's emphasis through the FARMS Program is on reductions in Upper Floridan aquifer withdrawals that will improve ground water conditions as documented in the Southern Water Use Caution Area (SWUCA) recovery strategy. In addition, the District also provides funding for projects that improve water quality affected by the use of mineralized ground water as documented in the Shell and Prairie Creek Watershed Management Plan – Reasonable Assurance Documentation. Reimbursement cost-share rates are capped at 50 percent for water quantity withdrawal reductions from the Upper Floridan aquifer **or** water quality improvements realized from decreasing the use of mineralized ground water, and at 75 percent for both water quantity **and** water quality improvements.

FARMS Program staff received a project proposal from Running W Citrus, Limited Partnership for their Alpine Grove, a 1,315-acre citrus grove in Highlands County. The annual average groundwater withdrawal authorized by their Water Use Permit to irrigate the grove is 1,755,900 gpd. Since January 2003, ground water usage on the grove has averaged at or slightly above the total permitted average daily quantities, but 86 percent below the drought annual average. This high water use is attributed to the prolong drought that the area is experiencing. The overall water usage is expected to decrease due to a recent change in the grove's irrigation method from overhead spray to low volume undertree spray. The primary goal of the project is to reduce Upper Floridan aquifer withdrawals through the use of an integrated irrigation system that will include soil moisture sensors connected to automated valve controllers to reduce the frequency and duration of irrigation events. The proposed project is expected to offset a minimum of 5 percent of the permitted quantities of the grove, which is equivalent to about 87,800 gpd.

#### *Benefits/Costs*

The proposed project involves water quantity BMPs which qualifies for a 50 percent cost-share reimbursement rate under the FARMS Program. Using an estimated 5 percent savings of permitted quantities yields a daily cost of \$0.57 per thousand gallons of groundwater reduced over the proposed five-year contract term, and \$0.17 per thousand gallons of groundwater reduced over a thirty-year term. Both values are within the guidelines for the generally accepted average cost savings per thousand gallons for the implementation of alternative supplies and improved irrigation techniques for ridge citrus operations. The fiscal year 2008 State Appropriations to the Governing Board will be used for one-half of the reimbursement, with the remainder divided evenly between the District Governing Board and the Peace River Basin Board. Upon approval, the Governing Board and Peace River Basin Board will have \$1,441,672 and \$246,845, respectively, remaining in their FARMS Program budgets.

#### Staff Recommendation:

See Exhibit 5

- 1) Approve the Running W Citrus, Limited Partnership project for a not-to-exceed project reimbursement of \$40,000 with \$10,000 provided by the Peace River Basin Board; \$10,000 provided by the Governing Board; and \$20,000 provided from 2008 State Appropriations to the Governing Board;
- 2) Authorize the transfer of \$10,000 from Fund 020 H017 Peace River Basin Board FARMS funds; \$10,000 from Fund 010 H017 Governing Board FARMS funds; and \$20,000 from the 2008 State Appropriations allocated to Fund 010 H017 FARMS funds to H554, Running W Citrus, Limited Partnership project fund;
- 3) Authorize the Executive Director to sign the agreement.

Presenter: Eric C. DeHaven

6. **Discussion Items:**

a. **Election of Officers and Committee Representatives**

1. **Vice Chair**

Each year in compliance with Section 373.0693 Florida Statutes, Basin Board members elect a vice chair to serve a one-year term. The vice chair presides over meetings in the absence of the Co-Chairs Ex Officio. The current vice chair is Ken Harrison.

**Staff Recommendation:**

Elect a vice chair to serve a one-year term.

**Presenter:** Neil Combee

2. **Secretary**

Each year in compliance with Section 373.0693 Florida Statutes, Basin Board members elect a secretary to serve a one-year term. Rufus Lazzell currently fills this position.

**Staff Recommendation:**

Elect a secretary to serve a one-year term.

**Presenter:** Neil Combee

3. **Primary and Alternate Representative to the Basin Board Land Resources Committee**

Each year, the Basin Boards select primary and alternate representatives to serve on the Land Resources Committee, to review staff's resource evaluation reports and the Florida Forever Work Plan, from a District-wide perspective. Ken Harrison is the current primary representative; Fred Trippensee is the alternate.

**Staff Recommendation:**

Select a primary and alternate representative to serve one-year terms.

**Presenter:** Neil Combee

4. **Primary and Alternate Representative to the Basin Board Education Committee**

The Basin Board Education Committee was formed in 1995. A representative is chosen from each Basin to facilitate communications between Board meetings, to discuss issues and opportunities that arise. The current primary representative is Paul Samuels; Fred Trippensee is the alternate.

**Staff Recommendation:**

Select a primary and alternate representative to serve one-year terms.

**Presenter:** Neil Combee

5. **Charlotte Harbor National Estuary Program Policy Committee**

Each year, a Board member is chosen to serve on the Charlotte Harbor National Estuary Program Policy Committee (Committee), to keep the Basin Board informed of issues being considered by the Committee. Rufus Lazzell is the current representative and has served in this capacity for several years.

Staff Recommendation:

Select a representative to serve a one-year term.

Presenter: Neil Combee

b. **Consumer Fertilizer Task Force Report**

*Purpose*

The purpose of this presentation is to provide the Board with a brief overview of the work of the Florida Consumer Fertilizer Task Force and a summary of their final report to the 2008 Florida Legislature.

*Background/History*

The Florida Consumer Fertilizer Task Force was created within the Department of Agriculture and Consumer Services (DACs) by the Florida Legislature on July 1, 2007, (Section 576.092 F.S.) to review and provide recommendations on the state's policies and programs addressing consumer fertilizers. The Task Force was made up of 13 members representing local government, the environmental community, the fertilizer and landscape industries, the Department of Environmental Protection, the University of Florida, the Water Management Districts, DACs, and the Florida Senate and House of Representatives. The Task Force developed a series of recommendations addressing statewide guidelines and standards for consumer fertilizer use, local government management of consumer fertilizer application, training and education of proper use, research studies, and funding.

In developing recommendations, the Task Force ensured that their decisions were informed by the best available consensus-based data and science. They assessed nutrient enrichment due to fertilizer and focused on reducing water quality impacts associated with non-point source pollution. The Task Force strove to assist local governments to comply with state and federal water quality standards, and to provide uniformity while accounting for geographic diversity and variations within Florida.

The Final Report recommended support for the current DACs labeling rule (Rule 5E-1.003(2)) with the understanding that the rule will be reviewed and revised based on updated science by December 31, 2012. It was recommended that the Limited Commercial Landscape Maintenance certification be expanded to include fertilizer best management practices. In addition, a model ordinance concerning the use of nonagricultural fertilizer was developed for use by local governments who chose to adopt it. The Task Force supported public education regarding fertilizer use based on the University of Florida Institute of Food and Agricultural Sciences six best practices for lawn care and they supported the continued support of ongoing research projects on fertilizer management. Finally, the Task Force recommended a dedicated funding source be provided for education and training by authorizing DACs to increase their tonnage fee on the sale of nitrogen and phosphorus.

The Final Report was adopted unanimously by the Task Force at its January 11, 2008, meeting; DACs was authorized to transmit the document to the Legislature on January 15, 2008. The Task Force was abolished upon submittal of the Final Report. Representative Bryan Nelson (Apopka) filed HB 1267, titled *Protecting Urban and Residential Environments and Water*, on February 29, 2008, based on the recommendations of the Task Force.

Staff Recommendation:

See Exhibit 6

This item is for the Board's information; no action is required.

Presenter: Veronica Crow, Manager, Resource Projects Department

c. **Fiscal Year 2009 Budget Preparation**

In April, the Peace River Basin Board will review for the first time a preliminary budget for the upcoming year. Staff will review the budget for discussion and initial direction from the Basin Board concerning funding levels of the various budget categories, including prioritization of Cooperative Funding proposals and other Basin projects. The preliminary budget assumes the millage rate will remain at 0.1827 and ad valorem revenues will be 5 percent below FY2008 for a total of \$8,813,132. This revenue estimate is for planning purposes and is based on the tax reform legislation enacted in 2007 (House Bill 1B) and the constitutional amendment (Amendment 1) that was passed on January 29, 2008. This revenue planning estimate is consistent with the results of the March 6, 2008 Ad Valorem Revenue Estimating Conference of the Office of Economic & Demographic Research, the Florida Legislature.

At the June Basin Board meeting, staff will provide an updated estimate of ad valorem revenue for FY2009, based on the June 1 estimate of taxable property values that are provided by the county property appraisers for budget planning purposes. However, the June 1 estimate is not required to specify the amount of new construction, which is needed to compute the maximum millage rate pursuant to section 200.185 (5)(a), Florida Statutes (created under House Bill 1B, as enacted). The actual impact of Amendment 1, growth in property values, and amount of new construction will not be known until property values are certified by county property appraisers between July 1 and July 15. In July, the Basin Board will vote on a final FY2009 millage rate and budget for recommendation to the Governing Board. This is the millage rate that will be used for the Truth in Millage (TRIM) Notices of Proposed Property Taxes.

The Budget tab provides the preliminary Budget Comparison Report for FY2009. The format separately identifies the portion of the budget that will be funded by outside revenue sources from the portion of the budget that will be funded from ad valorem based revenue sources (i.e., property taxes, balance from prior year and interest). The "Millage Rate Requirements" column, to the right of each project that is funded through the ad valorem based portion of the budget, indicates the funding source as Balance from Prior Year and Interest Earnings (BF/Interest) or the millage rate (e.g., 0.004) required to fund the budget through that project.

The Projects tab includes detailed information for all Cooperative Funding proposals submitted for consideration. Project managers have reviewed and provided a staff recommendation for each proposal.

For FY2008, the Peace River Basin Board adopted a millage rate of 0.1827. This rate was 6.3 percent less than the FY2007 millage rate of 0.1950. The millage rate had been held at 0.1950 for the previous 13 years. Funding from state sources (in addition to Save Our Rivers funding) will be incorporated into the Basin budget following the end of the 2008 legislative session. The amount of additional taxes that would need to be levied, if all Cooperative Funding proposals were funded, is shown as the last revenue item to balance the budget. A funding line identifies the last project that the Basin Board could fully fund at its existing millage rate, based on project rankings and revenue projections as of this date.

The staff and/or cooperators will make presentations on the following significant projects prior to review of the overall budget:

New Development Reclaimed Water Distribution Initiative. Basin Initiative – Mark Hammond, Director, Resource Projects Department

Watershed Management Program/FEMA. Cooperative Funding – Mark Hammond, Director, Resource Projects Department

Hillsborough/TECO Reclaimed Water Project. Cooperative Funding – Alison Ramoy, Senior Water Conservation Analyst, Resource Projects Department

Hillsborough/Mosiac Hopewell Reclaimed Water Recharge Project. Cooperative Funding – Alison Ramoy, Senior Water Conservation Analyst, Resource Projects Department

Lake Hancock Outfall Treatment System Project. Basin Initiative – Jennette Seachrist, SWIM Program Manager, Resource Data & Restoration Department

Peace Creek Canal Watershed Project. Basin Initiative – Jennette Seachrist, SWIM Program Manager, Resource Data & Restoration Department

Staff Recommendation:

See Budget Tab

Provide staff direction on developing the Basin's tentative FY2009 budget for the June 2008 meeting.

Presenter: Bruce C. Wirth, Deputy Executive Director  
Division of Resource Management

## 7. **Reports:**

### a. **Basin Board Education Committee**

This report provides an overview of the Basin Board Education Committee meeting held on March 11, 2008, at the Tampa Service Office. The overview will include reports regarding the election of vice chair, the water program for restaurant outreach, FY2007 Communications Department's accomplishments, focus groups and the drought communications plan.

Staff Recommendation:

See Exhibit 7

This item is presented for the Board's information; no action is required.

Presenter: Fred Trippensee, Alternate Representative  
Basin Board Education Committee

### b. **Charlotte Harbor National Estuary Program Policy Committee**

The Basin representative will provide highlights of the Charlotte Harbor National Estuary Program (CHNEP) Policy Committee meeting held Monday, March 24, 2008, in Punta Gorda.

Staff Recommendation:

This item is presented for the Board's information; no action is required.

Presenter: Rufus Lazzell, Basin Representative  
CHNEP Policy Committee

c. **Governing Board Activities**

An update will be provided on key issues before the Governing Board.

Staff Recommendation:

This item is presented for the Board's information; no action is required.

Presenter: Neil Combee and Pat Symons, Co-Chairs Ex Officio

7. **Announcements:**

Lou Kavouras

- a. Volunteer Appreciation Day: Saturday, April 26, 2008, 11:00 a.m., Nature's Classroom, Thonotosassa
- b. All Day Field Trip Upriver: Wednesday, April 16, 2008; 7:30 a.m., Punta Gorda
- c. Next Basin Board Meeting: Friday, June 6, 2008, 9:30 a.m., Bartow Service Office
- d. Tentative Basin Board meeting: Friday, July 18, 2008, 9:30 a.m., Bartow Service Office
- e. Other

8. **Adjournment**

Neil Combee

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\*\*\*\***Information Items**\*\*\*\*

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The item(s) listed below are for the Board's information, intended to keep the Board apprised of completed projects, cancelled projects, and projects that have executed contracts and are ready to begin. The item(s) did not require Board action at this time.

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1. **City of Avon Park Stormwater Utility Study (L310) – Project Completion**

In response to a cooperative funding request from the City of Avon Park, the Peace River Basin Board included funding for the City of Avon Park Stormwater Utility Study in its FY 2005 budget. The project consisted of developing a stormwater utility study, including an inventory of the stormwater infrastructure, documentation of flood prone areas, evaluation and modification of local ordinances, mock billing, and an evaluation of first billing effectiveness. The City Council will be presented with the stormwater utility ordinance on April 14, 2008 for consideration. If the ordinance is adopted, the stormwater utility could generate approximately \$332,000 the first year. This revenue will be used as a dedicated funding source for stormwater management for the City of Avon Park. The total project budget was \$36,000 with 75 percent (\$27,000) being funded by the Peace River Basin Board and 25 percent (\$9,000) being funded by the City of Avon Park. The City requested funding consideration under the Rural Economic Development Initiative.

2. **City of Sebring Stormwater Utility Study (L309) – Project Completion**

In response to a cooperative funding request from the City of Sebring, the Peace River Basin Board included funding for the City of Sebring Stormwater Utility Study in its FY2005 and 2007 budgets. The project consisted of developing a stormwater utility study, including an inventory of the stormwater infrastructure, documentation of flood prone areas, evaluation and modification of local ordinances, with mock billing, and an evaluation of first billing effectiveness. The City Council will be presented with the stormwater utility ordinance on May 6, 2008, for consideration. If the ordinance is adopted, the stormwater utility could generate approximately \$850,000 the first year. This revenue will be used as a dedicated funding source for stormwater management for the City of Sebring. The total project budget

was \$47,455 with 75 percent (\$35,592) being funded by the Peace River Basin Board and 25 percent (\$11,863) being funded by the City of Sebring. The City requested funding consideration under the Rural Economic Development Initiative.

3. **Charlotte County Toilet Rebate Program (L856) – Execution Notice**

This FY2008 Cooperative Funding project with Charlotte County offers financial incentives to water customers within the Charlotte County Utility's service area to replace existing high-volume toilets (3.5 gallons per flush (gpf) or higher) with ultra low-flow models (1.6 gpf or less) or high efficiency toilets (1.3 gpf.) The effective date of the contract is February 3, 2008, and will remain in effect through January 31, 2011. The total FY2008 cost for this project is \$100,100 with the Peace River Basin Board funding 50 percent, or \$50,050. Please refer to the write-up in the Projects section of this notebook for detailed information. The Executive Director signed this agreement; copies of the executed agreement and scope of work are available upon request.

4. **Lake Hancock Outfall Treatment Project (H014) - Execution Notice**

The Lake Hancock Outfall Treatment Project is a multi-year funded District initiative aimed at improving water quality in the Upper Peace River and maintaining good water quality in Charlotte Harbor, a Surface Water Improvement and Management (SWIM) priority water body. The District's consultant has completed a feasibility study and Basis of Design Report for the project. The second amendment adds funding for the next phase—design and permitting. The effective date of the second amendment is December 18, 2007, and will remain in effect through December 31, 2009. The consultant budget to date is \$2,650,000 with funding from Florida Forever. Please refer to the write-up in the Projects section of this notebook for detailed information. The Executive Director signed this amendment; copies are available upon request.

5. **Greater Port Charlotte Flood Protection and Stormwater Management Plan - Implementation - Sixth Amendment (K280) - Execution Notice**

This amendment adds FY2008 funds to the Cooperative Funding project with Charlotte County for the design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the Best Management Practices, and construction engineering and inspection for 36 flood control structures in the Greater Port Charlotte area. The existing flood control structures were constructed 25 to 30 years ago of galvanized steel sheeting and are rusted and deteriorated. The replacement structures of reinforced concrete will have a substantially longer lifespan and will be better able to control water surface elevations in the area. The effective date of the contract was July 13, 2000, and will remain in effect through December 31, 2011. The total project cost is \$8,330,325 with the Basin Board contributing \$3,062,058. For FY2008, the Basin Board provided \$500,000 in cooperative funding and Charlotte County provided \$2,360,100. Please refer to the write-up in the Projects section of this notebook for detailed information. The Executive Director signed this amendment; copies of the executed agreement, amendments, and scope of work are available upon request.

6. **City of Sebring Watershed Management Program – Fifth Amendment (L151) – Execution Notice**

This FY2008 Cooperative Funding project with the City of Sebring is to continue the development of a Watershed Management Plan to address the City's concern about rapid growth and potential water quality issues because runoff from the City discharges to Lake Jackson. The project began March 1, 2004, and is scheduled to be completed by December 31, 2009. The Amendment adds \$25,000 to include an additional area annexed by the City in the Watershed Management Plan. For FY2008, the Basin Board provided \$18,750, with the City reimbursing the District \$6,250. The total cost is \$345,000 with the City of Sebring reimbursing the District \$86,250. Please refer to the write-up in the Projects

section of this notebook for detailed information. The Executive Director signed this amendment; copies of the executed amendment, agreement, and scope of work are available upon request.

7. **Watershed Management Program – Maintenance of Watershed Parameters and Models - First Amendment (B206) – Execution Notice**

This amendment adds FY2008 funds to the Cooperative Funding Agreement with Polk County to perform tasks related to the Maintenance of Watershed Parameter and Models element of the Watershed Management Program. The effective date of the amendment is October 1, 2007, and will remain in effect through June 30, 2011. The total project cost is \$120,000 with the Basin Board contributing \$60,000. Please refer to the write-up in the Projects section of this notebook for detailed information. The Executive Director signed this amendment; copies of the executed agreement, amendment, and scope of work are available upon request.



# DRAFT

## Minutes of the Meeting

### PEACE RIVER BASIN BOARD

Southwest Florida Water Management District

Bartow, Florida

February 8, 2008

The Peace River Basin Board of the Southwest Florida Water Management District convened for a regular meeting on February 8, 2008, at 9:37 a.m., in the Bartow Service Office.

#### **Board Members Present**

Patsy C. Symons, Co-Chair Ex Officio  
C. A. "Neil" Combee, Jr. , Co-Chair Ex Officio  
J. Kenneth Harrison, Vice Chair  
Rufus C. Lazzell, Secretary  
James L. Hageman, Member  
Paul G. Samuels, Member  
Fred W. Trippensee, III, Member  
Patricia Crisman, Member

#### **Staff Present**

Bruce Wirth  
Eric DeHaven  
Chan Springstead  
Danny Kushmer  
Lou Kavouras  
Brian Armstrong  
Terri Behling  
Scott Harbison

#### **Via Video Conference**

Daryl Pokrana  
Linda Pilcher

#### **Recording Secretary**

Phyllis Young

A list of others who were present and signed the attendance roster is filed in the permanent files of the Basin. Compact disks of the audio and copies of the materials and handouts, as set out in full herein, are also filed in the permanent files of the Basin.

#### 1. **Call to Order and Roll Call**

Co-Chair Symons called the meeting to order at 9:37 a.m. Ms. Young called the roll and noted a quorum was present. (CD 1/Track 1)

#### 2. **Pledge of Allegiance**

Co-Chair Symons led the Pledge of Allegiance to the American Flag, followed by a moment of silence. (CD 1/Track 1)

#### 3. **Additions and Deletions to the Agenda**

Deputy Executive Director Lou Kavouras, Outreach, Planning and Board Services, stated there were no additions or deletions to the agenda. However, copies of revised recaps for Agenda Items 4c and 5a, with the changes highlighted, had been provided to Board members and were available at the sign-in table. (CD 1/Track 1)

#### 4. **Consent Items:**

After consideration, **Mr. Lazzell moved, seconded by Ms. Crisman, to approve the Consent Items, as follow:**

a. **Minutes of the December 14, 2007, Meeting** – approve the December 2007 meeting minutes, as presented.

b. **Facilitating Agricultural Resource Management Systems – TRB Groves, LLC - Phase III, Charlotte County**

1. **Approve the TRB Groves, LLC, Phase III, FARMS Project for a not-to-exceed project reimbursement of \$750,000 with \$187,500 provided by the Peace River Basin, \$187,500 provided by the Governing Board, \$128,316 provided from 2007 State Appropriations to the Peace River Basin, and \$246,684 provided from 2008 State Appropriations to the Governing Board;**

2. **Authorize the transfer of \$187,500 from Fund 020 H017 Peace River Basin FARMS funds, \$187,500 from Fund 010 H017 Governing Board FARMS funds, \$128,316 from the 2007 State Appropriations allocated to Fund 020 H017 FARMS funds, and \$246,684 from the 2008 State Appropriations allocated to Fund 010 H017 FARMS funds, to 010 H501, TRB Groves project fund;**
  3. **Authorize the Executive Director to sign the agreement.**
- c. **Facilitating Agricultural Resource Management Systems – S.Y. Hartt & Son, Inc., Highlands County**
1. **Approve the S. Y. Hartt & Son, Inc. FARMS Project for a not-to-exceed project reimbursement of \$70,000, with \$17,500 provided by the Peace River Basin Board, \$17,500 provided by the Governing Board, and \$35,000 provided from State Appropriations;**
  2. **Authorize the transfer of \$17,500 from Fund 020 H017 Peace River Basin Board FARMS funds, \$17,500 from Fund 010 H017 Governing Board FARMS funds, and \$35,000 from the 2007 State Appropriations allocated to Fund 020 H017 Peace River Basin Board State Appropriations, to H549 S. Y. Hartt & Son, Inc. FARMS project fund;**
  3. **Authorize the Executive Director to sign the agreement.**

**Motion carried unanimously. (CD 1/Track 1/5:58)**

5. **Discussion Items:**

a. **Polk County Comprehensive Water Supply Plan – Funding Request**

Water Supply and Resource Development Section Manager Brian Armstrong presented this agenda item to request an anticipated out-of-cycle funding request from Polk County to develop a Comprehensive Water Supply Plan. During Financial Engine presentations to the Board over the past two years, staff reported that approximately 45 million gallons of water per day would need to be developed to provide Polk County's water needs over the next 20-25 years. This Comprehensive Water Supply Plan is the first step to identify projects to meet those needs. Mr. Armstrong commented on the purpose, duration, and costs of the Plan, as well as potential supplies, partners, and project coordination.

The total project cost is estimated at \$955,318 of which the District will participate at 50 percent. Possible funding by the South Florida Water Management District would reduce the District's contribution by that amount.

After consideration, **Mr. Lazzell moved, seconded by Mr. Harrison, to approve the staff recommendation, as follows:**

1. **Approve the transfer of \$186,287 from the Peace River Basin Board's Water Supply and Resource Development Reserve funds for the Polk County Comprehensive Water Supply Plan;**
2. **Recommend the Executive Director enter into an agreement with Polk County for the Comprehensive Water Supply Plan for a total cost of \$955,318, with the District's share not to exceed \$477,659, to be divided among the Governing Board, the Alafia River Basin Board, and the Peace River Basin Board.**

**Motion carried unanimously. (CD 1/Track 2)**

b. **State Board of Administration Local Government Investment Pool (SBA LGIP)**

**Status**

Finance Director Daryl Pokrana spoke to the Board via video conference from District Headquarters in Brooksville to answer questions Board members might have regarding the Local Government Investment Pool, which was the topic of a memo written to all Basin Board members on January 22 by Governing Board Treasurer Jennifer Closshey. Board members had no questions for Mr. Pokrana; he did, however, provide a brief summary of how the investment pool relates to the Peace River Basin Board.

This item was presented for the Board's information; no action was required. (CD 1/ Track 3)

c. **Budget Update in View of the January 29 Special Election**

Linda Pilcher, Assistant Finance Director, provided the result and potential effects of the Special Election on the proposed constitutional amendment, (*Amendment No. 1, Property Tax Exemptions; Limitations on Property Tax Assessments*), which passed on January 29. Ms. Pilcher spoke on provisions of the amendment, assumptions, and variables that would affect the Basin's budget. For planning purposes, she provided a preliminary look at FY2009 ad valorem revenue, estimating a five percent reduction from FY2008, which is a reduction of \$463,000 to the Basin budget. Updates on these issues will be presented at Basin Board meetings throughout the fiscal year.

Topics of discussion on this agenda item included withdrawal of projects due to tax cuts, consideration of funding options that might not have been used in the past, the percent of project costs the Board funds, and State funding.

This item was presented for the Board's information; no action was required. (CD 1/ Track 4)

d. **Fiscal Year 2009 Cooperative Funding Requests**

Basin Planner Chancey Springstead provided an overview of the Cooperative Funding Initiative (CFI) and applications received for the FY2009 budget year. Mr. Springstead reviewed the FY2009 Cooperative Funding procedure and directed the Board to the original applications, which were received in December and provided behind the *FY2009 CFI Applications* tab in the meeting notebook. He provided a brief overview of the Basin's project submittals and reviewed the District's project ranking process in light of recent changes to Governing Board CFI policy. Staff will return to the April meeting with initial project rankings and funding recommendations for the Board's consideration. The preliminary budget will be presented and the millage cap set at the June Basin Board meeting, and for final approval in July or August, depending on the Governor's timeframe for submittal of the Governing and Basin Boards' budgets to Tallahassee.

The Board was encouraged to review the FY2009 project applications and be prepared to provide input at the April 4 Basin Board meeting.

This item was presented for the Board's information; no action was required. (CD 1/ Track 5)

At this time, several members of the public addressed the Board regarding land acquisitions around Lake Hancock that are part of the Lake Level Modification project. Mr. Bruce Lahey, Ms. Patsy Mitchell, and Ms. Diane Allen, each in turn, voiced their dismay that what they understood about the appraisal and purchase price process, as discussed at a meeting with Lake Hancock landowners in August 2006, was not being followed. They felt they were being treated unfairly, that communications with the landowners was very poor, and wanted the

District to resolve the issues. Many members of the public attended to support the three speakers, often showing their support with applause.

Co-Chair Symons expressed her concern about this situation, stating staff would be working with the landowners to resolve the issues. She thanked everyone for attending and emphasized that this issue would not be dropped.

Board members requested an update on this issue at the next meeting. (CD 1/Track 6)

6. **Report:**

a. **Governing Board Activities**

At Co-Chair Symons' request, staff played pre-recorded highlights of the January 29 Governing Board meeting. Robyn Hanke, Communications Manager, narrated the brief recap, which included recent agreements regarding the Weeki Wachee lease, Marion County water restrictions, and restoration of Sawgrass Park in southern Pinellas County. (CD 1/Track 7)

7. **Announcements:**

In addition to directing the Board's attention to announcements listed on the agenda, Ms. Kavouras made several comments, as follow:

- After the Governing Board meeting at Nature's Classroom on February 26, 2008, the Governing and Basin Boards will have lunch together beginning at 12 noon. At 1 p.m., the Joint Governing and Basin Boards Workshop will convene. Tours of Nature's Classroom will begin at 10:30 a.m. for Basin Board members who wish to participate.
- Information on the Basin's Community Education Grants is included with the Information Items at the end of the Summary Agenda.
- The Governor's Office is asking the Board's help in finding applicants to fill Governing and Basin Board positions that are currently open or will be open after March 1, 2008.

8. **Adjournment**

Co-Chair Symons encouraged Board members to attend the joint workshop, thanked everyone for attending, and adjourned the meeting at 10:57 a.m.

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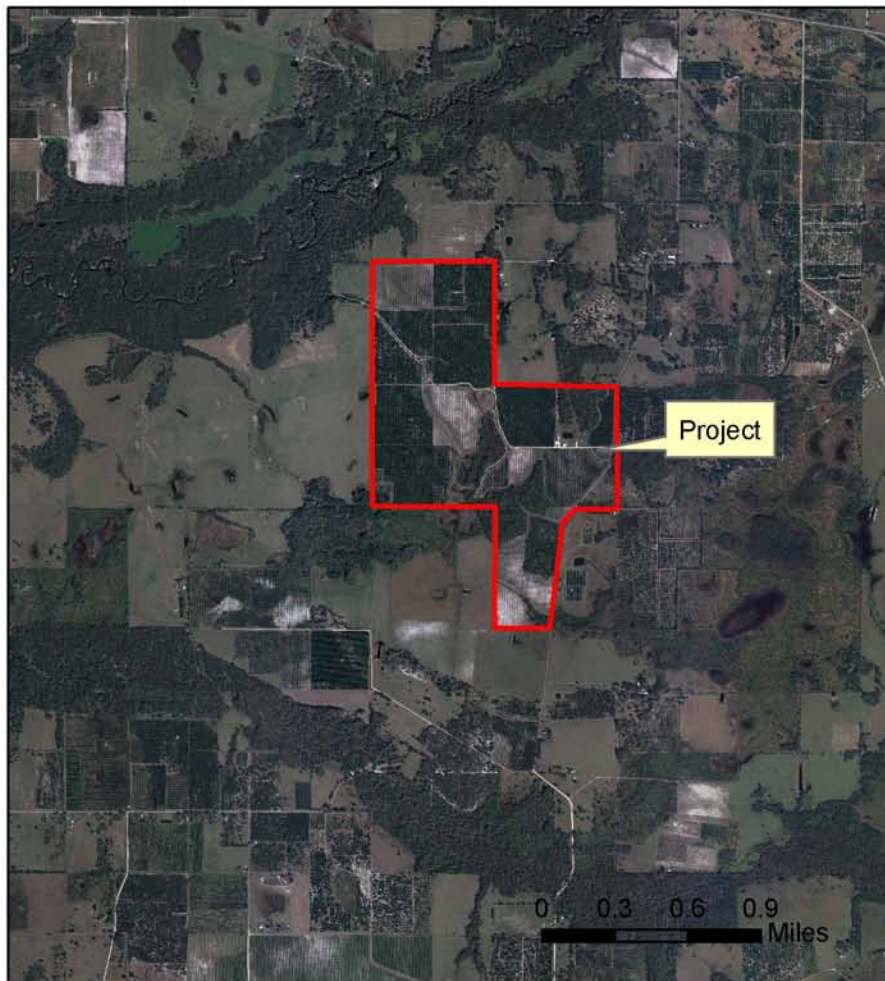
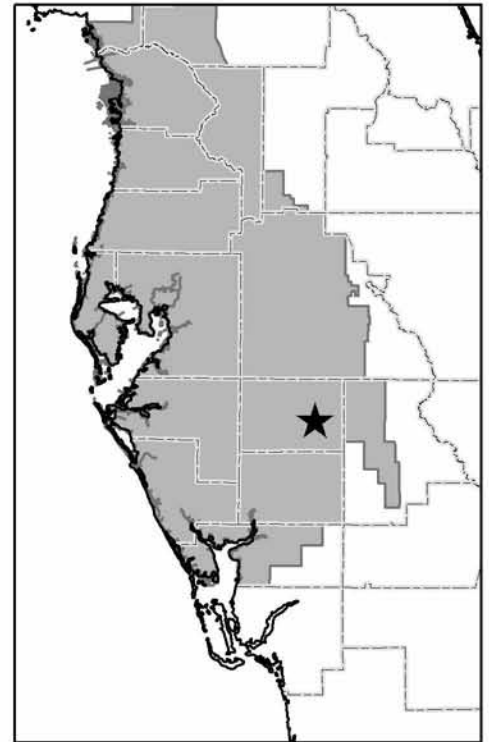
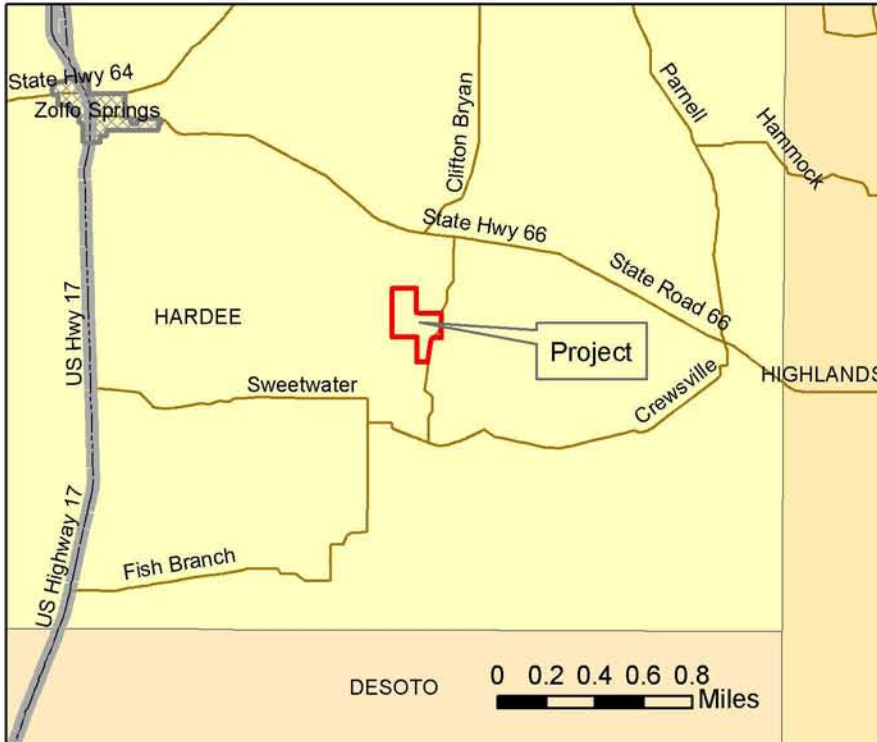
\*\*\*\*Information Items\*\*\*\*

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The item(s) listed below were for the Board's information, intended to keep the Board apprised of completed projects, cancelled projects, and projects that have executed contracts and are ready to begin. The item(s) did not require Board action.

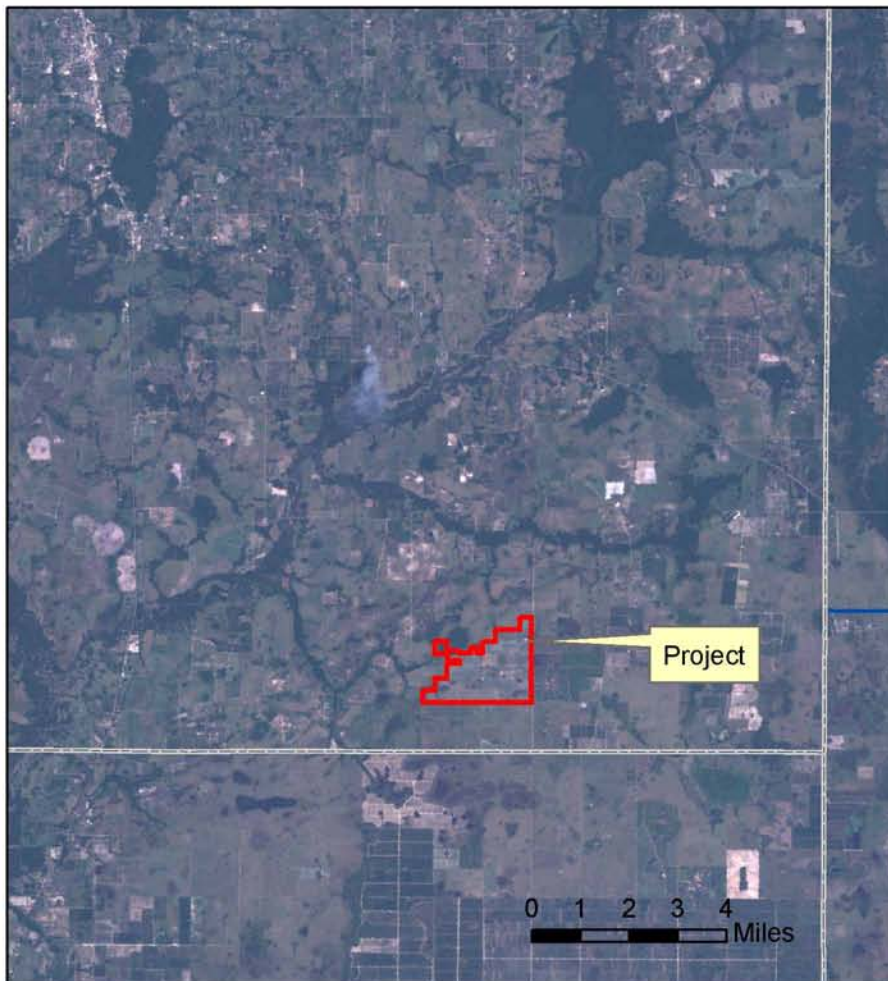
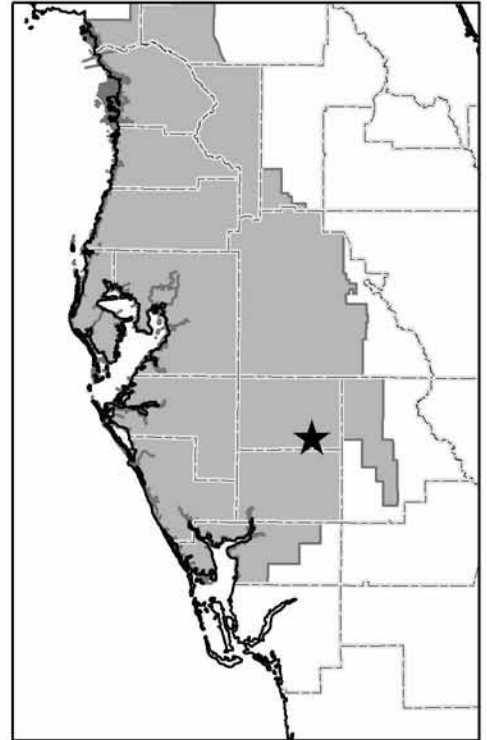
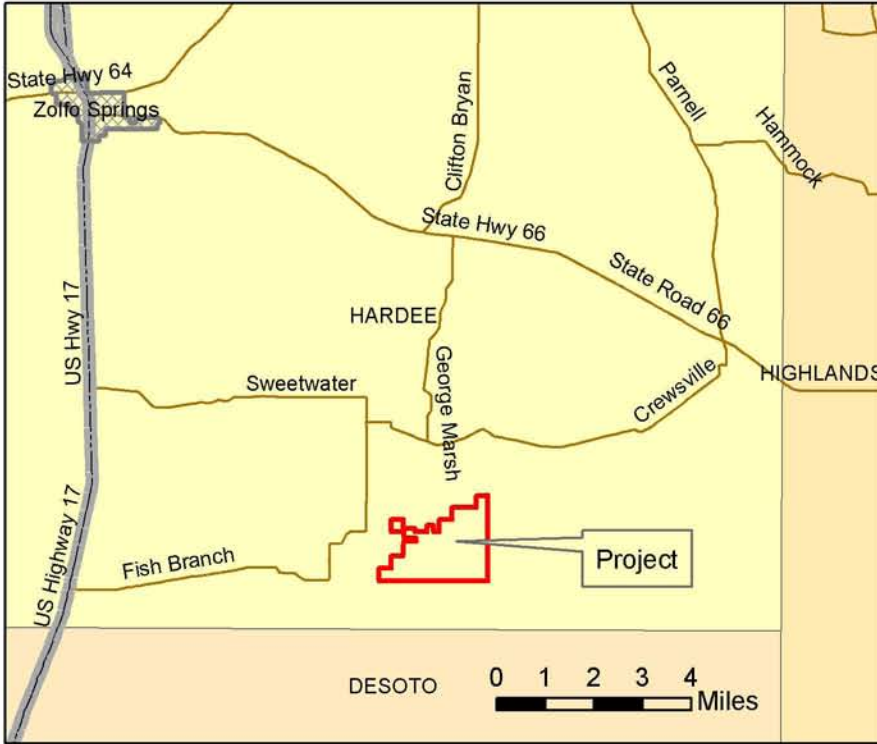
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1. 2008 Community Education Grants in the Peace River Basin
  2. Reducing Nursery and Landscape Water Use by Genetically Altering Nandina Plants (B257)
  3. Alligator Creek Habitat Restoration, Project 16 (W511) - Execution Notice
  4. Automated Citrus Irrigation Management to Reduce Water Consumption (B256) – Execution Notice
  5. City of Lakeland Plumbing Retrofit Project (L914) – Execution Notice
  6. City of Lakeland Pre-Rinse Spray Valve Retrofit Project (L915) – Execution Notice

# Location Map - The Groves of Peace River FARMS Project H552 WUP No. 20000212.005



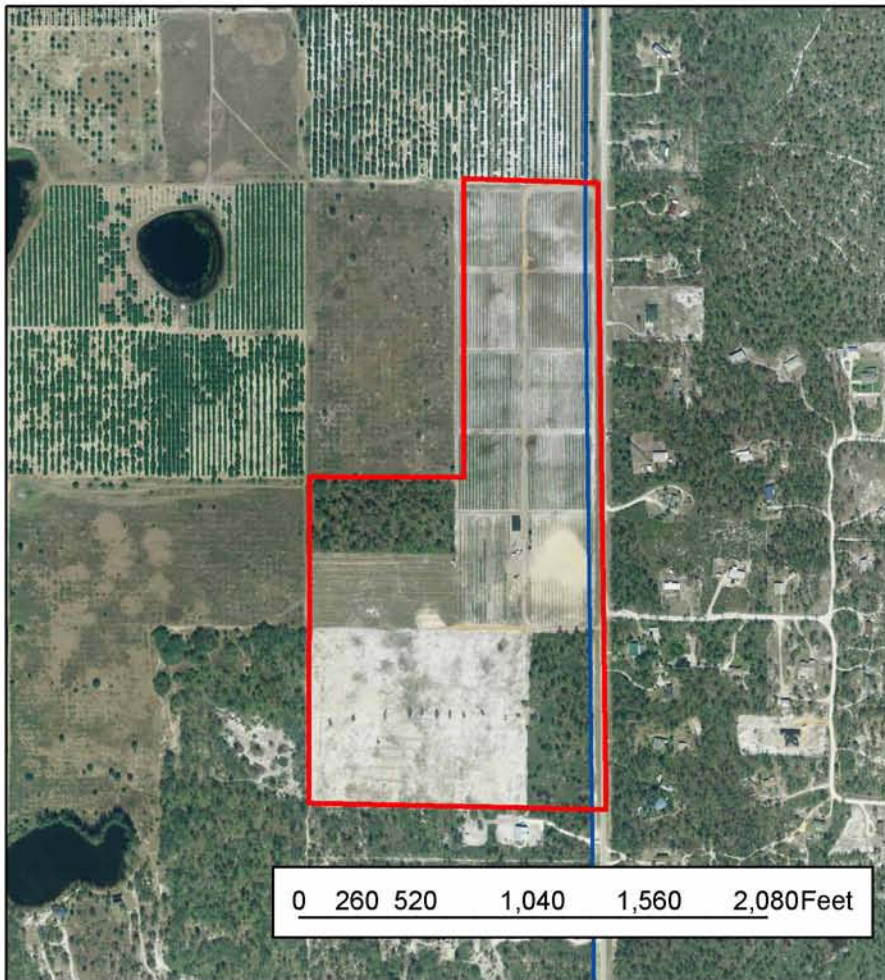
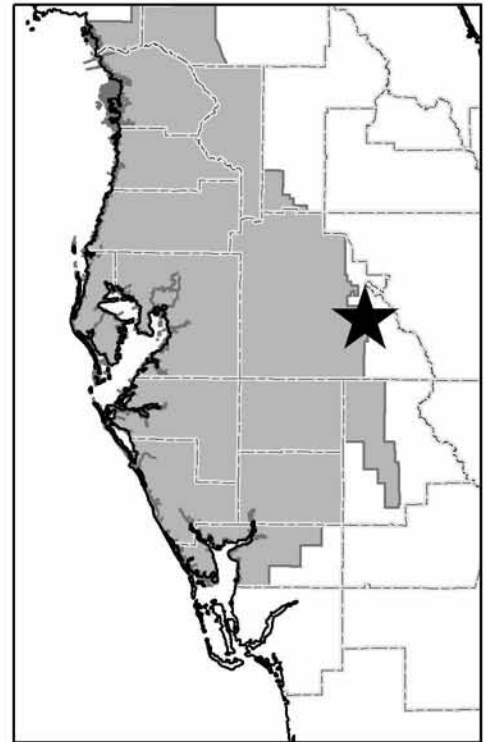
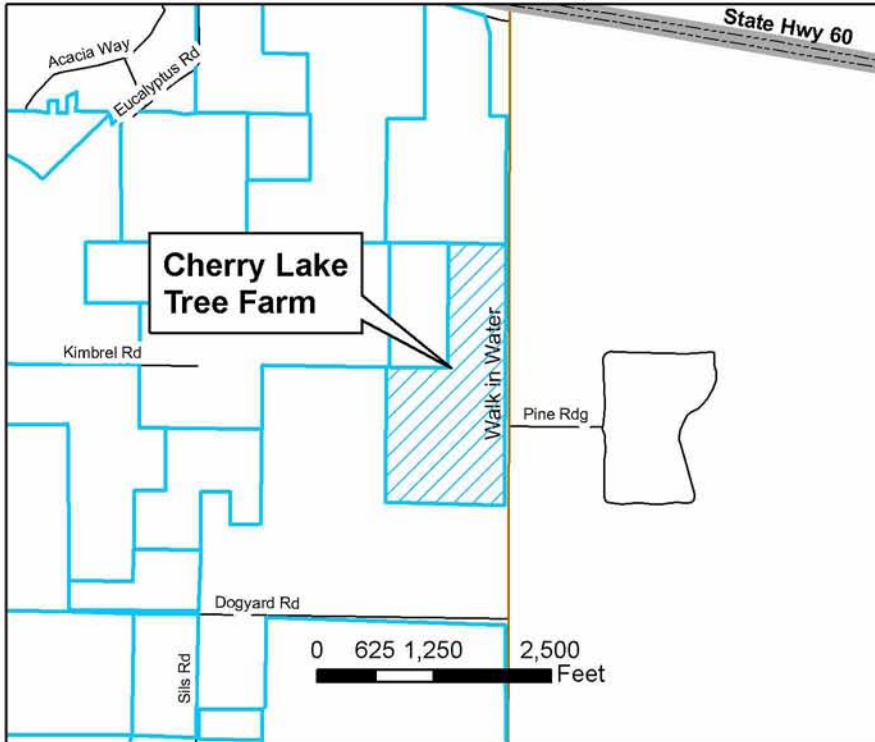


# Location Map - Las Lomas Holdings FARMS Project H553 WUP No. 20001454.007



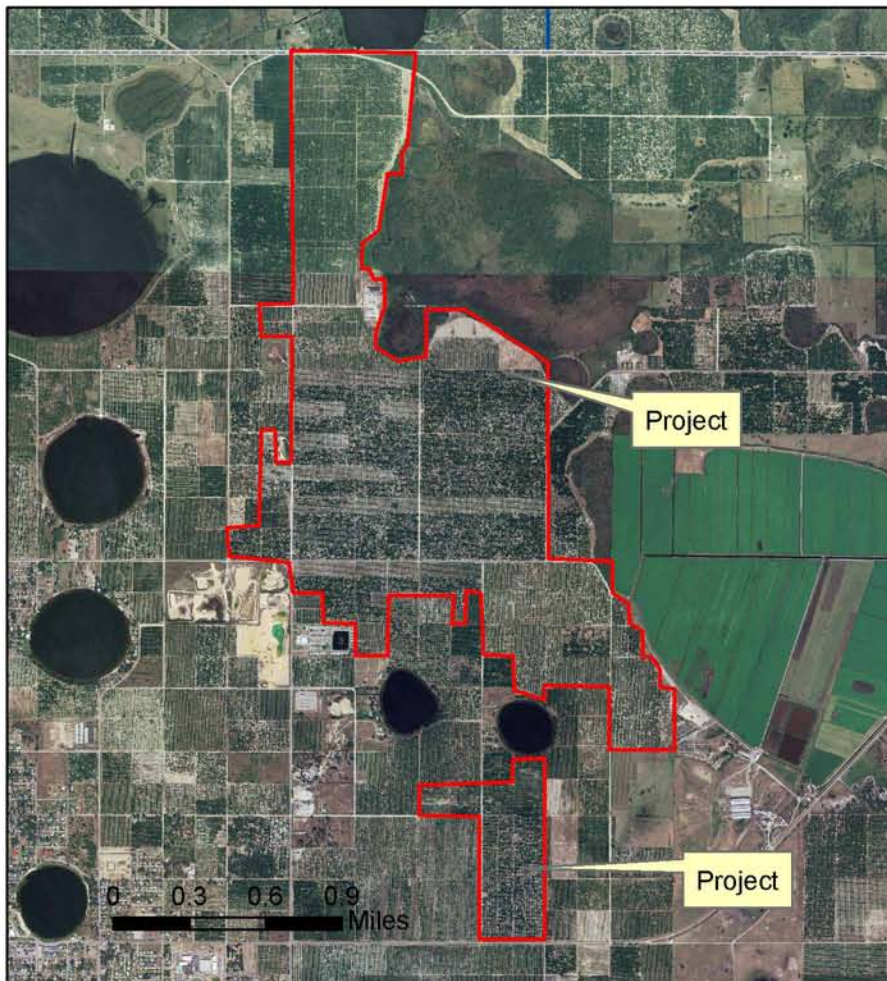
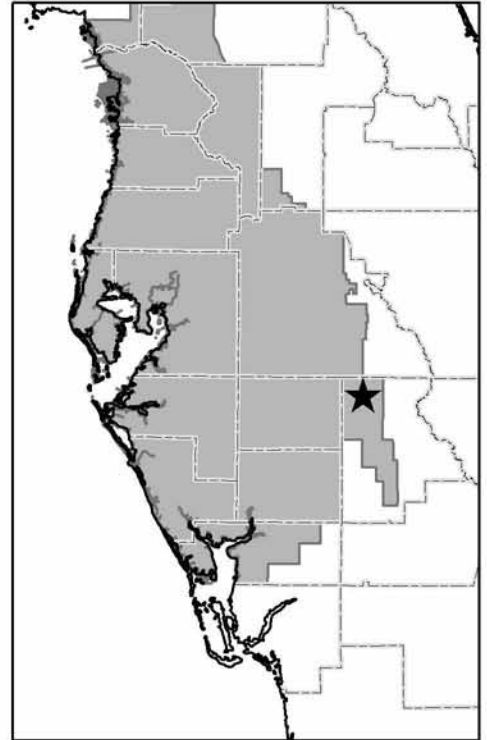
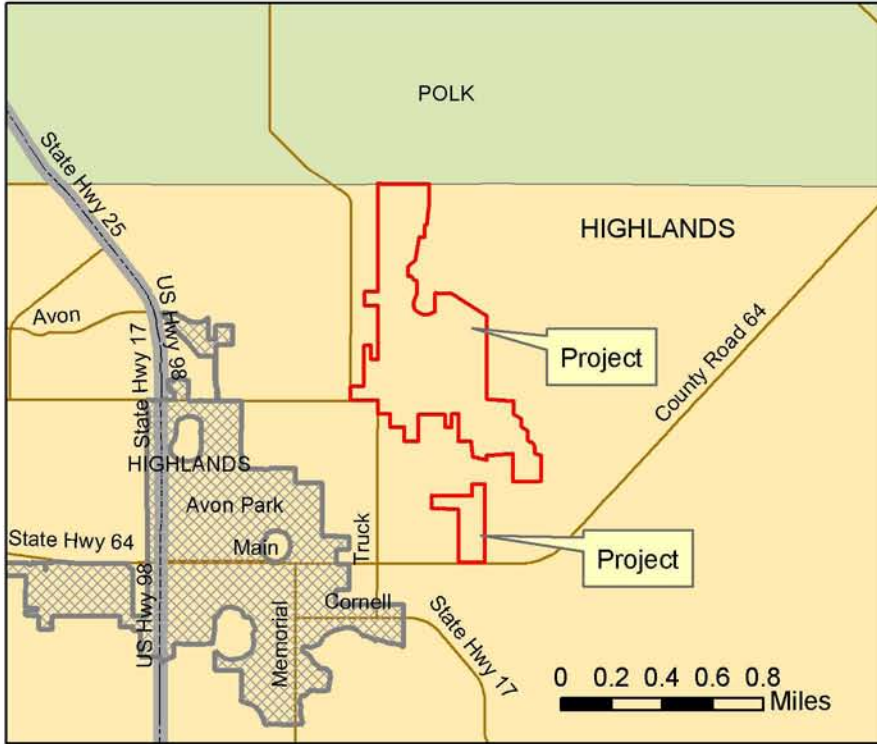
# Location Map

I.M.G. Enterprises, Inc., Cherry Lake Tree Farm  
FARMS Project H551 - WUP No. 200006278.006





# Location Map - Running W Citrus FARMS Project H554 WUP No. 20005638.005





**FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER  
SERVICES**

**FLORIDA CONSUMER FERTILIZER TASK FORCE  
FINAL REPORT**

**TO THE 2008 FLORIDA LEGISLATURE**



**JANUARY 15, 2008**

<http://consensus.fsu.edu/Fertilizer-Task-Force/index.html>



Report By Jeff A. Blair and Robert Jones  
Florida Conflict Resolution Consortium  
Florida State University



FINAL REPORT  
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FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

**FLORIDA CONSUMER FERTILIZER TASK FORCE**  
**FINAL REPORT**  
**JANUARY 15, 2008**

***Executive Summary***

The Florida Consumer Fertilizer Task Force was created by the Florida Legislature in 2007 to review and provide recommendations on the state's policies and programs addressing consumer fertilizers. It was comprised of 13 individuals representing a range of stakeholder interests who were technically qualified by training, education, or experience in water quality, horticultural, or agronomic science and who were appointed, respectively, by the President of the Senate, Speaker of the House, Commissioner of Agriculture, Florida League of Cities, and the Florida Association of Counties. The Florida Department of Agriculture and Consumer Services (DACS) provided the staffing and support for the Task Force.

Using the services of the professional facilitators of the Florida Conflict Resolution Consortium at Florida State University, the Task Force adopted a consensus process that required support of 75% of its members for any substantive decisions on findings and recommendations. During the course of six public meetings between September 6, 2007 and January 11, 2008, the Task Force developed a series of recommendations addressing statewide guidelines and standards for consumer fertilizer use, local government regulations based on sound science and a model local ordinance for consumer fertilizers, local government mechanisms to promote and encourage proper use, training and education on proper use, research studies, and funding. The Task Force took public comment at each meeting and provided a website for dissemination of meeting information, key documents, and public input.

During the course of the process the Task Force found that nutrient reduction in phosphorous & nitrogen requires a comprehensive, multi-faceted approach, and consumer fertilizer is an important component of this effort. The Task Force expects that through implementation of the DACS rule and registration process and the Task Force's recommendations, there will be a significant reduction in phosphorous and nitrogen applied in the urban environment that will contribute to decreasing environmental impacts and non-point pollution sources. In developing recommendations, the Task Force ensured that their recommendations were informed by the best available consensus-based data and science, assessed nutrient enrichment and surface waters due to fertilizer, focused on reducing water quality impacts associated with fertilizer as a component of non-point source pollution, assist local governments to comply with state and federal water quality standards, and provide uniformity while accounting for geographic diversity and variations within Florida.

**Key recommendations adopted by the Task Force include:**

1. Support for the current DACS labeling requirements for urban turf fertilizers, Rule 5E-1.003(2), and that the Rule serve as the statewide guideline for formulations, with the understanding that the rule will be reviewed and revised based on updated science by December 31, 2012.
2. Expansion of the Limited Commercial Landscape Maintenance (LCLM) certification established in Chapter 482, F.S. and additional authority to require all commercial applicators to have an appropriate certification based on modifying existing LCLM to include fertilizer best management practices (BMP's) and by adding BMP's and updates to continuing education requirements. In addition, the Task Force recommended that the Legislature modify Chapter 482 to authorize DACS to require limited certification for those who only apply fertilizer commercially (a new "Limited Commercial Fertilizer Applicator Certification" LCFAC). The Task Force recognized that the

existing Green Industry BMP training network, including DEP, IFAS, industry and private training providers could conduct the training necessary for obtaining this new certification.

3. A model ordinance concerning the use of nonagricultural fertilizer for use by local governments who choose to adopt an ordinance as directed by the Legislature. The Task Force recommended that Local Governments can adopt additional or more stringent provisions to the model ordinance provided the local government can demonstrate they meet at least one of the following criteria:
  - They have verified impaired waters and are facing existing or possible Total Maximum Daily Loads (TMDL) requirements (under state and federal laws); or
  - They have verified harm to human health or harm to the environment that warrants additional consumer fertilizer requirements; or
  - That they will improve water quality or prevent future impacts of consumer fertilizers on the environment.
4. Support of public education regarding fertilizer use based on six best practices for lawn care elements developed by the Institute of Food and Agricultural Sciences (IFAS), as well as a set of supplemental landscape management tips. The six best practices are:
  - Choose a fertilizer designed for lawns.
  - Apply fertilizer when grass is actively growing.
  - Apply fertilizer to the lawn and keep off other surfaces and away from water.
  - Mow lawn at highest lawnmower setting.
  - Use water wisely through proper irrigation.
  - Spot treatments for pests and weed problems.
5. Continued support of ongoing research projects on consumer fertilizer management, and support for future research on “real-world” assessment of fertilizer nutrient leaching and runoff from existing urban residential lawns, assessment of nutrient leaching and runoff from ground cover, native landscapes, and other alternative landscapes, and a mass balance or “box model” study to assess the ultimate sinks, fate and chemical transformations of N and P in turf, soil, and shallow groundwater systems. The Task Force recommended that the Legislature direct the DACS Best Management Practices Research Extension Coordinating Committee (BRECC) to address the research recommendations from the Task Force.
6. A dedicated source of funding be provided for education and training initiatives that address the appropriate application of consumer fertilizers, and that the Florida Legislature authorize DACS to increase the tonnage fee on the sale of nitrogen and phosphorus up to \$1.00 per ton, with the recommendation that DACS will determine the exact amount of the increase, not to exceed \$1.00/ton, by conducting a rule making initiative with affected interests. The Task Force recommends that an amount of money equal to or greater than the percent of sales of consumer fertilizers be used for funding consumer fertilizer training and education initiatives.

Following a unanimous adoption of the draft recommendations at the January 11, 2008 meeting, the Task Force authorized DACS to transmit this Final Report and adjourned. Information on the meetings, deliberations, public comments submitted, and support documents can be found at <http://consensus.fsu.edu/Fertilizer-Task-Force/index.html>.

# FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

## FLORIDA CONSUMER FERTILIZER TASK FORCE FINAL REPORT TO THE 2008 FLORIDA LEGISLATURE JANUARY 15, 2008



### **I** Introduction

The Task Force was created by the Florida Legislature in 2007 to review and provide recommendations on the state's policies and programs addressing consumer fertilizers. It was composed of 13 individuals representing a range of stakeholder interests and elected Andy Rackley to serve as its chair and Casey Fitzgerald to serve as its vice chair. The Florida Conflict Resolution Consortium served as the Task Force facilitators. The Task Force adopted a consensus process that required a super majority of 75% support of its members for any substantive decisions on findings and recommendations.

It met for six meetings between September, 2007 and January, 2008 and received briefings and public comments at each meeting. It also established an online website to provide information on the Task Force's work and an additional opportunity for online public comment.



*Public Comment at the December 17, 2007 Task Force Meeting, Apopka*



## **II** Task Force Mission, Guiding Principles and Vision of Success

### **A. Task Force Mission and Guiding Principles**

At its organizational meeting, the Task Force reviewed its legislative charge then discussed, drafted, refined and later adopted a mission statement and a set of guiding principles.

#### ***Mission Statement***

The mission of the Florida Consumer Fertilizer Task Force is to develop and deliver a package of consensus recommendations to the Florida Legislature designed to ensure that the education and regulation for the proper use of consumer fertilizers is informed by best available science and is uniform subject to variations necessary to meet local state and federal water quality standards. The Task Force will recommend statewide guidelines for management strategies (nonagricultural fertilizer use rates, formulations, and application), based on the best available science as well as model ordinances for municipalities and counties.

#### ***Guiding Principles***

1. The overall purpose of the Florida Consumer Fertilizer Task Force is to develop recommendations for submittal to the Florida Legislature regarding the education and use, and management strategies and regulation of consumer fertilizers.
2. The Florida Consumer Fertilizer Task Force shall operate under clear, concise, consistent, and fair procedural protocols.
3. The Florida Consumer Fertilizer Task Force shall strive to achieve consensus on substantive recommendations made to the Florida Legislature.
4. The Florida Consumer Fertilizer Task Force shall serve as an accessible liaison between the Task Force and their representative constituency groups to meet their mission.

### **B. Task Force Vision of Success**

Members discussed what was at stake for Florida's communities in terms of potentially huge future commitments of funding to enhance water quality in our lakes, rivers and bays, growing conflicts between upstream and downstream communities because of the failure to establish consistent science based standards; and a growing enforcement/compliance problem and the continued degradation of Florida's water quality.

Members subsequently offered a shared vision of a new, more successful approach for the use and application of consumer fertilizers in Florida in the next decade. The members vision was of great improvements in the water quality of the state's rivers, lakes and bays as a result of solving the problem of runoff and leaching of nitrogen and phosphorus from consumer fertilizer using a system of regulation that: is simple and straightforward; relies on an ongoing commitment to the use of sound science to inform best management practices; uses fact-based consumer and professional education to dramatically improve compliance; and relies on a public-private partnership that is committed to implementing a solution that is practical and sustainable.

### **III FINDINGS AND CONSIDERATIONS**

#### **A. LEGISLATIVE FINDINGS**

The following legislative findings were included in the charge to the Task Force:

1. There is a need for better training and education regarding the proper use of consumer fertilizers.
2. There should exist a mechanism to help local governments promote and encourage the proper use of fertilizers, thereby eliminating or minimizing the potential for environmental impacts.
3. Local government regulation of fertilizer uses for nonagricultural applications should be based on sound science, including water quality, agronomics, and horticulture.
4. There is a need for education regarding the use of consumer fertilizers.
5. There is a need for improved standards regarding nonagricultural fertilizer use and application.
6. While the constituents in fertilizer are naturally occurring in the environment, the improper use of fertilizer can be one of many contributors to non point source pollution.
7. The state's local governments are potentially subject to regulatory enforcement action by state or federal entities as a result of non point source pollution caused by storm water runoff.

#### **B. TASK FORCE CONSIDERATIONS**

In the course of evaluating options and developing recommendations, based on direction from the Florida Legislature, the following considerations were identified by the Task Force and informed their discussions and development of recommendations:

- Use the best available consensus-based data and science,
- Assess nutrient enrichment and surface waters due to fertilizer,
- Reduce water quality impacts associated with fertilizer—non-point source pollution,
- Comply with state and federal water quality standards, and
- Ensure uniformity while accounting for geographic diversity and variations.



## **IV TASK FORCE RECOMMENDATIONS**

Nutrient reduction in Phosphorous & Nitrogen requires a comprehensive, multi-faceted approach, and consumer fertilizer is an important component of this effort. The Task Force expects that through implementation of the DACS rule and registration process and the Task Force's recommendations, there will be a significant reduction in phosphorous and nitrogen applied in the urban environment that will contribute to decreasing environmental impacts and non-point pollution sources.

In addressing its legislative charge, the Task Force was briefed on and developed recommendations regarding the following six topics:

- Statewide Guidelines for Use (use rates, formulations, and applications)—Developing Improved Standards
- Local Government Regulations Based on Sound Science—Model Ordinances
- Local Government Mechanisms to Promote and Encourage Proper Use
- Training and Education on Proper Use
- Research and Studies Needs and Recommendations
- Funding

### **A. RECOMMENDATIONS FOR STATEWIDE GUIDELINES AND IMPROVED STANDARDS FOR USE**

1. The Task Force expressed support for the current DACS labeling requirements for urban turf fertilizers rule, Rule 5E-1.003(2), on the basis that the rule was based on the best available science at the time of promulgation, and recommends that the Rule serve as the statewide guideline for formulations, with the understanding that the rule will be reviewed and revised based on updated science by December 31, 2012. Research is currently being conducted by IFAS to quantify nutrient leaching in lawn grasses. This DEP funded turf nutrient leaching research will provide the best available science under which to review the DACS Rule's labeling requirements for urban turf fertilizers, including the prescribed application rates of nitrogen and phosphorus for sustaining turf grass and minimizing or preventing leaching.
2. The Task force addressed consumer fertilizer applications through expansion of the Limited Commercial Landscape Maintenance (LCLM) certification and additional authority to require all commercial applicators to have an appropriate certification. The Task Force supports and recommends that a combined training program be established, modifying the existing LCLM certification to include fertilizer BMP's and adding BMP's and updates to continuing education requirements. The Legislature should modify Chapter 482 to authorize DACS to require limited certification for those who only apply fertilizer commercially (a new "Limited Commercial Fertilizer Applicator Certification" LCFAC).

The Task Force recognizes that several thousand people already have attended and passed the Green Industry BMP Training Program developed by DEP and administered by UF IFAS. Therefore, we recommend that anyone who has been or will be certified through this program not be required to obtain additional LCFAC training. Such individuals can submit their certification to DACS to obtain the LCFAC certification.



The minimum training program for the application of fertilizers to turfgrasses or landscape plants for hire shall consist of training in the following subjects, except that applicants already holding any valid FDACS pesticide license may, but shall not be required to, attend the final pesticide law and licensing, IPM, and safety module. The course shall be designed, approved and made available by DEP and UF/IFAS and include:

- Overview of nonpoint source pollution, laws and effects on water quality; effects on business, economy, and quality of life; BMPs as both good business and environmental benefit.
- Florida turfgrass species and characteristics including fertilizer requirements and the effects of landscape design, mowing, irrigation, shade, wear, pest, disease, cold and heat stresses on fertilizer materials, amounts and timing, and conversely, the effects of fertilization on these cultural aspects in addition to direct effects on water quality, including nutrient pollution, erosion and sedimentation, and water usage rates.
- Irrigation systems and the effects of irrigation on volatilization, leaching, runoff, excessive withdrawal and water quality issues. Effects of over/under irrigation on plants and fertilizer needs. Diagnoses of irrigation vs. fertilizer problems. Importance of proper repair to maintain distribution uniformity to prevent spot leaching/runoff of fertilizers resulting in more fertilizer use and more pollution.
- Florida landscape plants and characteristics including fertilizer requirements and the effects of landscape design, pruning, irrigation, shade, pest, disease, cold and heat stresses on fertilizer materials, amounts and timing, and conversely, the effects of fertilization on these cultural aspects in addition to direct effects on water quality.
- Pesticide (including fertilizer pesticide mixtures) and licensing law, IPM, and safety.

An individual who is only applying fertilizer may apply for the new “LCFAC” specific to application of fertilizers.

The test material will be the same for the revised LCLM certifications and the new “LCFAC”, and will include at a minimum ensuring knowledge of the DEP developed Green Industries BMP’s training material. At a minimum the training would include the DEP material.

It is anticipated that the existing Green Industry BMP training network, including DEP, IFAS, industry and private training providers would conduct the training necessary for obtaining the Green Industry BMP certification. For those who only want to obtain the LCFAC, IFAS would coordinate the training opportunities and would administer the test. For those who pass the test, they would apply to DACS for their LCFAC, submit their fee, and DACS would issue the certification. DACS, DEP, and local governments would provide enforcement mechanisms within their existing structure and programs.

Businesses, whether composed of one employee or many, that only apply consumer fertilizer must have at least one individual who has the new “LCFAC”, and this individual is responsible to ensure that each employee who applies fertilizer has received appropriate annual training according to the curriculum, training, and records keeping provisions as established by DACS.

3. Use rates are addressed through the DACS urban turf labeling Rule and BMP’s, and the model ordinance approach as well as through the training and education, and funding recommendations.
4. The Task Force has developed a model ordinance for use by municipalities and counties concerning the use of nonagricultural fertilizer for use by local governments who choose to adopt an ordinance

as directed by the Legislature. The Task Force recommends that Local Government can adopt additional or more stringent provisions to the model ordinance provided the local government can demonstrate they meet at least one of the following criteria:

- They have verified impaired waters and are facing existing or possible TMDL requirements (under state and federal laws); or
- They have verified harm to human health or harm to the environment that warrants additional consumer fertilizer requirements; or
- That they will improve water quality or prevent future impacts of consumer fertilizers on the environment.

## **B. RECOMMENDATIONS FOR LOCAL GOVERNMENT REGULATIONS BASED ON SOUND SCIENCE—MODEL ORDINANCE**

The Model Fertilizer Use ordinance drafted and agreed to by the Task Force is another tool to reduce sources of nutrients coming from urban landscapes and to reduce the impact of nutrients on Florida’s surface and ground waters. *(See the Model Local Ordinance in Appendix #4)*

## **C. LOCAL GOVERNMENT MECHANISMS TO PROMOTE AND ENCOURAGE PROPER USE**

The Task Force addressed this issue through the development of the model ordinance with the ordinance’s provisions serving as BMP’s for the proper use of consumer fertilizer. In addition proper use is addressed as a result of the training, education, and certification for fertilizer applicators through the expansion of the Limited Commercial Landscape Maintenance (LCLM) certification and proposed new “Commercial Fertilizer Applicator Certification” (LCFAC), and the seeking of additional legislative authority requiring all commercial applicators to either have or be under the direct supervision of an individual having the DACS administered certification. The Task Force recommendations regarding educational messages is another vehicle to assist local governments in promoting and encouraging proper use of consumer fertilizers.



*A fertilizer spreader that features a deflector shield to deflect fertilizer granules away from all impervious surfaces, fertilizer-free zones and water bodies, including wetlands, is a provision of the model ordinance developed and recommended by the Task Force.*

## D. TRAINING AND EDUCATION ON PROPER USE

### 1. Best Practices for Lawn Care

The Task Force endorses the six (6) best practices for lawn care elements proposal as the starting point, that may be amended as well as revised for Florida specific conditions. They are as follows:

- Choose a fertilizer designed for lawns.
- Apply fertilizer when grass is actively growing.
- Apply fertilizer to the lawn and keep off other surfaces and away from water.
- Mow lawn at highest lawnmower setting.
- Use water wisely through proper irrigation.
- Spot treatments for pests and weed problems.

### 2. Additional Consumer Tips/Messages

In addition the Task Force supports the following additional consumer tips and messages to be used as part of any communications initiative:

- Provide the reasons why consumer should follow BMP's and labeling requirements.
- Deviating from label directions can contribute to pollution of area surface waters.
- If you choose to fertilize, fertilize properly. However, it is not necessary to fertilize in all cases.
- Avoid water bodies in applying fertilizer.
- Look for low to no phosphorous in consumer fertilizers.
- "Right plants in the right place".
- Use of native plants in the landscape may decrease the need for consumer fertilizer.
- "A properly maintained landscape provides a good environmental filter for urban runoff."
- Choose a fertilizer designed for lawns and landscape shrubs and follow the label application directions. Use an appropriate fertilizer – this is one that will have some of the N in slow-release form\*, no or very low P, K for stress tolerance, and other nutrients as needed
- Apply fertilizer when grass is actively growing. Apply fertilizer to the lawn and keep off other surfaces and away from water. Do not apply fertilizer to dormant turfgrass.
- Mow lawn at highest lawnmower setting. Be specific about mowing height based on the type of turfgrass. (e.g. St. Augustinegrass and bahiagrass -- 3.5 to 4 inches; Centipedegrass and zoysiagrass - - 1.5 to 2 inches; Dwarf St. Augustinegrass cultivars -- 2-2.5 inches).
- Use water wisely through proper irrigation. Be specific about the time to water.
- Be specific about fertilizer type and application time.
- Spot treatments for pests and weed problems. Non-chemical application practices can be encouraged also.
- Don't bag your clippings.
- Irrigate fertilizer in with ONLY about ¼" of water. More water may cause leaching or runoff while no water may cause volatilization or burn.
- Avoid fertilizing immediately prior to a significant rain since excessive water may cause fertilizer to run off the landscape.
- Do not leave fertilizer on walks, driveways, patios or other impervious surfaces. Sweep these granules onto the lawn.
- Keep a buffer zone around lakes, streams and rivers and be sure that fertilizer granules are not getting directly into water.

### 3. UF-IFAS Proposed Consumer Fertilizer Communications Campaign

The Task Force reviewed an IFAS proposal for a specific communications campaign with associated costs as a possible approach for providing consumers with information on best practices. (*See, Appendix 6 for the UF-IFAS proposed communication campaign.*)



## E. RESEARCH AND STUDIES NEEDS AND RECOMMENDATIONS

The Task Force recognizes that there are ongoing research projects and recommends the continued support of these efforts. The Task Force identified information gaps and the Future Research Needs (Science) Subcommittee recommended, and the Task Force supports the following research topics which should be factored into defining future research priorities:

1. *In situ* or “real-world” assessment of fertilizer nutrient leaching and runoff from existing urban residential lawns.
2. Experimental and *in situ* assessment of nutrient leaching and runoff from ground cover, native landscapes, and other alternative landscapes. These landscapes should be assessed for nutrient loss in conditions of fertilization augmentation and where no fertilization is necessary.
3. A detailed mass balance or “box model” study to assess the ultimate sinks, fate and chemical transformations of N and P in turf, soil, and shallow groundwater systems.
4. Consumer behavior studies to assess residential urban turf irrigation rates, actual fertilizer application rates, and other factors with respect to understanding urban turf management by consumers. Analyses may be nested in a residential subdivision approach to attain trends within communities in addition to statewide trends between communities across the state.
5. Assessment of the fate of urea-nitrogen in fertilizer leachate and runoff in urban turf landscapes. Although urea-N is widely known to rapidly transform into inorganic nitrogen in the soil environment, whereby it can be rapidly assimilated by turf, what proportion of the urea-N may actually be lost in leachate and runoff needs to be researched.

Possible examples of research projects that IFAS has identified and shared with the Task Force are found in Appendix #5.

The Task Force recommends that the Legislature direct the DACS Best Management Practices Research Extension Coordinating Committee (BRECC) to address the recommendations from the Task Force in Section E, Research and Studies Needs and Recommendations, including a review of the existing research.

## **F. FUNDING RECOMMENDATIONS**

The Task Force recommends that a dedicated source of funding be provided for education and training initiatives regarding enhancing the appropriate application of consumer fertilizers in accordance with the DACS labeling requirements for urban turf fertilizers rule, Rule 5E-1.003(2), and all of the provisions in these recommendations. The Task Force recommends that all users of non-agricultural fertilizers comply with the provisions contained within the recommendations, including but not limited to: homeowners, golf courses, commercial properties, and multi-family and condominium properties.

The Task Force recommends that the Florida Legislature authorize DACS to increase the tonnage fee on the sale of nitrogen and phosphorus up to \$1.00 per ton. DACS will determine the exact amount of the increase, not to exceed \$1.00/ton, by conducting a rule making initiative with affected interests. The Task Force recommends that an amount of money equal to or greater than the percent of sales of consumer fertilizers be used for funding consumer fertilizer training and education initiatives. The Task Force recommends that the tonnage fee increase for the sale of Nitrogen and Phosphorus (N & P) apply to all fertilizer sales in recognition of the fact that, to date, little funding has been spent on consumer fertilizer education and training. DACS will work with partners such as IFAS, non-profits and industry associations in developing and conducting training and education initiatives.

## APPENDIX # 1

### TASK FORCE MEMBERSHIP AND STAFF

<b>Task Force Members</b>	<b>Representation</b>
Scott Dudley	Florida League of Cities, Inc. <sup>1</sup>
Senator David Aronberg	Florida Senate
Peter John Barile	Environmental Community
Jerry Brooks	Department of Environmental Protection
Richard Budell	DACS Office of Agricultural Water Policy
Casey Fitzgerald (Vice-chair)	Water Management Districts
Richard Martinez	National Fertilizer Industry
Representative Bryan Nelson	Florida House of Representatives
Ron Olson	Florida-Based Fertilizer Industry
Andy Rackley (Chair)	Department of Agriculture and Consumer Services
Jerry Sartain	UF Institute for Food and Agricultural Sciences
Karen Taylor	Registered Landscape Architect
Commissioner Jon Thaxton	Florida Association of Counties

Jeff Blair and Robert Jones  
Task Force Facilitators  
FSU Florida Conflict Resolution Consortium



<sup>1</sup> Mayor Jay Arend served as the Florida League Cities Representative until January 8, 2008.

## APPENDIX # 2

### LEGISLATIVE CHARGE—SECTION 576.092, FLORIDA STATUTES

#### Section 10. Section 576.092, Florida Statutes, is created to read:

576.092 Consumer Fertilizer Task Force.--

- (1) The Legislature finds that:
  - (a) There is a need for better training and education regarding the proper use of consumer fertilizers.
  - (b) There should exist a mechanism to help local governments promote and encourage the proper use of fertilizers, thereby eliminating or minimizing the potential for environmental impacts.
  - (c) Local government regulation of fertilizer uses for nonagricultural applications should be based on sound science, including water quality, agronomics, and horticulture.
  - (d) There is a need for education regarding the use of consumer fertilizers.
  - (e) There is a need for improved standards regarding nonagricultural fertilizer use and application.
  - (f) While the constituents in fertilizer are naturally occurring in the environment, the improper use of fertilizer can be one of many contributors to nonpoint source pollution.
  - (g) The state's local governments are potentially subject to regulatory enforcement action by state or federal entities as a result of nonpoint source pollution caused by stormwater runoff.
  
- (2)(a) There is hereby created the Consumer Fertilizer Task Force within the Department of Agriculture and Consumer Services for the purposes of:
  - 1 Assessing existing data and information regarding nutrient enrichment and surface waters due to fertilizer, assessing management strategies for reducing water quality impacts associated with fertilizer, and identifying additional research needs.
  - 2 Developing statewide guidelines governing nonagricultural fertilizer use rates, formulations, and applications with attention to the geographic regions identified in Rule 5E-1.003, Florida Administrative Code.
  - 3 Taking public input and testimony concerning the issues in this section.
  - 4 Recommending methods to ensure local ordinances are based on best available data and science and to achieve uniformity among local government ordinances where possible, unless local ordinance variations are necessary to meet mandated state and federal water quality standards.
  - 5 Developing model ordinances for municipalities and counties concerning the use of nonagricultural fertilizer.
  
- (b)1. The task force shall consist of 13 members who are technically qualified by training, education,

or experience in water quality, horticultural, or agronomic science, and who shall be appointed as follows: three members appointed by the President of the Senate, one of whom shall be a representative from the Department of Environmental Protection, one of whom shall be a representative of the environmental community, and one of whom shall be a member of the Senate; three members appointed by the Speaker of the House of Representatives, one of whom shall be a representative from a water management district, one of whom shall be a representative of the University of Florida's Institute for Food and Agricultural Sciences, and one of whom shall be a member of the House of Representatives; five members appointed by the Commissioner of Agriculture, one of whom shall be a representative from the Department of Agriculture and Consumer Services, one of whom shall be a representative from the Office of Agricultural Water Policy, one of whom shall be a representative from the national fertilizer industry, one of whom shall be a representative from the Florida-based fertilizer industry, and one of whom shall be a registered landscape architect; one member appointed by the Florida League of Cities, Inc.; and one member appointed by the Florida Association of Counties.

2. Members shall choose a chair and vice chair from the membership of the task force.

(3) Staffing for the task force shall be provided by the Department of Agriculture and Consumer Services.

**(4) The task force shall review and evaluate the issues identified in paragraph (2)(a) and take public testimony. A report of the recommendations and findings of the task force, including recommendations for statutory changes, if any, shall be submitted to the President of the Senate and the Speaker of the House of Representatives by January 15, 2008, and the task force shall be abolished upon the transmittal of the report.**

*Section 12. This act shall take effect July 1, 2007.*



## APPENDIX # 3

### RULE 5E-1.003(2) LABELING REQUIREMENTS FOR URBAN TURF FERTILIZERS

(2) FERTILIZER LABEL REQUIREMENTS FOR URBAN TURF, SPORTS TURF OR LAWNS.

(a) Definitions

1. “Urban Turf” or “Lawns” means non agricultural land planted in closely mowed, managed grasses except golf courses, parks and athletic fields.

2. “Sports Turf” means non agricultural land planted exclusively for golf courses, parks and athletic fields.

3. “No Phosphate Fertilizer” means fertilizer products with phosphate levels below 0.5% intended for established urban turf or lawns.

4. “Low Phosphate Fertilizer” means fertilizer products intended for new or established urban turf or lawns, with phosphate levels equal to or above 0.5% or as provided in paragraph (2)(b).

5. “Starter Fertilizer” means a fertilizer formulated for a one-time application at planting or near that time to encourage root growth and enhance the initial establishment.

6. “Established Urban Turf” means urban turf older than 12 months.

7. “New Urban Turf” means urban turf established less than 12 months.

(b) Fertilizer products labeled for use on sports turf, urban turf or lawns shall be no phosphate or low phosphate and have labeling that meets the restrictions set forth in this rule for the application of nitrogen.

1. No phosphate fertilizers shall not contain more than 0.5% of available phosphate expressed as P<sub>2</sub>O<sub>5</sub>. The “grade” shall indicate a zero guarantee.

2. Fertilizers labeled as Low phosphate shall have use directions that do not exceed an application rate of 0.25 lbs P<sub>2</sub>O<sub>5</sub>/1000ft<sup>2</sup> per application and not to exceed 0.50 lbs P<sub>2</sub>O<sub>5</sub>/1000ft<sup>2</sup> per year. Label use directions may be included that allow higher rates if an annual soil sample representative for the site shows the need for a higher application rate.

3. Fertilizers labeled as, or formulated for use as, starter fertilizer shall have use directions that do not exceed an application rate of 1.0 lb of P<sub>2</sub>O<sub>5</sub>/1,000 ft<sup>2</sup> and that subsequent applications shall be made with products meeting the definition of Low or No Phosphate fertilizers. The term “Starter Fertilizer” shall be part of the brand name.

4. Fertilizers labeled as urban turf, sports turf, or lawn fertilizer shall have directions for use for nitrogen that:

a. Are consistent with the recommendations in the following table:

Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida

Species	Nitrogen recommendations (lbs N / 1000 ft <sup>2</sup> / year)*		
	North	Central	South
Bahia grass	2-3	2-4	2-4
Bermuda grass	3-5	4-6	5-7
Centipede grass	1-2	2-3	2-3
St. Augustine grass	2-4	2-5	4-6
Zoysiagrass	3-5	3-6	4-6

North Florida is north of Ocala. Central Florida is defined as south of Ocala to a line extending from Vero Beach to Tampa. South Florida includes the remaining southern portion of the state.

b. Nitrogen shall not be applied at an application rate greater than 0.7 lbs of readily available nitrogen per 1000 ft<sup>2</sup> at any one time based on the soluble fraction of formulated fertilizer, with no more than 1 lb total N per 1000 ft<sup>2</sup> to be applied at any one time and not to exceed the annual nitrogen recommendations in the Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida, set forth herein. Use directions for nitrogen may be included that allow higher rates if an annual tissue sample representative of the site shows the need for a higher application rate.

5. The following language shall appear conspicuously on bags of fertilizer sold at retail: "Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn/garden, and sweep any product that lands on the driveway, sidewalk, or street, back onto your lawn/garden."

(c) Specialty fertilizers labeled for urban turf or lawns shall have directions for use that include:

1. Application rates for phosphorous shall not exceed 0.25 lbs. P<sub>2</sub>O<sub>5</sub>/1000 ft<sup>2</sup> per application and not exceed 0.50 lbs. P<sub>2</sub>O<sub>5</sub>/1000 ft<sup>2</sup> per year. Label use directions may be included that allow higher rates if an annual soil sample representative for the site shows the need for a higher application rate.

2. Application rates for nitrogen shall not exceed 0.7 lbs of readily available nitrogen per 1000 ft<sup>2</sup> at any one time based on the soluble fraction of formulated fertilizer, with no more than 1 lb total N per 1000 ft<sup>2</sup> to be applied at any one time and not to exceed the annual nitrogen recommendations in the Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida. Use directions for nitrogen may be included that allow higher rates if an annual tissue sample representative of the site shows the need for a higher application rate.

3. Rates shall be expressed in units of weight or volume per unit of area coverage (where application rates are given in volume, the label shall provide sufficient information to calculate the application rates by weight).

4. Rates shall be expressed per 1000 square feet.

5. Maximum coverage area per container or bag shall be displayed prominently on the front of the container or bag. (i.e. This product covers 5000 square feet; This bag feeds 4000 square feet).

(d) Fertilizers labeled for sports turf at golf courses, parks and athletic fields shall:

1. Have directions for use not to exceed rates recommended in the document titled SL191 “Recommendations for N, P, K and Mg for Golf Course and Athletic Field Fertilization Based on Mehlich I Extractant”, dated March 2007, which is hereby adopted and incorporated by reference into this rule. Copies may be obtained from the Soil and Water Science Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611 or the following website: <http://edis.ifas.ufl.edu/SS404>.

2. Have directions for use in accordance with the recommendations in “BMP’s for the Enhancement of Environmental Quality on Florida Golf Courses”, published by the Florida Department of Environmental Protection, dated January 2007. Copies may be downloaded from <http://www.dep.state.fl.us/water/nonpoint/pubs.htm>.

(e) Fertilizers other than specialty fertilizers labeled for urban turf shall:

1. Have directions for use not to exceed rates recommended in the document titled Best Management Practices for Protection of Water Resources in Florida, June 2002, Florida Green Industries., which is hereby adopted and incorporated by reference into this rule. Copies may be obtained from [http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/BMP\\_Book](http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/BMP_Book).

(f) Existing Stock – Licensees are permitted to sell or distribute products that do not meet the label requirements of the rule for one and one-half years after the effective date of the rule. Products at the retail level on or after the effective date of the rule are permitted to be offered for sale.

## APPENDIX # 4

### “MODEL ORDINANCE” RECOMMENDATION

#### FLORIDA FRIENDLY FERTILIZER USE ON URBAN LANDSCAPES MODEL ORDINANCE

##### INTRODUCTION

The attached model Fertilizer Use ordinance is another tool to reduce sources of nutrients coming from urban landscapes to reduce the impact of nutrients on Florida’s surface and ground waters. However, restricting fertilizer use by itself will not eliminate the impacts of nutrients from urban landscapes. Local governments are advised they should also review their existing Land Development Regulations to assure they promote “Low Impact Design”, which minimizes clearing of natural vegetation and the compaction of urban soils. A Model Springs Protection Code is being developed by DCA, DEP, and other stakeholders that will include specific Land Development Regulation recommendations that promote Low Impact Design. This Model Code will be available in 2008.

Additionally, landscape design is a major determinant in the amount of fertilizer and irrigation that is needed to maintain healthy urban landscapes and minimize adverse impacts on water resources. A model Landscape Ordinance entitled “Guidelines for Model Ordinance Language for Protection of Water Quality and Quantity Using Florida Friendly Lawns and Landscapes” was developed by a group of agencies, industries, and interest groups over a two year period. It is fundamentally an adaptation of earlier water conservation ordinances revised to include water quality protections for compliance with TMDL and NPDES requirements. The language focuses on continuing education of lawn care and landscape professionals, proper planning and supervision during development and construction, and the use of best management practices, including the Florida Yards and Neighborhoods Program. This model ordinance may be downloaded from:

[HTTP://WWW.DEP.STATE.FL.US/WATER/NONPOINT/PUBS.HTM#MODEL%20ORDINANCES.](http://www.dep.state.fl.us/water/nonpoint/pubs.htm#MODEL%20ORDINANCES)

Finally, the 2004 Florida Legislature directed Florida’s water management districts to work with interested parties to develop landscape irrigation and Florida-Friendly design standards for new construction (section 373.228, F.S.). Local governments are to use the standards and guidelines when developing landscape irrigation and Florida-Friendly ordinances. The Committee on Landscape Irrigation and Florida-Friendly Design Standards convened and developed the standards. They are published in a booklet called Landscape Irrigation and Florida Friendly Design Standards (December 2006). This document can be downloaded from:

[HTTP://WWW.DEP.STATE.FL.US/WATER/WATERPOLICY/LAND\\_IRR.HTM](http://www.dep.state.fl.us/water/waterpolicy/land_irr.htm)

## **1. FINDINGS**

As a result of impairment to (MUNICIPALITY / COUNTY)'S surface waters caused by excessive nutrients under the Florida Impaired Waters Rule, or, as a result of increasing levels of nitrogen in the surface and/or ground water within the aquifers or springs within the boundaries of (municipality/county) the governing body of (municipality / county) has determined that the use of fertilizers on lands within (municipality / county) creates a risk to contributing to adverse effects on surface and/or ground water. Accordingly, the governing board of (municipality/county) finds that additional measures than are otherwise required by the most recent edition of the "*Florida Green Industries Best Management Practices for Protection of Water Resources in Florida, June 2002,*" may be required by this ordinance.

## **2. PURPOSE AND INTENT**

This Ordinance regulates the proper use of Fertilizers by any Applicator; requires proper training of Commercial and Institutional Fertilizer Applicators; establishes training and licensing requirements; establishes a Prohibited and Restricted Application Period; specifies allowable fertilizer application rates and methods, fertilizer-free zones, low maintenance zones, and exemptions. The Ordinance requires the use of Best Management Practices which provide specific management guidelines to minimize negative secondary and cumulative environmental effects associated with the misuse of Fertilizers. These secondary and cumulative effects have been observed in and on (MUNICIPALITY / COUNTY)'s natural and constructed stormwater and drainage conveyances, rivers, creeks, canals, springs, lakes, estuaries and other water bodies. *[Guidance: as appropriate]* Collectively, these water bodies are an asset critical to the environmental, recreational, cultural and economic well-being of (MUNICIPALITY / COUNTY) residents and the health of the public. Overgrowth of algae and vegetation hinder the effectiveness of flood attenuation provided by natural and constructed stormwater and drainage conveyances. Regulation of nutrients, including both phosphorus and nitrogen contained in Fertilizer, will help improve and maintain water and habitat quality.

## **3. DEFINITIONS**

For this Article, the following terms shall have the meanings set forth in this section unless the context clearly indicates otherwise.

"Administrator" means the (MUNICIPALITY / COUNTY) Administrator, or an administrative official of (MUNICIPALITY / COUNTY) government designated by the City/County Administrator to administer and enforce the provisions of this Article.

"Application" or "Apply" means the actual physical deposit of Fertilizer to Turf or Landscape Plants.

"Applicator" means any Person who applies Fertilizer on Turf and/or Landscape Plants in (MUNICIPALITY / COUNTY).

"Board or Governing Board" means the Board of City/County Commissioners of (MUNICIPALITY / COUNTY), Florida.

“Best Management Practices” means turf and landscape practices or combination of practices based on research, field-testing, and expert review, determined to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality, conserving water supplies and protecting natural resources.

“Code Enforcement Officer, Official, or Inspector” means any designated employee or agent of (MUNICIPALITY / COUNTY) whose duty it is to enforce codes and ordinances enacted by (MUNICIPALITY / COUNTY).

“Commercial Fertilizer Applicator” means any Person who applies Fertilizer on Turf and/or Landscape Plants in (MUNICIPALITY / COUNTY) in exchange for money, goods, services or other valuable consideration.

“Fertilize,” “Fertilizing,” or “Fertilization” means the act of applying Fertilizer to Turf, specialized Turf, or Landscape Plant.

“Fertilizer” means any substance or mixture of substances, except pesticide/fertilizer mixtures such as “weed and feed” products, that contains one or more recognized plant nutrients and promotes plant growth, or controls soil acidity or alkalinity, or provides other soil enrichment, or provides other corrective measures to the soil. [**Guidance:** Regulation of pest control businesses and applicators, and of pesticide use, is preempted to the Florida Department of Agriculture and Consumer Services (FDACS) by Chapters 482.242, and 487.051 (2), F.S. and suspected pesticide misuse should be reported to FDACS. Weed and feed products are registered pesticides. The Limited Commercial Landscape Maintenance Certification Program does not allow landscape maintenance workers to make any kind of pesticide applications (including weed control and/or weed and feed products) to any turf areas. Per 482.165(3) F.S., a civil penalty for unlicensed application of pesticides, including weed and feed products, may not be less than \$500 or more than \$5,000 for each offense. ]

“Guaranteed Analysis” means the percentage of plant nutrients or measures of neutralizing capability claimed to be present in a Fertilizer.

“Institutional Applicator” means any Person, other than a non-commercial or commercial Applicator (unless such definitions also apply under the circumstances), that applies Fertilizer for the purpose of maintaining Turf and/or Landscape Plants. Institutional Applicators shall include, but shall not be limited to, owners and managers of public lands, schools, parks, religious institutions, utilities, industrial or business sites and any residential properties maintained in condominium and/or common ownership.

“Landscape Plant” means any native or exotic tree, shrub, or groundcover (excluding Turf).

“Low Maintenance Zone” means an area a minimum of six (6) feet wide adjacent to water courses which is planted and managed in order to minimize the need for fertilization, watering, mowing, etc.

“Pasture” means land used for livestock grazing that is managed to provide feed value.

“Person” means any natural Person, business, corporation, limited liability company, partnership, limited partnership, association, club, organization, and/or any group of people acting as an organized entity.

“Prohibited Application Period” means the time period during which a Flood Watch or Warning, or a Tropical Storm Watch or Warning, or a Hurricane Watch or Warning, or a 3-day Cone of Uncertainty is in effect for any portion of (CITY/COUNTY), issued by the National Weather Service, or if heavy rain is expected.

“(MUNICIPALITY / COUNTY) Approved Best Management Practices Training Program” means a training program approved by the (MUNICIPALITY / COUNTY) Administrator that includes at a minimum, the most current version of the Florida Department of Environmental Protection’s “Florida Green Industries Best Management Practices for Protection of Water Resources in Florida, June 2002,” as revised and any more stringent requirements set forth in this Article.

“Slow Release,” “Controlled Release,” “Timed Release,” “Slowly Available,” or “Water Insoluble Nitrogen” means nitrogen in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant longer than a reference rapid or quick release product.

“Turf,” “Sod,” or “Lawn” means a piece of grass-covered soil held together by the roots of the grass.

#### **4. APPLICABILITY**

This Ordinance shall be applicable to and shall regulate any and all Applicators of Fertilizer and areas of application of Fertilizer within the area of (MUNICIPALITY / COUNTY), unless such Applicator is specifically exempted by the terms of this Ordinance from the regulatory provisions of this Ordinance. This Ordinance shall be prospective only, and shall not impair any existing contracts. If addressed by the legislature, local government can adopt additional or more stringent provisions to the model ordinance provided the local government can demonstrate they meet at least one of the following criteria:

- They have verified impaired waters and are facing existing or possible TMDL requirements (under state and federal laws); or
- They have verified harm to human health or harm to the environment that warrants additional consumer fertilizer requirements; or
- That they will improve water quality or prevent future impacts of consumer fertilizers on the environment.

**[Guidance:** Florida Statutes 125.568(3), 166.048(3), and 373.185(3) provided that a deed restriction or covenant entered after October 1, 2001, or local government ordinance, may not prohibit any property owner from implementing Xeriscape or Florida-friendly landscape practices on his or her land. Any restrictions created after this date are void.]

## **5. TIMING OF FERTILIZER APPLICATION**

No Applicator shall apply Fertilizers containing nitrogen and/or phosphorus to Turf and/or Landscape Plants during the Prohibited Application Period.

## **6. FERTILIZER CONTENT AND APPLICATION RATES**

(a) Fertilizers Applied to Turf and/or Landscape Plants within (MUNICIPALITY / COUNTY) shall be formulated and applied in accordance with requirements and directions provided by Rule 5E-1.003(2), Florida Administrative Code, *Labeling Requirements For Urban Turf Fertilizers*.

(b) Fertilizers shall be applied to Turf and/or Landscape Plants at the lowest rate necessary. Nitrogen shall not be applied at an application rate greater than 0.7 lbs of readily available nitrogen per 1000 ft<sup>2</sup> at any one time based on the soluble fraction of formulated fertilizer, with no more than 1 lb total N per 1000 ft<sup>2</sup> to be applied at any one time and not to exceed the annual nitrogen recommendations in the Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida, set forth below:

### Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida

#### Nitrogen recommendations

(lbs N / 1000 ft<sup>2</sup> / year)\*

Species	North	Central	South
Bahia grass	2-3	2-4	2-4
Bermuda grass	3-5	4-6	5-7
Centipede grass	1-2	2-3	2-3
St. Augustine grass	2-4	2-5	4-6
Zoysiagrass	3-5	3-6	4-6

\*North Florida is north of Ocala. Central Florida is defined as south of Ocala to a line extending from Vero Beach to Tampa. South Florida includes the remaining southern portion of the state.

(c) For new turf or landscape plants that are being installed or established, a one-time use of starter fertilizer as described in Rule 5E-1.003 shall be allowed at an application rate not to exceed 1.0 lb of P<sub>2</sub>O<sub>5</sub>/1,000 ft<sup>2</sup>.

(d) No phosphorus Fertilizer shall be Applied to existing Turf and/or Landscape Plants within (MUNICIPALITY / COUNTY) at application rates which exceed 0.25 lbs. P<sub>2</sub>O<sub>5</sub>/1,000 ft<sup>2</sup> per application nor exceed 0.50 lbs. P<sub>2</sub>O<sub>5</sub>/1,000 ft<sup>2</sup> per year,



(e) Nitrogen or phosphorus Fertilizer may not be applied to turf or landscape plants except as provided above unless *a soil or tissue deficiency has been verified by an approved test.* **[Additional Guidance:** *Soil and tissue tests for phosphorus are normally done by UF/IFAS or another accredited laboratory. FDEP has sponsored research (ca. 2007-2008) to compare several retail home test kits to IFAS extension lab results for a wide variety of Florida soils. This may allow more convenient testing by homeowners, although enforcement may be more difficult without written test results.]*

## **7. IMPERVIOUS SURFACES**

Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces. Any Fertilizer applied, spilled, or deposited, either intentionally or accidentally, on any impervious surface shall be immediately and completely removed to the greatest extent practicable. Fertilizer released on an impervious surface must be immediately contained and either legally applied to Turf or any other legal site, or returned to the original or other appropriate container. In no case shall Fertilizer be washed, swept, or blown off impervious surfaces into stormwater drains, ditches, conveyances, or water bodies.

## **8. FERTILIZER FREE ZONES**

Fertilizer shall not be applied within ten (10) feet, or three (3) feet if a deflector shield or drop spreader is used, of any pond, stream, water course, lake, canal, or wetland as defined by the Florida Department of Environmental Protection (Chapter 62-340, Florida Administrative Code) or from the top of a seawall. If more stringent (MUNICIPALITY / COUNTY) Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. Newly planted Turf and/or Landscape Plants may be fertilized in this Zone only for the first sixty (60) day establishment period.

## **9. LOW MAINTENANCE ZONES**

A voluntary six (6) foot low maintenance zone is strongly recommended, but not mandated, from any pond, stream, water course, lake, wetland or from the top of a seawall. A swale/berm system is recommended for installation at the landward edge of this low maintenance zone to capture and filter runoff. If more stringent (MUNICIPALITY / COUNTY) Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. No mowed or cut vegetative material shall be deposited or left remaining in this zone or deposited in the water. Care should be taken to prevent the over-spray of aquatic weed products in this zone. **[Guidance:** *Care must be taken to ensure erosion of the surface soil does not occur. Excessive erosion may be a greater pollution hazard than occasional proper applications of fertilizer.]*

## **10. MODE OF APPLICATION**

Spreader deflector shields are required when Fertilizing via rotary spreaders. Deflectors must be positioned such that Fertilizer granules are deflected away from all impervious surfaces, fertilizer-free zones and water bodies, including wetlands.

## **11. MANAGEMENT OF GRASS CLIPPINGS AND VEGETATIVE MATTER**

In no case shall grass clippings, vegetative material, and/or vegetative debris either intentionally or accidentally, be washed, swept, or blown off into stormwater drains, ditches, conveyances, water bodies, wetlands, or sidewalks or roadways.

## **12. EXEMPTIONS**

The provisions set forth above in this Ordinance shall not apply to:

(a) bona fide farm operations as defined in the Florida Right to Farm Act, Section 823.14, Florida Statutes, provided that fertilizers are applied in accordance with the appropriate Best Management Practices Manual adopted by the Florida Department of Agriculture and Consumer Services, Office of Agricultural Water Policy for the crop in question.

(b) other properties not subject to or covered under the Florida Right to Farm Act that have Pastures used for grazing livestock provided that fertilizers are applied in accordance with the appropriate Best Management Practices Manual adopted by the Florida Department of Agriculture and Consumer Services, Office of Agricultural Water Policy for the crop in question.

## **13. TRAINING**

(a) All Applicators of Fertilizer within the unincorporated area of (MUNICIPALITY / COUNTY), other than private homeowners on their own property, shall abide by and successfully complete an appropriate DACS Chapter 482, F.S. certification (i.e., the new limited commercial fertilizer applicator certification), providing training and continuing education requirements in minimizing nitrogen leaching and phosphorus runoff from fertilizer applications.

(b) Non-commercial applicators not otherwise required to be certified are required to follow the recommendations of the University of Florida IFAS *Florida Yards and Neighborhoods* program when applying fertilizers.

(c) A local government may establish a certification/education program for the application of these consumer fertilizers indicating the completion of an education program for anyone not otherwise certified by existing programs consistent with the ordinance and the DACS urban turf rule.

#### **14. LICENSING OF COMMERCIAL APPLICATORS**

(a) All Commercial Applicators of Fertilizer within the unincorporated area of (MUNICIPALITY / COUNTY), shall abide by and successfully complete an appropriate DACS Chapter 482, F.S. certification (i.e., the new limited commercial fertilizer applicator certification), providing training and continuing education requirements in minimizing nitrogen leaching and phosphorus runoff from fertilizer applications prior to obtaining a (MUNICIPALITY / COUNTY) Local Business Tax Certificate for any category of occupation which may apply any Fertilizer to Turf and/or Landscape Plants. Commercial Fertilizer Applicators shall provide proof of completion of an approved training program to the (MUNICIPALITY / COUNTY) Tax Collector's office within 180 days of the effective date of this ordinance.

(b) All businesses applying fertilizer to Turf and/or Landscape Plants (including but not limited to residential lawns, golf courses, commercial properties, and multi-family and condominium properties) must ensure that at least one employee has an appropriate DACS Chapter 482, F. S. certification (i.e., the limited commercial fertilizer applicator certification), prior to the business owner obtaining a Local Business Tax Certificate. Owners for any category of occupation which may apply any fertilizer to Turf and/or Landscape Plants shall provide proof of certification to the (Municipality/ County) Tax Collector's Office.

(c) Non-commercial applicators not otherwise required to be certified are required to follow the recommendations of the University of Florida IFAS *Florida Yards and Neighborhoods* program when applying fertilizers.

## **APPENDIX # 5**

### **UF-IFAS CONSUMER FERTILIZER RESEARCH PROJECTS**

1. Quantify run-off and develop models of fertilizer runoff from buffer zone turfgrass and landscape areas
2. Impact of withholding fertilizer for various periods during active growth of turfgrasses
3. Effect of zero nitrogen and phosphorous on turfgrass and landscape plants
4. Determine the impact of construction related soil compaction and use of subsoil on landscape fertilizer runoff
5. Compare the nutrient loss (leaching) from turfgrasses and landscape plants/ground covers in newly planted and established landscapes
6. Determine the relationship of landscape fertilization to the occurrence of red tide
7. Developing a seasonal fertilization program for turfgrass and landscape plants that minimize nutrient leaching and runoff
8. Develop model landscape designs for communities and developments that minimizes non-point source runoff
9. Evaluate the reduction of fertilizer for lawns and landscapes by use of reclaimed water
10. Conduct research surveys and focus groups to determine consumer fertilizer practices in Florida and to document changes in consumer fertilization practices following Florida Friendly Landscape education

## APPENDIX #6

### UF-IFAS PROPOSED COMMUNICATIONS CAMPAIGN

#### Phase #1 – \$250,000

The UF/IFAS Center for Landscape Conservation and Ecology Information Office could provide the following in support of the Fertilizer Task Force recommendations from May 2008 to May 2009.

- \$150,000      Underwriting *Gardening in a Minute* radio program for statewide coverage
- Provides Florida-friendly information in a short, fun format
  - Corresponding website providing much more extensive scientifically-based information
- \$20,000      Radio PSAs and Press Releases
- 20 region-specific PSAs
    - PSA development: researching topic, writing script, recording show, editing show, uploading to website, placement with radio stations
  - Press releases to secure media publicity
    - Press release development: researching, writing, editing, disseminating
- \$30,000:      Creating an editable website with an external web development firm
- Coordinating development of an interactive and informative site
  - Content development
- \$50,000      Fertilizer Tips Fact Sheets
- 10 Fact Sheets
  - Fact sheet development: researching topic, editing photos, writing content, formatting for the web and print, uploading to the website, printing and distribution
  - Cross promotion and placement with
    - Water Management Districts
    - Utility Companies
    - Regional Planning Boards
    - Extension Offices

#### Phase #2 – \$500,000

The UF/IFAS Center for Landscape Conservation and Ecology Information Office could provide the following in support of the Fertilizer Task Force recommendations from May 2008 to October 2009.

\$250,000      Phase #1

- \$125,000      Print advertisements
- advertisements
  - Print advertising campaign in major metro markets
  - Print advertisement development: region-specific content, design and layout, print-ready, placement, formatting and uploading to website

- \$125,000      Video PSAs
- 25 videos
  - Video development: researching topic, scrip writing, videotaping, editing, graphics, credits, music and uploading materials to website

**Phase #3 – \$1,000,000**

The UF/IFAS Center for Landscape Conservation and Ecology Information Office could provide the following in support of the Fertilizer Task Force recommendations from May 2008 to December 2009.

- \$500,000      Phase #2

- \$500,000      Public and Media Relations Campaign with an external public relations agency
- Coordination with external public relations agency specializing in this area. The PR agency would provide
    - Media relations
    - Media buying and placement (print and video) for Cable and network TV, commercial radio, newspapers and magazines
    - Cross promotions among industries
    - News feature story and photo development

**APPENDIX # 7**  
**CONSUMER FERTILIZER TASK FORCE**  
**SUBCOMMITTEE ON FUTURE RESEARCH**

(Appointed October 11, 2007)

The Florida Consumer Fertilizer Task Force's mission is to "develop and deliver a package of consensus recommendations to the Florida Legislature designed to ensure that the education and regulation for the proper use of consumer fertilizers is **informed by best available science** and is uniform, subject to variations necessary to meet local state and federal water quality standards. The Task Force will recommend statewide guidelines for management strategies (e.g. nonagricultural fertilizer use rates, formulations, and application), **based on the best available science** as well as model ordinances for municipalities and counties."

The Subcommittee on Future Research, Chaired by Task Force member Dr. Peter Barile, will bring back to the Task Force for consideration at its November 14 meeting, a draft set of recommendations regarding needed future research that will:

- Clarify what is the existing best available scientific research related to the Task Force's charge and mission; and
- Clarify what relevant research is currently being conducted and/or is funded to be conducted in the near future; and
- Clarify, and if possible, prioritize what additional scientific research may be needed in the future and what level of resources would be required to conduct that research and provide the results to inform future policy decisions regarding the regulation and education for the proper use of consumer fertilizers.

Dr. Peter Barile, Task Force member will chair and convene the Subcommittee composed of expert advisors from DEP, DOH, WMDs, IFAS and Industry including:

- Eric Livingston, Bureau Chief, Watershed Management, Division of Water Resource Management, DEP, [eric.livingston@dep.state.fl.us](mailto:eric.livingston@dep.state.fl.us), 850-245 8430
- Steve Kelley, Scotts, [steven.kelly@scotts.com](mailto:steven.kelly@scotts.com) 407-889-4200
- Dr. Ed Lowe, SJWMD, Director, Division of Environmental Services, [elowe@sjrwmd.com](mailto:elowe@sjrwmd.com), 386-329-4582
- Eberhard Roeder, DOH, ([Eberhard\\_Roeder@doh.state.fl.us](mailto:Eberhard_Roeder@doh.state.fl.us))
- Dr. Laurie Trenholm, IFAS; <mailto:Treletr@ufl.edu>; Associate Professor, Environmental Horticulture University of Florida P.O. Box 110675 Gainesville, FL 32611 352-392-1831, ext. 374 352-538-0788 mobile 352-392-1413 fax



## **APPENDIX # 8**


### **TASK FORCE PROCESS OVERVIEW AND MEETING SCHEDULE**

The Florida Consumer Fertilizer Task Force (Task Force) unanimously adopted consensus procedures for developing and reaching agreement on its recommendations to the Legislature. The procedure provided, “General consensus is a participatory process whereby, on matters of substance, the members strive for agreements which all of the members can accept, support, live with or agree not to oppose. In instances where, after vigorously exploring possible ways to enhance the members’ support for the final decision on a recommendation, and the Task Force finds that 100% acceptance or support is not achievable, final decisions will require at least 75% favorable vote of all members present and voting. This super majority decision rule underscores the importance of actively developing consensus throughout the process on substantive issues with the participation of all members and which all can live with. In order to conduct formal business, the Task Force will require a quorum of its appointed members. Seven (7) of Thirteen (13) members must be present to constitute a quorum.

The Task Force process included multiple opportunities for public input and comments. Each meeting of the Task Force featured opportunities for public comments.



The Task Force website included an on-line public comment page and periodically forwarded these comments to the Task Force members and posted the public comments received. For a review of these public comments, see: <http://consensus.fsu.edu/Fertilizer-Task Force/survey.html>



**Pubic Comments**

Please submit your comments on one or more of the areas covered by the task force.

**Instructions**

- Click the submit button at the bottom of this page when you have completed your responses.
- Please keep your comments concise. Comments are limited to 3000 characters (about two typed pages). If you feel you need to say more, then send us an e-mail to one of the address on the main page for this process.
- Do not use the return key or we will receive your responses before you have finished.

1. Statewide Guidelines for Use (use rates, formulations, and applications)  
Developing Improved Standards

Florida Department of Agriculture and Consumer Services

### Consumer Fertilizer Task Force

<a href="#">Main Page</a>	<a href="#">Meetings</a>	<a href="#">Resources</a>	<a href="#">Workplan</a>	<a href="#">Legislation and Rules</a>	<a href="#">Surveys &amp; Comments</a>	<a href="#">Science Subcommittee</a>
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**Meeting VI**  
January 10 - 11, 2008  
Tallahassee, FL

**Note: This is a change from an earlier meeting location.**

**Homewood Suites By Hilton**  
2987 Apalachee Parkway  
Tallahassee, FL  
850-488-3731

The Task Force summaries, presentations and briefings, resource documents and studies, and public comments were posted regularly on the Task Force's website.

In both the 5<sup>th</sup> and 6<sup>th</sup> meetings time was set aside on the Task Force meeting agendas to review the many public comments received and determine if these contained new ideas, suggestions or concerns that the Task Force should consider as it refined its recommendations.

The Task Force met six times between September, 2006 and January, 2007 (*see meeting schedule below*). The Task Force meeting summaries can be found at: <http://consensus.fsu.edu/Fertilizer-Task-Force/index.html>

## **TASK FORCE MEETING SCHEDULE**

<b>DATES</b>	<b>ACTIVITIES</b>
July 2007	Appointment of Florida Consumer Fertilizer Task Force
September 6, 2007	Task Force Meeting #1—Organizational: mission, visioning, project scoping, and identification of issues <i>Sarasota</i>
October 11, 2007	Task Force Meeting #2 <i>Gainesville</i>
November 2, 2007	Task Force Meeting #3 <i>West Palm Beach</i>
November 14, 2007	Task Force Meeting #4—Initial Draft Recommendations Public Workshop—Round One (Following Task Force Meeting) <i>Tallahassee</i>
December 17, 2007	Task Force Meeting #5—Review of Public Comments Public Workshop—Round Two (Following Task Force Meeting) <i>Apopka</i>
January 10 - 11, 2008	Task Force Meeting #6—Adoption of Final Package of Recommendations <i>Tallahassee</i>
January 15, 2008	Delivery of Final Recommendations to DACS and Florida Legislature

## Basin Board Education Committee Report

The BBEC meeting was held at the Tampa Service Office on March 11, 2008.

- Mac Carraway, from the Manasota Basin Board, was reelected vice chair of the BBEC.
- Chair Maritza Rovira-Forino introduced new Water Conservation Hotel And Motel Program (Water CHAMP) Coordinator Robin Grantham, reminding BBEC members that CHAMP has 357 participants, representing 39 percent of all the hotels and 57 percent of all available rooms in the District.
- Melissa Roe unveiled the District's new Program for Restaurant Outreach (Water PRO). The program, which is an extension of Water CHAMP, will promote water conservation in restaurants. A brochure has been created to promote the program and includes information about table tents, coasters, placemats and other materials promoting water conservation. The CHAMP coordinator will promote the program through the Florida Restaurant and Lodging Association as well as through direct mail and site visits to association members and independent restaurants. Materials will be free to restaurants and available for ordering online.
- Beth Putnam reviewed some of the highlights of the District's education efforts in FY2007:
  - The FY2007 media messaging campaign promoted Florida-friendly landscaping and resulted in 115 million impressions, representing a 10 percent increase over FY2006. In addition, there was a 274 percent increase in public education materials ordered during the two months of the concentrated campaign (March/April).
  - Water CHAMP participation increased by 37 percent in FY2007, potentially promoting wise use of water to 8 million visitors. In addition, 13 CHAMP properties have been certified as DEP Green Lodges, with 49 others in the application process.
  - Nearly 3 million people were educated through 280 water resources education projects ranging from school and community education grants, to field trips and workshops, to exhibits and special events.
  - Landscape education added a regional builder/developer specialist, resulting in more partnerships with builder associations. Homeowner association outreach was responsible for large gains in water conservation, with one townhouse community saving more than 2.4 million gallons of water in one year. Staff also worked with the green industry and the University of Florida to create a certification program for Florida-friendly maintenance professionals.
  - Spanish materials created in FY2007 include a web page, print ads, the District's first Spanish TV ad and several publications. A committee of Spanish-speaking internal staff provides guidance and review.
  - Watershed awareness weeks in both the Peace River and the Hillsborough River watersheds raised awareness and gained commitment for watershed protection among the public and local governments.
  - With online ordering and increased promotion of materials, more than 1 million brochures, newsletters and other publications were distributed.
  - During FY2007, 70 teachers attended groundwater institutes in Crystal River, Sarasota and Tampa Bay for in-depth, site-specific information about local water

resources. A similar institute was held for the Peace River basin teachers in FY2006 in Arcadia.

- Focus groups and surveys provide information that helps staff design education programs that are more effective in achieving behavior change. Several examples of focus groups, surveys and other methods of research were among the significant achievements of FY2007. The results of this research will guide future program development.
- Dorian Morgan demonstrated how focus groups are conducted and presented examples of what information has been gathered from focus groups and how that information has been used to help design survey questions, advertisements and programs.
- Michael Molligan gave an update on the District's Drought Communications Plan, including media messages that promote Florida-friendly landscaping, efficient irrigation and water conservation. The spring campaign also includes Reduce Your Use billboards and print ads. Spanish versions of the print, radio and TV messages are also part of the campaign.
- The Communications Department received 39 FY2009 cooperative funding applications for educational projects requesting \$2.4 million.
- The BBEC discussed a water conservation license plate. After considering the costs and complexity of the process, the BBEC agreed that the chair should send a letter to DEP requesting they consider spearheading the efforts of sponsoring a license plate. Revenues would be used for water conservation education. The chair will seek concurrence at the next Governing Board meeting.
- The BBEC's next meeting will be Thursday, July 10, 2008, in the Tampa Service Office.

**Southwest Florida Water Management District  
Peace River Basin  
Budget Progress Report  
Five Months Ended February 29, 2008**

Projects	Adopted FY2008 Budget	Prior Year Encum- brances	Budget Transfers/ Amendment	Modified FY2008 Budget	Encum- bered To Date	Expended To Date	Remaining Balance
<b>On-Going Activities</b>							
Z010	\$25,385	\$0	\$0	\$25,385	\$0	\$8,633	\$16,752
Z030	5,993	0	0	5,993	0	2,002	3,991
Z050	12,087	0	0	12,087	0	2,612	9,475
Z060	32,415	0	0	32,415	0	11,257	21,158
Z074	23,000	0	0	23,000	0	12,037	10,963
Z090	61,178	0	0	61,178	0	18,137	43,041
Z300	62,497	0	0	62,497	0	24,031	38,466
Z500	98,759	0	8,535	107,294	0	17,624	89,670
Z600	7,545	0	0	7,545	0	0	7,545
Z700	13,770	0	0	13,770	0	2,844	10,926
<b>Total On-Going Activities</b>	<b>\$342,629</b>	<b>\$0</b>	<b>\$8,535</b>	<b>\$351,164</b>	<b>\$0</b>	<b>\$99,177</b>	<b>\$251,987</b>
<b>Property Appraiser &amp; Tax Collector Commissions</b>							
Z910	\$438,832	\$0	\$0	\$438,832	\$0	\$238,278	\$200,554
<b>Total Property Appraiser &amp; Tax Collector Commissions</b>	<b>\$438,832</b>	<b>\$0</b>	<b>\$0</b>	<b>\$438,832</b>	<b>\$0</b>	<b>\$238,278</b>	<b>\$200,554</b>
<b>Reserves</b>							
Z930	\$500,000	\$0	\$0	\$500,000	\$0	\$0	\$500,000
<b>Total Reserves</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500,000</b>
<b>Save Our Rivers (SOR) Reimbursable Projects</b>							
S001	\$72,064	\$11,852	\$0	\$83,916	\$11,852	\$9,414	\$62,650
S017	81,055	24,125	0	105,180	31,265	14,745	59,170
S029	17,454	12,806	0	30,260	12,806	13	17,441
S030	106,860	709	0	107,569	7,920	33,694	65,955
S036	3,093	0	0	3,093	0	208	2,885
S040	135,011	1,218	0	136,229	33,776	17,036	85,417
S051	2,540	0	0	2,540	0	402	2,138
S054	288,537	33,370	0	321,907	108,950	54,120	158,837
S099	15,417	0	0	15,417	5,427	0	9,990
SA01	336,058	140,000	0	476,058	140,000	555	335,503
SA54	1,352	843,750	0	845,102	421,875	422,343	884
SB40	0	118,500	0	118,500	118,500	350	(350)

**Southwest Florida Water Management District  
Peace River Basin  
Budget Progress Report  
Five Months Ended February 29, 2008**

Projects	Adopted FY2008 Budget	Prior Year Encum- brances	Budget Transfers/ Amendment	Modified FY2008 Budget	Encum- bered To Date	Expended To Date	Remaining Balance
SB54	0	40,000	0	40,000	40,000	0	0
<b>Total Save Our Rivers (SOR) Reimbursable Projects</b>	<b>\$1,059,441</b>	<b>\$1,226,330</b>	<b>\$0</b>	<b>\$2,285,771</b>	<b>\$932,371</b>	<b>\$552,880</b>	<b>\$800,520</b>
<b>Surface Water Improvement &amp; Management (SWIM) Projects</b>							
W032							
W033	\$539	\$0	\$0	\$539	\$539	\$0	\$0
W036	27,331	23,990	0	51,321	51,321	0	0
W051	127,134	0	0	127,134	127,134	0	0
W056	3,151	1,696	0	4,847	4,847	0	0
W057	16,399	11,086	0	27,485	27,485	0	0
W0511	11,037	0	0	11,037	11,037	0	0
W0521	105,431	278,891	0	384,322	384,322	0	0
W0526	17,820	8,516	0	26,336	26,336	0	0
W0527	44,968	113,401	0	158,369	158,369	0	0
W0547	28,458	0	0	28,458	28,458	0	0
W0553	12,766	7,250	0	20,016	20,016	0	0
W0554	105,576	150,250	0	255,826	255,826	0	0
W0555	995	3,750	0	4,745	4,745	0	0
W0556	135	0	0	135	135	0	0
W0557	17,602	0	0	17,602	17,602	0	0
W0776	10,732	0	0	10,732	10,732	0	0
W0781	5,210	0	0	5,210	5,210	0	0
W0794	136,728	32,500	0	169,228	169,228	0	0
W0795	2,481	15,098	0	17,579	17,579	0	0
W0796	1,572	0	0	1,572	1,572	0	0
	7,001	62,500	0	69,501	69,501	0	0
<b>Total Surface Water Improvement &amp; Management (SWIM) Projects</b>	<b>\$683,066</b>	<b>\$708,928</b>	<b>\$0</b>	<b>\$1,391,994</b>	<b>\$1,391,994</b>	<b>\$0</b>	<b>\$0</b>
<b>Basin Initiatives</b>							
B063	425,600	0	0	425,600	425,600	0	0
B084	0	50,000	0	50,000	35,000	15,000	0
B099	159,100	18,007	0	177,107	0	28,151	148,956
B113	13,694	0	0	13,694	12,500	0	1,194
B131	16,849	0	0	16,849	1,364	7,806	7,679
B136	6,250	5,188	0	11,438	10,188	1,250	0



**Southwest Florida Water Management District  
Peace River Basin  
Budget Progress Report  
Five Months Ended February 29, 2008**

Projects	Adopted FY2008 Budget	Prior Year Encum- brances	Budget Transfers/ Amendment	Modified FY2008 Budget	Encum- bered To Date	Expended To Date	Remaining Balance
B151 Peace River CWM	4,292	0	0	4,292	0	1,475	2,817
B153 Lake Wales Ridge CWM	4,292	0	0	4,292	0	1,364	2,928
B163 Peace R. - Historical Land Cover Mapping	6,285	43,520	0	49,805	43,520	1,501	4,784
B184 FL 2091 Hydrologic Charact of Charlie Ck Wtrshd	2,379	0	0	2,379	0	265	2,114
B196 Ridge Lakes Stormwater Improvement - BMP Eval	1,120	69,324	0	70,444	69,324	1,712	(592)
B198 Lake Jackson MFL Recovery Feasibility Study	15,112	340,000	0	355,112	340,000	3,174	11,938
B199 Water Use During Prod of Select Tropical Foliage	0	29,618	0	29,618	29,618	0	0
B203 Cold/Chill Prot of Tropical Plants in Nursery	0	65,000	0	65,000	65,000	0	0
B206 Maintenance of Watershed Parameters & Models	143,765	131,920	0	275,685	168,615	11,615	95,455
B217 Ridge Lakes Stormwater Improvement	75,548	363,000	0	438,548	346,168	20,905	71,475
B219 Land Use/Cover Mapping	46,914	9,577	0	56,491	50,837	4,375	1,279
B226 Wtr Budget & Irrig Req for Mature Blueberries	9,563	5,064	0	14,627	5,064	0	9,563
B229 Field Eval of Bhiadwarf for Wtr Use Effic	13,125	9,667	0	22,792	9,667	0	13,125
B238 Crop Coefficients & Wtr Use for Peppers	3,649	3,649	0	7,298	3,649	0	3,649
B239 Deter Wtr Req For Genetically Alt Lantana Camara	9,350	2,114	0	11,464	8,871	2,476	117
B240 Redc Wtr Consp in Poly- Mulched Tomato/Pepper	5,500	2,200	0	7,700	220	0	7,480
B241 Reduction of Wtr Use for Citrus Cold Prot	4,000	1	0	4,001	1	0	4,000
B242 Potential to Use ASR in Avon Park Formation	13,302	4,992	0	18,294	4,992	21	13,281
B243 Long-Term Wtr Budget Anly of Lk Starr	105,948	0	0	105,948	100,000	105	5,843
B244 USGS - Hydrogeology & Qlty of GW in Highlands	24,533	0	0	24,533	20,000	438	4,095
B246 Wtr Conservation/FYN Reg Builder/Dev Specialist	15,786	6,225	0	22,011	2,711	3,610	15,690
B247 Effects of Dev on the Hydrologic Budget in SWUCA	62,579	0	0	62,579	0	0	62,579
B251 National Hydrography Database (NHD)	9,090	0	0	9,090	0	0	9,090
B256 Auto Citrus Irrigation Mgmt to Reduce Wtr Consp	38,500	0	0	38,500	31,570	6,930	0
B257 Reduc Nursery/Landscape Wtr Use Altering Nandina	7,000	0	0	7,000	7,000	0	0
B260 Upper Peace River System - Freshwater MFLs	60,250	0	0	60,250	35,000	0	25,250
B530 Mapping & GIS	44,753	0	0	44,753	0	7,734	37,019
B630 Field Operations	335,029	178,634	0	513,663	173,947	41,880	297,836
B670 Structure Operations	392,181	216,438	0	608,619	242,174	56,249	310,196
G004 Aquatic Plant Management	17,531	0	0	17,531	0	1,984	15,547
P259 Youth Water Resources Education	209,556	174,637	0	384,193	177,680	8,602	197,911
P268 Public Education	181,635	44,854	0	226,489	137,760	24,964	63,765
<b>Total Basin Initiatives</b>	<b>\$2,484,060</b>	<b>\$1,773,631</b>	<b>\$0</b>	<b>\$4,257,691</b>	<b>\$2,558,042</b>	<b>\$253,586</b>	<b>\$1,446,063</b>

**Southwest Florida Water Management District  
Peace River Basin  
Budget Progress Report  
Five Months Ended February 29, 2008**

Projects	Adopted FY2008 Budget	Prior Year Encum- brances	Budget Transfers/ Amendment	Modified FY2008 Budget	Encum- bered To Date	Expended To Date	Remaining Balance
<b>Water Supply &amp; Resource Development</b>							
F027	0	8,197	0	8,197	4,673	0	3,524
F032	965,104	2,168,803	500,000	3,633,907	3,633,907	0	0
F033	507,154	1,246,685	0	1,753,839	2,740,873	(1,534,433)	547,399
F035	0	246,438	0	246,438	246,438	0	0
H008	713,501	211,976	0	925,477	177,122	12,433	735,922
H009	0	625,000	0	625,000	625,000	0	0
H014	665,786	13,779,218	0	14,445,004	13,683,320	105,982	655,702
H015	28,549	239,377	0	267,926	233,893	8,107	25,926
H017	332,218	697,363	(105,651)	923,930	647,458	47,418	229,054
H024	64,135	347,514	0	411,649	347,514	578	63,557
H027	656,273	535,191	0	1,191,464	535,191	451	655,822
H028	0	270,938	0	270,938	270,938	0	0
H034	447,600	851,309	0	1,298,909	635,176	59,173	604,560
H044	2,719	0	0	2,719	0	0	2,719
H048	103,822	83,216	0	187,038	69,051	14,966	103,021
H051	339,501	202,500	(2,001)	540,000	202,500	0	337,500
H052	339,501	182,250	(2,001)	519,750	182,250	0	337,500
H057	0	0	0	0	0	30	(30)
H060	4,533	142,015	(4,533)	142,015	142,015	5	(5)
H062	146,381	218,953	0	365,334	218,953	1,448	144,933
H063	151,510	33,750	0	185,260	33,750	211	151,299
H068	125,000	0	0	125,000	0	0	125,000
H069	1,002,189	0	0	1,002,189	0	66	1,002,123
H100	499,109	1,494,583	(500,000)	1,493,692	993,692	0	500,000
H509	0	112,500	56,250	168,750	5,468	147,720	15,562
H512	0	334,835	0	334,835	334,835	0	0
H521	0	0	2,257	2,257	2,257	0	0
H522	0	119,926	0	119,926	119,926	0	0
H523	0	1,114	0	1,114	1,114	0	0
H525	0	0	37,196	37,196	37,196	0	0
H527	0	117,235	0	117,235	117,235	0	0
H529	0	22,583	0	22,583	22,583	0	0

**Southwest Florida Water Management District  
Peace River Basin  
Budget Progress Report  
Five Months Ended February 29, 2008**

Projects	Adopted FY2008 Budget	Prior Year Encum- brances	Budget Transfers/ Amendment	Modified FY2008 Budget	Encum- bered To Date	Expended To Date	Remaining Balance
H530	0	7,085	0	7,085	7,085	0	0
H534	0	32,755	0	32,755	32,755	0	0
H535	0	201,588	0	201,588	201,588	0	0
H539	0	234,260	0	234,260	66,096	168,164	0
H543	0	0	3,246	3,246	3,246	0	0
H548	0	0	6,702	6,702	6,701	0	1
<b>Total Water Supply &amp; Resource Development</b>	<b>\$7,094,585</b>	<b>\$24,769,157</b>	<b>\$(8,535)</b>	<b>\$31,855,207</b>	<b>\$26,581,799</b>	<b>\$(967,681)</b>	<b>\$6,241,089</b>
<b>Cooperative Funding</b>							
K075 Polk Co	2,379	1	0	2,380	0	237	2,143
K165 Highlands Co	3,199	1	0	3,200	1	1,992	1,207
K280 Charlotte Co	502,335	276,935	0	779,270	776,935	631	1,704
K300 Polk Co	654	0	0	654	0	0	654
K459 Charlotte Co SB	1,943	259,800	0	261,743	259,800	68	1,875
K725 Polk Co	40,069	0	0	40,069	37,725	594	1,750
K734 Lake Wales	0	1,945	0	1,945	1,945	182	(182)
L028 Englewood WD	1,753	93,075	0	94,828	93,075	102	1,651
L151 Sebring	30,008	68,770	0	98,778	35,570	34,740	28,468
L152 Avon Park	105,008	74,110	0	179,118	46,510	29,469	103,139
L153 Lake Placid	1,166	822,574	0	823,740	822,574	108	1,058
L159 Polk Co	0	42,406	0	42,406	42,406	41	(41)
L206 Char/Sara/Manatee	20,492	0	0	20,492	17,375	710	2,407
L215 Charlotte Co BCC	244,710	394,073	0	638,783	394,073	249	244,461
L309 Sebring	1,220	1	0	1,221	1	686	534
L310 Avon Park	1,328	1	0	1,329	1	686	642
L314 Highlands Co	10,694	447,628	0	458,322	447,628	1,016	9,678
L316 Polk Co Utilities	0	0	0	0	0	524	(524)
L324 Lakeland	476,262	374,617	0	850,879	845,480	1,599	3,800
L352 Frostproof/Polk Co	3,262	1,439,000	0	1,442,262	1,439,000	613	2,649
L353 Frostproof/Polk	1,029	500,000	0	501,029	500,000	141	888
L473 Highlands Co	356,342	100,000	0	456,342	100,000	48	356,294
L475 Polk Co	3,268	917,352	0	920,620	917,352	186	3,082
L479 Lakeland	2,057	189,216	0	191,273	189,216	385	1,672
L485 Charlotte Co	2,913	396,186	0	399,099	396,186	0	2,913

**Southwest Florida Water Management District  
Peace River Basin  
Budget Progress Report  
Five Months Ended February 29, 2008**

Projects	Adopted FY2008 Budget	Prior Year Encum- brances	Budget Transfers/ Amendment	Modified FY2008 Budget	Encum- bered To Date	Expended To Date	Remaining Balance
L486 Charlotte Co	5,022	321,457	0	326,479	290,495	32,097	3,887
L488 Charlotte Co	0	10,572	0	10,572	10,572	0	0
L553 Dundee	558,090	204,000	0	762,090	204,000	268	557,822
L633 DeSoto Co	228,103	0	0	228,103	0	0	228,103
L640 Punta Gorda	1,166	1	0	1,167	1	745	421
L649 FDEP	28,289	25,000	0	53,289	50,000	130	3,159
L671 Polk Co	5,101	124,997	0	130,098	124,997	1,656	3,445
L672 Polk Co	1,364	53,727	0	55,091	39,725	14,573	793
L673 Polk Co	189,930	301,558	0	491,488	486,558	52	4,878
L674 Polk Co	529,930	473,293	0	1,003,223	998,293	288	4,642
L679 Hardee Co	103,103	100,000	0	203,103	100,000	381	102,722
L680 Polk Co	166,120	100,368	0	266,488	260,368	0	6,120
L693 Child's Museum	21,288	4,797	0	26,085	0	4,969	21,116
L770 Lakeland	565,789	1	0	565,790	562,501	588	2,701
L856 Charlotte Co	52,124	0	0	52,124	50,050	594	1,480
L897 Highlands Co	256,567	0	0	256,567	0	1,338	255,229
L900 Polk Co	14,909	0	0	14,909	13,737	872	300
L902 Lake Wales	152,126	0	0	152,126	150,000	302	1,824
L903 Avon Park	163,200	0	0	163,200	0	401	162,799
L912 Dundee	62,948	0	0	62,948	0	1,361	61,587
L914 Lakeland	211,061	0	0	211,061	210,000	175	886
L915 Lakeland	16,761	0	0	16,761	15,750	113	898
L917 Polk Co	10,198	0	0	10,198	7,400	0	2,798
L918 Polk Co	82,984	0	0	82,984	0	241	82,743
P727 Lake Wales	3,268	1,073,918	0	1,077,186	1,073,918	102	3,166
P729 Polk Co	0	676,150	0	676,150	676,150	0	0
P730 Polk Co	2,379	0	0	2,379	0	0	2,379
<b>Total Cooperative Funding</b>	<b>\$5,243,911</b>	<b>\$9,867,531</b>	<b>\$0</b>	<b>\$15,111,442</b>	<b>\$12,687,369</b>	<b>\$136,253</b>	<b>\$2,287,820</b>
<b>Total Peace River Basin</b>	<b>\$17,846,524</b>	<b>\$38,345,569</b>	<b>\$0</b>	<b>\$56,192,093</b>	<b>\$44,151,575</b>	<b>\$312,493</b>	<b>\$11,728,025</b>

Southwest Florida Water Management District  
 Peace River Basin  
 Multi-Year Project Commitments and Budget Projections  
 March 20, 2008

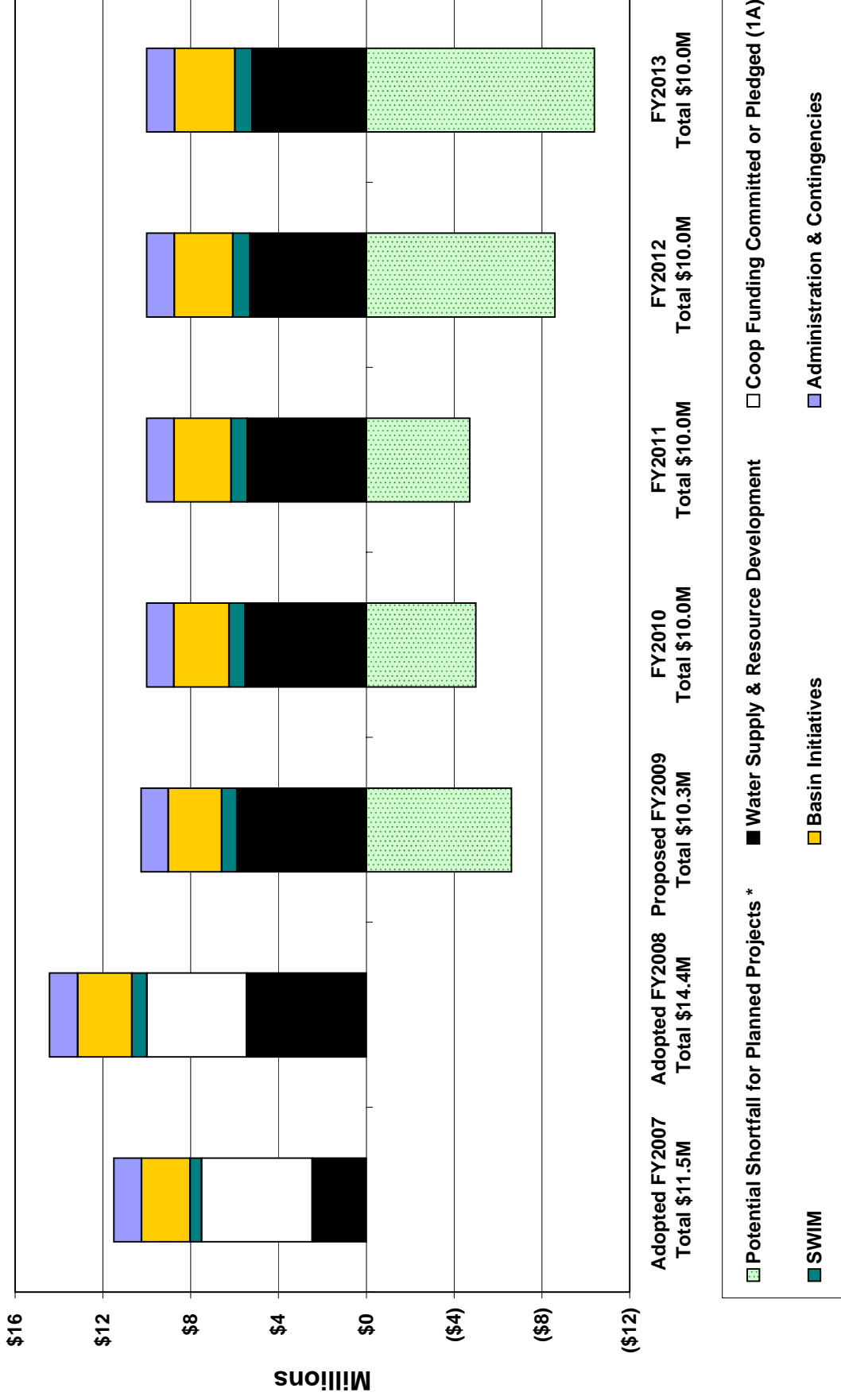
Expenditures	Prior Years	Adopted FY 2007	Adopted FY 2008	Proposed FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Remaining Future Funding	Project Totals
<b>On-Going Activities</b>										
Tax Appr. & Tax Coll. Commissions		321,265	342,629	317,709	327,240	337,057	347,169	357,584		
Contingencies		438,832	438,832	416,890	416,890	416,890	416,890	416,890		
Save Our Rivers (SOR)		500,000	500,000	500,000	500,000	500,000	500,000	500,000		
Surface Water Improvement & Management (SWIM)		610,516	1,059,441	840,522	865,738	891,710	918,461	946,015		
Basin Initiatives		517,735	683,066	702,776	723,859	745,575	767,942	790,980		
<b>Water Supply and Resource Development</b>		<b>2,525,959</b>	<b>2,484,060</b>	<b>2,445,686</b>	<b>2,519,057</b>	<b>2,594,629</b>	<b>2,672,468</b>	<b>2,752,642</b>		
F032 Peace River Regional Reservoir Expansion	\$2,343,481	694,232	965,104	1,143,582	-	-	-	-		\$ 5,146,399
F033 Peace River Facility Expansion	3,561,460	1,256,598	507,154	1,553,491	-	-	-	-	875,000	6,878,703
H008 Lake Hancock Lake Level Modification	557,507	178,115	713,501	169,629	687,500	687,500	687,500	687,500		5,243,752
H009 Lake Hancock Outfall Structure P-11 Modification	625,000	-	-	625,000	-	-	-	-		1,250,000
H014 Lake Hancock Outfall Wetland Treatment System	15,599,276	35,718	665,786	941,185	625,000	-	-	-		17,866,965
H017 Facilitating Agricultural Rsrc Mgmt Sys (FARMS)	4,505,517	600,920	332,218	382,604	-	-	-	-		5,821,259
H024 Upper Peace River Resource Development	364,017	132,953	64,135	63,895	62,500	375,000	375,000	375,000	3,375,000	5,187,500
H027 Charlotte Co Regional Rchd Wtr Expansion	1,426,087	654,516	447,600	547,534	-	-	-	-		2,631,587
H034 Peace Creek Canal Watershed	702,156	112,146	103,822	342,736	375,000	375,000	375,000	375,000	1,500,000	5,147,008
H048 Myakka Rvr Watershed Initiative	-	203,277	103,822	51,192	-	-	-	-		267,160
H051 PR/MRWSA - Reg Integ Loop Sys - Ph 2 Intct	-	339,501	339,501	911,162	1,120,095	470,576	470,576	470,576	2,987,920	6,973,683
H052 PR/MRWSA - Reg Integ Loop Sys - Ph 3 Intct	-	183,803	339,501	1,190,332	1,692,620	2,178,331	1,471,070	1,184,847	1,477,967	9,718,471
H062 CF Industries Aquifer Recharge & Recovery	-	146,381	103,806	103,806	172,063	-	-	-		422,240
H063 PR/MRWSA - Reg Resource Dev Feasibility Study	-	-	151,510	4,429	-	-	-	-		155,939
H069 PR/MRWSA - Regional Loop System Ph 1A	-	289,988	1,002,189	80,806	-	-	-	-		1,082,995
H100 Water Supply and Resource Development Reserves	1,703,704	-	-	-	-	-	-	-		1,993,692
Other Wtr Supply & Wtr Resource Development Projects	-	657,222	659,910	167,886	-	-	-	-		
<b>Future Wtr Sply/Wtr Resource Dev Allocation (7)</b>		<b>5,001,181</b>	<b>7,094,585</b>	<b>8,279,269</b>	<b>9,748,045</b>	<b>10,125,684</b>	<b>13,901,229</b>	<b>15,589,006</b>		
<b>Total Water Supply and Resource Development</b>		<b>5,001,181</b>	<b>7,094,585</b>	<b>8,279,269</b>	<b>9,748,045</b>	<b>10,125,684</b>	<b>13,901,229</b>	<b>15,589,006</b>		
<b>Coop. Funding Pledged</b>										
L151 Sebring WMPlan Sebring (REDI)	161,239	125,749	30,008	7,440	-	-	-	-		324,436
L215 Charlotte Co Rotunda ASR Well Conversion for Reuse Water	104,541	383,272	244,710	435,978	432,500	-	-	-		1,601,001
L473 Highlands Co WMPlan Lake Placid (REDI)	104,814	4,102	356,342	360,933	-	-	-	-		826,191
L553 Dundee Reclaimed Water Use System (REDI)	205,774	3,131	558,090	2,914,000	-	-	-	-		3,680,995
L633 DeSoto Co WMPlan Peace River (REDI)	-	529,363	228,103	3,493	337,500	-	-	-		1,098,459
L672 Polk Co WMPlan Polk County	-	338,569	1,364	149,910	-	-	-	-		489,843
L673 Polk Co Imp. BMPs Lk Belle & Tractor Lk	-	311,924	189,930	2,654	-	-	-	-		504,508
L674 Polk Co Imp. BMPs Saddlabaq Lake	-	529,677	529,930	2,654	-	-	-	-		1,062,261
L679 Hardee Co WMPlan Horse Creek (REDI)	-	104,363	103,103	3,493	-	-	-	-		210,959
L680 Polk Co WMPlan Bartow	-	165,800	166,120	2,654	-	-	-	-		334,574
L693 Water Exhibits-Glazer Childrens Museum of Tampa	-	6,167	21,288	21,472	-	-	-	-		
L902 Lake Wales Imp. BMP's Twin Lakes	-	-	152,126	153,301	-	-	-	-		
L903 Avon Park Imp. BMP's Avon Park Executive Airport	-	-	163,200	164,375	-	-	-	-		
Other Cooperative Funding Projects	-	2,502,117	2,744,314	4,222,357	770,000	-	-	-		
	-	3,559,377	2,499,597	-	-	-	-	-		
<b>Total Cooperative Funding</b>		<b>6,061,494</b>	<b>5,243,911</b>	<b>4,222,357</b>	<b>770,000</b>	<b>-</b>	<b>-</b>	<b>-</b>		
<b>Local Funding - County/City (for projects below funding line) (6)</b>		<b>-</b>	<b>-</b>	<b>161,750</b>	<b>1%</b>	<b>(4,991,960)</b>	<b>(8,592,567)</b>	<b>(10,393,971)</b>		
<b>Potential Future Funding Shortfall</b>		<b>-</b>	<b>-</b>	<b>(6,613,022)</b>	<b>-59%</b>	<b>(4,991,960)</b>	<b>(8,592,567)</b>	<b>(10,393,971)</b>		
<b>Total Expenditures</b>		<b>\$ 15,976,982</b>	<b>\$ 17,846,524</b>	<b>\$ 11,273,937</b>	<b>\$ 10,878,869</b>	<b>\$ 10,904,841</b>	<b>\$ 10,931,592</b>	<b>\$ 10,959,146</b>		
<b>Revenues</b>										
Ad Valorem Taxes										
Balance From Prior Years	(1)	\$ 9,238,659	\$ 9,276,980	\$ 8,813,132	\$ 8,813,131	\$ 8,813,131	\$ 8,813,131	\$ 8,813,131		
Local Funding - County/City	(2) & (3)	1,407,933	3,854,124	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000		
State Funding		942,270	354,900	174,183	-	-	-	-		
Federal Funding		2,927,704	2,001,079	-	-	-	-	-		
SOR Reimbursements	(4)	610,516	1,059,441	246,100	865,738	891,710	918,461	946,015		
Interest on Investments		850,000	1,300,000	840,522	200,000	200,000	200,000	200,000		
<b>Total Revenues</b>		<b>\$ 15,976,982</b>	<b>\$ 17,846,524</b>	<b>\$ 11,273,937</b>	<b>\$ 10,878,869</b>	<b>\$ 10,904,841</b>	<b>\$ 10,931,592</b>	<b>\$ 10,959,146</b>		
Estimated Millage		0.1950	0.1827	0.1827	0.1827	0.1827	0.1827	0.1827		
Income Per 100th Mill		\$ 473,772	\$ 507,771	\$ 482,383	\$ 482,383	\$ 482,383	\$ 482,383	\$ 482,383		
Change in Property Valuations		37.9%	7.2%	-5.0%	0.0%	0.0%	0.0%	0.0%		

Southwest Florida Water Management District  
Peace River Basin  
Multi-Year Project Commitments and Budget Projections  
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Notes/Assumptions

- (1) Proposed budgets have been developed based on ad valorem revenue at 5 percent below FY2008. This is based on the tax reform legislation enacted in 2007 (House Bill 1B) and the constitutional amendment (Amendment 1) that was passed on January 29, 2008, reducing taxable property values. The actual impact of Amendment 1 along with the actual growth in property values and new construction will not be known until July 1 when property values are certified.
- (2) FY2008 Actual Balance from Prior Years was \$5,001,369; \$930,940 additional balance forward from FY2006; \$113,115 excess fees; \$488,202 interest earnings over budget; \$27,349 Ad Valorem revenue over budget; \$149,379 unspent salaries; \$20,746 NWSI reserves lapsed; \$393,750 L633 DeSoto Co Watershed Management Plan withdrawn; \$289,440 H050 PR/MRWSA - Regional Integrated Loop System Ph 1 cancelled; \$1,000,000 L636 Charlotte Co City of Punta Gorda Emergency Interconnect cancelled; \$13,744 B171 Lk Wales Ridge Public Lands Hydrologic Water Quality Restoration completed under budget; \$27,090 B247 Effects of Development on the Hydrologic Budget in SWUCA completed under budget; \$83,266 Lake Fannie Berm Rehabilitation postponed and rebudgeted in FY2008; \$148,077 G-90 structure operations and T1 lines service fee under budget; \$6,675 L491 DCI Reuse Feasibility completed under budget; \$112,945 P730 Polk - WMP/Plan & Imp. BMP's Peace Creek Canal/Wahmeta Drainage System completed under budget; \$16,400 L520 Around the Bend Nature Tours Field Trip Program under budget; \$68,612 Property Appraiser & Tax Collector under budget; \$500,000 unspent contingency reserves; \$405,317 SWIM transfers under budget; and \$206,322 in projected favorable variances.
- (3) FY2009 Balance from Prior Years: \$1,147,245 additional balance forward from FY2007; (\$470,000) projected interest earnings under budget; \$125,000 H068 Hillsborough Co - South/Central Reg Rclm Water cancelled; and \$197,755 other projected favorable variances.
- (4) Historical interest amounts: \$376,093 in FY2003, \$299,516 in FY2004, \$512,911 in FY2005, \$1,399,096 in FY2006, and \$1,338,202 in FY2007.
- (5) Historical changes in property valuations: 8.3% in FY2003, 9.1% in FY2004, (2.9%) in FY2005, 17.0% in FY2006, 37.9% in FY2007, and 7.2% in FY2008.
- (6) Projects reflected on schedule but not currently funded based on existing millage rate and revenue projects as of this date..
- (7) No formal applications received; amounts for FY2009 through FY2013 reflect the planning numbers from the Long-Range Water Supply and Water Resource Development Funding Plan presented to the Basin Board in October 2007.

**Peace River Basin  
Graphical Presentation of Multi-Year Project  
Commitments and Budget Projections  
(includes ad valorem based funding only)  
FY2007 through FY2013**



\* Water Supply and Resource Development reserves of \$1.5 million are available as of February 29, 2008 that could be utilized to reduce future potential funding shortfalls.



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Projects	Rank	Adopted Budget FY2008	Proposed Budget FY2009	Funded By Outside Revenue	Funded By Ad Valorem Based Budget	Millage Rate Requirements	Increase/ (Decrease) From FY2008
<b>On-Going Activities</b>							
Z010		\$25,385	\$25,766	\$0	\$25,766	BF/Interest	\$381
Z030		5,993	13,354	0	13,354	BF/Interest	7,361
Z050		12,087	10,350	0	10,350	BF/Interest	(1,737)
Z060		32,415	34,469	0	34,469	BF/Interest	2,054
Z074		23,000	14,500	0	14,500	BF/Interest	(8,500)
Z090		61,178	57,917	0	57,917	BF/Interest	(3,261)
Z300		62,497	46,253	0	46,253	BF/Interest	(16,244)
Z500		98,759	92,452	0	92,452	BF/Interest	(6,307)
Z600		7,545	8,175	0	8,175	BF/Interest	630
Z700		13,770	14,473	0	14,473	BF/Interest	703
<b>Total On-Going Activities</b>		<b>\$342,629</b>	<b>\$317,709</b>	<b>\$0</b>	<b>\$317,709</b>		<b>(\$24,920)</b>
<b>Property Appraiser &amp; Tax Collector Commissions</b>							
Z910		\$438,832	\$416,890	\$0	\$416,890	BF/Interest	(\$21,942)
<b>Total Property Appraiser &amp; Tax Collector Commissions</b>		<b>\$438,832</b>	<b>\$416,890</b>	<b>\$0</b>	<b>\$416,890</b>		<b>(\$21,942)</b>
<b>Reserves</b>							
Z930		\$500,000	\$500,000	\$0	\$500,000	0.0007	\$0
<b>Total Reserves</b>		<b>\$500,000</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$500,000</b>		<b>\$0</b>
<b>Save Our Rivers (SOR) Reimbursable Projects</b>							
S001		\$72,064	\$90,434	\$90,434	\$0		\$18,370
S017		81,055	69,108	69,108	0		(11,947)
S029		17,454	14,493	14,493	0		(2,961)
S030		106,860	89,725	89,725	0		(17,135)
S036		3,093	3,209	3,209	0		116
S040		135,011	159,733	159,733	0		24,722
S051		2,540	2,078	2,078	0		(462)
S054		288,537	263,547	263,547	0		(24,990)
S099		15,417	24,263	24,263	0		8,846
SA01		336,058	6,689	6,689	0		(329,369)
SA54		1,352	0	0	0		(1,352)
SB54		0	117,243	117,243	0		117,243
<b>Total Save Our Rivers (SOR) Reimbursable Projects</b>		<b>\$1,059,441</b>	<b>\$840,522</b>	<b>\$840,522</b>	<b>\$0</b>		<b>(\$218,919)</b>
<b>Surface Water Improvement &amp; Management (SWIM) Projects</b>							
W032		\$539	\$873	\$0	\$873	0.0007	\$334
W331		27,331	29,431	0	29,431	0.0013	2,100
W436		127,134	128,476	0	128,476	0.0040	1,342

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Projects	Rank	Adopted Budget FY2008	Proposed Budget FY2009	Funded By Outside Revenue	Funded By Ad Valorem Based Budget	Millage Rate Requirements	Increase/ (Decrease) From FY2008
W501		3,151	2,483	0	2,483	0.0041	(668)
W506		16,399	14,776	0	14,776	0.0044	(1,623)
W507		11,037	18,472	0	18,472	0.0047	7,435
W511		105,431	103,955	0	103,955	0.0069	(1,476)
W521		17,820	17,843	0	17,843	0.0073	23
W526		44,968	45,113	0	45,113	0.0082	145
W527		28,458	20,511	0	20,511	0.0086	(7,947)
W547		12,766	13,920	0	13,920	0.0089	1,154
W553		105,576	107,876	0	107,876	0.0112	2,300
W554		995	366	0	366	0.0112	(629)
W555		135	38,316	0	38,316	0.0120	38,181
W556		17,602	3,467	0	3,467	0.0120	(14,135)
W557		10,732	741	0	741	0.0120	(9,991)
W559		0	5,410	0	5,410	0.0122	5,410
W776		5,210	5,672	0	5,672	0.0123	462
W781		136,728	137,758	0	137,758	0.0151	1,030
W794		2,481	2,497	0	2,497	0.0152	16
W795		1,572	0	0	0	0.0152	(1,572)
W796		7,001	4,820	0	4,820	0.0153	(2,181)
<b>Total Surface Water Improvement &amp; Management (SWIM) Projects</b>		<b>\$683,066</b>	<b>\$702,776</b>	<b>\$0</b>	<b>\$702,776</b>		<b>\$19,710</b>
<b>Basin Initiatives</b>							
B063		\$425,600	\$434,900	\$0	\$434,900	0.0243	\$9,300
B099		159,100	158,177	0	158,177	0.0276	(923)
B113		13,694	0	0	0	0.0276	(13,694)
B131		16,849	16,929	0	16,929	0.0279	80
B136		6,250	6,250	0	6,250	0.0281	0
B151		4,292	0	0	0	0.0281	(4,292)
B153		4,292	0	0	0	0.0281	(4,292)
B163		6,285	56,573	0	56,573	0.0292	50,288
B184		2,379	0	0	0	0.0292	(2,379)
B196		1,120	0	0	0	0.0292	(1,120)
B198		15,112	13,048	0	13,048	0.0295	(2,064)
B206		143,765	185,812	12,433	173,379	0.0331	42,047
B217		75,548	103,482	0	103,482	0.0352	27,934
B219		46,914	39,069	0	39,069	0.0361	(7,845)
B226		9,563	9,563	0	9,563	0.0363	0
B229		13,125	13,125	0	13,125	0.0365	0

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Projects	Rank	Adopted Budget FY2008	Proposed Budget FY2009	Funded By Outside Revenue	Funded By Ad Valorem Based Budget	Millage Rate Requirements	Increase/ (Decrease) From FY2008
B238		3,649	3,649	0	3,649	0.0366	0
B239		9,350	9,310	0	9,310	0.0368	(40)
B240		5,500	0	0	0	0.0368	(5,500)
B241		4,000	4,000	0	4,000	0.0369	0
B242		13,302	950	0	950	0.0369	(12,352)
B243		105,948	4,982	0	4,982	0.0370	(100,966)
B244		24,533	24,747	0	24,747	0.0375	214
B246		15,786	14,878	0	14,878	0.0378	(908)
B247		62,579	71,491	0	71,491	0.0393	8,912
B251		9,090	4,702	0	4,702	0.0394	(4,388)
B256		38,500	38,500	0	38,500	0.0402	0
B257		7,000	7,000	0	7,000	0.0403	0
B260		60,250	250	0	250	0.0403	(60,000)
B263		0	9,080	0	9,080	0.0405	9,080
B264		0	28,106	0	28,106	0.0411	28,106
B265		0	5,158	0	5,158	0.0412	5,158
B266		0	7,471	0	7,471	0.0414	7,471
B268		0	26,250	0	26,250	0.0419	26,250
B269		0	1,250	0	1,250	0.0420	1,250
B273		0	9,375	0	9,375	0.0421	9,375
B276		0	200,075	0	200,075	0.0463	200,075
B277		0	10,099	0	10,099	0.0465	10,099
B530		44,753	42,659	0	42,659	0.0474	(2,094)
B630		335,029	267,795	0	267,795	0.0529	(67,234)
B670		392,181	211,798	0	211,798	0.0573	(180,383)
G004		17,531	17,911	0	17,911	0.0577	380
P259		209,556	210,079	0	210,079	0.0621	523
P268		181,635	177,193	0	177,193	0.0657	(4,442)
<b>Total Basin Initiatives</b>		<b>\$2,484,060</b>	<b>\$2,445,686</b>	<b>\$12,433</b>	<b>\$2,433,253</b>		<b>(\$38,374)</b>
<b>Water Supply &amp; Resource Development</b>							
F032		\$965,104	\$1,143,582	\$0	\$1,143,582	0.0894	\$178,478
F033		507,154	1,553,491	0	1,553,491	0.1216	1,046,337
H008		713,501	169,629	0	169,629	0.1252	(543,872)
H009		0	625,000	0	625,000	0.1381	625,000
H014		665,786	941,185	246,100	695,085	0.1525	275,399
H015		28,549	21,695	0	21,695	0.1530	(6,854)
H017		332,218	382,604	0	382,604	0.1609	50,386

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Projects	Rank	Adopted Budget FY2008	Proposed Budget FY2009	Funded By Outside Revenue	Funded By Ad Valorem Based Budget	Millage Rate Requirements	Increase/ (Decrease) From FY2008
H024		64,135	63,895	0	63,895	0.1622	(240)
H027		656,273	547,534	0	547,534	0.1736	(108,739)
H034		447,600	342,736	0	342,736	0.1807	(104,864)
H044		2,719	0	0	0	0.1807	(2,719)
H048		103,822	51,192	0	51,192	0.1817	(52,630)
H051		339,501	911,162	0	911,162	0.2006	571,661
H052		339,501	1,190,332	0	1,190,332	0.2253	850,831
H060		4,533	497	0	497	0.2253	(4,036)
H062		146,381	103,806	0	103,806	0.2275	(42,575)
H063		151,510	4,429	0	4,429	0.2276	(147,081)
H068		125,000	0	0	0	0.2276	(125,000)
H069		1,002,189	80,806	0	80,806	0.2292	(921,383)
H072		0	7,126	0	7,126	0.2294	7,126
H073		0	138,568	0	138,568	0.2323	138,568
H100		499,109	0	0	0	0.2323	(499,109)
<b>Total Water Supply &amp; Resource Development</b>		<b>\$7,094,585</b>	<b>\$8,279,269</b>	<b>\$246,100</b>	<b>\$8,033,169</b>		<b>\$1,184,684</b>
<b>Cooperative Funding</b>							
K075 Polk Co		\$2,379	\$0	\$0	\$0	0.2323	(\$2,379)
K165 Highlands Co		3,199	0	0	0	0.2323	(3,199)
K300 Polk Co		654	0	0	0	0.2323	(654)
K459 Charlotte Co SB		1,943	1,042	0	1,042	0.2323	(901)
L028 Englewood WD		1,753	3,307	0	3,307	0.2323	1,554
L151 Sebring		30,008	7,440	0	7,440	0.2325	(22,568)
L152 Avon Park		105,008	7,440	0	7,440	0.2327	(97,568)
L153 Lake Placid		1,166	1,331	0	1,331	0.2327	165
L309 Sebring		1,220	0	0	0	0.2327	(1,220)
L310 Avon Park		1,328	0	0	0	0.2327	(1,328)
L314 Highlands Co		10,694	10,080	0	10,080	0.2329	(614)
L352 Frostproof/Polk Co		3,262	0	0	0	0.2329	(3,262)
L353 Frostproof/Polk		1,029	5,389	0	5,389	0.2330	4,360
L475 Polk Co		3,268	0	0	0	0.2330	(3,268)
L485 Charlotte Co		2,913	1,331	0	1,331	0.2330	(1,582)
L486 Charlotte Co		5,022	7,453	0	7,453	0.2332	2,431
L633 DeSoto Co		228,103	3,493	0	3,493	0.2333	(224,610)
L640 Punta Gorda		1,166	1,331	0	1,331	0.2333	165
L649 FDEP		28,289	3,646	0	3,646	0.2334	(24,643)
L671 Polk Co		5,101	5,226	0	5,226	0.2335	125

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L673 Polk Co		189,930	2,654	0	2,654	0.2335	(187,276)
L674 Polk Co		529,930	2,654	0	2,654	0.2336	(527,276)
L679 Hardee Co		103,103	3,493	0	3,493	0.2337	(99,610)
L680 Polk Co		166,120	2,654	0	2,654	0.2337	(163,466)
L856 Charlotte Co		52,124	1,761	0	1,761	0.2337	(50,363)
L897 Highlands Co		256,567	7,566	0	7,566	0.2339	(249,001)
L912 Dundee		62,948	6,228	0	6,228	0.2340	(56,720)
L914 Lakeland		211,061	1,189	0	1,189	0.2341	(209,872)
L915 Lakeland		16,761	1,141	0	1,141	0.2341	(15,620)
L917 Polk Co		10,198	1,841	0	1,841	0.2341	(8,357)
P727 Lake Wales		3,268	4,479	0	4,479	0.2342	1,211
P730 Polk Co		2,379	0	0	0	0.2342	(2,379)
L215 Charlotte Co BCC	1A	244,710	435,978	0	435,978	0.2432	191,268
L473 Highlands Co	1A	356,342	360,933	87,500	273,433	0.2489	4,591
L553 Dundee	1A	558,090	2,914,000	0	2,914,000	0.3093	2,355,910
L672 Polk Co	1A	1,364	149,910	74,250	75,660	0.3109	148,546
L693 Child's Museum	1A	21,288	21,472	0	21,472	0.3113	184
L902 Lake Wales	1A	152,126	153,301	0	153,301	0.3145	1,175
L903 Avon Park	1A	163,200	164,375	0	164,375	0.3179	1,175
K280 Charlotte Co	H	502,335	1,802,458	0	1,802,458	0.3553	1,300,123
K725 Polk Co	H	40,069	39,532	0	39,532	0.3561	(537)
L206 Char/Sara/Manatee	H	20,492	20,064	0	20,064	0.3565	(428)
L324 Lakeland	H	476,262	813,230	0	813,230	0.3734	336,968
L479 Lakeland	H	2,057	424,622	0	424,622	0.3822	422,565
L770 Lakeland	H	565,789	755,013	0	755,013	0.3978	189,224
L900 Polk Co	H	14,909	11,328	0	11,328	0.3981	(3,581)
L918 Polk Co	H	82,984	129,540	0	129,540	0.4008	46,556
N001 Auburndale	H	0	53,197	0	53,197	0.4019	53,197
N004 Polk Co Bidrs	H	0	18,351	0	18,351	0.4022	18,351
N014 FL Aquarium	H	0	1,977	0	1,977	0.4023	1,977
N063 Winter Haven	H	0	47,240	0	47,240	0.4033	47,240
N065 Haines City	H	0	1,078,980	0	1,078,980	0.4256	1,078,980
N072 Haines City	H	0	252,914	0	252,914	0.4309	252,914
N075 Winter Haven	H	0	554,430	0	554,430	0.4424	554,430
N112 Lakeland	H	0	219,021	0	219,021	0.4469	219,021
N113 Charlotte Co	H	0	58,823	0	58,823	0.4481	58,823
N126 Charlotte Co	H	0	127,269	0	127,269	0.4508	127,269

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Projects	Rank	Adopted Budget FY2008	Proposed Budget FY2009	Funded By Outside Revenue	Funded By Ad Valorem Based Budget	Millage Rate Requirements	Increase/ (Decrease) From FY2008
N013 Univ of FL	M	0	4,962	0	4,962	0.4509	4,962
N064 Lakeland	M	0	50,000	0	50,000	0.4519	50,000
N073 Winter Haven	M	0	106,000	0	106,000	0.4541	106,000
N074 Winter Haven	M	0	56,392	0	56,392	0.4553	56,392
N092 PR/MRWSA	M	0	1,350,229	0	1,350,229	0.4833	1,350,229
N122 Polk Co	M	0	272,672	0	272,672	0.4889	272,672
N008 Polk Co	L	0	22,644	0	22,644	0.4894	22,644
N009 Polk Co	L	0	57,538	0	57,538	0.4906	57,538
N010 Auburndale	L	0	500,000	0	500,000	0.5009	500,000
N011 Mulberry	L	0	400,000	0	400,000	0.5092	400,000
N024 Polk Co	L	0	26,225	0	26,225	0.5098	26,225
N093 WPI	???	0	8,227,331	0	8,227,331	0.6803	8,227,331
N127 WPI	???	0	62,500	0	62,500	0.6816	62,500
<b>Total Cooperative Funding</b>		<b>\$5,243,911</b>	<b>\$21,838,620</b>	<b>\$161,750</b>	<b>\$21,676,870</b>		<b>\$16,594,709</b>
<b>Total Appropriation Peace River Basin</b>		<b>\$17,846,524</b>	<b>\$35,341,472</b>	<b>\$1,260,805</b>	<b>\$34,080,667</b>		<b>\$17,494,948</b>

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Projects	Rank	Adopted Budget FY2008	Proposed Budget FY2009	Funded By Outside Revenue	Funded By Ad Valorem Based Budget	Millage Rate Requirements	Increase/Decrease From FY2008
<b>Anticipates Revenues and Balances</b>							
Ad Valorem Taxes		\$9,276,980	\$8,813,132	\$0	\$8,813,132		(\$463,848)
Balance from Prior Years		3,854,124	1,000,000	0	1,000,000		(2,854,124)
Avon Park - Water Mgmt Program (L152)		25,000	0	0	0		(25,000)
DeSoto Co - Stormwater Master Plan (L633)		56,250	0	0	0		(56,250)
Hardee Co - Watershed Mgmt Plan (L679)		25,000	0	0	0		(25,000)
Highlands Co - Lake Clay SW Retro (L897)		31,250	0	0	0		(31,250)
Highlands Co - Lake Placid WMP (L473)		87,500	87,500	87,500	0		0
Lake Placid - Lake Clay SW Retro (L897)		31,250	0	0	0		(31,250)
Polk Co - Bartow Watershed Mgmt Plan (L680)		80,000	0	0	0		(80,000)
Polk Co - Maint of W/S Para & Models (B206)		12,400	12,433	12,433	0		33
Polk Co - Watershed Evaluation (L672)		0	74,250	74,250	0		74,250
Sebring - Water Mgmt Plan (L151)		6,250	0	0	0		(6,250)
Ecosystem Trust Fund - Central W Coast SW Enhanc		6,750	0	0	0		(6,750)
Ecosystem Trust Fund - Charlotte Hbr/Upper Peace		150,000	0	0	0		(150,000)
Ecosystem Trust Fund - Lk Hancock Lk Level		187,500	0	0	0		(187,500)
Ecosystem Trust Fund - Myakka Rvr W/S Init		25,000	0	0	0		(25,000)
Save Our Rivers - Reimbursement		1,059,441	840,522	840,522	0		(218,919)
State SWIM/Surface Wtr Rstr Rebudget Prior Year		162,500	0	0	0		(162,500)
Water Protection & Sust T. F. (Surface Wtr Rstr)		143,750	0	0	0		(143,750)
Water Protection & Sust T.F. (Alternative Wtr)		1,325,579	0	0	0		(1,325,579)
U.S. EPA - Lake Hancock (H014)		0	246,100	246,100	0		246,100
Interest on Investments		1,300,000	200,000	0	200,000		(1,100,000)
<b>Sub Total Revenue Before Additional Taxes</b>		<b>\$17,846,524</b>	<b>\$11,273,937</b>	<b>\$1,260,805</b>	<b>\$10,013,132</b>		<b>(\$6,572,587)</b>
Additional Ad Valorem Required to Fund All		0	24,067,535	0	24,067,535		24,067,535
<b>Total Revenues</b>		<b>\$17,846,524</b>	<b>\$35,341,472</b>	<b>\$1,260,805</b>	<b>\$34,080,667</b>		<b>\$17,494,948</b>
<b>Millage Rate</b>		<b>.1827</b>	<b>.1827</b>		<b>.1827</b>		
<b>Income Per 100th Mill</b>		<b>\$507,771</b>	<b>\$482,383</b>		<b>\$482,383</b>		

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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Management Services
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	N/A
<b>Project Manager</b>	KAVOURAS, LOU
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The Boards and Executive Services Department provides administrative support to the Basin Board. These support activities include noticing, scheduling and preparing the agenda and minutes for regular and special meetings and workshops. Other functions include preparing meeting and travel arrangements and correspondence for Board members. The Deputy Executive Director for Outreach, Planning and Board Services is the primary staff liaison for members. The Deputy also assists with the conduct of meetings, works with the Governor's staff to ensure the legal constitution of Boards, coordinates with appropriate staff to ensure follow up on meeting issues, conducts new member orientation and ensures compliance with the Sunshine Laws. In addition, the Deputy and staff coordinate Board field trips, including planning, scheduling, meals, logistics and arranging for staff support. This budget item also provides funds for equipment and facility rental, legal advertisements for meeting notices, miscellaneous office supplies and printing and Board member travel reimbursements (e.g., meals, conference registration, mileage, etc.).

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Management Services
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	SPRINGSTEAD, CHAN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

Planning is an Executive support function responsible for long-range comprehensive planning and near-term strategic planning. Department staff administer the Comprehensive Watershed Management initiative; provide Basin Board support; and assist the Basin Board with development of resource management priorities. Planning Department staff support the Basin Board through the following tasks. Project Management Database project worksheets that are used in the Budget Notebook for each Basin Board meeting are reviewed to ensure accuracy and completeness. Planning staff work with project managers to identify any significant issues and resolve any discrepancies. Staff take the lead in preparing for joint Governing and Basin Board Planning Workshops and for the Basin Board's Annual Planning Workshop. Basin Board meetings are attended and presentations are made to the Board on an as-needed basis. Staff often coordinate responses to issues raised during meetings. Staff respond to Board Member questions and requests via oral and written communications. Staff assist Basin Board members by creating and providing presentations on Basin-specific issues. At the Board's request, research is conducted and special issues are presented during Board meetings. Department staff assist the Community Affairs Coordinators with Cooperative Funding kick-off meetings held for local governments and other potential cooperators. Assistance is provided for new Board member orientations.

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Management Services
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	LEWIS, JIM
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

Video production and conferencing staff provides audio-visual, archive tape, and video teleconferencing support for Basin Board and Governing Board meetings, including staff presentations. Audio-visual staff provides support for annual Basin Board planning workshops, and the semiannual Governing Board/Basin Board planning workshops, as well as other non-regularly scheduled workshops not held in a District office, as needed. Based on the time devoted to these activities, including travel, the appropriate salary percentage is allocated to each Basin Board.

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.



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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Management Services
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	N/A
<b>Project Manager</b>	MOLLIGAN, MICHAEL
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The Communications Department is an Executive support function responsible for a broad range of activities that support the District's mission, Governing and Basin boards, and other departments. Departmental functions include projects funded by the Governing and Basin boards, such as public information and media coordination; youth and public education programs and initiatives in coordination with local governments and other community organizations; promotion of sound water conservation practices; presentation of projects to the Basin boards in the budget adoption process; and graphics support for Basin Board presentations. Communications Department staff support the Basin Board through the following tasks. Basin Board meetings are attended on an as-needed basis to make presentations, answer questions, and participate in budget discussions. Responses are prepared to answer Board Member questions and requests via oral and written communications. Educational materials are developed, reviewed, updated, promoted, and distributed. Assistance is provided to cooperators to develop education projects that support the District's mission. Education and grant programs are promoted at schools and to cooperators. Support is provided to the Basin Board Education Committee. Media contact summaries and articles are disseminated. The District's web site is maintained.

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

**Risk Management - Peace River Basin**


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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Management Services
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Withlacoochee River, Peace River
<b>Cooperator(s)</b>	
<b>Project Manager</b>	PETRUCCELLI, LUCY
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The funds budgeted for this project apply to insurance on insured water control structures in this basin. Those structures with their corresponding insured values include: Alligator Creek Salinity Barrier - \$216,000, Peace Creek P-3 -\$71,000, P-5 - \$439,000, P-6 - \$262,000, P-7 - \$67,000, P-8 - \$253,000, P-11 - \$328,000, and G-90 - \$898,000. The total insured value is \$2,534,000. The District's current property insurance is rated at \$.575/100 of value. Governing Board Policy 120-1, directs that a Risk Management function be maintained to protect the assets of the District using an appropriate market based financing measure of a blend of self-insurance, insurance or transfer of risk. Budgeting a known minimal expenditure annually for insurance premiums has been more cost effective for the individual basins than establishing permanent reserves equal to the value of an individual structure or maximum probable loss should any structure be damaged or destroyed. Property coverage is currently provided in layers through several property insurance carriers. The current deductible is set at \$5,000 on all losses except flood and wind. The District's property rate for structures increased over 300% for FY2007 policy year and the District was only able to obtain insurance on 50% of total values due to major market losses caused by weather events in 2004, 2005 and 2006. No further updates will be made on this project unless a property loss claim is reported for any of the insured structures.

**Status As Of:** November 02, 2007

Property insurance rates for period 10/01/2007-09/30/2008 came in at almost 55% the annual budgeted amount. All funds for FY 2008 have been expended to cover the annual premium for insurance on the insured structures. There will be no further status reports this fiscal year unless there is a property damage claim reported on a structure.

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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Management Services
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	RATHKE, DAVID
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

Basin Board funds budgeted are for the administration and coordination of the Cooperative Funding program, including conducting cooperator workshops, processing applications, communicating with applicants and participating in project ranking. Basin Board funds are budgeted for the Community Affairs Coordinator (CAC) to attend and participate in Basin Board meetings and new Board member orientations and briefings and for the CAC's responses to Board member information requests, as well as other "as needed" services to the Basin Board. Funds are also budgeted for the CAC's administration of the FARMS Program (but not for individual FARMS projects) within the Basin.

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	DEHAVEN, ERIC
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The Resource Conservation and Data Department is involved in the development of innovative agricultural water conservation projects that are designed to reduce ground water withdrawals and improve water quality within the Southern Water Use Caution Area (SWUCA). The department also focuses on the collection of baseline water resources data including water quality data and lithologic/hydrologic information of District aquifer systems. Finally, the Department provides infrastructure support by constructing wells that form the backbone of various resource monitoring initiatives such as wellfield recovery and Minimum Flows and Levels (MFLs) establishment. The department includes four sections comprised of professional, technical, and administrative staff. The Administrative section administers the operating budget, Governing and Basin Board funded projects, as well as the administration of large-scale, long-term projects such as the Facilitating Agricultural Resource Management Systems Program (FARMS), Water Quality Monitoring Program (WQMP), Regional Observation Monitoring Program (ROMP) and Quality of Water Improvement Program (QWIP).

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	N/A
<b>Project Manager</b>	HAMMOND, MARK
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The Resource Projects Department addresses issues related to water supply, flood protection, water quality, and natural systems and consists of the Conservation Projects, Ecologic Evaluation, Engineering, Environmental, Hydrologic Evaluation, and Water Supply and Resource Development sections. The District's goal for water supply is to ensure an adequate supply of the water resource to provide for all existing and future reasonable and beneficial uses while protecting and maintaining water resources and related natural systems. The Department's efforts involve activities associated with the regional water supply planning, alternative water supplies, conservation, and reclaimed water strategic initiatives. The District's goal for flood protection is to minimize flood damage to protect people, property, infrastructure and investment. The Department's efforts primarily involve activities associated with the floodplain management strategic initiative and support for the flood and emergency response initiative. The District's goal for natural systems is to preserve, protect, and restore natural systems in order to support their natural hydrologic and ecologic functions. The Department's efforts involve minimum flows and levels and wetland system restoration. The District's goal for water quality is to protect and improve water quality to sustain the environment, economy and quality of life. The Department's efforts involve diagnostic, monitoring and implementing water quality improvement projects. The funds budgeted here are for coordinating the Water Supply and Resource Development Program, Water Resource Assessment Projects, Minimum Flows and Levels Program, Watershed Management Program, FEMA Map Modernization, and Cooperative Funding Programs, as-requested attendance at citizen meetings, and those unforeseen basin analyses which occur during the year. The Department works on ongoing projects and reviews, evaluates, and ranks each Fiscal Year's Cooperative Funding projects related to water supply, water quality, natural systems, and flood protection. Staff makes recommendations regarding these projects, and other items proposed in each year's budget. Staff also works to address any budget issues identified at Basin Board meetings. The funds budgeted here are for staff time related to coordinating those activities that do not relate to specific budgeted projects. These include the staff time of the Director, managers and several staff.

**Status As Of:** March 15, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

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<b>Project Type</b>	On-Going Activities
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	HOLTKAMP, MIKE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The Operations Department consists of six sections including Administration, Field Operations, Aquatic Plant Management, Hydrologic Data, Structure Operations and Mapping and GIS. The Administration section provides support for departmental management, planning, budgeting, and clerical functions. The Field Operations section is responsible for maintenance and restoration of all District-owned lands including fence construction, mowing, culvert installations, road and bridge maintenance and construction, fire line maintenance, prescribed burn support, erosion control, and well site preparation/restoration. The Aquatic Plant Management section is responsible for aquatic and ditch bank vegetation management operations on District flood control systems, the control of exotic aquatic plants on natural waters throughout the District, and the control of aquatic vegetation around water control structures and lake level gauges. Additionally, the Aquatic Plant Management section controls/eradicates infestations of upland invasive species including Brazilian pepper, Australian pine, cogongrass and tropical soda apple on all District-owned conservation lands. The Hydrologic Data section is responsible for designing, installing, and maintaining data collection sites in support of the District's resource monitoring and technical analysis, as well as data analysis and database management. The Structure Operations section inspects, operates, maintains, and repairs all District-owned flood and water conservation structures as well as salinity barriers throughout the District. This section also directs and operates the District's Emergency Operations Center (EOC), which is part of a state and nationwide storm tracking and emergency response network. The Mapping and GIS section is responsible for providing and maintaining all mapping and Geographical Information System database support. Included in this project are administrative salary allocations associated with overseeing field operations and maintenance, aquatic plant management, emergency operations, Supervisory Control and Data Acquisition (SCADA), and structure operations programs throughout the Basin, as applicable. Funds expended have been to prepare for Basin Board meetings as required or provide data to Board members, local agencies or the public.

**Status As Of:** March 18, 2008

Ongoing project details are shown in the project description.

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<b>Project Type</b>	On-Going Activities
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	SUTTON, ERIC
<b>Task Manager(s)</b>	LOVE, KEVIN, MILLER, WILL, BLASCHKA, STEVEN, WALSH, TOM
<b>Status</b>	Ongoing

**Description**

The Land Resources Department consists of five sections, including Administration, Land Acquisition, Land Management, Survey, and Land Use and Protection. The Administration section provides support for departmental management, planning, budgeting and clerical functions. The Land Acquisition section acquires lands as set forth in the District's Florida Forever Workplan. These lands are acquired for various functions including flood control, water storage and management, conservation and protection of water resources, aquifer recharge and recovery, water resource development, and preservation of wetlands, streams, lakes, and other natural systems. The Land Management section is responsible for the management and protection of natural and cultural resources on District lands. Major functions include natural systems restoration, prescribed burning, forest management, exotic species control, and monitoring. The Survey section is responsible for providing land surveying assistance in support of various projects and programs within the District. The Land Use and Protection section is responsible for land use activities on District lands including development of recreational trails and facilities, monitoring of public and private uses, management of the security officer program and maintaining visitor safety. Included in this project are activities on District-managed lands purchased with funds other than Florida Forever, Preservation 2000 and Save Our Rivers such as surveying costs (salaries and equipment rental), miscellaneous land use requests (salaries), resource protection (utilities and maintenance) and structural flood control projects.

**Status As Of:** March 13, 2007

As of this date, this project will not show an update. Ongoing project details are shown in the project description.

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**Project Type** Prop. App.&Tax Coll.  
**AOR(s)** Management Services  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** PILCHER, LINDA  
**Task Manager(s)** CACIOPPO, MIKE, LINSBECK, CATHY  
**Status**

**Description**

These funds pay the commissions due to the counties within the Basin for tax collection and property appraisals.

**Status As Of:** March 01, 2008

During the five months ended February 29, 2008, \$238,278 was remitted in commissions to Property Appraisers and Tax Collectors and \$139 was returned to the Basin in excess fees. Property Appraiser and Tax Collector commissions are statutorily prescribed and are based on property tax levies and collections, respectively. Amounts collected in excess of the underlying Property Appraiser and Tax Collector budgets are returned to the Basin as excess fees. Excess fees not recorded as accounts receivable as of September 30, 2007 are reflected as current FY2008 revenue.



**Contingencies - Peace River Basin**

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**Project Type** Reserves  
**AOR(s)** Management Services  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** PILCHER, LINDA  
**Task Manager(s)** CACIOPPO, MIKE, LINSBECK, CATHY  
**Status**

**Description**

Funds are budgeted for contingencies to be used at the Board's discretion. The goal is to set aside an amount equal to approximately 5 percent (2.5 percent minimum target) of the ad valorem based budget (ad valorem taxes plus interest plus balance forward multiplied by 5 percent).

**Status As Of:** March 01, 2008

To date, the Basin Board has not allocated any of its contingency funds.

**Project Type**                    SOR  
**AOR(s)**                         Water Quality, Natural Systems  
**Basin(s)**                        Peace River  
**Cooperator(s)**  
**Project Manager**             LOVE, KEVIN  
**Task Manager(s)**            SOWDERS, GINA, HAGBERG, JEFFREY, MILLER, WILL, GREEN, STEPHANIE, NELSON, BRIAN  
**Status**                         Ongoing

**Description**

In 1989, the Governing Board authorized the acquisition of 3,200 acres of land in Highlands County, referred to as the Jack Creek project. The Jack Creek project includes a significant part of Jack Creek, its 100-year floodplain, and outlying forested areas associated with the creek system and local lake outflow wetlands. The project area also includes portions of sand pine scrub and mixed scrub, among Florida's most unique threatened upland habitats. Jack Creek and its associated swamps serve as the natural drainage basin for the immediate area, as well as the water conveyance system for lakes in the area. The well-drained scrub areas surrounding the Jack Creek system appear to offer good recharge potential throughout the year. To date, some 1,284 acres have been acquired in fee simple within the project. As a part of the approval of the 2001 Land Acquisition Five-Year Plan, the Governing Board decided to no longer pursue acquisition of the remaining lands within the project.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

FY2008 - The Land Resources Department budget consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for security. The Aquatic Plant Management Section has budgeted a total of \$4,133 to treat invasive species infestations. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. FY2009 - The Land Resources Department budget request consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for mowing and security. The Aquatic Plant Management Section has budgeted funds for salaries, central garage charges and herbicides to treat infestations of invasive plant species. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements.

	<b>FY2008</b>	<b>FY2009</b>
	<b>Funding</b>	<b>Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
020 Peace River Basin	72,064	90,434

**Status As Of:**       February 28, 2008

Aquatic Plant Management staff treated five acres infested with the invasive species cogongrass during this period. Land Resources staff conducted a volunteer work day to install trail markers and signs.

**Project Type** SOR  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** LOVE, KEVIN  
**Task Manager(s)** SOWDERS, GINA, HAGBERG, JEFFREY, MILLER, WILL, GREEN, STEPHANIE, NELSON, BRIAN  
**Status** Ongoing

**Description**

The Prairie Creek project, consisting of 5,385 acres was approved by the Governing Board for acquisition in 1991. In 1995, as a part of the Preservation 2000 Remaining Needs and Priority report, lands along Shell Creek were included. The Prairie/Shell Creek project now consists of 24,837 acres within Charlotte and DeSoto Counties. The lands proposed for acquisition include a greenway corridor from the mouth of the Peace River to the District's Bright Hour Watershed project to the north and to the State's Babcock-Webb Wildlife Management Area to the south. Approximately 609 acres have been acquired in fee simple within the project in Charlotte County. Lands proposed for acquisition include 13,895 acres in fee simple and 10,624 acres proposed for less-than-fee acquisition.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

FY2008 - The Land Resources Department budget consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for security. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. The Aquatic Plant Management Section has budgeted funds for salaries, central garage charges and herbicides to treat infestations of invasive plants. FY2009 - The Land Resources Department budget request consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for security. Recreational improvements consist of an entrance sign, small kiosk and parking improvements. The Aquatic Plant Management Section has budgeted funds for salaries, central garage charges and herbicides to treat infestations of invasive plant species. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
020 Peace River Basin	81,055	69,108

**Status As Of:** February 26, 2008

Aquatic Plant Management Section staff treated 12 acres infested with invasive melaleuca trees.

**Upper Lake Marion Creek Watershed**

**Project Type** SOR  
**AOR(s)** Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** South Florida Water Management District  
**Project Manager** MILLER, WILL  
**Task Manager(s)** SOWDERS, GINA, LOVE, KEVIN, HAGBERG, JEFFREY  
**Status** Ongoing

**Description**

In 1991 the Governing Board authorized staff to pursue the acquisition of 1,898 acres of land in Polk County, referred to as the Upper Lake Marion Creek Watershed project adjacent to lands under protection by the South Florida Water Management District (SFWMD). The relatively undisturbed creek system flows north out of Lake Marion, joins Snell Creek and ultimately flows southeast to Lake Hatchineha. The entire Lake Marion Creek basin extends over 18,300 acres and includes portions of both the Southwest and South Florida Water Management Districts. To date, the SFWMD has acquired 277 acres in fee simple and approved an additional 1,621 acres for fee simple acquisition. This district has entered into an agreement with the SFWMD to provide management of SFWMD-owned lands since, due to the property's proximity to SFWMD-managed lands, the SFWMD can manage the property more efficiently and cost effectively.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

The Land Resources Department's FY2008 budget and FY2009 budget request includes monies for payment to the SFWMD for management of lands owned by the SFWMD and staff time for contract monitoring. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
020 Peace River Basin	17,454	14,493

**Status As Of:** February 18, 2008

This property is managed by the SFWMD. No significant activities by SFWMD this period.

**Project Type** SOR  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** LOVE, KEVIN  
**Task Manager(s)** HAGBERG, JEFFREY, MILLER, WILL, NELSON, BRIAN, ELLIOTT, PAUL, LANE, CHUCK  
**Status** Ongoing

**Description**

In 1991 the Governing Board authorized staff to pursue acquisition of 8,568 acres in DeSoto County, now referred to as the RV Griffin Reserve project. In 1996, the Governing Board increased the project size to 31,667 acres, with a majority of the additional lands lying in Sarasota County. The project includes lands supporting and surrounding the existing facilities at the Peace River/Manasota Regional Water Supply Authority treatment plant. Lands in the project area include mixed hardwood forests along the river; however, the majority of the lands in DeSoto County consist of pine flatwoods, rangelands, pastures, and pine plantations. The project lands support and protect present potable water supplies. To date, some 5,917 acres have been acquired in fee simple, and a conservation easement over another 3,804 acres known as the Lewis Longino Preserve. An additional 9,034 acres have been approved for acquisition in fee simple, and 12,616 acres have been approved for acquisition using less-than-fee simple techniques.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

FY2008 - The Land Resources Department Peace River Basin budget consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for mowing, security and demolition of structures. Funds in the Manasota Basin are for monitoring the conservation easement over the Lewis Longino Preserve. Field Operations has budgeted for salaries, rental equipment, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. The Aquatic Plant Management Section budgeted funds for salaries, central garage charges and herbicides to treat infestations of invasive plant species on the RV Griffin Reserve.

FY2009 - The Land Resources Department Peace River Basin budget request consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for security. Recreation improvements include an entrance sign, kiosk, improved parking area and trail signs. Field Operations has budgeted for salaries, rental equipment, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. The Aquatic Plant Management Section has budgeted funds for salaries, central garage charges and herbicides to treat infestations of invasive plant species. Costs for these activities are 100 percent reimbursed through the State's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
010 General Fund (Districtwide)	6,478	0
020 Peace River Basin	106,860	89,725
021 Manasota Basin	1,687	1,452

**Status As Of:** February 26, 2008

Aquatic Plant Management Section staff treated 31 acres infested with the invasive species Old World climbing fern. One wetland crossing was established for recreational use.

**Project Type** SOR  
**AOR(s)** Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** Florida State Parks  
**Project Manager** MILLER, WILL  
**Task Manager(s)** SOWDERS, GINA, LOVE, KEVIN, GREEN, STEPHANIE  
**Status** Ongoing

**Description**

In 1995 the Governing Board authorized the acquisition of the Myakka River/Charlotte Harbor project consisting of approximately 38,000 acres in Charlotte and Sarasota Counties. In 1998 the Governing Board authorized the acquisition of an additional 6,639 acres as a part of the Charlotte Harbor project. The Charlotte Harbor Save Our Rivers project was jointly purchased between the District and the State of Florida's Conservation and Recreation Lands (CARL) program. Lands within the project area are characterized by a variety of natural lands including isolated freshwater marshes, tidal marshes, and tidal swamps. To date 7,529 acres have been acquired in fee simple and are a part of the Charlotte Harbor State Buffer Preserve. There are no more lands slated for acquisition within the project. Under a management agreement with the State, the Department of Environmental Protection's Division of Recreation and Parks is the lead land manager for the project. The following recreational improvements/amenities are available within the Preserve: canoeing and boating, with future development of a small boat launch facility, fishing, and extensive hiking trails.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

Funds included in the FY2008 budget and FY2009 budget request are for staff time to monitor the District's agreement with the State. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
020 Peace River Basin	3,093	3,209

**Status As Of:** February 18, 2008

Charlotte county has completed a 7.4 acre survey of the anticipated Cattle Dock point boat ramp park. Charlotte county, DEP, and the District continued to work on agreements for the park.

**Project Type** SOR  
**AOR(s)** Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** LOVE, KEVIN  
**Task Manager(s)** SOWDERS, GINA, HAGBERG, JEFFREY, MILLER, WILL, NELSON, BRIAN, ELLIOTT, PAUL  
**Status** Ongoing

**Description**

In 1994 the Governing Board authorized the acquisition of approximately 40,000 acres within Hardee and DeSoto Counties known as the Lower Peace River Corridor project. Lands acquired and proposed for acquisition within the project include an extensive network of tributaries, floodplain swamps and connected headwaters. The project covers a corridor over 35 miles along the Peace River between Zolfo Springs at the upstream reaches, downstream to the Charlotte/DeSoto County line. Acquisition of lands within this project will provide protection for the receiving waters of Charlotte Harbor. To date, 12,105 acres have been acquired in fee simple in this project and an additional 39,354 acres have been approved for future acquisition. Recreational activities available include on-foot access and primitive camping, which is available with a special use permit. Approximately 12 miles of multi-use trails are under development.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

FY2008 - The Land Resources Department budget consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for mowing and security. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. The Aquatic Plant Management has budgeted funds for salaries, central garage charges and herbicides to treat invasive plant infestations. FY2009 - The Land Resources Department budget request consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for mowing, security and demolition. The Aquatic Plant Management Section has budgeted funds for salaries, central garage charges and herbicides to treat infestations of invasive plant species. Additionally, contractual funds have been budgeted to outsource locating and treating infestations of the invasive species Old World climbing fern within the Coker Prairie swamp. Old World climbing fern is spreading within as well as outside District-owned portions of the swamp. Due to the difficulty of assessing known areas of infestation and moving from site to site within the swamp, existing staff can not complete this job and stay up with required work on other properties. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

<b>FY2008</b>	<b>FY2009</b>
<b>Funding</b>	<b>Funding</b>

**District Budgeted - Outside Revenue (SOR)**

020 Peace River Basin	135,011	159,733
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**Status As Of:** February 18, 2008

Connector trail cut in from the new County park to existing trails. Trails GPSed and area reviewed for trail improvements. Two wetland crossings were establish for erosion control and to facilitate access. One ditch block was installed to rehydrate a seasonal wetland.

**Project Type**                    SOR  
**AOR(s)**                         Flood Protection, Water Quality, Natural Systems  
**Basin(s)**                        Peace River  
**Cooperator(s)**  
**Project Manager**             MILLER, WILL  
**Task Manager(s)**            SOWDERS, GINA, LOVE, KEVIN, GREEN, STEPHANIE  
**Status**                         Ongoing

**Description**

In 1998 the Governing Board authorized the less-than-fee acquisition of 51,158 acres in DeSoto County, referred to as the Bright Hour Watershed. To date 32,227 acres have been acquired by the District via perpetual conservation easements (less-than-fee). An additional 19,311 acres have been identified for potential purchase of conservation easements within the watershed. The project area consists of extensive, high quality prairie, hammock, marsh and slough systems that provide water management benefits for a traditionally water-poor region. Hydrologic values include protection of the headwaters of several important creek systems, such as Prairie and Shell Creeks. Water storage, conveyance and flood control are also provided by the watershed's poorly drained landscape. Habitat protection for numerous rare plant and animal species and globally imperiled, high quality natural communities is amply afforded by this project.

**Benefits**

Since the lands within the project are not owned in fee simple, land management activities consist of monitoring the terms of the conservation easements.

**Costs**

Funds included in the FY2008 budget and the FY2009 budget request are for staff time for annual monitoring of the conservation easements. Costs for this activity are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
020 Peace River Basin	2,540	2,078

**Status As Of:**       February 20, 2008

No significant activity this period



<b>Project Type</b>	SOR
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County
<b>Project Manager</b>	MILLER, WILL
<b>Task Manager(s)</b>	LOVE, KEVIN, HAGBERG, JEFFREY, BLASCHKA, STEVEN, NELSON, BRIAN, ELLIOTT, PAUL, LANE, CHUCK
<b>Status</b>	Ongoing

**Description**

Lake Hancock is located southeast of the city of Lakeland and north of the city of Bartow in Polk County. At 4,553 acres, Lake Hancock is the largest lake associated with the Peace River, and the third largest lake in Polk County. Lake Hancock has been recognized as having some of the poorest water quality in the state. The lake is characterized by persistent blue-green algae blooms, high nutrient concentrations and low dissolved oxygen levels in the water column and vegetation, fish, and wildlife populations indicative of eutrophic to hypereutrophic conditions. A requirement of the statutorily mandated minimum flow establishment is the development of a recovery strategy. Part of the proposed strategy for the Upper Peace River is to restore storage in Lake Hancock and release some of the water during the dry season to help meet the flow requirements. Historically, Lake Hancock fluctuated more than a foot higher than it has during the past several decades. This lowering was due to the dredging of the outfall canal as was common in the early part of the last century. This project proposes to reverse those impacts by modifying or replacing the District's outfall canal structure so that water levels can be maintained at historical levels. Presently, Structure P-11 is topped when water levels in Lake Hancock exceed 98.7. This project will be coordinated with other Lake Hancock restoration efforts. In particular, there will be a supporting hydrologic analysis to determine where property interests may need to be acquired due to increased lake elevations (see H008). Land acquisition within the Lake Hancock project is a necessary element of the lake's restoration. In support of the Lake Leve project and to continue a significant greenway from the Peace River watershed to the Green Swamp, the District identified areas along the shores of Lake Hancock for potential acquisition. To date, the District and Polk County have cooperatively acquired 1,267 acres (Circle "B" Bar Reserve) and the District has acquired an additional 4,521 acres. Polk County manages Circle "B" Bar Reserve for passive, nature-based recreation opportunities such as bicycling, running, hiking, horseback riding, picnicking, fishing, canoeing, kayaking, and environmental education. The County is building a Resource Education/Visitor Center (see SA54) and conduct interpretive and interactive programs that will improve public awareness and encourage stewardship and protection of natural resources. Center will be completed in the fall of 2008.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

FY2008 - The Land Resources Department budget consists of salaries and central garage for prescribed burning, resource monitoring, land maintenance, fence repair and recreational monitoring. The budget also includes contractual services for mowing and security. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. The Aquatic Plant Management has budgeted a total of \$12,102 to treat invasive plant infestations. FY2009 - The Land Resources Department budget request consists of salaries and central garage for land maintenance, fence repair and contract management. The budget also includes contractual services for servicing the air conditioning unit at the on-site security residence, security, payment to Polk County for 50 percent of the management costs for the Circle B Bar Reserve, and a land use alternatives analysis for lands within the project. Funds are also included to repair the plumbing at the maintenance facility on the property. Field Operations has budgeted for salaries, rental equipment, contracted services, central garage charges, parts, supplies, and land maintenance materials to support Land Management's requirements. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
020 Peace River Basin	288,537	263,547
<b>Project Funds Not Budgeted by the District</b>		
Polk County	13,000	12,670

**Status As Of:** April 27, 2007

Aquatic Plant Management staff treated three acres of the invasive, exotic species cogongrass.

<b>Project Type</b>	SOR
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	SUTTON, ERIC
<b>Task Manager(s)</b>	LOVE, KEVIN, HAGBERG, JEFFREY, MILLER, WILL, NELSON, BRIAN, WALSH, TOM
<b>Status</b>	Ongoing

**Description**

The Save Our Rivers Administration project contains monies for those items not attributable to one unique project during the budget cycle. Examples are studies affecting all conservation lands, preparation of resource evaluation reports, heavy equipment used solely on conservation lands, overtime, staff time, vehicle charges and equipment rental.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within the project are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

In addition to salaries and central garage charges, the FY2008 Land Resources budget and the FY2009 budget request includes funds for tree removal in cases where trees fall from District property onto adjoining owners' property in the Coastal, Hillsborough and Pinellas-Anclote Basins; and aerial flights to view exotic species in the Hillsborough, Manasota and Peace Basins. Costs for these activities are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>
<b>District Budgeted - Outside Revenue (SOR)</b>		
010 General Fund (Districtwide)	1,873,324	1,719,949
011 Alafia River Basin	10,258	10,763
013 Hillsborough River Basin	25,417	34,263
015 Coastal Rivers Basin	25,100	25,485
016 Pinellas-Anclote River Basin	6,926	12,198
019 Withlacoochee River Basin	7,166	7,198
020 Peace River Basin	15,417	24,263
021 Manasota Basin	15,258	24,263

**District Budgeted - Outside Revenue**

**Status As Of:** December 14, 2007

With the exception of the District fund, the Save Our Rivers (SOR) Administration project is used primarily to budget monies for SOR, Preservation 2000 and Florida Forever (reimbursable) projects. Generally, funds are not charged to this project, but transferred to other reimbursable projects within the Basin. An example is overtime. Staff knows at budget time that overtime will be required within the basins for work on SOR projects, but does not know for which projects, so monies will be budgeted in S099. When overtime is used later in the year, the monies will show as being spent for the actual project the staff member worked on (i.e., S009- Starkey, S016 - Weekiwachee Preserve, etc.). In the District funds monies are primarily used for SOR program administration, purchase of equipment and contractual services.

<b>Project Type</b>	SOR
<b>AOR(s)</b>	Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	
<b>Project Manager</b>	RHINESMITH, PHILIP
<b>Task Manager(s)</b>	KOLASA, KEITH
<b>Status</b>	Ongoing

**Description**

As part of the District's Hydrologic and Wetlands Restoration program, the District's Jack Creek tract located in Highlands County has been assessed for restoration needs. The health of wetlands within the tract have declined as a result of over-drainage from the construction of the Josephine Canal. The historic canopy of loblolly bay trees has been replaced by invasive species. Proposed restoration for this project will center on rehydration of the tract's degraded wetlands. This project will provide surface water modeling, design, and permitting for restoration of the Jack Creek tract. Hydrologic restoration of the Jack Creek tract will be consistent with the District's SWUCA objectives. Rehydration of wetlands within the property will increase water storage within this region of the District as well as provide aquifer recharge.

**Benefits**

This project will complete the design and permitting in preparation of hydrologic restoration to be completed. Restoration will focus on enhancing the wetlands within the tract by restoring the natural hydroperiod (seasonal water fluctuation). The augmentation of surface water levels will result in 60 acres of wetland restoration.

**Costs**

The total project cost was anticipated to be \$225,000. In FY2005, \$150,000 was budgeted for design and permitting and portions of the construction. The conceptual plans have been completed at a cost of \$30,000. The FY2009 budget is \$6,689 which includes staff time, central garage, and travel expenses.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>		
<b>District Budgeted - Outside Revenue (SOR)</b>				
020 Peace River Basin	336,058	6,689		
<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>	
<b>1. Project Feasibility and Alternatives</b>				
Report Draft Completed	12/1/06			12/1/06
Final Restoration Plan	2/1/07			2/1/07
<b>2. Contract Development &amp; Execution</b>				
Start Design	4/1/07			
Complete Design	6/1/07			
<b>3. Permitting</b>				
Pre Application Meeting w/ FDEP	8/1/07			
Permitting Complete	10/1/07			
<b>4. Construction</b>				
Construction Commence	12/1/07			
Construction Completed	4/1/08			

**Status As Of:** February 18, 2008

An evaluation of the Jack Creek tract was completed as a task identified in project B171. The evaluation provided recommendations for completing hydrologic restoration for this tract and a cost estimate for restoration. This project (SA01) will utilize the conceptual design plan being completed under project B171 to complete final design and permitting for restoration on the Jack Creek Tract. The primary wetland and the subject of the hydrologic study has undergone significant degradation over the last 35 years due to dewatering associated with the Jackson-Josephine canal that traverses the edge of the Jack Creek tract. The concept for this project will be to divert water from the canal into the wetland to provide rehydration of the wetland and aquifer recharge. The final restoration plan was submitted to the District in January 2007. The next phase will be the design and permitting for the rehydration of the wetland. It is envisioned that the project will entail the installation of a pump and pipe to rehydrate the site with surface water from Josephine Creek. The consultant is currently working on a cost proposal for the next phase of the project.

<b>Project Type</b>	SOR
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County
<b>Project Manager</b>	LANE, CHUCK
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The District and Polk County entered into an agreement on July 24, 2006, for the construction, operation and maintenance of an environmental education center on the District's and Polk County's jointly owned Circle B Bar Reserve on Lake Hancock in Polk County. The education center will include a meeting room with conference tables, LCD projector and presentation screen; science lab with microscopes, sinks, lab stations and specimen drawers; exhibit area with museum quality interpretive panels and hands-on learning features; outdoor elements including an amphitheatre with seating for outdoor presentations and a covered picnic area; office space; and storage areas. The Circle B Bar Reserve Natural Resources Management Plan, which was approved by the Polk County Commission, Peace River Basin and Governing Boards in 2002, envisioned an environmental education center on the property. Over the years, the District has funded the construction of environmental education facilities at Sawgrass Lake Park (Pinellas County), Nature's Classroom (Hillsborough County), Starkey Wilderness Park (Pasco County) and Weekiwachee Preserve (Hernando County). The vision for the Lake Hancock Environmental Education Center is that it will serve the community by providing teachers and schoolchildren with a venue to study their local natural resources. The 1,267-acre Circle B Bar Reserve was chosen to be the location of the environmental education center due to its central location to Polk County's urban population and the tremendous opportunity to highlight the Peace River headwaters. Polk County Environmental Lands Program is currently working with teachers to develop an environmental education curriculum that is designed to enhance existing resources for knowledge and understanding of local resources, Polk County and unique features of the environment including the Green Swamp Area of Critical State Concern, the Lake Wales Ridge and the Peace River Corridor.

**Benefits**

Pursuant to Section 373.1391(1)(a), Florida Statutes, lands within Preserve are managed and maintained in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

**Costs**

The Lake Hancock Environmental Education Center is anticipated to cost \$2,250,000 to design, permit and construct. The District and Polk County will each provide 50 percent of the funding for the center. Costs for this activity are 100 percent reimbursed through the state's Water Management Lands Trust Fund.

	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	
<b>District Budgeted - Outside Revenue (SOR)</b>			
020 Peace River Basin	1,352	0	
<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Execute Agreement			7/1/06
First payment of funding - design plans completed	12/1/06		10/25/06
Begin Construction	3/1/07		
End Construction	9/30/07		

**Status As Of:** January 02, 2008

The Education Center construction is 50% complete. Polk County staff is preparing documentation for the District so payment can be processed. The estimated completion date for the center is July, 2008.

**Project Type** SOR  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Alafia River, Hillsborough River, Peace River  
**Cooperator(s)** Polk County Natural Resources  
**Project Manager** TORRUSIO, MARY  
**Task Manager(s)**  
**Status** Proposed

**Description**

This watershed education project consists of education and outreach about watersheds at the Polk County Environmental Education Center at the Circle B Bar Reserve. Through this project, school-aged youth and the general public will experience the watersheds in which they live, including the Peace River watershed. FY2008 components include an interactive exhibit and a wetland planting to enhance a stormwater pond, which will serve as an outdoor classroom at the Center (FY2008). For FY2009, cooperators are adding two interactive exhibits, one on the Green Swamp and the other on central Florida lakes. The project will also provide bus transportation and classroom supplies to conduct a field trip program for Polk County students at the Circle B Bar Reserve.

**Benefits**

This project enhances the District's watershed education efforts by addressing key objectives for watershed education through the following messages: 1. water is a limited resource, 2. good stewardship of water resources begins in one's own backyard, 3. everyone lives in a watershed and 4. wildlife diversity depends upon healthy wetlands and good water quality. It is anticipated that 12,650 people will visit the Circle B Bar Reserve annually.

**Costs**

The project for FY2009 is proposed at a total cost to the District of \$163,833 with the following Basin contributions, reimbursable by SOR funds: Peace River--\$116,321; Hillsborough River--\$26,213; Alafia River--\$21,298. This increased funding will pay for two additional exhibits and the implementation of a field trip program for Polk County students. It is anticipated that 12,650 people will visit the Circle B Bar Reserve annually. The field trip program will reach 5,150 students per year at a cost of \$4.34 per student. Originally, the education center was budgeted only within the Peace River Basin since the building was constructed there. In FY2009, the proposal includes field trips for students throughout Polk County, which includes portions of the Alafia River and Hillsborough River Basins and has been budgeted accordingly.

**Additional Information**

The total project cost of the FY2008 project is \$80,000, and the Peace River Basin Board's contribution is \$40,000 in Save Our Rivers (SOR) funds for this project.

	FY2008 Funding	FY2009 Funding		
<b>District Budgeted - Outside Revenue (SOR)</b>				
011 Alafia River Basin	0	22,221		
013 Hillsborough River Basin	0	27,135		
020 Peace River Basin	0	117,243		
<b>Project Funds Not Budgeted by the District</b>				
Polk County Natural Resources	40,000	163,833		
<b>Critical Project Milestones</b>				
	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>	
Bid process for exhibit design and construction initiated	6/30/07			6/30/07
Purchase order opened to Polk County Natural Resources	7/30/07			7/24/07
Exhibit design/construction vendor selected	9/30/07	11/30/07		11/30/07
Exhibit design specifications finalized	11/30/07	1/30/08		
Bid awarded to vendor	1/15/08			1/15/08
Exhibit construction begins	1/30/08	8/4/08		
Exhibits installed at center	8/30/08			

**Status As Of:** February 25, 2008

The grand opening of the Nature Discovery Center is scheduled for November 1, 2008, and the current exhibits are under construction.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Peace River
<b>Cooperator(s)</b>	Hillsborough Community College Foundation
<b>Project Manager</b>	MAKOID, MARY ALICE
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

The HCC Foundation Field Trip Program includes three different field trip programs for elementary and middle school students in Hillsborough, Pinellas and Polk counties. The three sites for the field trips are English Creek, Upper Tampa Bay and Cockroach Bay. The programs are designed to give participants a better understanding of Florida's water resources through 120 hands-on field experiences with highly qualified HCC professors and ultimately to create the next generation of environmental stewards.

**Benefits**

This project is designed to implement an environmental education initiative in Tampa Bay. Tampa Bay was identified as the highest priority on the District's Surface Water Improvement and Management (SWIM) priority list in 1988. The project's goals are to teach students and teachers the importance of preserving and maintaining productive ecosystems and the role water plays throughout Florida's environment, specifically Tampa Bay.

**Costs**

The total FY2009 project cost is \$218,385, and the District's share of \$85,086 is funded by SWIM (\$42,543) and the remaining funding is split among the following Basin Boards: Alafia (\$7,500), Hillsborough (\$25,000), Northwest Hillsborough (\$5,000), Pinellas-Anclote (\$2,522) and Peace (\$2,521). Basin budget breakdowns were established based on a list of program participants provided by the cooperator. Budget lines below include costs to manage the project. District funding will be used to fund 120 field trips, a four-day teacher training program, supplies and materials and transportation for 5,000 students. This cost-effective program will reach 5,000 students at a cost to the District of \$17 per person. Budget increases from FY2008 are in response to a rise in transportation costs.

**Additional Information**

The total FY2008 project cost is \$151,085, and the District's share of \$52,286 is funded by SWIM (\$26,143) and the remaining funding is split among the following Basin Boards: Alafia (\$7,059), Hillsborough (\$12,548), NW Hillsborough (\$5,490), Pinellas-Anclote (\$523) and Peace (\$523). Basin budget breakdowns were established based on a list of FY2007 program participants provided by the cooperator. Budget lines below include costs to manage the project. District funding is used to fund 120 field trips, a four-day teacher training program, supplies and materials and transportation for 5,000 students. This program will reach 5,000 students at a cost to the District of \$10.46 per person.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
011 Alafia River Basin	0	7,285	11,761	0	19,046
013 Hillsborough River Basin	0	12,951	20,909	0	33,860
014 Northwest Hillsborough Basin	0	5,666	9,148	0	14,814
016 Pinellas-Anclote River Basin	0	540	870	0	1,410
020 Peace River Basin	0	539	873	0	1,412
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	0	26,980	43,560	0	70,540
<b>Project Funds Not Budgeted by the District</b>					
HCC Foundation	98,800	75,000	133,300	0	307,100
Other funding sources	22,000	10,000	0	0	32,000
			<b>Total</b>		<b>\$480,182</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Field trips begin	10/1/07		10/1/07
Purchase order opened	10/1/07		10/24/07
Field trips end	6/15/08		
Teacher training workshop	6/30/08		
Registration for 2008-2009 field trips	8/1/08		
Final report received by the District	9/30/08		

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**Status As Of:** February 22, 2008

The FY2008 project is underway. Field trips have already started. Cooperator submitted a proposal for FY2009 funding.



<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte Harbor National Estuary Program, Pinellas County, Sarasota Bay Estuary Program, Tampa Bay Estuary Program
<b>Project Manager</b>	KAUFMAN, KRIS
<b>Task Manager(s)</b>	GRANT, BJ
<b>Status</b>	Ongoing

**Description**

This SWIM initiative project involves mapping and monitoring seagrass within four SWIM priority waterbodies: Tampa Bay, Sarasota Bay, Lemon Bay, and Charlotte Harbor. In addition to SWIM waterbodies, contractual services for the St. Joseph Sound/Clearwater Harbor Biennial GIS Mapping of Seagrass (See K150) are completed under a single agreement to benefit from economy of scale. Specifically, the District's consultant will provide digital aerial photography, photointerpretation, and GIS-based mapping in order to generate calculations of seagrass acreage and distribution within each of the named waterbodies. The project is conducted every two years to monitor the long-term health of these vital resources. The 2006 mapping effort is complete and District staff are requested FY2007 and FY2008 funds for the 2007-2008 effort. The digital format utilized in 2004 and 2006 allowed for more detailed GIS analysis to be conducted beyond creation of the original seagrass map product and will allow for efficient transfer of the imagery to fill agency and public requests. A new task for the project in 2007-2008 will be to scan photography from 1994, 1996, 1999, 2002 at high resolution and create digital GIS imagery layers that will then be uploaded to the District's GIS system. SWIM will utilize a pre-qualified firm procured under the Mapping & GIS Section's RFP 006-07 as the consultant for the next phase of mapping. District funds shown in the table include staff salaries. The proposed FY2009 budget includes \$175,000 as a portion of the funding needed for the 2009-2010 mapping effort.

**Benefits**

The mapping of seagrasses within each estuary allows the District, the Estuary Programs, and other entities to monitor the health and distribution of seagrasses. Seagrass health is used as an indicator of water quality conditions. Thus, this project can assist with water resource management decision making, specifically in evaluating the effectiveness of water quality improvement projects.

**Costs**

The project costs for mapping SWIM waterbodies in 2007-2008 is estimated at \$332,000. Costs associated with the upcoming 2007-2008 effort are included in the FY2007 and FY2008 budgets. The FY2007 budget was \$168,350, with State SWIM and six basin boards contributing. The FY2008 budget is \$163,650, with State SWIM and six basin boards contributing. The percent of this effort paid by each basin is based on the amount of area per waterbody flown for the aerial photography. Tampa Bay is approximately 55% of the area flown, Sarasota Bay is 7%, and Charlotte Harbor (including Lemon Bay) is 38%. For the total project costs of \$332,000, four basins (Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River) will fund 5.5% of the cost at \$18,260 each. The Manasota Basin will fund 13.75% of the cost at \$45,650 and the Peace River Basin will fund 14.25% of the cost at \$47,310. State SWIM will fund the remaining half of the 2007-2008 costs (\$166,000). Funding for the 2009-2010 effort will be budgeted over both FY2009 and FY2010. The total proposed FY2009 budget is \$175,000 with six basin boards contributing.

**Additional Information**

The next phase of mapping will begin in December 2007. Seagrass mapping for SWIM waterbodies (W331) and St. Joseph Sound Clearwater Harbor (K150) will be completed under one agreement at a total estimated cost of \$300,000. Seagrass meadows serve as nurseries for a variety of commercially and recreationally important species of fin fish and shellfish, and they are highly dependent upon the maintenance of good water quality. The project meets the goals and objectives of the Tampa Bay, Sarasota Bay, and Charlotte Harbor SWIM Plans, the Tampa Bay Estuary Program, Sarasota Bay Estuary Program, and Charlotte Harbor National Estuary Program. The mapping effort was last conducted in 2005-2006. Between 2004 and 2006, seagrass coverage in Tampa Bay increased by approximately 4.7%. In Sarasota Bay, which has a more highly urbanized watershed than Tampa Bay, seagrass increased 7% in coverage from 2004 to 2006. From 2004 to 2006, Charlotte Harbor seagrass coverage increased by 1%. The only SWIM waterbody to experience a loss in coverage between 2004 and 2006 was Lemon Bay with a 1% decrease.

Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

011 Alafia River Basin	31,071	10,549	11,359	0	52,979
013 Hillsborough River Basin	31,071	10,549	11,359	0	52,979
014 Northwest Hillsborough Basin	31,071	10,549	11,359	0	52,979
016 Pinellas-Anclote River Basin	31,071	10,549	11,359	0	52,979
020 Peace River Basin	81,081	27,331	29,431	0	137,843
021 Manasota Basin	79,127	26,372	28,398	0	133,897

**District Budgeted - Outside Revenue**

State Trust Funds (SWIM)	172,980	95,897	103,264	0	372,141
State Trust Funds (SWIM) - Prior 2006	165,904	0	0	0	165,904

**Total** **\$1,021,701**

**Critical Project Milestones**

**1. Critical Project Milestones**

	Projected	Amended	Actual
Request for Proposals	6/15/03		7/11/03
Begin Review of Proposals	8/15/03		9/22/03
Draft Agreement to Management Services	10/31/03		12/17/03
Contract Executed	11/15/03		1/16/04
Photography Shot for 2003/2004	1/31/04		1/17/04
Final Report for 2003/2004	12/31/04		12/31/04
Consultant Notice to Proceed	12/1/05		12/13/05
First Amendment to the 2003/2004 Agreement	12/1/05		12/13/05
Acquisition of Aerial Photography	1/31/06	2/15/06	2/10/06
Agreement Expiration Date	12/31/06		12/31/06
Final Deliverables for 2005/2006	12/31/06		12/31/06

**2. Critical Project Milestones**

Processing of Technical Specifications and Purchase Order	10/30/07		11/30/07
Purchase Order with scope of work Opened	11/30/07		11/30/07
Work Order #1 Opened	12/13/07		12/13/07
Consultant imagery acquisition	1/30/08	2/15/08	2/15/08
Consultant ortho-imagery production	3/31/08		
Consultant photointerpretation	10/31/08		
Consultant GIS validation	11/30/08		
Consultant final deliverables	12/31/08		

**Status As Of:** February 28, 2008

A pre-qualified firm, procured under the Mapping & GIS Section's RFP 006-07, will complete the 2007-2008 phase of mapping. The purchase order and first work order were opened December 2007. District and Consultant staff are coordinating acquisition of photography for January 2008. The Consultant requested an extension for photography acquisition through February 15, 2008 due to poor flight conditions. All imagery was acquired for the project by the approved extension date. Color balancing and ortho-imagery processing are underway.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County Natural Resources
<b>Project Manager</b>	SIMS, SHELLEY
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This project is in response to a cooperative funding project from Polk County. The objective of this project is to acquire additional parcels of land adjacent to an existing wetland system, remove the nuisance vegetation, restore the wetland hydroperiods and provide water quality treatment. This project will increase the available flood storage and allow for additional untreated stormwater runoff to be directed onto the site for water quality treatment prior to discharging to Banana Lake. This project includes land and easement acquisition, design, permitting and construction to restore and enhance an existing wetland system in the Banana Lake watershed.

**Benefits**

This project will improve water quality and enhance natural systems. The additional acreage provided adjacent to the wetland will increase the open water area for storage and increase the littoral shelf area available for additional wetland planting.

**Costs**

The total estimated project cost is \$1,409,021. The FY2008 project cost is \$500,000, with Polk County and the District each contributing half (\$250,000). The District share is split between the Peace River Basin Board (\$125,000) and State SWIM (\$125,000). The FY2009 project cost is \$500,000, with Polk County and the District each contributing half (\$250,000). The District share is split between the Peace River Basin Board (\$125,000) and State SWIM (\$125,000). Polk County has applied for a 319 grant from FDEP in the amount of \$800,000 for construction and public education signage. District funds shown in the table include staff salaries.

**Additional Information**

During the past 10 years a significant portion of the 285 acre basin has been developed for residential use. Stormwater runoff has been conveyed to retention ponds which border the wetland area adding to increased seasonal high water flows. In 2004, this increase directly impacted four homes adjacent to the wetland, causing one to be permanently abandoned. In 2006 Polk County, in cooperation with the Federal Emergency Management Agency (FEMA), purchased and demolished the abandoned home site at a cost of \$320,000 for the structure. FEMA contributed \$220,000 and Polk County contributed \$100,000 to purchase the abandoned home site. This abandoned home site is to be included in the additional acreage to be incorporated into the existing wetland system.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	0	127,134	128,476	0	255,610
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	0	127,134	128,475	0	255,609
<b>Project Funds Not Budgeted by the District</b>					
FDEP 319 Grant	0	800,000	0	0	800,000
Polk County Natural Resources	189,021	250,000	250,000	0	689,021
			<b>Total</b>		<b>\$2,000,240</b>

**Critical Project Milestones****1. Contract Development and Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft agreement sent to Management Services	12/17/07		
Agreement returned from Management Services	3/28/08		
Agreement sent to Cooperator	4/18/08		
Signed agreement returned from Cooperator	5/9/08		
Agreement fully executed	5/23/08		
Notice to Proceed	5/26/08		

**2. Project Tasks**

Design Completion	12/31/08		
Permitting Complete	12/31/09		
Construction Completion	12/31/10		

**Status As Of:** February 18, 2008

A pre-application meeting with Bartow Regulation is scheduled for June 28, 2007. An agreement has been drafted and is currently under review. A Scope of Work was provided by the cooperator and is currently under review. The agreement has been routed for signature.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte Harbor National Estuary Program
<b>Project Manager</b>	GARCIA, LIZANNE
<b>Task Manager(s)</b>	KAUFMAN, KRIS
<b>Status</b>	Ongoing

**Description**

This project provides for the administration and implementation of projects as outlined in the SWIM Plan for Charlotte Harbor. The FY2009 budget will include staff salaries and administrative costs to implement projects in the SWIM Plan. Administration and implementation includes assessment of implementation progress, a review and refinement of the Pollutant Load Reduction Goal (PLRG) for the waterbody, periodic SWIM Advisory Committee meetings, new project development (rationale and justification), development of relevant contracts and Requests for Proposals, invoicing, project related presentations, field visits, and miscellaneous duties as they arise. Included in the FY2006 budget was \$50,000 for a historical benthic habitat mapping and change analysis of Charlotte Harbor. The project will be similar to the effort completed for Tampa Bay in determining historical seagrass coverage from 1950s aerial photography. This benthic habitat map will allow the District and the Charlotte Harbor National Estuary Program (CHNEP) to refine goals being set for this system.

**Benefits**

This project's support of the Charlotte Harbor SWIM Plan creates an opportunity for a cohesive effort between the District, the CHNEP, and other state and local agencies to better implement resource management decisions and restoration activities. SWIM projects are eligible for state matching funds with the state funding 50 percent of the project costs and the District funding the remaining 50 percent.

**Costs**

The FY2008 and FY2009 ongoing costs for the Charlotte Harbor SWIM Plan Implementation are funded 12.5 percent from the Manasota Basin, 37.5 percent from the Peace River Basin, and 50 percent from the State SWIM Program and include staff salary, travel and central garage.

**Additional Information**

In 1987, the Florida Legislature established the Surface Water Improvement and Management (SWIM) Act having recognized that water quality and habitat in surface waters throughout the state have degraded or were in danger of being degraded. The Act requires the five water management districts to maintain a priority list of water bodies of regional or statewide significance within their boundaries, and develop plans and programs for the improvement of those water bodies. To date, ten SWIM water bodies in the District have had plans developed and approved by the state. Several plans have been updated one or more times as required by the Act. The Charlotte Harbor SWIM Plan was first approved in 1993 and last updated in November 2000. Since the first plan, the District has initiated a number of restoration and diagnostic assessment projects. Included within these are: 1) implementation of a water quality monitoring program, 2) development of a pollutant loading model, 3) investigation of a resource-based pollutant load reduction goal, 4) assessment of toxin levels, 5) identification of cumulative impacts to freshwater inflow reductions, 6) seagrass mapping efforts, 7) various habitat restoration projects, and 8) involvement in numerous public outreach and education activities.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	83,227	3,151	2,483	0	88,861
021 Manasota Basin	27,743	1,050	828	0	29,621
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	58,577	4,201	3,310	0	66,088
State Trust Funds (SWIM) - Prior 2006	76,230	0	0	0	76,230
			<b>Total</b>		<b>\$260,800</b>

**Critical Project Milestones**

**1. SWIM Plan Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Last Update of SWIM Plan			11/22/00
Next Update of SWIM Plan	6/1/07	12/31/09	

**2. Benthic Habitat Map Critical Project Milestone**

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**Status As Of:** February 28, 2008

SWIM Plan Update: The last update of the SWIM Plan for Charlotte Harbor became effective in 2000. District staff continue to work with the Charlotte Harbor National Estuary Program, the Florida Department of Environmental Protection and local governments to implement projects in the 2000 Plan. Current projects being implemented in the Charlotte Harbor watershed include W527, W528, W555, W556, and W558. Updates for these projects are included under the individual project numbers. Status of the activities implemented with the Charlotte Harbor National Estuary Program are provided under project number W526. The District was waiting until the CHNEP Comprehensive Conservation and Management Plan (CCMP) was updated before updating the Charlotte Harbor SWIM Plan to ensure that both documents are consistent in their overall goals. The District through the CHNEP has actively participated in the update of the CCMP which was conceptually approved by the CHNEP Policy Committee at its November 2007 meeting. Final approval and signing of the CCMP by the Policy Board is scheduled for a Signing Ceremony on March 24, 2008. SWIM staff will develop a timeline for updating the SWIM Plan. An updated SWIM Plan is not anticipated to be complete until 2009. Benthic Habitat Map Update: The historical mapping of seagrass is complete. Final deliverables have been received and the final payment is processing.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte Harbor Environmental Center
<b>Project Manager</b>	ANTOINE, KENDRA
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This project provides for a water quality education program to more than 4,000 residents in the Charlotte Harbor area. The program has the following components: volunteer water quality monitoring, Journey to the Estuary boat tours, speaking presentations, workshops, hiking trips, wading trips, printing expenses and attendance at special events. The Charlotte Harbor Environment Center (CHEC) is coordinating this education effort.

**Benefits**

The project fosters a sense of stewardship for the Peace River, Charlotte Harbor, Lemon Bay and related freshwater resources through focused education opportunities for public participation and schools. The program provides an opportunity for comparison of different areas within the Charlotte Harbor and Lemon Bay watersheds. These programs are consistent with the District's watershed management and watershed education initiatives. The educational efforts help residents and visitors to better understand the relationship of the harbor, the river and their lives. The knowledge gained from this program equips participants with the foundation to make informed future watershed decisions.

**Costs**

The total cost of the FY2009 project is \$85,835, with the District's share proposed to be \$34,726. The Manasota Basin Board is requested to fund \$3,473 (20%), the Peace River Basin Board \$13,890 (80%) and SWIM \$17,363. This \$4,178 (11%) decrease in funding from FY2008 is the result of a reduction in programs offered. The program is projected to reach 4,230 residents, giving a cost-benefit ratio for the District's share of \$. Budget lines below include costs for staff to manage the project.

**Additional Information**

Volunteer water quality monitoring provides valuable data to various government and environmental agencies as part of an ongoing data collection system to monitor the health of the harbor. The Lemon Bay Watershed Education Program is an effort to support existing watershed activities underway in the region. The District is working with the CHEC, Sarasota and Charlotte counties, the Charlotte Harbor National Estuary Program, the Science and Environment Council of Sarasota County and others to coordinate watershed education efforts.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	60,900	16,399	14,776	0	92,075
021 Manasota Basin	34,034	4,100	3,694	0	41,828
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	39,934	20,498	18,470	0	78,902
State Trust Funds (SWIM) - Prior 2006	76,737	0	0	0	76,737
<b>Project Funds Not Budgeted by the District</b>					
Other Funding Sources	45,050	40,000	51,109	0	136,159
			<b>Total</b>		<b>\$425,701</b>

**Critical Project Milestones**

**FY2007 Budgeted Funds**

	Projected	Amended	Actual
Initiate purchase order	1/2/07		1/2/07
First Task Report Due	2/15/07		2/15/07
Second Task Report Due	4/15/07		4/15/07
Third Task Report Due	6/15/07		6/15/07
SWIM Water School	6/29/07		2/19/07
Fourth Task Report Due	9/14/07	3/31/08	
Lemon Bay Conference	9/14/07		4/24/07
Project Close	11/30/07	3/31/08	

**FY2008 Budgeted Funds**

Initiate Purchase Order	10/1/07	10/31/07	10/31/07
First Task Report Due	12/31/07		12/11/07

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Second Task Report Due	3/31/08
Third Task Report Due	6/30/08
Fourth Task Report Due	9/16/08

**Status As Of:** February 26, 2008

The FY2007 purchase order has been extended through December 31, 2007. The extension has been granted to give the cooperator time to receive the water quality monitoring results from the lab and to upload these results to the CHEC website. To date, the following tasks have been completed under the FY2007 scope of work: the CHEC planned and implemented a 3-day SWIM Water School with an average of 30 participants each day; conducted 12 public speaking programs reaching 682 citizens; hosted 40 wading trips with 729 participants; developed a "Keep It Clean" booklet, which is currently being distributed; implemented a Lemon Bay Conference on March 24 with more than 100 citizens participating; developed a Lemon Bay display that has been present at 6 community events reaching 676 residents; conducted 12 Journey Through the Estuary boat trips reaching 132 residents; researched, planned and produced a Lemon Bay DVD, which is in the editing process; conducted 2 water quality monitoring training sessions reaching 15 volunteers and completed 4 speaking programs regarding the water quality monitoring program reaching 116 residents. The 12-month water quality monitoring program in Lemon Bay is complete. The FY2008 purchase order is open. To date, the following tasks have been completed under the FY2008 scope of work: the CHEC planned and implemented a 3-day SWIM Water School with an average of 19 participants each day; conducted 5 public speaking programs reaching 208 citizens; hosted 9 estuary wading trips with 133 participants; set-up an educational display that has been present at 1 public event reaching 175 residents; conducted 4 Journey Through The Estuary boat trips reaching 45 residents and conducted 2 hiking trips with 29 participants. The CHEC also conducted 2 training sessions reaching 13 participants of the Volunteer Water Quality Monitoring Program; volunteers have conducted 5 months of water quality samples and the CHEC implemented two water quality speaking sessions reaching 38 residents. The Peace River Talk Tours have been scheduled. The Down River Tour is scheduled for April 2, and the Upriver Tour is scheduled for April 16.



**Project Type** SWIM  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** Charlotte Harbor Environmental Center  
**Project Manager** ANTOINE, KENDRA  
**Task Manager(s)**  
**Status** Proposed

**Description**

The Charlotte Harbor Environmental Center (CHEC) will develop and provide watershed education outreach programs to residents about their impact on the Peace River watershed and on Charlotte Harbor. The CHEC will identify target audiences and develop and deliver specific educational programs and products. Program activities proposed for FY2009 include: implementation of a network of river monitors at 8 sites in Hardee County, a volunteer water quality monitoring program in Punta Gorda Isles, water quality monitoring updates on the CHEC web site and participation in community events and speaking engagements. All program components will focus on improving the health of the watershed.

**Benefits**

The Peace River discharges into Charlotte Harbor, a SWIM priority water body and a Charlotte Harbor National Estuary Program (CHNEP) designated "estuary of national significance." This project contains components that contribute to the District's watershed education efforts throughout the Peace River Basin. This project proposes to identify behaviors and encourage actions that residents can take to protect water resources.

**Costs**

The total FY2009 project cost is \$71,248, with the District's share proposed to be \$34,050. The Peace River Basin Board is requested to fund \$17,025 and SWIM \$17,025. This request represents a \$14,700 (43%) increase in funding to allow for additional programming. The FY2009 project provides outreach to an estimated 5,000 residents and builds upon the FY2008 project. This program is projected to reach 5,000 residents, giving a cost benefit for the District's share of \$7.

**Additional Information**

Beginning in FY2005 with funding from Peace River basin initiatives for public education (P268), CHEC conducted research for a watershed education program. Based on research results, the CHEC developed a plan and began to implement a watershed education program in FY2006 also funded through basin initiatives for public education. In FY2007 and FY2008, the program received SWIM funding.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	11,912	11,037	18,472	0	41,421
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	11,912	11,037	18,472	0	41,421
<b>Project Funds Not Budgeted by the District</b>					
Charlotte Harbor Environmental Center	23,826	19,350	37,198	0	80,374
			<b>Total</b>		<b>\$163,216</b>

**Critical Project Milestones**

**FY2007 Budgeted Funds**

	Projected	Amended	Actual
First Task Report Due	2/15/07		2/15/07
Second Task Report Due	4/30/07		4/25/07
Third Task Report Due	7/31/07		6/25/07
Fourth Task Report Due	9/14/07	3/31/08	

**FY2008 Budgeted Funds**

	Projected	Amended	Actual
Initiate Purchase Order	10/1/07	10/31/07	
First Task Report Due	12/31/07		12/31/07
Second Task Report Due	3/31/08		
Third Task Report Due	6/30/08		
Fourth Task Report Due	9/16/08		
Project Close	11/14/08		

**Status As Of:** February 28, 2008

The FY2007 purchase order has been extended until March 31, 2007. The extension has been granted to give the cooperator time to receive the water quality monitoring results from the lab. All tasks on the FY2007 purchase order are complete and the final



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invoice is in the mail. The FY2008 purchase order is open. To date, the following tasks have been completed under the FY2008 scope of work: the CHEC has conducted 5 months of volunteer river water quality monitoring and CHEC has agreed to participate in several speaking engagements and events.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Florida Department of Environmental Protection
<b>Project Manager</b>	POWERS, STEPHANIE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This multi-year project is a Surface Water Improvement and Management (SWIM) Program initiative consisting of the hydrologic restoration of approximately 677 acres of freshwater and saltwater wetland and saltern areas critical to early life stages of many commercially-important fishes in Charlotte Harbor. The Alligator Creek project is located on a 1,600 acre site that is owned by the Florida Department of Environmental Protection (FDEP) and is located south of Punta Gorda abutting Charlotte Harbor. The restoration activities are being performed in phases based on available funds. The current phase (Phase II) includes construction of Projects 1-A, 3, 10, 11 and 16. Project 16 will be constructed concurrently with the other projects, but under a separate agreement with the U.S. Army Corps of Engineers (USACE).

**Benefits**

Completion of Projects 1-A, 3, 10, 11 and 16 would restore the historic hydroperiod and associated coastal habitats to approximately 600 acres of wetland and saltern areas which have been severely impacted by anthropogenic activities. Projects 5, 6, 8, 13 and 14 would restore an additional 77 acres of coastal ecosystems.

**Costs**

The construction contract for projects 1-A, 3, 10, and 11 is for \$1,000,750.86. The funding agreement with the USACE for Project 16 is for \$615,384.62, of which the District is to contribute \$215,384.62. Additionally, funds requested in FY2009 (\$100,000 from the Peace River Basin and \$100,000 from a State SWIM funds for a total of \$200,000) will be used for design, permitting, and construction of Phase III (Projects 5, 6, 8, 13, and 14). It is anticipated that additional funding during future fiscal years will be necessary to meet all construction expenses and District staff will seek grant funding to help offset construction costs.

**Additional Information**

Charlotte Harbor is generally viewed as one of the most productive estuarine systems in Southwest Florida. Although it is appropriately considered a healthy system, problems exist in the areas of hydrologic alterations, water quality degradation, and habitat loss. The SWIM Plan for Charlotte Harbor focus on management strategies for the Peace and Myakka Rivers, in addition to Charlotte Harbor proper, to reduce point and non-point source pollution and to preserve and restore habitat. Restoration at the Alligator Creek site commenced in 1999 with design and permitting of Projects 1 and 2 (Phase I) and the formal acceptance of the Alligator Creek Conceptual Habitat Restoration Plan in December 2000. Projects 1-A, 3, 10, 11 and 16 (Phase II) represent the next set of priority projects at the Alligator Creek site, which will be followed by Projects 5, 6, 8, 13 and 14 (Phase III). This project represents a major restoration effort. As a result, the District has partnered with Mote Marine Laboratory through the cooperative funding program in FY2007 (see Project No. W555) to help determine how effective the Alligator Creek Project is and to help guide future restoration efforts in Charlotte Harbor and around the state. Charlotte Harbor is a District priority Surface Water Improvement and Management (SWIM) program waterbody and is considered an "estuary of national significance" with the establishment of the Charlotte Harbor National Estuary Program (CHNEP). Water quality data and seagrass mapping efforts suggest that Charlotte Harbor's water quality is not degrading, and its fisheries' habitats are mostly stable. Data collected since its SWIM designation in 1993 indicate the system experiences annual algae blooms and that nutrient concentrations in these areas appear elevated in comparison to other Florida estuaries. The Alligator Creek Project is consistent with the habitat restoration goals of the District's SWIM Plan for Charlotte Harbor and the Charlotte Harbor National Estuary Program's CCMP.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	560,904	105,431	103,955	100,000	870,290
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	288,374	5,430	103,955	100,000	497,759
Ecosystem Trust Fund - Alligator Ck Rstr (SWIM)	800,000	0	0	0	800,000
Ecosystem Trust Fund - Charlotte Hbr Rstr	0	100,000	0	0	100,000
FCMP - Alligator Creek Restoration (SWIM)	120,000	19,400	0	0	139,400
NOAA - Alligator Creek	50,000	0	0	0	50,000
State Trust Funds (SWIM) - Prior 2006	408,794	0	0	0	408,794
<b>Project Funds Not Budgeted by the District</b>					
U.S. Fish and Wildlife Service	16,700	0	0	0	16,700
USACE	400,000	0	0	0	400,000

	Total	
	<b>\$3,282,943</b>	
Critical Project Milestones	Projected	Amended Actual
<b>1. Critical Project Milestones - Phase II</b>		
Consultant Selection Short List Approved by Basin Board		2/1/02
Execute Contract with USACE		12/11/07
Permit Application Sent to SWFWMD and ACOE		11/16/00
Request for Bids		8/16/05
RFP for Final Design and Permits sent to Management Services	4/30/01	4/16/01
RFP released	9/28/01	10/9/01
Draft Contract to Management Services	6/7/02	6/7/02
Contract Executed	8/7/02	10/9/02
Draft Conceptual Design Report	11/7/02	12/6/02
Draft Conceptual Design Report	11/7/02	12/6/02
90 Percent Plan Submittal	3/6/03	3/6/03
100 Percent Plan Submittal	6/6/03	7/2/03
100 Percent Plan Submittal	9/6/03	9/11/03
Permits Received	3/27/04	6/23/04
<b>2. Critical Project Milestones - Phase III</b>		
Request for Proposals	4/30/08	

**Status As Of:** February 29, 2008

The Request for Bid (RFB) was advertised on 08/16/2005, and the bid responses were opened on 09/14/2005. Two responses were received and Tampa Contracting Services (TCS) was awarded the contract. The TCS bid for the base projects (Projects 1-A, 3, 10 and 11) was \$1,000,750.86. The private entity construction agreement was fully executed on 3/2/2006, the notice to proceed was issued to TCS on 3/7/2006, and the contractor mobilized soon after that. Construction is now completed. The agreement with the USACE was executed on December 11, 2007. The USACE construction staff are currently reviewing the site and estimate that they can construct all of Project 16 for approximately \$400,000, which is significantly lower than the construction contractor's bid for Project 16. Additional funds requested for FY2008 will be used to either supplement construction funds for Project 16 in case the Corps cannot complete construction, or for design of the next set of priority projects (i.e., Phase III) at the Alligator Creek site. Construction of Project 16 commenced on February 11, 2008. The RFP for Phase III will be released in April 2008.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality
<b>Basin(s)</b>	Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte County, Florida Fish and Wildlife Conservation Commission
<b>Project Manager</b>	SZAFRANIEC, MARY
<b>Task Manager(s)</b>	KAUFMAN, KRIS
<b>Status</b>	Ongoing

**Description**

This project is an ongoing SWIM Initiative to monitor water quality in Charlotte Harbor, a SWIM priority waterbody and designated estuary of national significance. The purpose of the water quality monitoring is to establish a long-term database of water quality conditions within the estuary to provide essential data for planning and management purposes, such as implementation of the Charlotte Harbor SWIM Plan. The District began collecting and analyzing monthly water quality samples from Charlotte Harbor in 1993. In 2000, the District worked with staff from Charlotte County (County) and the Florida Fish and Wildlife Conservation Commission (FFWCC) to develop an implementation plan for long-term water quality monitoring. As a result of these discussions, the District, County, and FFWCC agreed to cooperatively monitor water quality in Charlotte Harbor. The District and the FFWCC are responsible for collection of 25 samples per month. The County is responsible for analyzing each sample for 11 water quality parameters, including nutrients, color and turbidity. Data management and publication of the data for this project are completed under W547.

**Benefits**

The project created a multi-agency cooperative effort that provides a long-term water quality dataset to assist in establishing the health of the Charlotte Harbor study area and provide information on changes in water quality.

**Costs**

The FY2009 project cost is \$42,900, which includes \$21,450 from State SWIM, \$16,087.50 from the Peace River Basin Board and \$5,362.50 from the Manasota Basin Board. District funds shown in the table include staff salaries.

**Additional Information**

Charlotte Harbor is generally viewed as one of the most productive estuarine systems in southwest Florida. Although it is appropriately considered a healthy system, problems exist in the areas of hydrologic alterations, water quality degradation, and habitat loss. The SWIM Plan for Charlotte Harbor focus on management strategies for the Peace and Myakka Rivers, in addition to Charlotte Harbor proper, to reduce point and non-point source pollution and to preserve and restore habitat. The objectives of this project are consistent with these strategies. This coordinated effort involves two separate agreements: 1) an agreement between the District and the County outlining responsibilities of both parties but does not involve the transfer of funds, and 2) an agreement between the District and the FFWCC outlining sampling services and reimbursement rates for water quality monitoring.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	119,045	17,820	17,843	0	154,708
021 Manasota Basin	39,683	5,940	5,948	0	51,571
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	42,611	23,760	23,791	0	90,162
State Trust Funds (SWIM) - Prior 2006	174,171	0	0	0	174,171
			<b>Total</b>		<b>\$470,612</b>

**Critical Project Milestones****1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Contracts	12/31/00		11/21/00
Basin Board Approval of Agreement	4/30/01		12/13/00
Governing Board Approval of Agreement	4/30/01		12/19/00
Contract Executed	5/1/01		5/7/01
First Water Quality Monitoring Event	5/12/01		5/12/01
Notice to Proceed	6/1/01		5/9/01
FFWCC First Amendment to Contracts Management	3/26/04		4/2/04
FFWCC First Amendment Fully Executed	5/31/04		9/27/04
Charlotte County First Amendment Fully Executed	3/30/05		3/30/05
FFWCC Second Amendment to Contract Fully Executed	5/22/07		5/22/07
Charlotte County Second Amendment Fully Executed	3/26/08		

**Status As Of:** February 26, 2008

To date, reimbursement has been made to FFWCC for water quality sampling efforts through December 2007. A second amendment to the original agreement was executed in May 2007 with the FFWCC. A second amendment to the original was sent to Charlotte County for signature on February 26, 2008. These amendments allow for an additional three-year "No Cost Time Extension" extending each party's commitment to the project through March 31, 2011. Currently, the Charlotte Harbor Environmental Center (CHEC) is presenting the results of these efforts on its website, <http://www.checflorida.org>, allowing the public to view results in terms of both status and trends in water quality.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte Harbor National Estuary Program
<b>Project Manager</b>	GARCIA, LIZANNE
<b>Task Manager(s)</b>	KAUFMAN, KRIS, POWERS, STEPHANIE
<b>Status</b>	Ongoing

**Description**

This project provides for the funding of the Annual Workplan for the Charlotte Harbor National Estuary Program (CHNEP). The District participates in three main areas. First the District's SWIM program, funded by the basin boards and State, carries out the projects that will address water quality and habitat restoration within the Harbor. Second, the District, through the basin boards and State, have contributed annual funding to the CHNEP since 1997 to carry out the administration and implement of projects identified in the CHNEP Comprehensive Conservation and Management Plan. And finally, the District provides staff to sit on the technical, management and policy (Governing Board member) committees of the program. The District's annual budget includes funding support to the CHNEP and District staff salaries, travel and central garage to administer the project, which includes attending board meetings and other workshops and invoicing.

**Benefits**

This project' support of the CHNEP creates an opportunity for a cohesive effort between the District, CHNEP and other state and local agencies to implement resource management decisions and restoration activities. Additionally, this project provides for leveraging funding between the partners. Projects contained within the CHNEP Annual Workplan address management issues concerning hydrologic alterations, water quality degradation, and habitat loss within the Peace and Myakka River watersheds and the Charlotte Harbor estuary.

**Costs**

The District has provided funding to the CHNEP on an annual basis since 1997. The District's annual funding commitment for the CHNEP is \$110,000. The District share is split between the Manasota Basin Board (12.5%, \$13,750) and the Peace River Basin Board (37.5%, \$41,250). The remaining 50% (\$55,000) will come from State SWIM funds. District funds are used to implement projects outlined in the Annual Workplan. District funds in the table include staff salaries, travel and central garage.

**Additional Information**

In 1987, the Florida Legislature established the Surface Water Improvement and Management (SWIM) Act, having recognized that water quality and habitat in surface waters through out the state have degraded or were in danger of being degraded. The Act requires the District to maintain a priority list of waterbodies of regional or statewide significance within their boundaries. Charlotte Harbor is designated as a priority waterbody. Charlotte Harbor was identified by the United States Environmental Protection Agency (USEPA) in 1995 as an estuary of Federal Significance and subsequently included in the National Estuary Program. As a result of this designation, the Charlotte Harbor National Estuary Program was established to assist the region in developing a comprehensive plan for the restoration and protection of Charlotte Harbor. Partners in the CHNEP include the Southwest Florida and South Florida Water Management Districts, USEPA, Florida Department of Environmental Protection, other state and federal agencies, and local governments from the watershed. The goals and strategies for the Harbor are identified in the Comprehensive Conservation and Management Plan (CCMP) for Charlotte Harbor which provides guidance to each entity on their contribution to restore the Harbor. Since 1993, the District has completed several habitat restoration projects and diagnostic assessments, including seagrass mapping, water quality monitoring, and development of a pollutant load reduction goal for the Harbor.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	274,040	44,968	45,113	27,500	391,621
021 Manasota Basin	91,346	14,989	15,037	27,500	148,872
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	119,587	59,956	60,149	55,000	294,692
State Trust Funds (SWIM) - Prior 2006	368,701	0	0	0	368,701
<b>Project Funds Not Budgeted by the District</b>					
CHNEP	977,725	110,000	110,000	0	1,197,725
			<b>Total</b>		<b>\$2,401,611</b>

**Critical Project Milestones****2. FY2004 Annual Workplan Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
FY2004 Contract with CHNEP Executed	3/15/04		4/16/04
FY2004 Contract Close Out	12/31/06		

<b>3. FY2005 Annual Workplan Critical Project Milestones</b>		
FY2005 Contract with CHNEP Executed	4/15/05	6/10/05
FY2005 Contract Close Out	12/31/07	
<b>4. FY2006 Annual Workplan Critical Project Milestones</b>		
FY2006 Contract with CHNEP Executed	12/31/05	8/2/06
FY2006 Contract Close Out	12/31/08	
<b>5. FY2007 Annual Workplan Critical Project Milestones</b>		
FY 2007 Contract with CHNEP Executed	4/1/07	6/11/07
FY 2007 Contract Close Out	12/31/09	
<b>5. FY2008 Annual Workplan Critical Project Milestones</b>		
Contract with CHNEP Executed	12/1/07	
FY2008 Contract Close Out	12/31/10	

**Status As Of:** January 04, 2008

FY2004 Contract: This agreement has been closed out. FY2005 Contract: The FY2005 Agreement was executed on 06/10/05 and expires on 12/31/2007. The FY2005 Workplan includes an update to the Water Quality Status and Trends Report prepared for the watershed in 2003. Additional projects include two Research and Restoration Partners projects (1. Do altered coastal habitats promote non-native fish invasions into the Charlotte Harbor Estuary and 2. Assessment of water quality impacts of bio-solids landspreading) and funding for the Charlotte Harbor Water Quality Monitoring Network.) The District has received the deliverables under this agreement and is reviewing. The CHNEP has not provided an invoice requesting reimbursement for the projects included in this agreement although they have indicated that all work was completed prior to the expiration date of the agreement. FY2006 Contract: Changes to the CHNEP's Workplan budget delayed the agreement process. The FY2006 Agreement was executed 8/2/2006 and expires on 12/31/2008. The FY2006 Workplan includes a special publication of Florida Scientist regarding the CHNEP 2005 Watershed summit, an Integrated GIS:IMS project, mapping of historic subbasin boundaries and funding for the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network. The Special Issue of Florida Scientist was published and the District has received a copy. The Final report for the Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Network has been received. FY2007 Contract: The FY2007 Agreement was executed on June 11, 2007 and expires 12/31/2009. Projects included for funding are related to addressing environmental data and information needs to measure the health of the estuary, identify opportunities for water quality and habitat restoration projects and to measure the success of these projects. FY2008 Contract: District staff requested that the CHNEP provide a scope of work and budget for the agreement by September 11, 2007. This information was received September 24, 2007 and the scope of work was consistent with the Annual Workplan approved by the CHNEP last spring. However the District's budget for this project included funds from the Water Protection and Sustainability Trust Fund and processing of the agreement was delayed until it was decided that Water Management Lands Trust Funds would be used for the project. The draft agreement was sent to the CHNEP on November 20, 2007 for review and approval. Subsequently, on December 6, 2007 the CHNEP indicated that they would like to revise the scope of work and budget to address project issues. The District's project manager requested a revised scope of work at that time. As of the date of this update, the CHNEP has not responded to a follow-up from the District. Management Conference: The Management and Policy Committee's unanimously approved the update of the CCMP at their meetings in November. A signing ceremony is planned for March 2008.



**Peace River Water Quality Monitoring**

**Project Type** SWIM  
**AOR(s)** Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** KAUFMAN, KRIS  
**Task Manager(s)** WOLDEN, CATHERINE  
**Status** Ongoing

**Description**

This project is an ongoing SWIM Initiative to monitor water quality in the Peace River. The District participated in a multi-agency cooperative effort to monitor the river from 1997 to 1998. It was determined a long term effort was needed to characterize water quality conditions and pollutant loadings in the river system. The current project began in 2000 and funding will be used to continue the monthly water-quality monitoring program at ten United States Geological Service (USGS) stream stations in the Peace River. The data will be used in conjunction with streamflow measurements provided by an existing USGS program to estimate monthly pollutant loading at the ten gauge sites. Partners in this project include the Charlotte Harbor National Estuary Program and Charlotte Harbor Environmental Center (CHEC). Currently, CHEC is presenting results of this effort on its website [www.checflorida.org](http://www.checflorida.org) (See W547).

**Benefits**

This data will be used to develop future water quality improvement projects as needed. The project's data is regularly used to create publications such as, "Water Quality Conditions and Pollutant Loads and Yields in the Peace and Myakka River Basins" (See W554). Ongoing projects in the watershed such as the Lake Hancock Outfall Treatment Project have analyzed the data in order to understand current conditions as well as justify recommendations for action.

**Costs**

The FY2008 ongoing costs for this project are funded 50 percent from the Peace River Basin and 50 percent from the State SWIM Program and are for the District's Water Quality Monitoring Program (WQMP) staff to collect samples and the District Laboratory to analyze the samples. District funds shown in the table include staff salaries.

**Additional Information**

The Peace River discharges into Charlotte Harbor, a SWIM priority waterbody and is designated as an "estuary of national significance." Charlotte Harbor is generally viewed as one of the most productive estuarine systems in Southwest Florida. Although it is appropriately considered a healthy system, problems exist in the areas of hydrologic alterations, water quality degradation, and habitat loss. The SWIM Plan for Charlotte Harbor focus on management strategies for the Peace and Myakka Rivers, in addition to Charlotte Harbor proper, to reduce point and non-point source pollution and to preserve and restore habitat. The objectives of this project are consistent with these strategies. The District began water quality monitoring projects along the Peace and Myakka Rivers in 2000 (See W528). Since 2001, the District has also supported sampling in the tidal portions of the Peace and Myakka Rivers by the Florida Fish and Wildlife Conservation Commission (FFWCC) (See W521).

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	113,977	28,458	20,511	0	162,946
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	53,484	28,457	20,510	0	102,451
State Trust Funds (SWIM) - Prior 2006	90,738	0	0	0	90,738
			<b>Total</b>		<b>\$356,135</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
First Sampling Event	10/3/00		10/3/00

**Status As Of:** January 02, 2008

Water quality sampling is ongoing. Samples have been collected from October 2000 through December 2007. Data have been received, quality checked, and reported on through December 2006.



<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality
<b>Basin(s)</b>	Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte Harbor Environmental Center
<b>Project Manager</b>	SZAFRANIEC, MARY
<b>Task Manager(s)</b>	KAUFMAN, KRIS
<b>Status</b>	Proposed

**Description**

This ongoing project is in response to a funding request from Charlotte Harbor Environmental Center (CHEC) for water quality data management and on-line publication of water quality maps and graphs. Water quality data from various sources collected within the Peace River Basin, Myakka River Basin, Charlotte Harbor, and Lemon Bay are included. The project involves four major tasks: 1) management of estuarine water quality data involving compilation, quality assurance/quality control, and updates to a District approved database, 2) upload of data to the Environmental Protection Agency's (EPA) STORage and RETrieval (STORET) database, 3) mapping of water quality data made available on the CHEC website, and 4) graphing of District Peace and Myakka River basin water quality data made available on the CHEC website. In FY2005, the project expanded its coverage to include Sarasota County's Northern Lemon Bay water quality sampling effort, Florida Department of Environmental Protection (FDEP) volunteer water quality project, and FDEP Lemon Bay monitoring network. An FY2009 cooperative funding request was received for continuation of the project's sixth year of multi-agency monitoring and management.

**Benefits**

Information provided through this project will offer technical support for environmental management activities conducted by the District's SWIM Program, FDEP, the Peace River/ Manasota Regional Water Supply Authority, the Charlotte Harbor National Estuary Program, and other local and regional organizations. Publication of the data in the STORET databases and website provides an historical record of the changes in water quality within each system.

**Costs**

The FY2009 budget is \$66,000, with the Charlotte Harbor Environmental Center and the District each contributing half (\$33,000). The District share is split between State SWIM (\$16,500), the Peace River Basin (\$12,375), and the Manasota Basin (\$4,125). The cost to each basin board is determined by its watershed's (Peace River and Myakka River watersheds) relative influence on water quality in Charlotte Harbor. District funds shown in the table include staff salaries.

**Additional Information**

Since 2003, the CHEC has been presenting the results of these efforts on its web site [www.checflorida.org/chec/water quality](http://www.checflorida.org/chec/water%20quality), allowing the public and scientists to view the results in terms of both status and trends in water quality. Water quality data the District annually funds the Florida Fish and Wildlife Conservation Commission to collect from Charlotte Harbor, lower Lemon Bay, and the tidal reaches of the Peace and Myakka Rivers is included in Tasks 1-3 of this project (See W521). The cooperative project is executed through purchase orders and associated scopes of work. The SWIM Plan for Charlotte Harbor focuses on management strategies for the Peace and Myakka Rivers, in addition to Charlotte Harbor proper, to reduce point and non-point source pollution and to preserve and restore habitat. The objectives of this project are consistent with these strategies.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	29,306	12,766	13,920	12,750	68,742
021 Manasota Basin	21,456	4,255	4,640	4,250	34,601
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	30,881	17,020	18,559	17,000	83,460
State Trust Funds (SWIM) - Prior 2006	29,817	0	0	0	29,817
<b>Project Funds Not Budgeted by the District</b>					
Charlotte Harbor Environmental Center	82,000	30,500	33,000	34,000	179,500
			<b>Total</b>		<b>\$396,120</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
FY2006 P.O. Final Invoice Paid			5/3/07
FY2004 First Quarter Report	12/30/03		12/19/03
Second Quarter Report	3/30/04		3/24/04
Third Quarter Report	6/30/04	12/21/04	12/21/04
Final Report	9/30/04	5/21/05	5/21/05
FY2005 P.O. Open	3/22/05		3/22/05

**Water Quality in the Peace and Myakka Basins, Charlotte Harbor, and Lemon Bay**

FY2005 First Quarter Report	5/15/05	6/30/05	6/29/05
Second Quarter Report	8/15/05	9/30/05	9/30/05
Third Quarter Report	10/15/05	11/15/05	11/15/05
Fourth Quarter Report	2/15/06	3/10/06	4/13/06
FY2006 P.O. Open	3/30/06		3/30/06
FY2006 First Quarter Report	5/30/06		5/24/06
Second Quarter Report	8/30/06		8/31/06
Third Quarter and Draft Final Report	11/30/06	4/1/07	3/23/07
Fourth Quarter and Final Report	2/28/07	4/1/07	3/23/07
FY2007 P.O. Open	3/30/07		3/21/07
FY2007 First Quarter Report	5/30/07		5/3/07
FY2007 Second Quarter Report	8/30/07		6/30/07
FY2007 Third Quarter Report	11/30/07		11/30/07
FY2008 P.O. Open	1/7/08		1/7/08
FY2007 Fourth Quarter Report	2/28/08		2/5/08
FY2008 First Quarter Report	5/30/08		
FY2008 Second Quarter Report	8/30/08		
FY2008 Third Quarter Report	11/30/08		
FY2008 P.O. Terminates	12/31/08		
FY2008 Fourth Quarter Report	2/28/09		

**Status As Of:** February 27, 2008

The FY2008 final scope of work was approved and the purchase order was opened, January 7, 2008. Currently, CHEC is presenting the results of these efforts on its web site, <http://www.checflorida.org>.

**Coral Creek Habitat Restoration Project**

**Project Type** SWIM  
**AOR(s)** Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** Florida Department of Environmental Protection  
**Project Manager** POWERS, STEPHANIE  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This multi-year project is a Surface Water Improvement and Management (SWIM) Program initiative consisting of the hydrologic and habitat restoration of degraded and impacted wetlands. It is also expected to provide water quality treatment for presently-untreated stormwater flows into the District and FDEP-owned project area. The project area is approximately 2,600 acres. Proposed restoration of the creek includes: restoration/enhancement of historic and man-made creek channels, intertidal, low-salinity and freshwater habitats, complementary marshes and uplands; removal of invasive, exotic vegetation; and construction of stormwater treatment features to improve water quality for the Charlotte Harbor. A preliminary assessment of restoration and stormwater treatment opportunities will need to be conducted first, followed by project design and permitting, and, finally, construction. The District is the lead agency in procuring the services of an engineering consultant and a construction contractor. The FDEP will be the entity responsible for long-term operation and maintenance of the site. A related project was submitted by the FDOT through the FY2008 Cooperative Funding Initiative (see Project No. W556, FDOT - Cape Haze Pioneer Trail Hydrologic Restoration Project). The Cape Haze Pioneer Trail Hydrologic Restoration Project is expected to improve tidal flushing in an approximately 110 acre tidal creek which has been impounded since the early 1900s due to the construction of a railroad causeway across the East Fork of Coral Creek.

**Benefits**

This project will provide restoration of impacted wetlands and treatment of stormwater on District-owned lands. A preliminary assessment of restoration and stormwater treatment opportunities will be conducted to determine the specific acreage of wetlands restored and to estimate the amounts of pollutant removal that can be achieved.

**Costs**

Funds budgeted in FY2009 (\$100,000 from the Peace River Basin and \$100,000 from State SWIM funds for a total of \$200,000) are for the construction of two selected restoration projects within the 2,600 acre project site. It is anticipated that additional funding during future fiscal years will be necessary to meet all construction expenses and District staff will seek grant funding to help offset construction costs.

**Additional Information**

Approximately 2,600 acres of the District/FDEP-owned lands surround the East and West Forks of Coral Creek, which flows into Charlotte Harbor near Placida, south of the Rotonda in Charlotte County. Charlotte Harbor is a SWIM priority waterbody as well as a designated estuary of national significance as part of the National Estuary Program. The project is consistent with the habitat restoration and water quality improvement goals of the District's SWIM Plan for Charlotte Harbor. The project site is part of the 43,000 acre Charlotte Harbor Preserve State Park. The FDEP is the entity responsible for the management of the site. The property contains a number of habitat types (e.g., tidal creeks, mangrove swamps, salt marshes, salterns, salt and freshwater ponds, freshwater wetlands, pine flatwoods, scrub and other uplands) which have been impacted by anthropogenic activities. Much of the hydrology of the site has also been impacted by ditching and dredge and fill activities that occurred as recently as the mid-1970s. Further, the construction of a dam across the West Fork eliminated the saltwater signature from the upper half of the West Fork, thus creating a 270 acre freshwater impoundment now dominated by cattails. It appears that a significant volume of the stormwater runoff from the Rotonda development discharges into the West Fork without much water quality treatment. Similarly, the East Fork also appears to receive untreated stormwater discharges from a residential area to the north. Elevated nitrogen levels have been observed in Coral Creek by Charlotte Harbor National Estuary Program water quality studies. In addition to hydrologic and habitat restoration, it is envisioned that the restoration of this site would incorporate some level of treatment for stormwater runoff entering the site.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	152,963	105,576	107,876	250,000	616,415
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	2,962	5,575	107,876	250,000	366,413
Ecosystem Trust Fund - Coral Ck (SWIM)	150,000	100,000	0	0	250,000
			<b>Total</b>		<b>\$1,232,828</b>

Critical Project Milestones	Projected	Amended	Actual
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**1. Critical Project Milestones**

Advertise Request for Proposals	11/17/06	11/17/06
Consultant Selection	2/2/07	2/23/07
Draft Agreement Sent to Management Services	3/16/07	8/8/07
Agreement Returned from Management Services	8/29/07	11/29/07
Agreement Sent to Consultant	9/6/07	12/18/07
Signed Agreement returned from Consultant	10/4/07	12/20/07
Agreement fully executed	10/18/07	1/18/08
Notice to Proceed	10/24/07	2/11/08

**Status As Of:** February 29, 2008

The Request for Proposal (RFP) to solicit engineering services for this project was drafted in cooperation with the FDEP and advertised on November 17, 2006. Twelve responses were received on January 11, 2007. Each of the responses were reviewed and the contract was awarded to King Engineering Associates. An agreement with the consultant was executed on January 11, 2008. Notice to proceed was issued on February 11, 2008, via Work Order #1.

**Project Type** SWIM  
**AOR(s)** Water Quality  
**Basin(s)** Peace River, Manasota  
**Cooperator(s)** Charlotte Harbor Environmental Center  
**Project Manager** KAUFMAN, KRIS  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This SWIM cooperative funding project seeks to create a water quality summary report for the Peace and Myakka river systems. The project is needed to compile data from multiple inter-agency monitoring efforts into a single comprehensive water quality summary and analysis. Results of this report can be incorporated into ongoing resource management efforts in the Peace River, Myakka River, and Charlotte Harbor. The project scope contains the following elements: 1) summaries and statistical analyses of water quality data collected in water year (WY) 2005 for the Peace and Myakka basins, 2) estimated loads and yields for WY2002 through WY2005, and 3) an integrative analysis of trends in surface water quality for WY2002 through WY2005.

**Benefits**

The information provided by this report will be used by District staff, the Charlotte Harbor National Estuary Program, the Florida Department of Environmental Protection, and the public for assessing the health of these systems. The reports will assist in resource management decision making and will guide future restoration efforts.

**Costs**

The total FY2007 project cost is \$30,000 with CHEC contributing \$15,000. The District's share is \$15,000. The Peace River Basin is funding \$3,750, the Manasota Basin is funding \$3,750, and State SWIM is funding the remaining \$7,500. District funds shown in the table include staff salaries.

**Additional Information**

Charlotte Harbor is generally viewed as one of the most productive estuarine systems in Southwest Florida. Although it is appropriately considered a healthy system, problems exist in the areas of hydrologic alterations, water quality degradation, and habitat loss. The SWIM Plan for Charlotte Harbor focus on management strategies for the Peace and Myakka Rivers, in addition to Charlotte Harbor proper, to reduce point and non-point source pollution and to preserve and restore habitat. The objectives of this project are consistent with these strategies. The District began water quality monitoring projects along the Peace and Myakka Rivers in 2000 (See W527 & W528). Since 2001, the District has also supported sampling in the tidal portions of the Peace and Myakka Rivers by the Florida Fish and Wildlife Conservation Commission (FFWCC) (See W521). The proposed project will follow the example of previous publications created by the Charlotte Harbor Environmental Center (CHEC), e.g., the 2002 publication, titled, "Water Quality Conditions and Pollutant Loads and Yields in the Peace and Myakka River Basins," which featured data from WY2001.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	4,491	995	366	0	5,852
021 Manasota Basin	4,491	996	365	0	5,852
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	8,981	1,990	731	0	11,702
<b>Project Funds Not Budgeted by the District</b>					
Charlotte Harbor Environmental Center	15,000	0	0	0	15,000
			<b>Total</b>		<b>\$38,406</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	Projected	Amended	Actual
Notice to Proceed	12/31/06		5/11/07
Issued Purchase Order	12/31/06	5/11/07	5/10/07
Project Kick Off Meeting	5/11/07		5/11/07
First Progress Report	8/31/07		6/30/07
Second Progress Report	9/30/07		12/17/07
Third Progress Report	10/31/07	3/31/08	
Fourth Progress Report and Final Report	12/15/07	3/31/08	
Final Report	12/31/07	3/31/08	

**Status As Of:** February 28, 2008

The District provided comments on the project's draft final report and appendices to the cooperator in January 2008. A three month no cost time extension through 03/31/2008 was approved to finish the review and editing process of the draft and final reports. Due to the highly technical nature of the document and numerous calculations, longer review and revision times are needed to ensure all data, interpretations, and conclusions contained within the document are accurate.

## Evaluating the Effects of Restoration on Estuarine Fishes

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Mote Marine Laboratory
<b>Project Manager</b>	POWERS, STEPHANIE
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

### Description

This project is in response to a cooperative funding request from Mote Marine Laboratory to examine the effects of SWIM habitat restoration activities, specifically the Alligator Creek Wetlands Restoration Project (W511) in Charlotte Harbor, on economically-important estuarine fishes such as juvenile snook, red drum, and tarpon. The Alligator Creek Project is a major District restoration effort. This project provides the District with an opportunity to help determine the effectiveness of the Alligator Creek Wetland Restoration Project. Mote Marine Laboratory will take advantage of three years of pre-restoration monitoring from four tidal creeks representing a range of anthropogenic degradation. Sampling will continue through restoration and post-restoration monitoring of fish assemblages and seeks to address the effects of wetland restoration projects on mangrove creek fishes. Restoration is seen as an effective means to repair anthropogenic ecological damage, but quality data on the extent that restoration projects improve estuarine ecology is rare. Likewise, there is little data on the extent that restoration of natural freshwater flows reverses these negative impacts. Quantitatively understanding how habitat restoration projects impact fishes is critical so that appropriate conservation and management measures can be enacted. The results of this project will be used as part of the monitoring and evaluation effort of the Alligator Creek Wetlands Restoration Project. This project will help validate the results of existing SWIM habitat restoration projects and the habitat restoration goals for the District's SWIM Plan for Charlotte Harbor, and will also help guide future restoration efforts in the Harbor and around the state. Phase I monitoring was completed December 31, 2006. Phase II of this project, with budget approval, will commence on October 1, 2008.

### Benefits

This project will document and quantify how the restoration of historic freshwater inflow patterns improve estuarine ecology for economically-important fishes as specifically applied to an existing SWIM project, i.e., the Alligator Creek Wetlands Restoration Project (W511). Results from this project will be used as part of the monitoring effort for the Alligator Creek project. This project will also result in guidance on how future conservation and management measures should be appropriately enacted.

### Costs

The total project cost is estimated to be \$612,500. The District's FY2009 portion of the total cost is requested to be \$75,000. Of this amount, 50 percent (\$32,500) will come from State SWIM funds and 50 percent (\$32,500) will come from the Peace River Basin Board. Mote Marine Laboratory, through grants from the Florida Sea Grant Program, Florida Fish and Wildlife Conservation Commission, and the Charlotte Harbor National Estuary Program, will provide \$75,000 in this fiscal year. The District provided project funding in FY2007, matching Mote's \$400,000. District funds shown in the table include staff salaries.

### Additional Information

Florida's southwest coastline has been drastically altered for development, water management, agriculture, mining, and mosquito control purposes, which has modified freshwater flows into estuaries and caused changes to estuarine ecology. Freshwater inflow is a major ecological structuring factor in estuaries which influences the abundance and distributions of vegetation, vertebrates and invertebrates that use estuaries for some or all of their life cycles. Further, it has been shown (in Charlotte Harbor and in other estuaries) that freshwater flow alterations negatively impact estuarine fishes, especially the economically-important species. This project will document and quantify how the restoration of historic freshwater inflow patterns improves estuarine ecology.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	33,613	135	38,316	37,500	109,564
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	33,612	134	38,315	37,500	109,561
<b>Project Funds Not Budgeted by the District</b>					
Mote Marine Laboratory	487,500	0	0	0	487,500
			<b>Total</b>		<b>\$706,625</b>
<b>Critical Project Milestones</b>		<b>Projected</b>		<b>Amended</b>	<b>Actual</b>
<b>Critical Project Milestones</b>					
Issue Notice to Proceed		12/31/06			12/30/06
Sampling Commences		1/2/07			10/1/06
Final Report		12/1/07			1/2/08

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Contract Expiration

12/31/07

12/31/07

**Status As Of:** February 29, 2008

This project was administered through a purchase order. Sampling has been completed and the final report was received on January 2, 2008. This will be the final update for Phase I.



<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Florida Department of Transportation
<b>Project Manager</b>	POWERS, STEPHANIE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

#### Description

This project is in response to an FY2008 cooperative funding request from the Florida Department of Transportation (FDOT) to restore habitat and improve water quality in the upper reaches of the East Fork of Coral Creek in Charlotte County. In the early 1900s, a railroad causeway was constructed across Coral Creek effectively reducing the bank-to-bank open water width from approximately 1,000 feet down to around 30 feet. This activity significantly reduced tidal exchange and caused sedimentation in Coral Creek. Charlotte County acquired the railroad right-of-way and converted the northern segment to a rails-to-trails bike/pedestrian path, known as the Cape Haze Pioneer Trail. The District owns land on both sides of the trail. The trail presently terminates at the northern shore of Coral Creek. The County had coordinated with the FDOT through a Local Agency Participation (LAP) agreement to bridge the existing 30 foot opening and continue the trail to the south, but construction funds were redirected toward the hurricane recovery efforts after Hurricane Charlie passed through the area in August 2004. District and FDOT funds would be used for the engineering design, environmental permitting and construction for the removal of the existing causeway. Non-District funds would be used for the construction of the new elevated boardwalk.

#### Benefits

The project is anticipated to restore tidal exchange and improve estuarine and intertidal habitats to approximately 110 acres of the East Fork of Coral Creek. It would also remove significant areas of exotic vegetation growth from project areas. Additional benefits include extending the Pioneer Trail to the south, thus continuing public access to the southern segment of the rails-to-trails. Further, this project compliments the goals of the Coral Creek Habitat Restoration Project (W553), at SWIM initiative project, presently in the design phase.

#### Costs

The FY2008 project cost is \$60,000 for design and permitting, with the FDOT and the District each contributing half (\$30,000). The District share is split between the Peace River Basin Board (\$15,000) and State SWIM (\$15,000). Future funding requests will be made to finance construction of the project.

#### Additional Information

Coral Creek flows into Charlotte Harbor near Placida, south of the Rotunda in Charlotte County. Charlotte Harbor is a SWIM priority waterbody as well as a designated estuary of national significance as part of the National Estuary Program. The project is consistent with the habitat restoration and water quality improvement goals of the District's SWIM Plan for Charlotte Harbor. The project site adjacent to an ~2,600 acre parcel co-owned by the District and the FDEP, and is part of the Charlotte Harbor Preserve State Park. It appears that a significant volume of the stormwater runoff from a residential area to the north discharges into the East Fork without much water quality treatment. Elevated nitrogen levels have been observed in Coral Creek by Charlotte Harbor National Estuary Program water quality studies.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	0	17,602	3,467	348,750	369,819
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	0	17,602	3,466	348,750	369,818
<b>Project Funds Not Budgeted by the District</b>					
FDOT	0	30,000	697,500	0	727,500
			<b>Total</b>		<b>\$1,467,137</b>

**Status As Of:** February 29, 2008

Numerous contacts have been made with the FDOT project manager requesting a scope of work. A final version of the scope was received on February 13, 2008. An agreement has been drafted and will be routed to Management Services for review.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Charlotte Harbor Environmental Center
<b>Project Manager</b>	KAUFMAN, KRIS
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This SWIM cooperative funding project will investigate the influence of coastal freshwater creeks on seagrass communities of eastern Charlotte Harbor. The following coastal creeks (listed from north to south) occur within the SWFWMD boundary along the "East Wall" of Charlotte Harbor: Alligator Creek, Rock Creek, Whiddon Creek, Silcox Creek, Big Mound Creek, Winegourd Creek, Zemel/Clark Creek, and Bear Branch. The land uses-land covers (LULC) surrounding these creeks have been dramatically altered in the last decade, whether by ecological restoration or large residential development. Furthermore, a District-funded project documenting smaller parcels in need of restoration identified a dozen more potential projects in this area. Clearly, the state of these coastal creeks has been influenced by changes in the associated local watersheds, whether by volume of freshwater discharge, nutrients, true color, or a variety of other indicators of change. However, the impact of these changes in local watersheds on the nearshore environment is not well understood. Therefore, this project proposes a seagrass monitoring and analysis program to characterize seagrass response to environmental variability associated with these coastal creeks.

**Benefits**

Understanding the affects of fresh water influences and land use changes on Charlotte Harbor seagrasses will assist the District in identifying restoration needs for the area and will contribute to water resource management decision making. Data collected will be utilized by the Charlotte Harbor National Estuary Program's ongoing water quality target setting efforts and will provide supplemental information for the District Biennial Seagrass Mapping project (W331).

**Costs**

The FY2008 budget is \$40,000, with the Charlotte Harbor Environmental Center and the District each contributing half (\$20,000). The District share is split between the Peace River Basin Board (\$10,000) and State SWIM (\$10,000). District funds shown in the table include staff salaries.

**Additional Information**

Estuarine submerged aquatic vegetation (SAV) communities of Charlotte Harbor include several species of seagrasses, epiphytes, and macroalgae. These important components of estuarine ecology provide food, habitat, and other "functions" that support a myriad of ecological and economic relationships, blue crabs, snook, and snook fishing among them. Seagrasses depend on a balance of salinity and nutrients to survive. Several studies published in the last five years report declines in water quality of the area, while two recent reports using a variety of data sources suggest either no change or decreasing seagrass abundance and distribution in Charlotte Harbor proper, within District boundaries.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	0	10,732	741	0	11,473
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	0	10,731	741	0	11,472
			<b>Total</b>		<b>\$22,945</b>

**Critical Project Milestones**

**1. Contract Development and Execution**

	Projected	Amended	Actual
Draft Purchase Order Scope of Work Submitted to District	6/30/07	9/1/07	2/5/08
District Processing of Purchase Order	10/1/07	11/15/07	2/19/08
Notice to Proceed	10/2/07	12/1/07	

**2. Project Tasks**

	Projected	Amended
Project Kick-off Meeting	10/15/07	3/15/08
Seagrass and Water Quality Sampling to Begin	11/1/07	3/31/08
First Progress Report	12/31/07	4/30/08
Second Progress Report	3/31/08	7/21/08
Third Progress Report	6/30/08	11/30/08
Fourth Progress Report and Draft Final Report	9/30/08	12/15/08
Project Status and Report Review Meeting	10/15/08	12/15/08

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Final Report

12/31/08

2/15/08

**Status As Of:** February 28, 2008

A scope of work has been accepted by the District and a purchase order for the project is processing. The first quarter sampling for the project is anticipated to be completed by March 31, 2008 after a "notice to proceed" is received.

**Project Type** SWIM  
**AOR(s)** Natural Systems  
**Basin(s)** Peace River, Manasota  
**Cooperator(s)** Charlotte Harbor Environmental Center  
**Project Manager** KAUFMAN, KRIS  
**Task Manager(s)**  
**Status** Proposed

**Description**

This FY2009 SWIM cooperative funding project will look to assess the accuracy of mapping classifications used in the District's ongoing Biennial Seagrass Mapping Project (See W331). This effort will supplement the District's well established accuracy assessment of the maps. While the District assesses the project's ability to correctly identify the presence of seagrass, the cooperative funding project will conduct a more in-depth evaluation of the mapping categories: patchy seagrass, continuous seagrass, and tidal flat. Estimates of inter-annual change in seagrass habitat based on aerial photos finds little change between habitat classes during the past nearly 20 years of study. However, a recent analysis of more localized data from the Florida DEP seagrass transect data (CHEC 2006) found decreases in abundance and distribution of seagrasses around Charlotte Harbor and Lemon Bay. Locations where declines were noted included transects around the mouth of the Peace River. Furthermore, of quadrats that occurred in polygons categorized as tidal flat/non-vegetated, most did contain some seagrass, some up to 25% coverage. This is an important observation, as 45% of the approximately 10,200 ha of potential seagrass habitat mapped near the Peace and Myakka river mouths in 2006 is classified as tidal flat/non-vegetated. The following tasks regarding the 2008 seagrass maps produced by the District for the Charlotte Harbor and Lemon Bay segments are proposed for this project: 1. assess map accuracy by defining spatial variability of seagrass abundance in classified polygons using variation in percent cover by seagrass in square-meter quadrats; 2. quantify seagrass abundance in classified polygons using percent cover by seagrass in square-meter quadrats; 3. describe abundance and distribution of seagrass at its deepest depth of occurrence to verify map estimates of deep edge/maximum depth of distribution of seagrass species. The public will be able to access all data via [www.checflorida.org](http://www.checflorida.org).

**Benefits**

This project will provide the District and end users of District seagrass maps with new highly detailed information on the accuracy of classifying seagrass as patchy or continuous. The District, county governments, and Estuary Programs will be able to use the data in ongoing water quality/water clarity target setting and other resource protection projects.

**Costs**

The FY2009 project cost is \$40,000, with CHEC and the District each contributing half (\$20,000). The District share is split between Peace River and Manasota Basin Boards (\$5,000 each) and State SWIM (\$10,000).

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	0	0	5,410	0	5,410
021 Manasota Basin	0	0	5,410	0	5,410
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	0	0	10,820	0	10,820
<b>Project Funds Not Budgeted by the District</b>					
Charlotte Harbor Environmental Center	0	0	20,000	0	20,000
			<b>Total</b>		<b>\$41,640</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>1. Contract Development and Execution</b>			
Finalize scope of work and process purchase order	10/1/08		
Notice to Proceed	10/5/08		
<b>2. Critical Milestone</b>			
Planning meeting and data analysis	10/15/08		
Draft report	4/15/09		
Final report	6/15/09		
Data posted	6/15/09		

**Status As Of:**

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Winter Haven
<b>Project Manager</b>	SZAFRANIEC, MARY
<b>Task Manager(s)</b>	GRANT, BJ, GARCIA, LIZANNE
<b>Status</b>	Ongoing

**Description**

This project provides for the administration and implementation of projects as outlined in the SWIM Plan for the Winter Haven Chain of Lakes. The FY2008 budget will include staff salaries and administrative costs to implement projects in the SWIM Plan. Administration and implementation includes assessment of implementation progress, a development of a Pollutant Load Reduction Goal (PLRG) for the waterbody, periodic SWIM Advisory Committee meetings, new project development (rationale and justification), development of relevant contracts and Requests for Proposals, invoicing, project related presentations, field visits, and miscellaneous duties as they arise.

**Benefits**

This project's support of the Winter Haven SWIM Plan creates an opportunity for a cohesive effort between the District, and other state and local agencies to better implement resource management decisions and restoration activities. SWIM projects are eligible for state matching funds with the state funding 50 percent of the project costs and the District funding the remaining 50 percent.

**Costs**

The FY2008 and FY2009 ongoing costs for the Winter Haven Chain of Lakes SWIM Plan Implementation are funded 50 percent from the Peace River Basin, and 50 percent from the State SWIM Program and include staff salary, travel and central garage.

**Additional Information**

The Winter Haven Chain of Lakes (WHCL) is a priority waterbody on the District's Surface Water Improvement and Management (SWIM) priority list. The WHCL is composed of 19 interconnected lakes located in and around the City of Winter Haven in north-central Polk County. The first WHCL SWIM Plan was completed in 1990 and updated in 1998. The WHCL SWIM Plan proposed to continue implementing stormwater treatment projects as funding becomes available. This project provides for the administration and implementation of the projects as outlined in the adopted SWIM Plan, which includes setting a pollutant load reduction goal (PLRG). The State of Florida water policy requires the District to set a PLRG for each of its water bodies and to adopt the PLRG in a SWIM plan, other watershed management plan, or District-wide or basin specific plan. Lakes in the chain express some of the best and poorest water quality in the state. The management of the system is complicated by the lakes being connected. The objective of the recently completed PLRG modeling project was to use either the District's Linked Watershed/Waterbody model (LWWM) or other appropriate watershed and waterbody models to simulate pollutant loadings to and water quality dynamics in WHCL to finalize the PLRG for the WHCL. This model and the Winter Haven Chain of Lakes Water and Nutrient Budget (PBSJ, September 2004) will be used in the planned next SWIM Plan update. This update was anticipated in FY2007. This update has been deferred until the City of Winter Haven and the District complete the Chain of Lakes Water Quality Management Plan (W796). In addition to this project, the District and the City are implementing a Sediment Removal Feasibility (W794) study for three lakes in the Chain as well as additional stormwater treatment projects.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	41,911	5,210	5,672	0	52,793
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	8,217	5,210	5,671	0	19,098
State Trust Funds (SWIM) - Prior 2006	50,541	0	0	0	50,541
			<b>Total</b>		<b>\$122,432</b>

**Critical Project Milestones**

**1. PLRG Consultant Agreement Development and Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Contract Executed	10/1/02		9/17/02
Collecting and Analyzing Existing Data	4/5/03		1/27/03
Notice To Proceed	10/5/03		9/23/02
PLRG Simulations	7/31/04	10/31/04	10/31/04
Final Project Report	9/30/04	12/31/04	12/30/04
PLRG Contract Close Out	12/31/04		3/15/05

**2. Critical Project Milestones**

Begin SWIM Plan Update	12/30/06	5/1/09	
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Complete SWIM Plan Update

5/1/10

**Status As Of:** February 27, 2008

The Florida Department of Environmental Protection (FDEP) has developed Total Maximum Daily Loads (TMDL) for phosphorus for eight lakes in the Southern Chain (Cannon, Howard, Idylwild, Jessie, Lulu, May, Mirror, and Shipp). District staff are participating with the FDEP, the City of Winter Haven and other stakeholders in the preparation of a Basin Management Action Plan (BMAP), which is the next step in the FDEP's TMDL process. The District is working with the City of Winter Haven on the Chain of Lakes Water Quality Management Plan (W796). This study will incorporate existing information, obtain additional data, and use the previously developed nutrient budget and pollutant load reduction goal (PLRG) studies to develop water quality models of the lakes. The existing water quality models will be used to evaluate alternatives and best management practices that could be used to meet the TMDLs and PLRGs. The results of this study (W796), the PLRG study and, upon completion, the results of the Sediment Removal Feasibility Study (W794) will be used for the SWIM Plan update. The Chain of Lakes Water Quality Management Plan will not be complete until December 2008. Updates for these projects may be found under the appropriate project numbers.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Winter Haven
<b>Project Manager</b>	GRANT, BJ
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This project consists of design, permitting, and construction of the South Lake Conine Watershed Restoration Project. Lake Conine is a 236 acre lake within the Winter Haven Northern Chain of Lakes, which has been classified as a Surface Water Improvement and Management (SWIM) priority waterbody. During the 1970's and 1980's, Lake Conine had some of the worst water quality in Polk County. The primary reason for this degradation was the inflow of treated wastewater from the City of Winter Haven's Wastewater Treatment Plant #2. In 1990, the treatment plant discharge was removed from the lake and converted to reuse water for irrigation. Since the removal of the wastewater discharge, the water quality of the lake has improved but remains poor. Lake Conine has been identified as an impaired waterbody by the Florida Department of Environmental Protection. One of the primary pollution sources is a 228 acre highly urbanized watershed that discharges untreated stormwater to the south side of the lake. This untreated stormwater is the subject of this proposed project. It is estimated that this drainage area annually discharges: 495 pounds of phosphorus; 2,255 pounds of nitrogen; 365 pounds of heavy metals; 63,452 pounds of suspended solids; and 10,164 pounds of oxygen demanding substances (Dames and Moore, 1990) into Lake Conine. The treatment of this drainage area is listed as a priority in the Winter Haven Chain of Lakes SWIM Plan.

**Benefits**

The goal of this project will be to remove approximately 70% of the stormwater pollution from the subject watershed by using physical, chemical and biological processes. The proposed project would be 33.5 acres in size and would ultimately include parking, walking paths, boardwalks, fishing piers, and educational exhibits which would be funded by the City in the future. Additional project benefits include: wildlife habitat improvement through wetland enhancement; flood storage and watershed hydrologic benefits; groundwater recharge; and water conservation.

**Costs**

The total project cost is \$1,200,000, and the requested District share is \$600,000, of which, \$65,000 was budgeted in FY2007 for design and \$535,000 is phased over FY2008 and FY2009 for construction. To date, a total of \$332,500 of the District's share has been budgeted, with half or \$166,250 from the Peace River Basin Board and \$166,250 from State SWIM. The remaining District share, requested in the FY2009 budget, totals \$267,500 (\$133,750 from the Peace River Basin Board and \$133,750 from State SWIM). District funds shown in the table include staff salaries. The City share totals \$600,000 which includes a total of \$112,000 for land acquisition that will be used for construction funding match.

**Additional Information**

The Winter Haven Chain of Lakes is a District Surface Water Improvement and Management (SWIM) priority waterbody and consists of 19 interconnected lakes divided into a southern and northern chain. Many of these lakes have been negatively impacted through historical point and non-point sources of pollution and many have been listed as impaired. The South Lake Conine Watershed Restoration Project is consistent with the District's SWIM Plan for the Winter Haven Chain of Lakes.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	36,933	136,728	137,758	0	311,419
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	36,932	136,727	137,757	0	311,416
<b>Project Funds Not Budgeted by the District</b>					
City of Winter Haven	177,000	152,500	267,000	0	596,500
			<b>Total</b>		<b>\$1,219,335</b>

**Critical Project Milestones**

**1. Contract Development and Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft agreement sent to Management Services	12/31/06		12/31/06
Draft agreement returned from Management Services	1/19/07		2/16/07
Agreement sent to Cooperator	1/26/07		2/19/07
Signed Agreement returned from Cooperator	2/23/07		5/31/07
Agreement fully executed	3/9/07		6/7/07



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Notice to Proceed	3/16/07	6/7/07
<b>2. Project Tasks</b>		
Design and Permitting complete	6/16/08	
Construction complete	9/30/10	
<b>3. Agreement Expiration Dates</b>		
Agreement expiration	12/31/10	

**Status As Of:** February 22, 2008

A cooperative agreement with the City of Winter Haven was executed on 6/7/07. The City of Winter Haven advertised a RFP with a response deadline of 8/9/07. City of Winter Haven and District staff have reviewed the proposals and a consultant has been selected. The City and the District accepted the Scope of Work submitted by the Consultant on 2/22/08. The agreement between the City and the Consultant is scheduled to go before the City Commission for approval on 3/10/2008.



<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Winter Haven
<b>Project Manager</b>	GARCIA, LIZANNE
<b>Task Manager(s)</b>	SZAFRANIEC, MARY
<b>Status</b>	Ongoing

**Description**

This study will quantify the nutrient inputs from sediment into Lakes May, Shipp and Lulu in the Southern Chain of Lakes in Winter Haven. The project will also study the feasibility to remove or inactivate the sediments if they are found to be contributing significant amounts of nutrients to the overlying water column. If sediment removal or inactivation is feasible, the City would request funding in future years for implementation of the study recommendations. This initial study will also identify additional information required to perform future design and permitting work. City staff recommends that the benefits of muck removal should be reviewed while opportunities for land acquisition for sediment disposal still exist. The City would be responsible for hiring a consultant to perform the study.

**Benefits**

The project will assist the District and the City of Winter Haven in making water quality management decisions regarding the removal or inactivation of sediments from the Lakes May, Shipp and Lulu.

**Costs**

The FY2005 project cost was \$150,000 with the City of Winter Haven and the District each contributing half ( \$75,000). The District's share is split between the Peace River Basin Board (\$37,500) and the State SWIM Program (\$37,500). The FY2009 ongoing costs shown in the table include staff salary, travel and central garage related to project management.

**Additional Information**

The Winter Haven Chain of Lakes is a SWIM priority water body. The SWIM Plan for the Winter Haven Chain of Lakes references the need to quantify the effects of nutrient loading from sediments to the overlying water column. The Southern Chain of Lakes in Winter Haven has historically been subject to numerous point and non-point sources of pollution. All point sources of pollution have been removed from the lakes but the lingering effects of these discharges remain. Non-point sources of pollution have discharged into all of the above mentioned lakes through drainage pipes carrying untreated stormwater and the City has in cooperation with the District has implemented several stormwater treatment projects throughout the Chain. City staff performed a survey of the accumulated sediments in Lakes Howard, May, Shipp and Lulu in 1994. An estimated 2.9 million cubic yards of unconsolidated organic sediments exist in the bottom of the four mentioned lakes. In Lake May, the average depth of these sediments approaches 7 feet resulting in the sediment/water interface being within 3.5 feet of the water's surface during low water, allowing wind, wave and boat action to re-suspend the sediments on a continual basis.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	36,920	2,481	2,497	0	41,898
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	4,592	2,480	2,497	0	9,569
State Trust Funds (SWIM) - Prior 2006	48,490	0	0	0	48,490
<b>Project Funds Not Budgeted by the District</b>					
City of Winter Haven	75,000	0	0	0	75,000
			<b>Total</b>		<b>\$174,957</b>

**Critical Project Milestones****1. Contract Development and Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
City of Winter Haven approve agreement	4/15/05		2/22/05
District approve agreement	6/15/05		3/4/05
Notice to proceed sent for agreement	8/15/05		3/9/05

**2. Project Phases**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Phase I Organic Sediment Study Complete	8/30/06	2/27/07	3/30/07
Phase II Feasibility Study Complete	12/30/06	12/31/07	3/30/07
Final report submitted	8/30/07	1/31/09	

**3. Agreement Expiration Date**

	<b>Projected</b>	<b>Amended</b>
Contract Expiration	12/31/07	7/31/09

**Winter Haven Chain of Lakes Sediment Removal Feasibility Study**

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**Status As Of:** February 28, 2008

The consultant for the City collected water and sediment quality and hydrologic data in Lakes May, Shipp and Lulu from August 2005 to June 2006 to develop hydrologic and nutrient budgets that were used to calibrate water quality models for each of the lakes. The model was then used to evaluate the benefit to in-lake water quality from the removal of sediments from the lakes. After several delays and requests for extensions from the City, the draft report was received by the City in November 2006. The draft report recommended that sediments be removed from Lake May and that sediments in Lakes Shipp and Lulu be treated with alum to prevent nutrient influx into the water column. Although not included in the Phase 1 Scope of Work, the draft Phase 1 report included estimated costs for sediment removal and inactivation and recommendations for the most feasible and cost effective means of addressing the sediment impacts. (This work was to be completed under Phase 2 of the project, however, the consultant completed this work for the amount budgeted for Phase 1.) Preliminary cost estimates for these recommendations were approximately \$7.4 million. Subsequently, the City decided to have the report peer reviewed and the City, using their own funds, contracted with Dr. Karl Havens at the University of Florida to review the report. Dr. Havens concluded the study was technically sound, however, in his opinion sediment removal or inactivation would not produce cost effective benefits to water quality. Dr. Havens cited Banana Lake and Lake Hollingsworth as examples where post-dredging water quality had not improved as much as anticipated by lake managers and the public. City and District staff met with the consultant in January 2007 to review comments from Dr. Havens, the City and District. At that meeting, the District project manager concluded that the consultant had met both the Phase 1 and Phase 2 requirements in the agreement between the City and the District. The total cost for this work was \$107,510, leaving a balance of \$42,490. The City and the District requested that the consultant prepare a scope of work for additional data collection and analyses that would address some of the issues raised by Dr. Havens. (The District also suggested that the City not move forward with dredging or sediment inactivation in Lakes May, Shipp and Lulu until the Water Quality Management Plan for the Winter Haven Chain (W796) is complete.) The District approved the final report for Phase 1 in June 2007. The City and its consultant provided the draft Scope of Work in August 2007. The District approved the Scope of Work, but questioned the City as to whether beginning this work in the dry season is warranted, since the purpose of the additional sampling was to capture wet season data. The District contacted the City project manager several times via email and phone calls requesting that the City indicate whether the consultant would honor the Scope of Work if sampling was delayed until spring 2008 in hopes of capturing wet season data. In November 2008, District staff reiterated this request and indicated that the City would need to request a "No Cost Time Extension Amendment" if they wish to proceed. The City requested a time extension amendment on November 19, 2007. This amendment has been fully executed as of February 2008. The project milestones have been updated to reflect this amendment. The District project manager is working with the City to finalize the amendment to the agreement with the consultant so that additional sampling can be conducted with the onset of the rainy season.

<b>Project Type</b>	SWIM
<b>AOR(s)</b>	Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Winter Haven
<b>Project Manager</b>	GRANT, BJ
<b>Task Manager(s)</b>	
<b>Status</b>	Cancelled

**Description**

This project is in response to a cooperative funding request from the City of Winter Haven to install sediment and trash removal devices for 3 of the largest outfalls presently treated by alum. The project is an expansion of the Lake Howard Alum Project, which treats stormwater from the downtown area by dosing it with aluminum sulfate (alum). Alum treatment is a proven method for removing the chemical pollutants from stormwater, but does not remove significant amounts of sediment and trash. The City of Winter Haven is the lead and will be responsible for hiring an engineer to perform the necessary survey work, evaluate various methods and products, prepare plans, and to assist in the bidding and construction of the project.

**Benefits**

The project will remove the sediment and trash from a combined 155.6 acres of urbanized watershed area before the water is discharged into Lake Howard.

**Costs**

The total project cost is \$600,000, with the City of Winter Haven and the District each contributing 50 percent of the necessary funding. The project cost is \$600,000 with the City of Winter Haven contributing \$300,000. The District's share is \$300,000. The Peace River Basin Board is funding 40% of the District's share (\$120,000) and the remaining 60% (\$180,000) will come from State SWIM funds. Funds budgeted in FY2008 are for staff salaries, central garage, and travel.

**Additional Information**

The Winter Haven Chain of Lakes is composed of 19 interconnected lakes within and around the City of Winter Haven in north central Polk County. Extreme hydrologic changes to the lakes and the high degree of urbanization have increased nutrient loading to the lakes and degraded water quality. The SWIM Plan for the Winter Haven Chain of Lakes Focuses on implementing stormwater treatment projects to improve water quality. Lake Howard is a 628 acre lake located immediately west of downtown Winter Haven and is one of 16 interconnected lakes known as the Southern Winter Haven Chain of Lakes. Lake Howard has experienced a positive trend in water quality improvement in the past 3 years as a result of 3 completed stormwater treatment projects, including the Lake Howard Habitat and Water Quality Improvement Project, the Lake Howard Alum Treatment Project, and the Janphyll Village Wetland Treatment Project. The Peace River Basin Board and SWIM provided funding for all 3 projects that treat 75% of the entire watershed area of Lake Howard.

	<b>Prior Funding</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	127,023	1,572	0	0	128,595
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	5,689	1,571	0	0	7,260
State Trust Funds (SWIM) - Prior 2006	182,002	0	0	0	182,002
<b>Project Funds Not Budgeted by the District</b>					
City of Winter Have	300,000	0	0	0	300,000
			<b>Total</b>		<b>\$617,857</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Contract Executed	3/30/05		3/11/05
Notice to Proceed	4/1/05		3/17/05
Design Complete	4/30/06	6/30/07	
Construction Complete	5/31/07	5/31/08	
Contract Termination	12/31/07		

**Status As Of:** October 31, 2007

The City forwarded a copy of their engineering consultant's qualifications to District staff for review on 6/1/2005. District staff reviewed the qualifications and approved the use of the consultant for this project on 6/2/2005. The City was unable to negotiate a scope of work or cost estimate with the engineering consultant. The City requested a no-cost time extension to complete the design of the project. The City is now working with a different consultant to develop a scope work and cost estimate. District staff

**Winter Haven Chain of Lakes - Lake Howard Stormwater Retrofit Project (Withdrawn)**

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approved the engineering consultant's scope of work on 1/19/2007. Due to the size of the sediment filtration device needed to efficiently remove pollutants from the stormwater runoff and the limited space available for the project, the feasibility and design of the project has been complicated. The City has opted to cancel this project and move forward with other projects cooperatively funded by the District. The City of Winter Haven anticipates requesting funding for the Lake Howard Stormwater Retrofit Project in the future.

**Project Type** SWIM  
**AOR(s)** Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** Winter Haven  
**Project Manager** SZAFRANIEC, MARY  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This project is in response to a funding request from the City of Winter Haven to create water quality management action plans for the Winter Haven Chain of Lakes. The Winter Haven Chain of Lakes is a District Surface Water Improvement and Management (SWIM) priority waterbody and consists of 19 interconnected lakes divided into a southern and northern chain. This project is consistent with the Winter Haven Chain of Lakes SWIM Plan. Many of these lakes have been negatively impacted through historical point and non-point sources of pollution and many have been listed as impaired. The proposed project involves incorporating existing information, obtaining additional data, and using the previously developed nutrient budget and pollutant load reduction goal (PLRG) studies to develop water quality models of the lakes. The existing water quality models will be used to evaluate alternatives and best management practices that could be used to meet the TMDLs and PLRGs. A water quality management plan will be created with affected stakeholders, including governmental agencies, homeowners, special interest groups and interested citizens. All sources of pollution, including stormwater, point sources, sediments, and septic tanks will be addressed in the plan.

**Benefits**

The plan will give specific recommendations of projects that could be used to meet the SWIM Plan water quality goals and PLRGs, as well as FDEP's TMDL goals. The Plan will also provide cost estimates for the recommended projects and identify potential cooperators for project implementation.

**Costs**

The total project cost is \$250,000, with the City of Winter Haven and the District each contributing 50 percent of the necessary funding. The Peace River Basin Board is funding 50% of the District's share (\$62,500) and the remaining 50% (\$62,500) will come from State SWIM funds. District funds shown in the table include staff salaries.

**Additional Information**

The Winter Haven Chain of Lakes is composed of 19 interconnected lakes within and around the City of Winter Haven in north central Polk County. Extreme hydrologic changes to the lakes and the high degree of urbanization have increased nutrient loading to the lakes and degraded water quality. The SWIM Plan for the Winter Haven Chain of Lakes focuses on implementing stormwater treatment projects to improve water quality. The objectives of this project are consistent with this goal.

	Prior Funding	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>					
020 Peace River Basin	71,023	7,001	4,820	0	82,844
<b>District Budgeted - Outside Revenue</b>					
State Trust Funds (SWIM)	71,023	7,000	4,819	0	82,842
Winter Haven - Chain of Lk WS Mgmt Plan (SWIM)	125,000	0	0	0	125,000
<b>Project Funds Not Budgeted by the District</b>					
City of Winter Haven	125,000	0	0	0	125,000
			<b>Total</b>		<b>\$415,686</b>

**Critical Project Milestones**

	Projected	Amended	Actual
<b>1. Contract Development and Execution</b>			
Contract Executed	12/31/05	3/31/06	9/15/06
Notice to Proceed	1/6/06	3/31/06	9/22/06
<b>2. Project Phases</b>			
Completion of Phase I - Evaluation of Existing Information	7/1/07	11/1/07	1/12/08
Completion of Phase II - Evaluation of Existing Conditions	3/1/08	8/1/08	
Completion of Phase III - Preparation of Water Quality Master Plan	11/1/08	12/1/08	
<b>3. Agreement Expiration Date</b>			
Agreement to expire	12/31/08		

**Status As Of:** February 27, 2008

The cooperative agreement was sent to the City for signature on 2/16/2006. The agreement with the City was executed September

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15, 2006. Notice to proceed is effective September 22, 2006. The Scope of Work has been completed and the City has sent the consultant a Letter of Authorization to the Consultant. The consultant began Phase I tasks in June 2007. In Phase I of the project, the Consultant evaluated existing information which includes collection, review and compiling of existing surface water, groundwater, stormwater and sediment quality and quantity information, data and studies to achieve a thorough understanding of available information and science in the Winter Haven Chain of Lakes. The Phase I Draft Data Evaluation Report has been received and comments were provided to the Consultant. Phase I has been completed and a meeting will be scheduled with the City, the District and FDEP to determine if it is conceivable to move on to Phase II of the project.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	United States Geological Survey
<b>Project Manager</b>	KINSMAN, GRANVILLE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This initiative is to establish and maintain the Peace River Basin's surface water monitoring network, and is jointly funded by the Peace River Basin Board and the United States Geological Survey (USGS).

**Benefits**

This project provides basic surface water stage, discharge and/or water quality data collection to support assessing flooding events, developing surface water management plans, facilitating habitat restoration projects, establishment and monitoring of minimum flows and levels (MFLs), establishment of total maximum daily loads (TMDLs), land acquisition and management, and other critical water management activities.

**Costs**

In FY2008, surface water stage, discharge and/or water quality is measured at 39 sites in the Peace River Basin for a cost of \$425,600. These sites are: Tiger Creek near Babson Park, Livingston Creek near Frostproof, Carter Creek near Sebring, Josephine Creek near DeSoto City, Peace Creek Drainage Canal near Wahneta, Saddle Creek at SH 542 near Lakeland, Lake Parker Outlet near Lakeland, Saddle Creek at Structure P11 near Bartow, Peace River at Bartow, Peace River at Ft Meade, Whidden Creek near Ft. Meade, Bowlegs Creek near Ft. Meade, Payne Creek near Bowling Green, Thompson Branch near Wauchula, Peace River at Zolfo Springs, Charlie Creek near Gardner, Peace River at Arcadia, Hawthorne Creek at 760A near Nocatee, Joshua Creek at Nocatee, Horse Creek near Myakka Head, Horse Creek at SR 665 near Limestone, Horse Creek near Arcadia, Horse Creek near Nocatee, Prairie Creek near Fort Ogden, Shell Creek near Punta Gorda, Prairie Creek at Washington Loop Road, Shell Creek at Washington Loop Road, Peace Creek near Bartow, Peace River near Bartow, Six Mile Creek near Clear Springs, Barber Branch near Homeland, Peace River at Clear Springs, Peace River near Homeland, Phosphate Mine Outfall CS-8 near Bartow, and Charlie Creek near Crewsville. In FY2008, two water level monitoring sites (Peace River Distributary at Dover Sink and Gator Sink near Bartow) that were budgeted under Project B113 in FY2007 were added to this project for long-term monitoring. These sites were installed to assess the hydraulic connection between the Peace River and underlying aquifers and determine the amount of flow loss due to the karst openings along the upper part of the Peace River. In addition, two flow monitoring sites (Peace River at Nocatee and Shell Creek near Circle K Grove) that were budgeted under Project H057 in FY2007 were added to this project in FY2008 for long-term monitoring. These sites were installed to expand the surface water flow monitoring network on water bodies designated for proposed water supply projects. In FY2009, no changes are planned to the data collection program in the Peace River Basin. The increase in FY2009 reflects an annual adjustment to pricing by the USGS.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	783,095	0	104,900	108,500	0	996,495
013 Hillsborough River Basin	1,195,755	0	120,900	121,600	0	1,438,255
014 Northwest Hillsborough Basin	183,574	0	44,200	44,700	0	272,474
015 Coastal Rivers Basin	1,252,307	0	236,900	243,900	0	1,733,107
016 Pinellas-Anclote River Basin	341,332	0	56,600	57,100	0	455,032
019 Withlacoochee River Basin	1,349,667	0	281,180	296,880	0	1,927,727
020 Peace River Basin	1,869,565	0	425,600	434,900	0	2,730,065
021 Manasota Basin	852,020	0	184,500	231,900	0	1,268,420
<b>Project Funds Not Budgeted by the District</b>						
USGS	1,182,766		173,800	0	0	1,356,566
				<b>Total</b>		<b>\$12,178,141</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Install flow site on Thirty-mile Creek near Nichols	10/1/00		10/1/00
Install stage site on Peace River near Nocatee	10/1/00		8/22/01
Install stage site on Peace River near Gardner	10/1/00	9/7/01	9/6/01



Install flow site on Whidden Creek near Ft. Meade	10/1/00		10/1/00
Install stage site on Peace River near Buchanan	10/1/00	11/5/01	11/5/01
Add specific conductance/temp. measurements on Joshua Creek at Nocatee/Prairie C	10/1/01		10/1/01
Begin discharge measurements on 7 Lake Placid Seepage Study surface water sites	10/1/01	6/30/01	6/30/01
Install and begin monitoring surficial aquifer wells for Lake Placid Seepage Study	10/1/01	6/30/01	6/30/01
Install continuous gauging/conductivity station on Peace River @ Punta Gorda	10/1/01	10/1/02	8/29/02
Begin flow monitoring at Peace Ck nr Bartow	10/1/03		10/1/03
Discontinue lake level monitoring at 14 sites	10/1/03		10/1/03
Install stage/water quality site at Shell Creek at Washington Loop Road	10/1/03	1/31/04	1/31/04
Install stage/water quality site at Prairie Creek at Washington Loop Road	10/1/03	1/31/04	1/31/04
Begin flow monitoring at Peace R nr Bartow	10/1/06		10/1/06
Begin flow monitoring at Charlie Ck nr Crewsville	10/1/06		10/30/06
Begin flow monitoring at Phosphate Mine Outfall	10/1/06		10/11/06
Begin flow monitoring at Peace R. nr Homeland	10/1/06		10/11/06
Begin flow monitoring at Peace R. at Clear Spgs	10/1/06		10/11/06
Begin flow monitoring at Barber Branch	10/1/06		10/11/06
Begin flow monitoring at Six Mile Ck	10/1/06		10/11/06

**Status As Of:** February 29, 2008

FY2008 data collection is ongoing, with no problems to report. The District's FY2008 commitment to the project is \$425,600, of which \$0 has been expended (the USGS bills us every six months for these activities).



**Quality of Water Improvement Program - Peace River Basin**

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Water Quality, Natural Systems  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** STOVER, KEVIN  
**Task Manager(s)**  
**Status**

**Description**

Pursuant to F.S. Ch. 373.206, any abandoned artesian well having a detrimental impact on the District's water resources must be properly plugged. The District's Quality of Water Improvement Program (QWIP) provides funding assistance to landowners to come into compliance with the statute. To increase landowner cooperation and the number of abandoned artesian wells plugged annually, without increasing staff levels, the District's Governing Board has allocated matching funds to augment the Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Peace River, and Manasota Basins QWIP budget to maintain the Funding Assistance Initiative since January 1, 1994. The Funding Assistance Initiative was designed to reimburse landowners up to 100 percent of the cost to have their abandoned artesian wells plugged, with a maximum District reimbursement of \$5,000 per well and \$15,000 annually per landowner. This incentive has increased landowner cooperation and the number of wells plugged annually. Under the 50/50 cost sharing program, QWIP plugged an average of 50 wells per year. Under the Funding Assistance Initiative, the QWIP has reimbursed an average of approximately 200 wells per year.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	645,588	66,810	381,682	389,793	0	1,483,873
011 Alafia River Basin	363,769	29,850	126,188	114,244	0	634,051
013 Hillsborough River Basin	171,375	0	14,485	29,677	0	215,537
014 Northwest Hillsborough Basin	116,550	0	10,001	10,159	0	136,710
016 Pinellas-Anclote River Basin	92,527	0	8,219	11,824	0	112,570
020 Peace River Basin	698,905	36,960	159,100	158,177	0	1,053,142
021 Manasota Basin	1,288,259	0	195,540	201,631	0	1,685,430
				<b>Total</b>		<b>\$5,321,313</b>

**Status As Of:** February 27, 2008

Since the last update six wells have been plugged. Since the inception of the program in the mid-1970s, 686 wells have been plugged in the Peace River Basin. There are 19 additional wells that have been inspected and approved for plugging. Wells plugged since the last update are as follows: Charlotte County (1) Howard Saslow - four inch well casing to unknown depth with a total well depth 250 feet - plugging for a well no longer in use - District reimbursement \$950; Polk County (1) Lake Ashton Phase II - four inch well casing to 85 feet with a total well depth 114 feet - plugging for a well no longer in use - District reimbursement \$950; (2) Berkley Ridge - eight inch well casing to 74 feet with a total well depth 447 feet - plugging for a well no longer in use - District reimbursement \$3,558; (3) Joe Ruthven - four inch well casing to unknown depth with a total well depth 262 feet - plugging for a well no longer in use - District reimbursement \$1,891; Desoto County (1) New Florida Ventures - eight inch well casing to 58 feet - total well depth 392 feet - plugging for a well no longer in use - District reimbursement \$3,869; Highlands County (1) City of Sebring - sixteen inch well casing to 575 feet with a total depth of 1,300 feet - plugging for a well no longer in use - District reimbursement \$5,000.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	General Fund (District), Alafia River, Peace River, Manasota
<b>Cooperator(s)</b>	United States Geological Survey
<b>Project Manager</b>	BASSO, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The project is a cooperative effort between the United States Geological Survey (USGS) and the Southwest Florida Water Management District (SWFWMD) to assess the hydraulic connection between the river and underlying aquifers, characterize and map karst features within or adjacent to the river bed, and determine the amount of flow loss to the karst openings along the upper part of the Peace River from Bartow to Ft. Meade.

**Benefits**

Long-term decline in Upper Floridan aquifer water levels has reversed the hydraulic gradient between the river and the underlying aquifers which has occasionally resulted in loss of perennial flow along the river between Bartow and Homeland. Understanding the extent, timing, and magnitude of flow loss to the underlying aquifers is the first step in the process of developing water resource development projects that could eventually augment low flow conditions along the upper reach of the river.

**Costs**

Funding for FY2003 was provided through a budget transfer from the District Fund 010 Water Resources Development Reserves and the Alafia River, Manasota, and Peace River Basins. The District's share of the total cost for the FY2003 portion of the study is \$125,000 with \$62,500 allocated from the District's General Fund, \$15,625 from the Alafia River Basin, \$15,625 from the Manasota Basin, and \$31,250 from the Peace River Basin. Subsequent years will be budgeted under the annual USGS-SWFWMD joint funding agreement with the District's share from Fund 010 contributing roughly 50 percent and the remaining 50 percent comprised from the Alafia River, the Manasota, and the Peace River basins. The Alafia River and Manasota basins make up 25 percent each with the remainder of basin funding coming from the Peace River Basin. These percentage contributions are contract dollars only and do not reflect salaries and benefits.

**Additional Information**

Major elements of the study include: 1) conducting an analysis of historical hydrogeologic and land-use information in the basin, 2) identifying, locating, and characterizing karst features in the river bed and flood plain, 3) quantifying the flow losses to the karst openings and gains from mining outfalls, and 4) assessing the hydraulic connection of the river to the underlying aquifers. Two new stream gaging stations will be installed on the river by the USGS between Bartow and Ft. Meade. The District will provide and supervise drilling operations at three sites near the upper part of the Peace River. Drilling operations will involve collection of data on geology, hydraulic characteristics, and degree of connection between the river bed and underlying aquifers. Monitor wells will also be installed in the surficial aquifer, intermediate aquifer system, and the Upper Floridan aquifer at each site. The project was initiated in FY2002 and funded under the annual USGS-SWFWMD cooperative agreement. Due to delays in obtaining drilling site access and the need to collect at least one-year of monitoring data from the wells, the project has been extended by three years and will be completed by October 2008. In October 2003, an interim project report was provided by the USGS that includes the location of karst features and preliminary estimates of flow loss to the underlying aquifers. A final report will present the findings of the study at the end of FY2008.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	365,478	0	27,388	0	0	392,866
011 Alafia River Basin	79,750	0	7,444	0	0	87,194
020 Peace River Basin	160,375	0	13,694	0	0	174,069
021 Manasota Basin	80,763	0	7,444	0	0	88,207
<b>Project Funds Not Budgeted by the District</b>						
USGS	656,400		50,000	0	0	706,400
				<b>Total</b>		<b>\$1,448,736</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Planning Document	9/30/02		9/30/02
Installation of 2 Stream flow Gages	9/30/02		9/30/02
Selection of Drilling/Testing Sites	3/30/03		3/7/03
Final Planning Document	3/30/03		3/30/03

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Securing Permanent Easements for Monitor Wells	6/30/03	9/30/04	3/30/05
Interim Report on Karst Features/Seepage Loss	9/30/03		10/30/03
Completion of Coring (3 sites)	12/30/03	7/31/06	5/31/06
Completion of Monitor Well Installation (3 sites)	9/30/04	12/31/06	10/31/06
Completion of APTs	12/30/04	3/30/07	1/31/07
Draft Report	6/30/05	6/30/08	
Final Report	9/30/05	9/30/08	

**Status As Of:** March 01, 2008

Writing of the technical report is underway. The District expects the final report in September 2008.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	Citrus 20/20, Inc., Tampa Water Department, Hillsborough County, Progress Energy, Citrus County, City of Tampa, City of North Port - Public Utilities, City of Venice, Manatee County, Sarasota, Sarasota County, Peace River/Manasota Regional Water Supply Auth., City of Bradenton, Longboat Key
<b>Project Manager</b>	ROE, MELISSA
<b>Task Manager(s)</b>	GRANTHAM, ROBIN
<b>Status</b>	Ongoing

**Description**

The Water Conservation Hotel And Motel Program (Water CHAMP) provides education to hotel/motel management and guests with the goal of reducing water use. The District provides printed materials to all participating properties to assist owners/managers in determining ways to save water through their properties' operational processes, including, but not limited to, a towel and linen reuse program. There are 912 hotels and motels in the District. Water CHAMP has 359 participants, representing 39 percent of all the hotels and 57 percent of all available rooms in the District, and continues to grow. After experiencing a 33 percent growth rate in 2006, participation in Water CHAMP increased 37 percent in 2007. The District's new Program for Restaurant Outreach (Water PRO). The program will extend water conservation achieved through the Water CHAMP program by promoting water conservation in restaurants. A brochure has been created to promote the program and includes information about the table tents, coasters, placemats and other free materials promoting water conservation online. The CHAMP coordinator will promote the program through the Florida Restaurant and Lodging Association as well as through direct mail and site visits to association members and independent restaurants. Other materials include a button for wait staff to wear declaring that the restaurant only serves water upon request and cling stickers promoting water conservation to be placed on bathroom mirrors.

**Benefits**

Water CHAMP provides the tools and education needed to help hotel and motel staff and guests learn to conserve water. This program measures the effectiveness of this education effort via actual water savings. Evaluation studies show that participants save an average of 20 gallons and up to 50 gallons of water per occupied room per day. Based on audits of 71 properties in Pinellas and Hillsborough counties within a one-year period between 2002-2003, the total estimated savings for all participating properties in those counties was more than 100 million gallons/yr.

**Costs**

The total cost of the program in FY2009 is proposed to be \$83,692 with District funds budgeted for the first time to expand the program to support the 10 hotels/motels in the Green Swamp Basin, which is administered by the Governing Board. Costs will be shared as follows: District - \$7,828, Alafia River - \$3,550, Hillsborough River - \$8,107, Northwest Hillsborough - \$4,070, Pinellas-Anclote - \$17,372, Coastal Rivers - \$6,563, Withlacoochee River - \$6,207, Peace River - \$16,271, and Manasota - \$13,724. Funds will be used for Champ coordinator (District temporary employee) salary, travel, printed materials, costs to educate the audience and promote the program through advertising, workshops, tradeshow, professional memberships, etc. Each basin's share is based on anticipated work within that basin. Based on the average number of guests exposed to the program, the estimated per person cost for the program is less than \$.01. As the program grows, the cost per person decreases.

**Additional Information**

The total cost of the program for FY2008 is \$75,864. Funding for this program covers salary and travel for the coordinator (a Board-authorized temporary staff position), printing of CHAMP materials and education/promotion. Two evaluation measures were included as part of the pilot program: guest acceptance and water savings. Hotel/motel guests give the program a 98 percent approval rating. Water savings determined by Pinellas County Utilities through on-site inspections and billing research revealed a total savings of 14 million gallons per year (mg/y) from representative properties. From those results we can project that the 76 participating Pinellas-Anclote River Basin Water CHAMP properties (2002-2003) potentially saved a total of 71 mg/y. Based on Pinellas County water rates, that translated into a \$569,400 savings per year to participating hoteliers. Also in 2002, the Tampa Water Department conducted water use audits of 54 participating hotels and motels within Hillsborough County. According to their findings the 54 properties saved 35 million gallons of water in one year. This brought the total estimated savings in Pinellas-Anclote, Hillsborough River, Northwest Hillsborough and Alafia River Basins to over 100 million gallons in a one year period from 2002 to 2003. Currently the 359 properties that participate in the program Districtwide represent more than 37,000 hotel rooms. Based on the average occupancy rate (68 percent) and water savings (20 gal/day/occupied room) Water CHAMP can save more than 503,000 gallons of water per day.

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

010 General Fund (Districtwide)	0	0	0	7,944	0	7,944
011 Alafia River Basin	12,989	0	3,622	3,782	0	20,393
013 Hillsborough River Basin	23,758	0	8,276	8,649	0	40,683
014 Northwest Hillsborough Basin	13,830	0	4,154	4,340	0	22,324
015 Coastal Rivers Basin	9,954	0	6,660	6,873	0	23,487
016 Pinellas-Anclote River Basin	167,676	0	18,033	18,306	0	204,015
019 Withlacoochee River Basin	9,308	0	6,287	6,477	0	22,072
020 Peace River Basin	55,886	0	16,849	16,929	0	89,664
021 Manasota Basin	58,229	0	14,262	14,266	0	86,757
				<b>Total</b>		<b>\$517,339</b>

**Critical Project Milestones**

	Projected	Amended	Actual
300th property signs up			6/29/07
Program begins in Pinellas	6/10/02		6/10/02
Program begins in Hillsborough	6/1/03		6/1/03
Program begins in Citrus and Hernando	9/15/04	11/10/04	11/10/04
Program begins in Manasota	10/1/04		10/1/04
Program begins in Peace River	10/1/05		10/1/05
Pilot continuing education program in Pinellas	9/1/06	4/1/08	
Education pilot program evaluation complete	1/31/08	4/1/10	

**Status As Of:** March 11, 2008

Currently Water CHAMP has 359 participants, representing more than 39 percent of all the hotels and 57 percent of all available rooms in the District. District staff is working with the Florida Events Planner and The Florida Magazine to encourage visitors to stay in Water CHAMP properties. These publications are distributed to event/meeting planners and visitors providing information on statewide activities and programs. Two of four ads have been placed in the Florida Events Planner with the remainder going into the Florida Magazine. Visit Florida, the state's tourism bureau, is distributing Water CHAMP hotel directories through all five of its state welcome centers. District staff is working with local tourist centers to display and distribute the Water CHAMP hotel directories. Directories are currently located at the Sarasota Convention and Visitors Bureau and the Tampa Bay Beaches Chamber of Commerce in St. Pete Beach. Staff is working with the Florida Restaurant & Lodging Association (FRLA) to place an ad in the March/April issue of its statewide magazine. The ad will promote Water CHAMP to hotels and motels in west-central Florida and encourage them to sign up for the program online. The Water CHAMP Coordinator position has been filled. The new coordinator began work February 25, 2008. Basin updates are as follows: **Pinellas-Anclote River Basin** - Of the approximately 332 properties in this basin, 105 are CHAMP properties. District staff has completed work on a poster for commercial laundry rooms to remind staff to conserve water and energy by washing only full loads of laundry. This poster is being distributed to hotels through a partnership with Progress Energy. District staff is also working with Progress Energy to produce a housekeeping manual for hotels highlighting ways to clean rooms while conserving water and energy. The program coordinator is working with the Tampa Bay Beaches Chamber of Commerce to use the Water CHAMP logo for acknowledging all participating properties in this basin in its 2008-2009 visitors' guide. **Hillsborough River, Northwest Hillsborough and Alafia River Basins** - Of the approximately 171 properties in this basin, 101 are CHAMP properties. The second edition of the "Going Green Can Keep You Out of the Red" conservation workshop is scheduled for April 3 (location to be determined) in conjunction with the HCHMA General Membership Meeting. This workshop is targeted toward hotel and motel general managers and directors of engineering and will include presentations on the Florida Green Lodging Program, energy-efficient lighting and recycling programs. The HCHMA also includes a water conservation column in its bimonthly newsletter, which is distributed to about 200 businesses, hotels and motels in Hillsborough County. For the third year in a row, all Water CHAMP properties in this basin are designated with the Water CHAMP logo in the Tampa Bay & Co's Destination and Meeting and Planner guides. The 2008 guides are now in circulation. **Coastal Rivers and Withlacoochee River Basins** - There are approximately 82 properties in this basin, 47 are CHAMP properties. Water CHAMP properties are identified with the Water CHAMP logo on the official web site of the Citrus County Visitors and Convention Bureau (Visit Citrus) at visitcitrus.com. Citrus County Utilities is working with the District to increase participation in Water CHAMP and to increase overall conservation measures with commercial properties. District staff is trying to coordinate a workshop with the Kings Bay/Crystal River Rotary Club and area chambers of commerce to promote water conservation among area businesses and residents. **Manasota Basin** - There are approximately 172 properties in this basin, 65 are CHAMP properties. Sustainable Sarasota, a county program designed to promote sustainability in the local community, will include the Water CHAMP logo and description on its web site. The Longboat Key Public Works Department will also promote Water CHAMP to the hotels in that area. **Peace River Basin** - Program began in 2006. There are approximately 155 properties in this basin, currently 41 of them are Water CHAMP properties. The program coordinator will continue to work with area hotels to

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promote Water CHAMP at a Charlotte County Young Professionals meeting, in order to increase participation and knowledge of the program. Work is continuing with the City of Lakeland to get water audit results on all participating properties in Lakeland. The city provided current water use data in 2006. This new data will help determine actual water-use savings associated with the Water CHAMP program as new properties are added. Work is also underway with the City of Winter Haven Utilities to design a bill stuffer to be included in all mailings to lodging facilities in their service area. Water Program Restaurant Outreach - At the March 11, 2008 Basin Board Education Committee meeting, Melissa Roe unveiled the District's new Water Program for Restaurant Outreach (Water PRO). The program, which is an extension of the Water CHAMP program, will promote water conservation in restaurants. A brochure has been created to promote the program and includes information about the table tents, coasters, placemats and other free materials promoting water conservation online. The CHAMP coordinator will promote the program through the Florida Restaurant and Lodging Association as well as through direct mail and site visits to association members and independent restaurants.



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<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

The FAWN project started in 1997 and the District's involvement with the project started in 2003. This project collects and distributes weather and climatic data, and has an educational component to teach the public how to use the data to conserve water. Funding for the project was distributed over several years and is needed to continue data collection and dissemination. In FY2009 FAWN is planning additional weather schools, fact sheets and enhanced irrigation management tools. These elements will help conserve water and reduce fertilizer leaching.

**Benefits**

Increase the growers' knowledge and provide climatic data to help them reduce water use. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions. Estimated savings are in excess of one billion gallons of water and \$500,000 per hour. Therefore during a cold winter where growers could use cold protection five (5) to ten (10) nights, annual savings could be as much as ten billion gallons of water and \$5 million to producers. Few winters require no cold protection, and it would be reasonable to assume this management tool would average saving five billion gallons of water and \$2.5 million annually. The key to realizing these water use savings is educating the public through schools, written material, trade shows, etc. In addition to collecting the data, FAWN information is used for workshops and other public events to help teach the public the significance of weather and climatic data for water conservation and how to use the data. An in-depth weather school is held annually. FAWN has developed a youth training curriculum. In FY2008-2009 FAWN will enhance its urban program, develop more educational components and add new weather tools.

**Costs**

The FY2008 budget includes \$100,000 for the FAWN project. Half this funding (\$50,000) will come from general revenue and the remaining amount will be divided evenly between the eight Basin Boards with each budgeting \$6,250.

**Additional Information**

The Florida Automated Weather Network (FAWN) has been a successful, on-going, multi Agency (IFAS, FDAC, SFWMD, SJRWMD, and Industry) project with about a \$500,000 annual budget. They are asking for continued funding in FY2008. The other cooperators have not yet determined their level of continued support for FAWN. FAWN's weather data has been used by local Emergency Management personal to supplement the District's and other sources' climatic data. The project was first funded by the Peace River Basin Board and later expanded to the Manasota Basin Board. This proposal is to expand the project into the Hillsborough River, Alafia and Withlacoochee Basin Boards. FAWN has recently received new commitments for additional funds from FDACS, SFWMD and SJRWMD. FAWN was created in 1997 with a legislative appropriation to the University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS). These funds were used to create infrastructure and to establish 11 weather sites that were incorporated with a small UF/IFAS network of five sites in Central Florida. Over the next few years there is a plan to expand FAWN's network to 33 sites. In 2002 additional funding was obtained from the Florida Division of Emergency Management to complete the system and in 2003 the Peace River Basin Board recognized the significance of FAWN and provided a \$5,000 grant. A year later the Peace River and the Manasota Basin Boards entered into a three-year agreement to provide FAWN with \$15,000 per year. These funds were to help continue FAWN's data collection efforts and to expand the program's educational components. That same year FDACS, SJRWMD and SFWMD approved funds for FAWN. Currently there are 10 FAWN sites within the District located at: Arcadia, Balm, Bradenton, Bronson, Brooksville, Dover, Frostproof, Lake Alfred, Ona and Sebring. In addition there are several sites surrounding the District that provide useful information to the citizens of the District. Current and historical climatic data from these sites, and FAWN irrigation tools, can be accessed on the web at: <http://fawn.ifas.ufl.edu/>. The FAWN program was developed to provide real time weather information to help Florida citizens make informed weather related decisions. This information is used to help conserve water and protect Florida's natural systems. Irrigators use FAWN data to help determine when and how much to water. Also, FAWN data is used to assist individuals to determine when to turn off irrigation systems used for cold protection. Urban and agricultural chemical applicators use FAWN to help make decisions relative to the application of chemicals and fertilizer. FAWN has been expanded to provide on-line water/irrigation management tools that require weather inputs. Examples of these tools include insect and disease control, cold protection, irrigation, nutrient management and many more. The District's Agricultural Advisory Committee has expressed their support for the FAWN program. In addition to the current tools, FAWN is working with University of Florida scientists to develop others. Some of the studies already funded by the District will be used to enhance the FAWN program. For example, the Wet Bulb Irrigation Cut Off management tool has been able to allow strawberry, citrus, fern, vegetable, ornamental growers and home owners determine when it is safe to shut off irrigation systems used for cold protection.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	87,500	0	50,000	50,000	0	187,500
011 Alafia River Basin	10,937	0	6,250	6,250	0	23,437
013 Hillsborough River Basin	10,938	0	6,250	6,250	0	23,438
014 Northwest Hillsborough Basin	10,937	0	6,250	6,250	0	23,437
015 Coastal Rivers Basin	10,938	0	6,250	6,250	0	23,438
016 Pinellas-Anclote River Basin	10,937	0	6,250	6,250	0	23,437
019 Withlacoochee River Basin	10,938	0	6,250	6,250	0	23,438
020 Peace River Basin	25,937	0	6,250	6,250	0	38,437
021 Manasota Basin	25,938	0	6,250	6,250	0	38,438

**Total** **\$405,000**

Critical Project Milestones	Projected	Amended	Actual
FY2007 Governing Board Notification	1/2/07		1/1/07
Basin Board Notification	1/3/07		1/3/07
FY2006 Project Ends	3/1/07		3/1/07
FY2007 Data Collection	12/1/07		12/1/07
FY2008 Completion Report	1/31/08		
FY2007 Completion Report	2/27/08		
FY2007 Project Ends	2/28/08	7/31/08	
FY2008 Contract to Cooperator	3/1/08		2/26/08
FY2007 No Cost Time Extension	3/31/08		
FY2008 Data Collection	12/31/08		
FY2008 Project Ends	2/28/09		

**Status As Of:** February 29, 2008

9/15/2003 - Processed Purchase Order. 10/10/2003 - P.O. Mailed to cooperator. 11/04/2003 - Project continued as planned.  
 1/4/2004 - Reporting weather to public. Project continued as planned. 3/2/2004 - Project continued as planned. 5/4/2004 - Project continued as planned. 6/23/2004 - Reviewed Draft progress report - Project continued as planned. 7/12/2004 - Reviewed Task Completion reports for tasks 1, 2, 3, 4, 5, 6, and 7. Project continued. 09/07/2004 - Project continued as planned. 11/1/2004 - Reviewed Task Completion report for task 8. 11/16/2004 - Reviewed annual reports and process payment. 12/04/2004 - Data collection ongoing. Project continued as planned. 1/24/2004 - Data collection ongoing. Project continued as planned. 2/24/2005 - Presentation to District's Governing Board. 3/1/2005 Data collection continuing as planned. 5/2/2005 - Data collection continuing as planned. 6/2005 - Coastal and Withlacoochee basin board presentations, project continuing as planned. 9/1/2005 Data collection continuing as planned. 10/5/2005 - IFAS executed the Agreement. 11/1/2005 - Highlands Co. Weather School canceled because of Hurricane Wilma, other schools continuing as planned. 1/11/2006 - Successful series of weather schools: 11/3/2005 - Bartow - 31 Attendees 31; 11/16/2005 - Arcadia - 27 Attendees; 11/22/2005 - Sebring - 25 Attendees. Dade City 1/11/2006 50 registered to attend. 3/1/2006 Statewide steering committee met in February. 4/17/2006 - Data Collection continuing as planned. 6/12/2006 - Data Collection continuing as planned. 8/15/2006 - Working on educational program, data collection continuing as planned. 10/12/2006 - Reviewed task reports - project continuing as planned. 12/4/2006 - Reviewed task reports - project continuing as planned. 1/24/2007 - Annual FAWN business meeting with all cooperators. 5/1/2007 - Waiting for 06 completion report - coordinator has retired and replacement has resigned. 7/6/2007 - Reviewed FY06 completion report. 11/1/2007 - New internet page with urban irrigation tool. 1/2/2008 - Weather School in Pasco County; Continue data collection and distribution. 2/20/2008 - Reviewed task 13 reports. 2/20/2008 -Processed no cost time extension to complete 4H component of Project.



**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** General Fund (District), Peace River  
**Cooperator(s)**  
**Project Manager** SPRINGSTEAD, CHAN  
**Task Manager(s)**  
**Status** Ongoing

**Description**

The Comprehensive Watershed Management (CWM) initiative has been established to improve the management of water and related natural resources within the Southwest Florida Water Management District. This initiative employs a watershed-based approach to resource management. Staff from a variety of agencies, disciplines and departments make up watershed teams that have been assigned to eleven watersheds in the District. The Draft Peace River Comprehensive Watershed Management Plan describes and documents "present conditions" of the water resources in the District's four Areas of Responsibility (AORs). The Plan represents a significant component of the CWM initiative for this basin. Major programs and processes to which the CWM initiative provides input include cooperative funding; basin initiatives; annual basin planning sessions and budget development; recommending restoration/mitigation/acquisition sites; local government comprehensive plan and amendment review; Development of Regional Impact review; and several others. The Basin's assigned planner is the contact person for this project. Activities and milestones related to the Peace River CWM initiative are routinely updated in the status section below.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	50,861	0	4,292	0	0	55,153
020 Peace River Basin	52,001	0	4,292	0	0	56,293
				<b>Total</b>		<b>\$111,446</b>

**Status As Of:** August 09, 2007

Emergency Basin Board meeting was held on July 27, 2007, to approve the Basin's budget. FY2008 Budget was approved.

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** General Fund (District), Peace River  
**Cooperator(s)**  
**Project Manager** SPRINGSTEAD, CHAN  
**Task Manager(s)**  
**Status** Ongoing

**Description**

The Comprehensive Watershed Management (CWM) initiative has been established to improve the management of water and related natural resources within the Southwest Florida Water Management District. This initiative employs a watershed-based approach to resource management. Staff from a variety of agencies, disciplines and departments make up watershed teams that have been assigned to eleven watersheds in the District. The Draft Lake Wales Ridge Comprehensive Watershed Management Plan describes and documents "present conditions" of the water resources in the District's four Areas of Responsibility (AORs). The Plan represents a significant component of the CWM initiative for this basin. Major programs and processes to which the CWM initiative provides input include cooperative funding; basin initiatives; annual basin planning sessions and budget development; recommending restoration/mitigation/acquisition sites; local government comprehensive plan and amendment review; Development of Regional Impact review; and several others. The Basin's assigned planner is the contact person for this project. Activities and milestones related to the Lake Wales Ridge CWM initiative are routinely updated in the status section below.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	37,118	0	4,292	0	0	41,410
020 Peace River Basin	33,434	0	4,292	0	0	37,726
				<b>Total</b>		<b>\$79,136</b>

**Status As Of:** August 09, 2007

Emergency Basin Board meeting was held on July 27, 2007, to approve the Basin's budget. FY2008 Budget was approved.

**Project Type** Basin Initiatives  
**AOR(s)** Flood Protection, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** KOLASA, KEITH  
**Task Manager(s)**  
**Status** Ongoing

**Description**

Considerable alteration of the watersheds in the Peace River Basin has occurred since the early 1900s, which has resulted in major changes to the physical configuration of conveyance channels, lake shorelines, and wetlands. Consequently, functional changes in the Basin's surface water systems have occurred, including the reduction of recharge capability in the upper Basin, the over drainage of lakes and wetlands, the reduction of water volume in storage in lakes and wetlands, and the loss of water quality benefits provided by unimpaired wetlands. To restore and/or retrofit the hydrologic functions of the systems in the Basin, it is critical to have information on the historical conditions that existed in the Basin before large scale alterations took place. This project will provide the historical land cover information for the Peace River and the Lake Wales Ridge basins in the form of maps, tables, and a GIS database for the time period prior to the beginning of significant land and water alterations. The completed product will provide a close approximation of the Basin's condition as it was roughly 100-years ago. The project will result in: (1) an improved, definitive pre-development land cover; (2) documentation of the historical coverages of ponds, lakes, wetlands, and floodplains; and (3) documentation of the locations and extents of streams and creeks; and; (4) historic surface water levels for several of the Basin's lakes. The methodology developed during this project will be transferable to the entire Peace River Basin and to all other basins within the District. The project deliverables will benefit Peace River Basin MFL work on lakes, hydrologic and water quality restoration in the Lake Wales Ridge and Peace River basins, the development and implementation of watershed management plans, SWUCA objectives, and DOT mitigation.

**Benefits**

This project will provide a GIS database describing the historical land cover and historical hydrologic resources that existed roughly 100 years ago for the Peace River Basin and the Lake Wales Ridge Basin. The information will be used to support efforts in MFLs, SWUCA, and Peace Basin restoration activities. The information is also being applied to Lake Hancock and Peace River MFL recovery projects. The final products are being used by District staff and staff from other agencies, such as by FDEP for the Peace River Cumulative Impact Study.

**Costs**

The total budget amount for this project is \$412,450, of which all is being funded by the Peace River Basin Board as a Basin Initiative. Due to the large size of the Peace River Basin this project was divided into three phases. Funds in FY2004 (\$159,491) were used to complete the historical land cover database for Highlands County and roughly one half of Polk County. Funds in FY2005 (\$168,902) are being used to complete the second half of Polk County and all of Hardee County. In FY2006 \$19,656 was budgeted for staff salaries only. \$64,400 was budgeted in FY2007 to complete the Desoto County area. The District funding amounts shown in the table below include staff salaries.

**Additional Information**

Modern day land cover maps are based solely on soils data and depict many areas as altered land or impacted land. This project uses a variety of historical maps and data to interpret the natural land cover that existed prior to disturbance. The data used in this project include the General Land Office Notes (GLOS) from the 1850-60 time period, early military maps and forest surveys, the 1927 soil survey maps, the 1950 soil maps, and early USGS quad maps. The first phase of the project was completed by (Jones Edmunds and Associates) JEA Consultants. The completed database was made available to all District staff on the District's GIS network. The final product was presented at both the Wetlands Scientist Conference and the ESRI Conference in 2005. The second phase of this project has been completed by HDR Consultants for the western portion of Polk County, all of Hardee County, and a portion of Highlands County. The third phase is currently underway. This project has involved three different consultant agreements.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	412,449	0	6,285	56,573	0	475,307
				<b>Total</b>		<b>\$475,307</b>

**Critical Project Milestones**

	Projected	Amended	Actual
<b>1. Phase I (Highlands and Polk)</b>			
Advertise RFP	8/29/03		8/29/03
Notice to Proceed/Kick-off meeting	10/29/03		2/16/04

Prepare soils map & vegetation model	1/30/04		4/30/04
Prepare General Land Office Notes (GLOS) database	4/30/04		6/15/04
Correlate GLOS data with soils data	7/15/04		7/30/04
Final pre-development land cover map	2/15/05		3/28/05
Final surface water features map layer	4/15/05		10/30/04
Final report, receipt of all data	6/30/05		6/30/05
Close-out	8/1/05		8/1/05
<b>2. Phase II (Polk and Hardee)</b>			
Close-out		8/20/07	9/20/07
Complete Scope of Work	11/1/04		10/25/04
Contracts Administration Review	11/30/04		11/30/04
Advertise RFP	12/10/04		12/10/04
RFP review and ranking	1/30/05		2/11/05
Contract Negotiations	2/28/05		3/28/05
Contract Approval	3/15/05		5/15/05
Notice to Proceed/Kick-off meeting	3/28/05		6/2/05
Prepare General Land Office Notes (GLOS) database	3/30/06		3/30/06
Correlate GLOS data with soils data	3/30/06		8/2/06
Prepare soils map & vegetation model	3/30/06		6/15/06
Final hydrography layer	7/30/06	4/20/07	8/2/06
Final surface water features map layer	7/30/06		8/2/06
Final report, receipt of all data	11/30/06	7/20/07	7/20/07
Final pre-development land cover map	11/30/06	6/20/07	4/30/07
<b>3. Phase III (Desoto)</b>			
Complete Scope of Work for Desoto County	3/30/07		5/10/07
<b>3. Phase III (Desoto)</b>			
Execute Agreement with Consultant	6/20/07		8/12/07
Prepare General Land Office Notes	10/30/07		1/30/08
Prepare soils map and vegetation model	2/15/08		
Correlate GLOS data with soils data	5/15/08		
Hydrography layer	7/15/08		
Build pre-development land cover map	8/20/08		
Draft and Final Report	9/30/08		

**Status As Of:** February 22, 2008

Status updates on the first phase of the project are provided in the project history below as it has been completed. For the second phase of the project, the Notice to Proceed (NTP) was issued to HDR Engineering on June 02, 2005. HDR has completed all project tasks including transcribing and geocoding the General Land Office Surveys (GLOS) notes, the draft and final hydrography layer, and the draft and final soil maps and vegetation model. The Consultant experienced some delays with producing pre-development land cover layer due to inaccuracies with the historical soils maps from 1927. The 1927 soils maps lacked accuracy on boundaries of wetlands, especially along river corridors. The consultant used the historical USGS topo quads in place of the 1927 soils maps. This required many extra hours of staff work, but has resulted in a more accurate final product. A time extension amendment was processed to provide an additional six months to complete the project and final report. The final GIS layers have been completed and a draft and final report were both completed by mid July 2007. Final invoices have been processed and the second phase (agreement) was closed out. District staff have provided copies of the completed deliverables to other agencies such as FDEP and Polk County. An agreement was completed for the third and final phase of this project. The third phase which is underway will map the Desoto County portion of the Peace River Basin. HDR has completed processing and geocoding 1850 GLOS notes including the bearing tree data. HDR is currently working on the soils vegetation correlations.

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** United States Geological Survey  
**Project Manager** BEACH, MICHAEL  
**Task Manager(s)**  
**Status** Ongoing

**Description**

The project objectives are to 1) provide an assessment of current hydrologic and water-quality characteristics of the Charlie Creek watershed in the Peace River basin, and 2) produce a detailed water budget for the watershed during the study period. The project will include field reconnaissance, implementation of new data sites, seepage runs, and data collection and analysis.

**Benefits**

Results from this work will support and constrain future modeling efforts in this watershed, a principal sub-basin of the Peace River basin.

**Costs**

The cost for the project is \$696,000 shared equally by the USGS and the Peace River Basin Board. The project began in FY2004 and will be completed in FY2007. District funding for each year is \$62,000, \$120,000, \$122,000, and \$44,000, chronologically by fiscal year.

**Additional Information**

Charlie Creek watershed at 330 square miles is a principal sub-basin of the Peace River basin. Agriculture is the principal land use, but the watershed is the least developed in the Peace River basin. Flows in the upper Peace River have been affected by several factors, including: reduced ground-water baseflow due to lowering of the potentiometric surface of the Upper Floridan aquifer; altered surface drainage due to land surface alterations and development activities; and changes in rainfall. It has become increasingly important to develop a better understanding of the factors that affect river flows to provide policy makers with technically sound management alternatives. As part of the United States Geological Survey (USGS)/ SWFWMD cooperative studies program, this project will evaluate factors influencing flows in the Charlie Creek watershed.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	364,163	0	2,379	0	0	366,542
<b>Project Funds Not Budgeted by the District</b>						
USGS	348,000		0	0	0	348,000
				<b>Total</b>		<b>\$714,542</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Contract approved by USGS	4/1/04		5/7/04
Monitor Network Installation Complete	6/30/04		6/7/04
Data Collection Complete	3/31/06		3/31/06
Project Completion	9/30/07		

**Status As Of:** February 01, 2008

1) The SWAT models of the basin budgets being developed by the USF Geospatial Analytics Group are now expected to be completed by February 2008; 2) The cooperator now believes a draft report will be ready at the end of June 2008; and 3) the original project completion date was September 30, 2007.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	
<b>Project Manager</b>	KOLASA, KEITH
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The lakes along the Lake Wales Ridge make up a unique and valuable water resource. Many of the lakes have good to excellent water quality; however, these lakes are showing signs of declining water quality. The results of the Ridge Lakes Screening Procedure (B102) completed by District staff revealed that approximately 40 lakes receive direct untreated stormwater discharges from urban land uses. This project will develop conceptual stormwater retrofit plans for specific problematic stormwater inflows that were identified during the Ridge Lakes Screening and will serve as the basis to implement water quality enhancement of this lake system. This project will begin with lakes located along the Ridge in Polk County and then end with lakes in Highlands County. Conceptual plans will be developed for approximately 20 sites on 10 Ridge lakes.

**Benefits**

This project will provide conceptual design plans and costs to complete stormwater retrofits. The completed design plans and costs will be used to develop cooperative projects with other local governments and agencies to begin implementation of these projects which will protect and enhance the water quality of several lakes along the Lake Wales Ridge.

**Costs**

A total of \$170,000 was budgeted by the Peace River Basin Board in FY2005 to complete conceptual retrofit plans for 11 Ridge lakes. The final design, permitting, and construction will be carried out under project B217. The funding table below indicates staff salary travel and central garage charges.

**Additional Information**

Information collected during the development of the conceptual plans will include: (1) existing land availability such as through FDOT rights-of-ways/drainage easement and other public lands, (2) land availability documentation such as real estate plat maps, and FDOT drainage maps, (3) lands needing to be acquired and their respective assessed value, (4) willingness of the landowner to sell or provide a land license agreement, (5) total construction costs and cost per acre of treatment, and (6) identification of the funding sources and partnering agencies. This information will be used to complete a cost/benefit analysis and a ranking of the proposed retrofits. During the lake screening a number of stormwater discharges were identified as originating from State Highways 27 and 17. District staff have been coordinating with FDOT and local governments to move the conceptual projects forward into implementation. Projects that have been developed are being carried forward under project B217.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	195,748	0	1,120	0	0	196,868
				<b>Total</b>		<b>\$196,868</b>

**Critical Project Milestones**

**1. Consultant Agreement Development and Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Consultant Selection	11/10/04		10/10/04
Contract Development	12/30/04		11/24/04
Contracts Administration Review	1/1/05		2/15/05
Negotiate Costs	1/20/05		2/2/05
Contract Execution	1/30/05		3/11/05

**2. Work Order 1**

Prepare First Work Order	2/15/05		2/15/05
Execute Work Order and Issue NTP	2/28/05		2/28/05
Consultant Kick-off Meeting	3/28/05		4/14/05
Watershed Evaluation for first three lakes	1/5/06		10/24/05
BMP Alternative Analysis & Conceptual Plans	2/5/06		2/20/06

**3. Work Order 2**

Execute Second Work Order and Issue NTP	3/15/06		4/17/06
Watershed Evaluation for next five lakes	5/15/06	10/15/06	10/12/06
BMP Alternative Analysis & Conceptual Plans	7/15/06	11/11/06	1/7/07

**4. Work Order 3**

Execute Third Work Order and Issue NTP	9/15/06	3/15/07	6/30/07
Watershed Evaluation for last 2 lakes	2/15/07	11/30/07	10/2/07
BMP Alternative Analysis & Conceptual Plans	4/15/07	12/30/07	1/30/08

**5. Project Development**

Develop Cooperative Agreements with Local Governments and FDOT	10/15/07	12/30/07	2/20/08
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**6. Close Out**

Contract Termination	9/11/06	2/20/08	
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**Status As Of:** February 22, 2008

The first work order for this project has been completed. The work order provided conceptual design plans for stormwater retrofits for Lakes Menzie, Marie, and Gordon in Dundee, Polk County. The second work order was executed on May 24, 2006. The second work order was for five lakes located in Highlands County. District and Consultant staff completed a site visit to each of these five lakes on May 17, 2006. The Consultant completed the conceptual design plans and associated reports for the five lakes included in the second work order on January 7, 2007. District staff met with staff from the Town of Lake Placid and Highlands County on Nov. 6, 2006 and Dec. 7, 2006 to discuss developing a cooperative funding project to begin the stormwater retrofit for one of the lakes included in the 2nd work order, Lake Clay. The County and City submitted an FY2008 cooperative funding request for this project on Lake Clay (L897). The third work order for the last group of lakes was completed. The lakes are Lake Clinch located in Frostproof and Lake Wailes located in Lake Wales. District and Consultant staff completed a preliminary site visit to the stormwater systems on these lakes on Feb. 21, 2007. During the course of this project three time extensions have been needed due to delays with completing survey task associated with the design plan preparation. The third and final time extension has been approved and will extend the project completion to December 30, 2007. The watershed evaluation of the last two lakes has been completed and the conceptual design plans and cost benefit are near completion.



<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Highlands County
<b>Project Manager</b>	KOLASA, KEITH
<b>Task Manager(s)</b>	ARNOLD, DAVE
<b>Status</b>	Ongoing

**Description**

This is a multi-year project funded as a Basin Initiative to develop lake level recovery strategies for Lakes Jackson and Little Jackson consistent with the Southern Water Use Caution Area (SWUCA) recovery plan. The state's water management districts are statutorily charged with the establishment of minimum flows and levels for the protection of Florida's water resources. Several lakes in Highlands County have been identified for minimum levels adoption in the Southwest Florida Water Management District's (District) Priority List and Schedule for the Establishment of Minimum Flows and Levels. District staff have developed proposed minimum levels for lakes Jackson and Little Jackson located within the Josephine Creek Watershed. The proposed minimum levels incorporate information on the effects of water-use, rainfall and structural alterations (e.g., modifications to lake outlets) on lake stage. According to information in the SWUCA recovery plan, the proposed minimum levels for these lakes are not being met. The first phase of the project, funded in FY2005, completed an evaluation of the watershed, completed data development needed to run the hydrologic model used to evaluate recovery options, and provided a preliminary cost of potential recovery alternatives. The second phase, funded in FY2006 and FY2007 will complete a water budget model for these lakes so that potential gains in water level can be quantified and will complete an integrated hydrologic model for the entire watershed and will further refine recovery alternatives and costs. Highlands County will be assisting with this phase of the project and is contributing \$30,000 towards the project.

**Benefits**

This project will identify lake level recovery strategies for Lake Jackson and Little Lake Jackson and will implement these strategies if determined to be feasible. Minimum Flows and Levels (MFLs) have been established on these two lakes and recovery strategies are needed to maintain these levels if determined to be feasible. The recovery alternatives identified under this project may be applicable to other lakes with established MFLs.

**Costs**

The total project budget is \$420,000. FY2005 funds (\$80,000) were provided by the Peace River Basin Board. For FY2006, \$130,000 was included in the District's budget (\$41,176 from the Peace River Basin and \$58,824 from the Water Protection and Sustainability Trust Fund) including a revenue agreement with Highlands County for \$30,000. Funding for FY2007 (\$210,000) includes \$105,000 from the Water Protection and Sustainability Trust Fund and \$105,000 provided by the Peace River Basin Board. Future funding will be requested to implement the lake level recovery alternatives if determined to be feasible. The District funding in the table below includes staff salary, travel and central garage charges.

**Additional Information**

The specific elements of the District's Watershed Management Program Guidelines and Specifications that will be completed during this project are: (1) Review of aerial contour maps and acquisition of new information on an as needed basis; (2) Digitizing available contour information from aerial maps and review of as-built plans and other information to document existing conditions of the Jackson-Josephine Creek watershed; (3) Development of digital terrain models for existing conditions topography; (4) Compilation of existing reports, survey information, etc. to document existing conditions; (5) Map historic floodplain that will be restored along Jackson-Josephine Creek between Lake Jackson and Lake Josephine and extent of water staging areas; (6) Compilation of regional rainfall, groundwater level, surface water level, water-use, and water quality data; (7) Assessment of Floridan Aquifer level data, groundwater modeling results, and, if needed, application of groundwater models to determine existing conditions; (8) Develop a GIS database for watershed modeling; (9) Formulation of the approach to watershed modeling; (10) Limited survey to update existing information, and; (11) determination of probable or planning level costs of recovery options.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	255,439	0	15,112	13,048	0	283,599
<b>District Budgeted - Outside Revenue</b>						
Highlands Co-Lks Jackson/Ltl Jackson Rvry (B198)	30,000	0	0	0	0	30,000
Water Protection & Sust T. F. (Surface Wtr Rstr)	163,824	0	0	0	0	163,824
				<b>Total</b>		<b>\$477,423</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
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**1. Phase I**



Consultant Selection Process	10/15/04	10/20/04
Draft Agreement and Scope of Work	10/20/04	10/25/04
Contracts Adm Review	11/25/04	11/23/04
Complete Work Order	5/20/05	6/30/05
NTP and Kick-off Meeting	5/30/05	7/11/05
Data Compilation	9/20/05	1/20/06
Digitize 1 foot contours	10/20/05	10/15/06
Data Summaries	4/20/06	4/25/06
Map Water Staging Areas	5/20/06	6/20/06
GIS Database Development	6/15/06	12/10/06
Formulation of Approach to Watershed Modeling	10/25/06	6/20/06
Determination of Planning Level Costs	12/25/06	12/10/06

<b>2. Phase II</b>		
Develop Rev Agreement with Highlands County	3/10/06	4/20/06
Contracts Adm Review	4/10/06	5/25/06
Draft Consultant Agreement and Scope of Work	4/20/06	6/20/06
Contracts Adm Review	5/20/06	7/15/06
Execute Agreement	7/10/06	10/16/06
Execute Rev Agreement with Highlands County	7/10/06	10/16/06
Complete Work Order	12/10/06	
Summary of Water Quality and Water Storage Benefits	4/10/07	
NTP and Kick-off Meeting	4/10/07	
Watershed Evaluation of Additional Basins	12/10/07	
Develop Water Budget	2/25/08	

**Status As Of:** February 28, 2008

Phase I of this project has been completed. The individual tasks completed for this first phase are outlined in the Additional Info section above. Phase I concluded that recovery alternatives would potentially help to achieve raising the lake level by nearly 0.5 ft during normal hydrologic conditions and therefore would increase the frequency that the lake meets adopted MFL. The recommended recovery alternatives focus on the installation of new control structures along the Jackson-Josephine canal, between Structure 3 and Structure 4. Two alternatives were proposed with the first alternative including two structures just downstream of Structure 2, and the second alternative including a third further downstream. The estimated cost of each structure is roughly \$1.6 million. Little land acquisition is anticipated for the first 2 structures; however, significant land acquisition is anticipated for the third structure making the cost of all three structures (2nd alternative) significantly higher. This project is now in its second phase. The second phase of this project will focus on developing the hydrological model for this watershed which is needed to predict the duration that the MFL may be achieved and also determine flooding risks. An agreement with the Consultant to develop the hydrologic model was approved on October 16, 2006. A revenue agreement with Highlands County was approved in August 2006 by Highlands County and executed by the District in October 2006. The second phase of this project was temporarily put on hold for the last five months, pending a review of the MFL methodology for Lake Jackson and Little Lake Jackson. The MFL's for Lake Jackson and Little Jackson were evaluated using the newer methodology developed by Hydrologic Evaluation Section. A staff meeting was held on December 19, 2007 to review the revised MFLs. The MFLs that were determined by the new methodology only changed slightly from the original MFLs. In addition to the revised MFL methodology, the MFL compliance criteria was also re-evaluated using the newer methodology that is adjusted for rainfall deficits. An inter-department staff meeting was held January 17th, 2008 to review revised compliance criteria.

## Maintenance of Watershed Parameters & Models

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	Pasco County, Polk County, Hernando County
<b>Project Manager</b>	MCCLUNG, GORDON
<b>Task Manager(s)</b>	ALTMAN, GENE, LETASI, SCOTT, TURNER, DAWN, MAYER, RICHARD, WALKER, LARRY
<b>Status</b>	Ongoing

### Description

This is a basin initiative to fund the Maintenance of Watershed Parameters and Models element of the District's Watershed Management Program (WMP). This process will be applied to watersheds where the parameters and model(s) were developed or updated based on the District's Guidelines and Specifications (G&S) and where parameters from Environmental Resource Permitting (ERP) submittals can be converted to the District's GIS system until a model is developed. Funding will be required each year to continue maintenance. With proposed FY2008 funding the work of capturing watershed parameter changes resulting from approved ERPs will continue throughout the District. In addition, FY2008 funding will support capturing watershed parameter changes due to previous District aerial topographic mapping projects, performing public outreach for ongoing Watershed Management Plans that has been encouraged by the Governing Board, and revising the watershed parameters and model(s) based on information obtained during the public review and comment period that is deemed best available.

### Benefits

A WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed assists local governments with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. In addition, the information provides the District with the best available information to evaluate adverse impacts and mitigation of floodplain impacts for proposed ERPs. The continuous maintenance of watershed parameters in the GIS database as ERP permits are approved and new information is provided to the District through either aerial topographic mapping and its public review and comment period will provide the most up to date information about the watershed. If a watershed model has not been developed, the maintenance of parameters in the GIS processes the information in a format that will save time and funding when the watershed is modeled.

### Costs

In FY2005, the Governing Board contributed \$80,000 and each Basin Board contributed an additional \$10,000 each to support the development of the District's maintenance process. The maintenance budget for FY2006 is \$848,000, of which the District's share is \$808,000. Hernando and Polk Counties contributed \$20,000 each in FY2006 for maintenance within their jurisdiction. The maintenance budget for FY2007 is \$1,094,200, the District's share is \$924,200. Hernando County (\$25,000), Pasco County (\$125,000) and Polk County (\$20,000) are contributing the indicated funding in FY2007 for maintenance. An additional \$75,000 in FY2007 funds budgeted by the Coastal Rivers Basin Board for Spring Hill Lakes Management Plan (L775) has been transferred to this project after the Basin Board approved Hernando County's request to use these funds to perform maintenance based on percolation information collected from ERPs and Hernando County. The proposed maintenance budget for FY2008 is approximately \$2.167 million, of which the District's share is approximately \$1.597 million. The District's share is split between the Governing Board (\$597,250), Alafia River Basin (\$61,500), Hillsborough River Basin (\$253,200), Northwest Hillsborough Basin (\$11,900), Coastal Rivers Basin (\$606,550), Pinellas-Anclote River Basin (\$64,800), Withlacoochee River Basin (\$298,300), Peace River Basin (\$143,600), and Manasota Basin (\$130,150). Hernando, Pasco, and Polk Counties will contribute an additional \$300,000, \$250,000, and \$20,000 respectively for maintenance within their jurisdictions. The budget is based on the projected number of approved ERP permits and the average development area within each Basin, except for the Hernando County portions of Coastal Rivers and Withlacoochee River Basins where the total \$600,000 cooperative funding distribution is based on the percent area. As parameter and model maintenance occurs in a Basin, the project budget and scope may require refinement based on the information gathered. Future funding to continue maintenance has been estimated for through 2011. The projected District annual funding amount ranges from \$1,365,000 to \$1,889,000. The District funding amounts shown in the table include staff salaries.

### Additional Information

A WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. After the Topographic Information, Watershed Evaluation and Management Plan elements are completed, the watershed parameters and models require continuous maintenance to simulate the watershed's characteristics as the land form changes. The watershed's parameters change with the rapid growth being experienced in the District. If continued maintenance of the models is not performed, the watershed parameters and model will no longer represent the system. This limits their value in the areas of ERP and flood protection programs. For FY2005, the District managed this project by issuing work orders for the tasks needed to develop the maintenance process, and then by monitoring the efforts.

FY2006 funds will be used to begin implementing the maintenance process throughout the District in watersheds with ongoing or completed Watershed Management Plans. For FY2007 this effort will be continued District wide for all watershed where ERPs are approved. Both Hernando County and Polk County contributed funds in FY2006 and FY2007 for maintenance in their jurisdictions. In addition, Pasco County contributed funds in FY2007 for maintenance within their jurisdiction. A cooperative funding revenue agreement will be developed with each community contributing funds towards maintenance. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. Future funding will be required each fiscal year to continue maintenance of watershed parameters and models. In the future those local governments with the technical abilities to perform the maintenance activities will be encouraged to manage this effort. The District will provide funding assistance to communities that can and those that cannot provide matching funds. Matching funds will be requested from the Federal Emergency Management Agency (FEMA) for this basin initiative. Failure to provide ongoing maintenance will diminish the return on the investment the District has made in their respective Watershed Management Plans.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	953,496	(40,400)	1,598,009	1,996,924	1,780,900	6,288,929
011 Alafia River Basin	84,497	0	59,465	76,052	176,300	396,314
013 Hillsborough River Basin	171,497	0	143,865	156,793	70,750	542,905
014 Northwest Hillsborough Basin	64,505	0	12,065	13,207	29,150	118,927
015 Coastal Rivers Basin	90,897	75,000	310,036	246,142	689,250	1,411,325
016 Pinellas-Anclote River Basin	113,296	0	43,565	49,082	204,750	410,693
019 Withlacoochee River Basin	124,625	0	179,098	112,648	1,693,750	2,110,121
020 Peace River Basin	133,834	0	131,365	173,379	325,250	763,828
021 Manasota Basin	215,705	0	130,315	162,076	397,150	905,246
<b>District Budgeted - Outside Revenue</b>						
Citrus Co - Maint of WS Para & Models (B206)	0	0	0	90,000	0	90,000
Hernando Co - Maint of W/S Para & Models (B206)	45,000	11,110	300,000	200,000	0	556,110
Marion Co - Main of WS Para & Models (B206)	0	0	0	31,000	0	31,000
Pasco Co - Maint of W/S Para & Models (B206)	125,000	0	250,000	500,000	1,528,000	2,403,000
Polk Co - Maint of W/S Para & Models (B206)	40,000	0	20,000	20,000	180,000	260,000
				<b>Total</b>		<b>\$16,288,398</b>

### Critical Project Milestones

#### 1. Critical Project Milestones

Recognition of District, Basin Board, & Governing Board on reports

#### 2. FY2005 Consultant Services Agreement (URS)

	Projected	Amended	Actual
Draft Agreement to Management Services	3/14/05		4/21/05
Draft Agreement returned from Management Services	4/4/05		5/23/05
Notice to Proceed	5/31/05		6/6/05
Contract Execution	5/31/05		6/6/05
Maintenance of Watershed Parameters and Models Planning	7/21/06	4/30/07	3/22/06
Contract Termination	7/21/06	5/31/07	5/31/07

#### 3. FY2006 Consultant Services Agreements

Draft Agreement to Management Services	6/30/06		8/4/06
Draft Agreements returned from Management Services	7/17/06		8/24/06
Ten (10) Consultant Agreements Execution	9/30/06		11/15/06
First Amendment to Management Services	4/16/07		4/18/07
First Amendment Execution	6/19/07		7/30/07
Contract Termination	10/31/08	5/31/11	

#### 4. FY2007 Consultant Services Agreements

Draft Agreements to Management Services	3/12/07		4/17/07
Draft Agreements returned from Management Services	5/22/07		5/15/07
Consultant Agreements Execution	6/19/07		8/1/07
Notice to Proceed to Consultants	7/1/07		8/10/07
Contract Termination	5/31/11		

#### 5. Hernando County Maintenance

Draft Agreement to Management Services	3/31/05		3/25/05
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**Maintenance of Watershed Parameters & Models**

Draft Agreement returned from Management Services	4/15/05	4/20/05
Contract sent to County for signature	8/20/06	11/9/06
County Contract Execution	12/10/06	12/12/07
County Contract Expiration	10/31/10	

**6. Polk County Maintenance**

Draft Agreement to Management Services	8/9/05	8/9/05
Draft Agreement returned from Management Services	8/23/05	8/23/05
Contract sent to County for signature	8/25/05	8/25/05
Contract Execution	10/31/05	12/2/05
Draft First Amendment to Management Services	7/24/07	
Draft First Amendment returned from Management Services	8/24/07	
First Amendment sent to County for signature	9/4/07	
First Amendment Execution	10/1/07	
Contract Termination	6/30/09	

**7. Pasco County Maintenance**

Draft Agreement to Management Services	4/3/07	4/3/07
Draft Agreement returned from Management Services	4/23/07	4/23/07
Contract sent to County for signature	5/4/07	5/4/07
Contract Execution	7/28/07	7/28/07
Contract Termination	12/31/09	

**Status As Of:** February 29, 2008

FY2005: The consultant services agreement with URS Corporation Southern was executed on June 6, 2005. Notice to proceed was issued on the same date. Work Order #1 has been developed to investigate the current data (type, quality, quantity, etc.) entering the District through ERP and to develop a proposed work flow to maintain the watershed parameters and models as permits are approved. A kick-off meeting with the consultant team and District staff was held on June 14th to introduce and plan the project with all departments that will be involved, including: Technical Services, Legal, and Resource Management. The final report has been accepted. Remaining funds are being used to develop presentation and documentation of an example project to be distributed to cooperators, FEMA, and other District WMP consultants who will be performing maintenance beginning with FY2006 funds. Work Order #2 has been executed to document the maintenance process step-by-step. The consultant has completed the example maintenance project along with accompanying documentation and presentation. This contract has been terminated and the final payment processed. FY2006 : Staff has developed consultant services agreements with ten (10) WMP consultants to begin maintenance of watershed parameters and models. Maintenance efforts will first be directed at completed and ongoing Watershed Management Plans. The District's consultants who originally prepared the Watershed Management Plans will be typically tasked with maintenance of their respective watershed(s). Work orders will be issued as project(s) with approved ERP(s) are identified or new site conditions data become available. Basin Board funding will only be used for maintenance activities within the Basin. Consulting services agreements were executed by November 15, 2006, with all 10 consultants including: Ardaman; Ayres & Associates; BCI; Dyer Riddle Mills & Precourt; Jones Edmunds; Keith Parsons; Post Buckley Schuh & Jernigan; TBE Group; and URS. Amendments have been executed for these 10 agreements to increase the total compensation for approved FY2007 and anticipated FY2008-2011 funding, extend the contract termination date, and revise the scope of work to be consistent with current WMP agreement language. An additional nine (9) agreements have been executed with the remaining consultants approved to perform elements of the District's WMP. All 19 consultant services agreements will support District-wide maintenance. Each consultant has been assigned specific watersheds for maintenance. Project managers within the Engineering Sections will be responsible for developing and executing work orders with each of these consultants. Guidelines and specifications are being developed for specific maintenance activities. Recent maintenance efforts have included conducting public information meetings in Pasco and Hernando County and maintenance evaluations for several of the District's watersheds. Hernando Co. Maintenance: Previously performed under Project B705. Fiscal year budgeted funds are as follows; FY2005 = \$11,110, FY2006 = \$40,000, FY2007 = \$50,000, FY2008 = \$600,000, proposed FY2009 = \$400,000; with 50% revenue from the County for continued maintenance of the County's WMPs. Public review and comment meetings, 3 total, concluded on 08/06/2007. The agreement transmitted to the County on 11/09/2006 for signature was executed on 12/12/2007. Work orders and data sets for countywide ERP evaluation and inclusion of LiDAR were transmitted to the consultants to develop cost. Staff is evaluating cost estimates provided on 02/22/2008. Polk Co. Maintenance: Previously performed under Project B723. The Cooperative Funding Agreement with Polk County was executed on December 2, 2005. A total of \$80,000 has been encumbered (\$40,000 in FY2006, and \$40,000 in FY2007) for continued maintenance of Polk County's WMPs. Work Orders have been issued for maintenance of the Gator Creek and Itchepackesassa Creek watershed parameters and models. Pasco Co. Maintenance: The cooperative funding agreement has been executed.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Florida Department of Transportation, Dundee
<b>Project Manager</b>	KOLASA, KEITH
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a multi-year project funded as a Basin Initiative to design, permit, and construct stormwater treatment systems for 10 lakes located within the Lake Wales Ridge, Polk and Highlands Counties. Conceptual plans and cost estimates for 10 Ridge lakes were funded in FY2005 under project B196. This project will move the conceptual projects forward to implementation. The first stormwater retrofit will take place on Lake Menzie located in the Town of Dundee. Funds requested in FY2007 are being used to design, permit, and construct the stormwater retrofit for Lake Menzie. The system will treat runoff from the commercial area of Dundee and State Road 17, and will consist of a two swales, two retention basins, and a long infiltration basin (French drain). The completed project will provide water quality enhancement of Lake Menzie. The Town of Dundee will participate in the project by providing the land for the project. The project will be constructed within the Town's park land adjacent to the lake. The Florida Department of Transportation is providing 50 percent of the funding for the project on Lake Menzie. Funds requested in FY2008 will be used to complete construction of the retrofit on Lake Menzie. Funds are being requested in FY2009 to continue stormwater retrofits on Ridge lakes with completed conceptual plans. Staff are continuing to coordinate with other agencies and local governments to develop future funding.

**Benefits**

This project will protect and enhance the water quality of eleven lakes located within the Lake Wales Ridge chain of lakes by providing stormwater treatment in areas where direct stormwater discharges have caused water quality impacts.

**Costs**

In FY2006, \$110,000 was budgeted for the design and permitting of stormwater retrofit projects for Lake Menzie and Marie. Of the \$110,000, \$55,000 was provided by FDOT, \$27,500 was provided by the State Surface Water Restoration Fund, and \$27,500 was provided by the Peace River Basin Board. In FY2007, \$253,000 was budgeted for the construction of the stormwater system at Lake Menzie. Of the \$253,000, \$126,500 is provided by FDOT, \$63,250 is from the State Surface Water Restoration Fund, and \$63,250 is from the Peace River Basin Board. In FY2008, \$50,000 was budgeted for completing construction of the stormwater retrofit projects in the Town of Dundee. The funds requested in FY2009 are needed to complete design and permitting of retrofit project for Lake Isis in Avon Park. In summary, this project currently involves 4 separate agreements. These include an agreement with the Town of Dundee, FDOT, District Consultant, and District construction contractor.

**Additional Information**

This project is based on the results of an assessment completed by District staff of the 105 lakes forming the Lake Wales Ridge chain of lakes. The purpose of the assessment was to identify impacts to these lakes and then develop a strategy to address these issues. The results of the Ridge Lakes Screening Project revealed that approximately 26 Ridge lakes receive significant direct untreated stormwater discharges from urban land uses. Many of these lakes act as stormwater catchment basins for the urban land around them. Stormwater remediation was identified as one of the most important action plans needed to protect and enhance the water quality of the Lake Wales Ridge chain of lakes. As the first step of beginning the stormwater remediation, conceptual plans are currently being developed for approximately 20 sites on 10 Ridge lakes under project B196, with funds budgeted in FY2005. Under project B196 a cost/benefit analysis is also being completed. This project (B217) will carry the most cost effective retrofit sites forward into design and permitting stages. The FDOT and the Town of Dundee were identified as cooperative funding partners in FY2006 and agreements were drafted with them to complete projects on two lakes located within the Town of Dundee. Funding for the design and permitting of a stormwater retrofit for Lake Menzie in Dundee was included in the FY2007 budget and FY 2008. Staff have also continued to work with other agencies and local governments to develop funding for stormwater on other targeted Ridge Lakes. For example, a stormwater retrofit on Lake Clay has been developed as an FY 2008 cooperative funding project with Highlands County and the Town of Lake Placid for FY2008 (Project L897).

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	142,922	0	75,548	103,482	0	321,952
<b>District Budgeted - Outside Revenue</b>						
FDOT - Ridge Lake SW Improvements (B217)	181,500	0	0	0	0	181,500
Water Protection & Sust T. F. (Surface Wtr Rstr)	123,250	0	0	0	0	123,250
				<b>Total</b>		<b>\$626,702</b>



Critical Project Milestones	Projected	Amended	Actual
<b>1. Contract Development &amp; Execution</b>			
Develop agreement with FDOT	10/30/05		10/30/05
Finalize agreement with FDOT	1/15/06		3/1/07
Develop agreement with Town of Dundee	2/15/06		2/15/06
Finalize agreement with Town of Dundee	3/15/06		4/20/06
<b>2. Consultant Agreement</b>			
Select Consultant	6/15/06		4/26/06
Finalize agreement with Consultant	10/15/06		6/30/07
NTP and Kick-off with Consultant	11/15/06		7/11/07
<b>3. Critical Project Milestones</b>			
Preliminary Design for 1st lake	1/15/08		
Preliminary Design for 2nd lake	1/15/08		
Permit Pre-application meeting	2/15/08		
Final Design and Permitting for 2nd lake	4/15/08		
Final Design and Permitting for 1st lake	4/15/08		
<b>4. Close Out</b>			
Send Invoices to FDOT			
Consultant Contract Termination			
Town of Dundee Contract Termination			
FDOT Revenue Contract Termination			

**Status As Of:** February 25, 2008

The first stormwater retrofits to take place will be on Lakes Menzie in the Town of Dundee. A contract and scope of work were drafted and sent to FDOT in September of 2005. District staff met with the Town of Dundee on Feb. 27, 2006 to discuss establishing a land agreement to complete the stormwater retrofit project on Lake Menzie. District staff completed a cooperative agreement with the Town to allow the use of their land to construct the stormwater treatment project. Finalizing an agreement with FDOT took much longer. After a lengthy contract revision process, the final agreement was approved by FDOT legal on Feb. 21, 2007 and was approved by the FDOT executive staff on March 1, 2007. The agreement was approved by both the District and the Town of Dundee. District staff have prepared an agreement with the Consultant who will complete the design, permitting, and construction management for this project. Due to delays with the FDOT revenue agreement, the Consultant agreement schedule was revised to extend the schedule and was resubmitted for approval. The agreement with the District's consultant was executed on July 11, 2007 and a NTP was issued to the consultant to begin the project. A kick-off meeting was held within the first week of August to begin the design and permitting process. Preliminary design plans were completed and a meeting was held with the Town of Dundee to review the design plans. The Town and FDOT have reviewed and approved the preliminary design plans. The project is currently undergoing 60% design plans.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	N/A
<b>Project Manager</b>	BRAUNSCH, WILLIAM
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

Beginning in 1989, the District initiated a comprehensive land use/cover mapping program. This program results in a Geographic Information System (GIS) data set that delineates over 50 categories of land use/cover (for example: single family residential, pine forest, wetland forest, row crops, citrus). The mapping categories adhere to the Florida Department of Transportation's Florida Land Use and Cover Classification System (FLUCCS) and are compatible with similar efforts at the other water management districts. Until 2005 the program was on a five year update cycle (1989, 1994, 1999, 2004). The rapid development within the District has made the five year update cycle to be inadequate and beginning with the 2005 orthophotos the update was done on an annual basis. The funding proposed here will update the land cover database using the 2007 orthophotos.

**Benefits**

The land use/cover data collected under this project are widely used to support the District's planning, modeling and land acquisition programs. These data are also among the most commonly requested by external customers. Accurate tracking of acreages and locations of key agricultural land use/cover is a key component of the Southern Water Use Caution Area (SWUCA) Recovery strategy. This information, when coupled with data collected through the District's Water Use Permitting (WUP) process; provide the most accurate means for tracking these significant water uses within the SWUCA. These data also provide an important source of information for monitoring permit compliance. A significant benefit of this program is a consistent, and therefore defensible, estimation of agricultural trends.

**Costs**

This project was initially funded in FY1989 with updates in FY1994 and FY1999. Since FY2005 this project has been included in the Governing and Basin Board's budgets. The Governing Board contributes fifty percent of the project cost and the remainder is distributed using a formula that accounts for the relative areas of each basin. This is an annual funding request to support the continued update of the database. District does not currently have sufficient in-house staff resources to support this effort and the funding is used for staff augmentation, consulting services, plotting supplies and fieldwork associated with the project.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	408,173	(3,450)	162,928	163,327	1,743,218	2,474,196
011 Alafia River Basin	26,407	0	11,579	9,947	116,603	164,536
013 Hillsborough River Basin	39,780	0	12,454	10,668	126,522	189,424
014 Northwest Hillsborough Basin	19,345	0	3,648	3,411	26,835	53,239
015 Coastal Rivers Basin	33,067	0	13,466	11,502	137,971	196,006
016 Pinellas-Anclote River Basin	50,083	0	6,842	6,043	62,983	125,951
019 Withlacoochee River Basin	47,371	0	31,401	26,283	340,985	446,040
020 Peace River Basin	77,393	0	46,914	39,069	516,700	680,076
021 Manasota Basin	49,185	0	21,126	17,815	224,687	312,813
				<b>Total</b>		<b>\$4,642,281</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>2. FY2005 Annual Update</b>			
Complete Update	4/30/07	6/30/07	7/6/07
<b>3. FY2006 Annual Update</b>			
Begin Update	5/1/07	7/1/07	7/9/07
Complete Update	9/30/07	9/30/07	9/30/07
<b>4. 1995/1999 Northern District Backdating Update</b>			
Begin Update	10/1/07	10/15/07	
Complete Update	9/30/08	3/7/08	
<b>4. FY2007 Annual Update</b>			
Begin Update	10/1/07	3/10/08	

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Complete Update	5/30/08
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**4. FY2008 Annual Update**

Begin Update	6/1/08
Complete Update	9/30/08

**Status As Of:** February 15, 2008

The 2006 land use/cover update project began July 9, 2007. As of August 17, 2007 the SWUCA portion of the 2006 land use/cover update project has been completed. The northern portion of the 2006 land use/cover update project was completed September 28, 2007. The district-wide 2006 land use/cover project was completed effective September 28, 2007. The 1995 and 1999 northern district back dating project was started October 15. Two photointerpreter contractors have left the project. A second photointerpreter contractor (as per project requirements) started on October 17. The Project B219 team now consists of 2 contract photointerpreters and the Project Manager. The 1995 and 1999 northern district back dating project is ongoing.



**Determine Total Water Budget & Irrig. Req.for Mature Southern Highbush Blueberries**

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Alafia River, Hillsborough River, Withlacoochee River, Peace River  
**Cooperator(s)** University of Florida  
**Project Manager** COHEN, RON  
**Task Manager(s)**  
**Status** Ongoing

**Description**

Blueberry production is a high valued cash crop. The estimated 2003 value of blueberry production in Florida was about \$18.6 million dollars. As the value of other crops decrease more growers have been converting their fields to blueberries. A 1998 report estimated a 400% increase in blueberry acres by the year 2008. This four-budget year research project will quantify how much water a typical blueberry plant needs and will develop irrigation guidelines to help conserve water, reduce potential runoff and water quality impacts.

**Benefits**

There are about 735Mgals permitted for annual blueberry irrigation. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions. If we assume a 5% savings from this project it would conserve about 37 Mgals per year.

**Costs**

This project cost \$153,000 and will be budgeted in four fiscal years. The Alafia, Hillsborough River, Peace River and the Withlacoochee River Basin Boards will each budget \$9,563 annually for this project.

**Additional Information**

Southern highbush blueberry acreage and production has steadily increased in Florida during the last decade (Williamson and Lyrene, 2005). A recent survey of the industry identified Highlands, Polk, Hillsborough and Lake counties as areas of rapid growth (Williamson and Lyrene, 2000). In fact, Highlands, Polk and Hillsborough counties ranked 2nd, 3rd and 4th respectively, in blueberry acreage in the state. This is in addition to current blueberry production in Marion, Hernando, Pasco and Levy Counties. The following table of blueberry acres and water use comes from the District's regulatory database. \* Most individual blueberry operations are below the District's water use permitting thresholds. The individual acres are not large, but the water use is intensive. Recent observations have seen growers converting their existing citrus and strawberry acres to blueberries. Most of the acreage planted during the last decade is grown under a production system known as "pine bark culture" (Williamson and Lyrene, 2000; Williamson and Lyrene, 2005). Beds of pine bark ranging from 3 (single row beds) to 8 (double row beds) feet wide and 6 to 8 inches deep are laid out in rows and plants are set directly in the bark rather than in the soil. Blueberry plants grow rapidly in pine bark but their root systems are restricted to the pine bark layer with some penetration into the underlying soil. An informal grower survey revealed that Florida blueberry growers irrigated once every 2 to 3 days during the growing season and apply 1/2 to 3/4 inch of water at each irrigation event. Frequent irrigation is needed because pine bark beds dry out rapidly due their low water holding capacities and because roots are confined to the pine bark layer. There is a general thought that the amounts of water applied during each irrigation event are in excess of what is needed to irrigate the effective root zone. The project is investigating this hypothesis. In these experiments, IFAS will compare plant growth and yield under "standard" and "reduced" irrigation rates, and determine the total water budget and crop coefficient of mature, bearing, southern highbush blueberry plants in Florida. Information from this project will be provided to the growers to help them reduce water use and to the District for use in planning, conservation and water use permitting. In addition, results from this project will help reduce fertilizer leaching, thus helping to improve water quality. The project will also allow for more soil storage thus reduce potential off site flooding issues.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	19,126	0	9,562	9,563	0	38,251
013 Hillsborough River Basin	19,126	0	9,562	9,563	0	38,251
019 Withlacoochee River Basin	19,126	0	9,563	9,563	0	38,252
020 Peace River Basin	19,126	0	9,563	9,563	0	38,252
				<b>Total</b>		<b>\$153,000</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Agreement to Contracts	9/1/05		9/1/05
Agreement to Cooperator	11/1/05		11/1/05
District Executes Agreement	2/1/06		2/1/06
Notice to Proceed	3/1/06		3/1/06

**Determine Total Water Budget & Irrig. Req.for Mature Southern Highbush Blueberries**


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Basin Board Notification	3/1/06	3/1/06
Year 1. Data Collection	4/1/06	4/1/06
Year 2. Data Collection	12/1/06	12/1/06
Year 3. Data Collection	12/1/07	12/1/07
Year 4. Data Collection	12/1/08	
Completion Report	12/1/09	
Project Ends	8/31/10	

**Status As Of:** February 29, 2008

9/1/2005 - Developing detailed scope of work. 9/9/2005 - Agreement sent to contracts for review. 11/1/2005 - Agreement in contracts. 12/15/2005 - Sent agreement to cooperator. 1/11/2006 - Cooperator reviewing agreement. 2/16/2006 - Sent Notice to Proceed 4/17/2006 - Transplanting bushings and setting up data collection system. 6/12/2006 - Data collection project continuing as designed. 8/15/2006 - Reviewed first report. 10/12/2006 - Data collection project continuing as designed. 12/4/2006 - Dormant for winter. 2/15/2007 - Basin Board presentation. 2/25/2007 - Growers filed day at Balm. 5/1/2007 - Data collection project continuing as designed. 7/6/2007 - Reviewed task report. 8/31/2007 - Data collection project continuing as designed. 11/1/2007 - Data collection project continuing as designed. 11/16/2007 - Problems with lysemeters may need to install new ones. Could delay results by a year, a no cost contract amendment would be needed. 1/2/2008 - Enhancing lysemeters 2/29/2008 - Plants dormant, researchers are gearing up for data collection.

**Field Evaluation of Bahiadwarf, For Water Use Efficiency, Turf Quality, Mowing Requirement**

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Hillsborough River, Peace River, Manasota  
**Cooperator(s)** University of Florida  
**Project Manager** COHEN, RON  
**Task Manager(s)**  
**Status** Ongoing

**Description**

Lawn and landscape is one of the largest permitted and actual uses of water in the District. Most of this water is used for turf grass irrigation. It is estimated that about 50% of per capita use is for exterior irrigation. As growth in the District continues the demand for lawn irrigation will too. In addition, sod production and the associated water use will also increase. This multi agency year research project will investigate a potentially viable drought tolerant alternative to current popular grass varieties.

**Benefits**

Results from this project can be used to reduce and conserve urban turf irrigation, agricultural pasture and sod production water use. Reduced irrigation will reduce the runoff potential and water quality impacts. The District will use results from this project in its conservation, planning and regulation programs.

**Costs**

This multi-agency, 3-year project will cost \$317,500. Part of the project cost (\$160,000 - \$53,333 annually) will come from a Consortium for Plant Biotechnology Research (CPBR - <http://www.cpbr.org>) grant. The remaining funds will be divided evenly between the Hillsborough River, Manasota and Peace River Basin Boards. Each Basin Board will budget \$13,125 in FY2006, FY2007, FY2008 and FY2009.

**Additional Information**

Part of the project's funding will come from the Consortium for Plant Biotechnology Research (CPBR - <http://www.cpbr.org>). Overall project costs have been reduced because of the ability to leverage previous CPBR and USDA grants that funded the initial research. Bahiagrass (*Paspalum notatum* Flugge) is a low input, drought tolerant and disease resistant warm season turfgrass used for residential lawns, pastures and along highways in the Southeastern US. However turf quality of currently available Bahiagrass cultivars is poor, due to prolific seedhead production, open growth habit and light green color. Recent laboratory research has developed a generation of transgenic Bahiagrass (Bahiadwarf) over-expressing a gibberellic acid catabolizing enzyme (GACE) for improved turf characteristics and reduced mowing requirement. Bahiadwarf prototypes have displayed characteristics such as denser growth habit, reduced seed head production and reduced mowing requirement, that make this plant more attractive for public use. A recently funded USDA project has added multiple drought stress protective genes to the Bahiadwarf, enhancing the plant's environmental friendliness. This project with the University of Florida, IFAS will investigate and document the drought tolerance of the Bahiadwarf under field conditions. They will compare the Bahiadwarf to the industry standard St. Augustine grass and wildtype Bahiagrass. To further enhance the Bahiadwarf, additional transgenic Bahiagrass lines with an improved drought stress response will be generated and compared to St. Augustine grass and wildtype Bahiagrass. In the second and third year of the project, they will evaluate water use efficiency, turf quality, mowing requirement and persistence under different irrigation regimes.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
013 Hillsborough River Basin	26,250	0	13,125	13,125	0	52,500
020 Peace River Basin	26,250	0	13,125	13,125	0	52,500
021 Manasota Basin	26,250	0	13,125	13,125	0	52,500
				<b>Total</b>		<b>\$157,500</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Agreement to Contracts	8/1/05		8/1/05
Agreement to Cooperator	11/1/05		11/1/05
District Executes Agreement	12/1/05		12/1/05
Notice to Proceed	1/1/06		1/1/06
Basin Board Notification	1/1/06		1/1/06
Governing Board Notification	2/1/06		2/1/06
Year 1. Data Collection	12/1/06		12/1/06
Year 2. Data Collection	12/1/07		12/1/07
Year 3. Data Collection	12/1/08		

Field Evaluation of Bahiadwarf, For Water Use Efficiency, Turf Quality, Mowing Requiremen

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Completion Report  
Project Ends

9/1/09  
1/1/10

**Status As Of:** February 29, 2008

9/1/2005 - Agreement is being processed by the District. 11/1/2005 - Agreement is being processed by the District. 12/30/2005 - Agreement mailed to cooperator. 1/11/2006 - Cooperator reviewing agreement. 1/23/2006 - Notice to proceed mailed to IFAS. 3/1/2006 Mobilizing staff and equipment. 4/17/2006 - Data Collection 6/12/2006 - Update Agreement (Scope of Work) to incorporate enhanced data collection equipment. 8/16/2006 - Data Collection. 10/12/2006 - Data Collection. 12/4/2006 - Data Collection. 2/28/2007 - Reviewed report, project continuing as designed. 5/1/2007 - Plant damage because of herbicide, project continuing as designed. 7/6/2007 - Data Collection. 11/1/2007 - Reviewed task report. 1/2/2008 - Project continuing as planned. 2/29/2008 - Project continuing as planned.

## Crop Coefficients and Water Use for Peppers in Southwest Florida

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Alafia River, Hillsborough River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

### Description

Peppers are one of the major row crops grown in the District and in some regions, second only to tomatoes. The actual amount of water these crops use is based on soils, growing season and climatic conditions. To improve the crops' water use efficiency and to help conserve water, it is important for the grower and the District to know exactly how much water the crops require. This lysimeter study will determine how much water pepper plants in Southwest Florida need, determine crop coefficients and an irrigation schedule to help growers.

### Benefits

Currently there are over 8,000 acres directly permitted for pepper production and an additional 17,000 acres that might be in a rotation with pepper. These sites are permitted for about 16.5 Mgd (27 Mgd for rotational sites). The number of acres planted and their water use will change annually based on market and climatic conditions. Assuming that results from this project will help reduce 10% of that water, the savings could be about 1.7 Mgd. Added benefits to this project include a potential reduction in pollutant loading and information for AGMOD.

### Costs

This two-year project will cost \$135,000. These costs will be divided between the five basin boards that have the most acres permitted for pepper production. Project costs have been prorated between the Alafia (49%), Hillsborough River (19%), Manasota (15%), Peace River (8%) and the Withlacoochee River (9%) Basin Boards. Basin Board funds will be budgeted in FY2007, FY2008 and FY2009. Alafia River will budget \$21,891, Hillsborough River will budget \$8,514, Manasota will budget \$4,257, Peace River will budget \$3,649 and the Withlacoochee River will budget \$6,689 each year.

### Additional Information

Currently, the District and the growers use water use values developed outside of Florida. Although these values seem to be reasonable, local crop coefficients could help enhance irrigation scheduling and reduce water use. In addition, the crop coefficients will help decrease the transport of nutrients into the ground and surface water. Water use within the District is expected to increase by 2020. It is anticipated that a large portion of this increased demand will be met by water conservation. Since agricultural water use accounts for the largest fraction of the total permitted water amount in the District, efforts are needed to develop methods to help this water use sector reduce their water use.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	21,891	0	21,891	21,891	0	65,673
013 Hillsborough River Basin	8,514	0	8,514	8,514	0	25,542
019 Withlacoochee River Basin	6,689	0	6,689	6,689	0	20,067
020 Peace River Basin	3,649	0	3,649	3,649	0	10,947
021 Manasota Basin	4,257	0	4,257	4,257	0	12,771
				<b>Total</b>		<b>\$135,000</b>

### Critical Project Milestones

	Projected	Amended	Actual
Agreement to Contracts	8/1/06		5/1/07
Agreement to Cooperator	11/1/06		6/1/07
District Executes Agreement	12/1/06		8/31/07
Notice to Proceed	1/1/07		8/31/07
Basin Board Notification	2/1/07		10/31/07
Year 1. Data Collection	12/1/08		
Year 2. Data Collection	12/1/09		
Year 3. Data Collection	12/1/10		
Completion Report	9/1/11		
Project Ends	2/1/12		

**Status As Of:** February 29, 2008

8/15/2006 - Develop agreement. 12/4/2006 - Reviewed draft scope of work. 2/28/2007 - Processing agreement. 5/1/2007 - Agreement in legal for review. 7/6/2007 - Waiting for IFAS to execute the Agreement. 8/31/2007 - Notice to Proceed has been issued to IFAS. 11/1/2007 - - Data collection continuing as planned. 1/9/2007 - Data collection continuing as planned. 2/29/2008 - Data collection continuing as planned.

**Determine Water Requirements For Genetically Altered Lantana Camara Nursery and Lands**

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

A large amount of water is permitted for nursery and landscape irrigation. With the increase of urban development it is anticipated that the overall permitted amount for these uses will also increase. To reduce water use for landscape irrigation and to conserve water, the District has been promoting Florida Friendly principles. One of the first and most important principles of this practice is the selection and use of drought-tolerant plants (Koske and Owings). The intent of this project is to develop a drought tolerant variety of Lantana camara; and determining its water needs for nursery production and urban landscapes.

**Benefits**

It is estimated that each year Florida nurseries sell as many as 40 million Lantana plants to other states, of those plants about 5 million are grown within the District. The number of acres planted and their water use will change annually based on market and climatic conditions. To quantify an estimated water savings from this project lets assume one Lantana plant covers 12 square feet (3 ft x 4 ft) and the proposed Lantana plants will save 150 gallons of water a year, thus these plants could save as much as 750 million gallons of water a year for this District.

**Costs**

This three-year project will cost \$112,790. Currently over 80% of the District's permitted container nursery production occurs within the jurisdictional region of four basin boards. Funding for this project is prorated between them (Alafia River (22%), Manasota (22%), Hillsborough River (28%) and Peace River (28%)) boards. The Nursery industry has provided \$12,890 for this project and the Alafia Basin Board will budget \$7,350, Hillsborough River will budget \$9,350, Manasota will budget \$7,350 and the Peace River will budget \$9,350 in FY2007; and \$33, 250 (Alafia River - \$7,315, 22% , Manasota - \$7,315, 22%, Hillsborough River \$9,310, 28% and Peace River \$9,310, 28%) in both FY2008 and FY2009.

**Additional Information**

In the past the industry has provided seed money to start this project and they are supportive of this proposal. Drought tolerant plants develop various mechanisms that allow them to survive droughts, and stay green while producing flowers without much water. Lantana depressa and Lantana involucrata are some of the best drought tolerant plants available and are among the few plants recommended for desert landscaping in Arizona (City of Tucson; Hedding; Master gardeners of the University of Arizona Pima County Extension Services). In addition they have been used widely in many other states such as California (UC Sacramento County Extension) and Nevada (Southern Nevada Water Authority) for landscape water conservation. Lantana depressa and Lantana involucrate are not widely used in Florida. Several lantana species exist in Florida. Lantana depressa and Lantana involucrata provide year-round color, use little irrigation, have excellent salt tolerance (Beaulieu), attracts butterflies (Schaefer et al., 2002) and hummingbirds (Beaulieu), and have limited fertilization and pesticide requirements (Beaulieu; Owings, 2004), which helps to reduce pollutant loading. Because of these attributes, Lantana depressa and Lantana involucrata, are recommended for water saving in Florida landscapes (South Florida Water Management District). However, adoption of these species of Lantana has been poor because they do not have appealing growth habits and flower colors. Homeowners, nurseryman and landscapers prefer growing Lantana camara. This species of Lantana offers a spectrum of long-lasting colors and is widely used in the U.S. (Koske and Owings; Russ, 2004). In Florida, Lantana camara varieties produce abundance of viable pollen and hybridize with Florida's native species, Lantana depressa, contaminating the native species' gene pool. Consequently, they have been listed as a Category I invasive species by the Florida Exotic Pest Plant Council (<http://www.fleppc.org/>). Category I invasive species are defined as invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. IFAS, FDACS and other entities do not recommend producing or growing Category I invasive species plants. Genetic sterilization of Lantana camara could control its invasiveness, thus protecting Florida's native species and ecosystems. Also, it will allow it to be used widely in public and residential landscapes for water conservation and butterfly attraction. Thus conserving water and reducing pollutant loading into the state's water resources. This project will develop a variety of Florida Friendly sterile Lantana camara plants. In addition it will determine the plants water requirements for nursery and landscape irrigation.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	7,350	0	7,350	7,315	0	22,015
013 Hillsborough River Basin	9,350	0	9,350	9,310	0	28,010
020 Peace River Basin	9,350	0	9,350	9,310	0	28,010
021 Manasota Basin	7,350	0	7,350	7,315	0	22,015

**Determine Water Requirements For Genetically Altered Lantana Camara Nursery and Lands**

**Project Funds Not Budgeted by the District**

FNGLA	12,890	0	0	0	12,890
			<b>Total</b>		<b>\$112,940</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Agreement to Contracts	8/1/06		8/1/06
Agreement to Cooperator	11/1/06		10/1/06
District Executes Agreement	12/1/06		11/1/06
Notice to Proceed	1/1/07		11/1/06
Governing Board Notification	2/1/07		11/1/06
Basin Board Notification	2/1/07		11/1/06
Year 1. Data Collection	12/1/07		12/1/07
Year 2. Data Collection	12/1/08		
Year 3. Data Collection	12/1/09		
Completion Report	10/1/10		
Project Ends	1/31/11		

**Status As Of:** February 29, 2008

8/15/2006 - Agreement to Contracts. 10/12/2006 - Agreement sent to cooperator for review and execution. 11/2/2006 - Cooperator executes agreement. 11/8/2006 - NOP sent to cooperator. 12/4/2006 - Reviewed task report. 2/28/2007 - Project continuing as planned. 5/1/2007 - Reviewed task report, project continuing as planned. 7/6/2007 - Site visit project continuing as planned. 8/31/2007 - Reviewed task report, project continuing as planned. 11/1/2007 - Data collection continuing as planned 1/2/2008 - Reviewed task completion report, project continuing as designed. 2/29/2008 - Data collection continuing as planned.



**Reducing Water Consumption in Polyethylene-Mulched Tomato and Pepper Fields after Me**

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply  
**Basin(s)** Alafia River, Peace River, Manasota  
**Cooperator(s)** University of Florida  
**Project Manager** COHEN, RON  
**Task Manager(s)**  
**Status** Ongoing

**Description**

Tomato and pepper producers use methyl bromide (MBr) to fumigate their beds before production. About 50 to 95% of the MBr that is injected in to the soil can eventually enter the atmosphere and damage the earth's ozone layer. EPA's Clean Air Act (Amendments of 1990) requires that MBr and other similar chemicals be phased out. The loss of MBr has a major impact on the production practices of tomato and pepper producers in our District and can cause an increase in their water use. This project will provide the water use information needed to address this change in technology.

**Benefits**

Water use information from this project will be used by growers to save water and in the District's conservation, planning and permitting programs. This will help preserve ground water, reduce off-site discharge of pesticides and nutrients and flooding and improve water quality. Currently there are about 152,000 acres in the District that are permitted for the production of tomatoes and peppers. These sites are permitted for about 335 Mgd. The number of acres planted and their water use will change annually based on market and climatic conditions. Assuming that results from this project will help reduce at a minimum 5% of the permitted water, the savings would be about 17 Mgd.

**Costs**

This project will cost \$150,000. About 98% of the permitted tomato and pepper production is divided between three basin boards. Project costs have been prorated between the Alafia (22%), Manasota (67%), and Peace River (11%) Basin Boards. Funds will be budgeted in FY2007 and FY2008, Alafia will budget \$33,500, Manasota will budget \$11,000 and the Peace River will budget \$5,500 each year.

**Additional Information**

Tomato and pepper production relies on a relatively large quantity of water to provide the necessary soil moisture to establish, grow and harvest both crops. These commodities are grown with either seepage or seepage plus drip irrigation. Both systems require constant irrigation to maintain the water table relatively shallow during crop establishment, which reduces the soil storage, increases the risks of flooding, off-site discharge and nutrient leaching. A quick calculation of the irrigation volumes required to produce one acre of tomato indicates that between 4 and 6 ac-inches per acre of water are used to establish and maintain the crop with seepage irrigation. Most existing recommendations for tomato and pepper production were generated when MBr was a viable option for bed fumigation. Also, relatively inexpensive low density-polyethylene mulch (LDPE) was used and current environmental regulations about water run-off and nutrient leaching were not always considered in research projects. Current production practices have changed considerably since past water and production requirements were developed. This project will look at the new technology and changes in growing practices. The University of Florida and the State of Florida have started a vigorous campaign to address the phase out of MBr and the development of Best Management Practices (BMP). Within that context, the use of new developments in fumigation techniques and mulch materials that tend to reduce water use makes sense. Current MBr alternatives, such as 1,3-dichloropropene + chloropicrin (1,3-D + Pic; Telone C-35) and methyl iodide (MI; Midas), have poor efficacy against soil borne pests when applied in saturated soils, as it was customary for MBr, because these molecules can bind more tightly to water molecules than MBr. Another reason that justifies exploring reduced water irrigation programs is the use of higher retentive mulch films (virtually impermeable (VIF) and metalized films). These mulches retain more moisture in the planting beds than previous materials, which adds another component to fumigant and water management in tomato and pepper production. No defendable scientific research has been conducted in Florida to reduce water irrigation volumes for tomato and pepper by combining the lower water requirement of new fumigants and the higher water retention of new mulch films. This project will determine the effect of varying water management regimes on tomato and pepper production, and assess the effect of high retentive mulches and MBr alternatives on the water volumes necessary for tomato and pepper irrigation.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	33,500	0	33,500	0	0	67,000
020 Peace River Basin	5,500	0	5,500	0	0	11,000
021 Manasota Basin	11,000	0	11,000	0	0	22,000
				<b>Total</b>		<b>\$100,000</b>

Critical Project Milestones	Projected	Amended	Actual
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Agreement to Contracts	8/1/06	8/26/06
Agreement to Cooperator	11/1/06	10/1/06
District Executes Agreement	12/1/06	11/1/06
Notice to Proceed	1/1/07	11/1/06
Basin Board Notification	2/1/07	11/1/06
Governing Board Notification	2/1/07	11/1/06
Year 1. Data Collection	12/1/07	12/1/07
Year 2. Data Collection	12/1/08	
Completion Report	6/1/09	
Project Ends	10/31/09	

**Status As Of:** February 29, 2008

8/15/2006 - Agreement to Contracts. 10/12/2006 - Agreement is being reviewed by Legal. 11/8/2006 - Sent notice to proceed.  
 12/4/2006 - Field preparation. 2/28/2007 - Data collection project continuing as planned. 5/1/2007 - Data collection project continuing as planned. 7/6/2007 - Dormant for summer. 8/31/2007 - Reviewed task completion report. Project continuing as designed. 11/1/2007- Data collection project continuing as planned. 1/2/2008 - Field preparation for next season. 2/29/2008 - Data collection continuing as planned.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

### Description

This is a multi-agency agricultural water conservation project to assist citrus producers in reducing water use for cold protection. The project is an expansion and enhancement of a previously successful Peace River and Alafia Basin Board project (B137). That project was taken statewide by FDACS, SFWMD and SJRWMD. Florida citrus growers use low volume irrigation to conserve water and to provide a more effective method of freeze protection. One characteristic of low volume irrigation used for citrus freeze protection is that the decision to use irrigation must be made prior to the water in the lateral irrigation lines reaching freezing temperatures of 32 degrees F. This project would develop site-specific methodology to accurately determine minimum temperatures the next morning based on sunset temperatures recorded the previous evening. This allows for multiple temperature observations on cold nights from the growing area providing necessary replication of the Brunt equation. In addition, this project will help disseminate this information in newsletters and other sources, including FAWN to help the growers conserve water.

### Benefits

The water saving would be a function of acres normally protected and gallons of water per acre per hour. Systems started at 8:00 p.m. and operated to 8:00 a.m. the following morning at 100 trees/acre and 10 gallon/hour emitters would require 12,000 gallons of water per acre per night of freeze protection. This volume represents a total of 0.44 acre-inches of water used for freeze protection per night. Implementation of this methodology by 10% of the permitted citrus acreage within the Alafia, Manasota and Peace River Basin Boards (35,526 acres) would result in a water savings of 424,458,000 gallons of water per non-critical freeze night.

### Costs

This three-year project will cost \$15,000. About 90% of the permitted citrus acres are within three basin boards and project costs have been prorated between the Alafia (12%), Manasota (8%) and Peace River (80%) Basin Boards. In FY2007, FY2008 and FY2009 Alafia will budget \$600, Manasota will budget \$400 and the Peace River will budget \$4,000 each year.

### Additional Information

One characteristic of low volume irrigation used for citrus freeze protection is that the decision to use irrigation must be made prior to the water in the lateral irrigation lines reaching freezing temperatures of 32 degrees F. Mature citrus foliage is subject to freeze damage at temperatures below 24 degrees F depending on acclimation and tree condition. Minimum temperatures above 24 degrees F would result in minimal freeze damage of acclimated mature citrus foliage. Temperatures that would fall between 32 and 24 degrees F would require no water resources for freeze protection, since these temperatures would be above critical values for acclimated citrus leaves. There is an opportunity to determine before a freeze event time the actual need for irrigation to protect citrus trees, thus saving water resources during a freeze event. Temperature models exist that can help predict minimum temperatures for the following morning at sunset the previous day under stable freeze conditions and are available through the FAWN (project B136) weather network. These models need to be enhanced for individual locations to develop a high level of confidence among citrus growers using the models (Brunt equation to predict minimum temperature methodology has worked for both advective and radiation type freezes). Leaf freezing methodology was developed in the early 1980's and late 1990's at the University of Florida Fruit Crops Department. Determinations of KP50 (killing point) of citrus leaves were made weekly on mature citrus leaves to quantify the level of citrus acclimation to cooler temperatures experienced in the fall and winter months. Data indicated that these leaf-freezing temperatures were dynamic in nature and changed throughout the winter in response to previous week's growing conditions. This project would develop site-specific methodology to accurately determine minimum temperatures the next morning based on sunset temperatures recorded the previous evening this allows for multiple temperature observations on cold nights from the growing area providing necessary replication of the Brunt equation. In addition, this project will help disseminate this information in newsletters and other sources, including FAWN to help the growers conserve water. Historical temperature data indicates (1941-1970) that there is a 75% chance of temperatures reaching 32 degrees F or lower during any given winter in Tampa and a 95% chance of 32 degrees F or lower in Lake Alfred during any given winter. Growers using this methodology in the 2000-2001 season based on historical weather data from the FAWN Dover and Lake Alfred locations had 6 and 7 nights of minimum temperatures below 32 degrees F, respectively. Growers run their irrigation system for cold protection when temperatures were predicted to be 32 degrees F or below. This is in response to the uncertainty of the actual minimum morning temperatures. This would have resulted in 13 nights of freeze protection-using water. Minimum temperatures on all 13 nights regardless of location did not reach a minimum temperature of 26 degrees F. Growers with accurate information of foliage freezing temperatures would not have realized any additional benefit in protecting foliage if water was used for freeze protection based on this criteria. The water saving would be a function of acres normally protected and gallons of water per acre per hour. Systems started at 8:00 p.m. and operated to 8:00 a.m. the following morning at 100 trees/acre and 10 gallon/hour emitters would require 12,000 gallons of water per acre per night of freeze protection. This volume represents a total of 0.44 acre-inches of water used for freeze protection per night. Implementation of this methodology by 10% of the permitted citrus acreage within the Alafia,

## Reduction of Water Use for Citrus Cold Protection

Manasota and Peace River Basin Boards (35,526 acres) would result in a water savings of 424,458,000 gallons of water per noncritical freeze night. Most of the project costs (i.e., equipment) were incurred by the Polk County Citrus Advisory Committee. This project will need funds to collect leaf data and to distribute the information. In addition, the funds will be required for the educational component to help teach the growers how to use the data.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	600	0	600	600	0	1,800
020 Peace River Basin	4,000	0	4,000	4,000	0	12,000
021 Manasota Basin	400	0	400	400	0	1,200
				<b>Total</b>		<b>\$15,000</b>

Critical Project Milestones	Projected	Amended	Actual
Agreement to Contracts	8/1/06		8/1/06
Agreement to Cooperator	11/1/06		10/1/06
District Executes Agreement	12/1/06		11/1/06
Notice to Proceed	1/1/07		11/1/06
Basin Board Notification	2/1/07		12/1/06
Governing Board Notification	2/1/07		12/1/06
Year 1. Data Collection	12/1/07		12/1/07
Year 2. Data Collection	12/1/08		
Completion Report	6/1/09		
Project Ends	11/30/09		

**Status As Of:** February 29, 2008

10/12/2006 - Agreement is being reviewed by Legal. 11/8/2006 - Sent official notice to proceed. 12/4/2006 Mobilizing equipment. 2/28/2007 - Data collection, mild winter not too much to report. 5/1/2007 - Dormant for summer. 7/6/2007 - Processed payment, Dormant for summer. 8/31/2007 - Dormant for summer. 11/1/2007 - Dormant for summer. 1/2/2008 - Reporting weather watch to growers and determining plant cold hardness index. 2/29/2008 - Reporting weather watch to growers and determining plant cold hardness index.

**Potential to Use ASR in the Avon Park Formation**

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** BARCELO, MARK  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This study will evaluate the potential for ASR operation in the Avon Park Formation, which is not the injection zone typically used for ASR in the southern and central areas of the District. Investigators from the University of South Florida Geology Department will conduct a detailed mineralogical and chemical investigation of the Avon Park Formation that will culminate in an ASR operation model. Compounds that are regulated by primary and secondary drinking water standards will be considered, with an initial focus on arsenic and its identified source, pyrite. Major tasks of the study will include: descriptions of existing cores; sample collection; chemical analysis and interpretation of cores; collection and analysis of Avon Park Formation groundwater; and modeling a range of ASR scenarios using the collected data.

**Benefits**

Water supply continues to be a critical issue in the SWUCA, and this study compliments the District's water supply planning efforts. This project will enable the District and local governments to make knowledgeable decisions about future investment in ASR.

**Costs**

Six Basin Boards have been asked to participate in funding this project at a level of \$12,000 each in FY2007 and \$12,000 each in FY2008.

**Additional Information**

ASR is an important water supply option that is integral to water resources management in the SWUCA. Because of the significant benefit to future water supply that ASR can provide, the District has funded several ASR projects and investigative studies to further develop this technology. Over the past several years, there have been growing concerns about the quality of water retrieved from the current injection zone, the Suwannee Limestone. Elevated arsenic concentrations have been consistently discovered in injectate that is stored and recovered from the Suwannee Limestone. The results of this study will be an important tool that can be used to evaluate future ASR development in the SWUCA.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	12,777	0	13,302	950	0	27,029
013 Hillsborough River Basin	12,777	0	13,302	950	0	27,029
014 Northwest Hillsborough Basin	12,777	0	13,302	950	0	27,029
016 Pinellas-Anclote River Basin	12,777	0	13,302	950	0	27,029
020 Peace River Basin	12,777	0	13,302	950	0	27,029
021 Manasota Basin	12,777	0	13,302	950	0	27,029
				<b>Total</b>		<b>\$162,174</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Contract execution	2/25/07		
Contract completion	2/25/09		

**Status As Of:** February 21, 2008

Continuing to analyze geologic cores from the Avon Park Formation. A meeting was held on February 13, 2008 with the principal investigator to review year one progress and resolve issues with invoices received from USF.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	United States Geological Survey
<b>Project Manager</b>	BEACH, MICHAEL
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The purpose of this cooperative project between the U.S. Geological Survey (USGS) and the District is to analyze the effects of rainfall and ground-water levels on the lake levels of Lake Starr over a wide range of conditions. This lake is a 134-acre seepage lake located on the Lake Wales Ridge within the Peace River Basin, about four miles north of Lake Wales. The project will be based on a 10-year data set.

**Benefits**

It is believed that rainfall most affects lake levels when rainfall is above normal. It is also believed that ground-water levels most affect lake levels when rainfall is generally normal to low and ground-water levels are low due to pumping. However, if the District is to responsibly manage water resources, it is imperative that the District be able to verify and quantify these relationships. This ten-year dataset provides the District and the USGS with an extremely wide range of rainfall and lake level conditions, and the opportunity to significantly improve on the previous work. Additionally, the developed relationships between rainfall and ground-water levels versus lake levels will provide a measure against which simpler statistically-based models can be tested in the future.

**Costs**

The cost of the project is \$600,000, to be shared equally between the USGS and the Peace River Basin Board. The project will take three years to complete, October 2006 through September 2009. District costs for FY 2009 will be \$100,000 and will complete the District obligation to this project.

**Additional Information**

The USGS previously did an analysis on this lake for the 2-year period August 1996 through July 1998. During that period rainfall was 50.68 inches and 54.04 inches, respectively. These rainfall amounts are very close to the long term annual average of 51.99 inches. Lake levels during that time fluctuated between 103.9 feet and 106.6 feet, NGVD: a range of less than three feet. Since that time, the USGS has continued collecting data: lake levels, ground-water levels, rainfall, and evaporation. There are now ten years of data that include periods of extreme drought as well as periods of considerable rainfall. Lake levels over that time have fluctuated between 96.3 to 109.8 feet, NGVD: a range of over 13 feet. Analysis of the extended data will provide a better understanding of the contribution to lake levels from groundwater, rainfall, and evaporation at the extreme ends of the rainfall and lake level ranges.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	104,538	0	105,948	4,982	0	215,468
<b>Project Funds Not Budgeted by the District</b>						
USGS	100,000		100,000	100,000	0	300,000
				<b>Total</b>		<b>\$515,468</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Agreement Completed	10/1/06		12/12/06
Analytic Water Budget and Analysis	9/30/07		
Report Preparat & Review	3/31/08		
Model Development	12/31/08		
Project Complete & Report Due	9/30/09		

**Status As Of:** February 22, 2008

1) Modeling is continuing as model development has now switched to the MODFLOW LAK3 package; 2) Cooperator is revising recharge areas and refining the recharge estimates in the Lake Starr basin; 3) 10 year transient simulations are being run with the LAK3 package and work on this phase is expected to be complete by the end of June 2008. 4) A report on the analytic water budget, in the form of a peer reviewed article, is due at the end of March 2008. The report is behind schedule.



**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** United States Geological Survey  
**Project Manager** MCBRIDE, TAMERA  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This study will update information on the hydrogeology and water quality of the surficial, intermediate, and Floridan aquifer systems in Highlands County and will assess long-term water resource trends. The project will be conducted by the U. S. Geological Survey and cooperatively funded by the SWFWMD, SFWMD, Highlands County, and the U. S. Geological Survey. The project will be implemented over a three year period (FY2007 to FY2009) and will enable water resource managers to better evaluate current hydrologic conditions; define present-day baseline conditions; and identify what additional hydrologic data are needed.

**Benefits**

Water supply continues to be a critical issue in the SWUCA, and this study compliments the District's water supply planning efforts. This project will enable the District and local governments to make knowledgeable decisions about area water needs and resources.

**Costs**

The FY2009 fund request from the Peace River Basin Board is \$20,000. This is the third year of the project. The total cost of the project is estimated to be \$580,000 with the U.S. Geological Survey contributing \$290,000, the SFWMD contributing \$170,000, and the SWFWMD (Peace River Basin Board) and Highlands County each contributing \$60,000.

**Additional Information**

Water resources in Highlands County have not been comprehensively studied in the last 50 years (Bishop, 1956), and information gathering is essential to make knowledgeable water resource decisions in the SWUCA. Population and water use have significantly increased in parts of the county since the last comprehensive study was completed. This report will enable water resource managers to better evaluate current hydrologic conditions; define present-day baseline conditions; and identify what additional hydrologic data are needed. This is a three-phase study that investigators will complete by researching existing information, collecting new data, and generating a written report. In Phase 1 (FY2007), data was compiled from area stakeholders, and it will be used to characterize current groundwater quality conditions, assess long-term trends, and identify data gaps. For Phase 2 (FY2008), groundwater levels will be measured; maps and hydrogeologic cross-sections will be developed; water level trends will be evaluated; and groundwater quality samples will be collected and analyzed. The results of the study will be published in a USGS Scientific Investigations Report during Phase 3 (FY2009).

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	22,330	0	24,533	24,747	0	71,610
<b>Project Funds Not Budgeted by the District</b>						
Highlands County	20,000		20,000	20,000	0	60,000
SFWMD	20,000		56,000	56,000	35,000	167,000
USGS	60,000		96,000	96,000	35,000	287,000
				<b>Total</b>		<b>\$585,610</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Complete Research Existing Data and Information	10/1/07	3/1/08	2/12/08
Complete Hydrogeologic Mapping	4/1/08		
Complete Water Quality Sampling and Analysis	10/1/08		
Submit Report for Final Approval	10/1/09		

**Status As Of:** February 28, 2008

The District received and signed the FY2008 Joint Funding agreement. The second drafts of various hydrogeologic maps are complete. More than 200 geologists' and geophysical logs were compiled to date for Highlands and adjacent Counties. These data will be used to construct more highly-resolved maps depicting the thickness of the surficial aquifer system; top and thickness of the intermediate confining unit/intermediate aquifer system; and the top of the Upper Floridan aquifer in Highlands County. The source of the logs has been primarily from the files of the FGS, USGS, SFWMD, and SWFWMD. There are several areas of the county that contain little or no geologic data, which has delayed completion of researching existing data. To help fill the voids, about 180

drillers' logs were obtained from the SFWMD. After careful review, about 40 of the most reliable logs were used to improve the hydrogeologic maps. The research for existing data task was completed. The design of a water quality monitoring well network for the surficial aquifer system, intermediate aquifer system, and Upper Floridan aquifer was completed. Enough well sites have been identified so water quality sampling can begin. Water quality sampling of wells in Highlands County began on September 28, 2007. At present, a total of 32 wells were sampled for the major cations and anions and nutrients. Seven of the wells sampled tapped the surficial aquifer system, seven tapped the intermediate aquifer system, and 18 wells tapped the Floridan aquifer system.



**Water Conservation/FYN Regional Builder/Developer Specialist**

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	DURELL, SYLVIA
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

The Water Conservation/FYN Regional Builder/Developer specialist promotes implementation of indoor and outdoor water conservation to the members of the building industry, managers of community development districts and boards and members of homeowner associations. The majority of decisions concerning indoor water use and the design and maintenance of landscapes are made by builders, developers, and landscape and irrigation professionals. Their decisions impact water supply, water quality and natural systems. In FY2008, the specialist added the promotion of indoor water conservation to her scope of work. FY2009 will be the third year of funding for this outreach. In FY2009, the specialist will promote the District's advanced level of the Florida Water Star (FSW) program if funded for implementation. FWS's objectives are to educate the building industry about the water conservation and water quality protection practices they can add to their building and maintenance plans. Model homes will be judged on specific criteria and, if the project achieves the points required, it will receive FWS certification.

**Benefits**

The program addresses priority concerns of the Basin Boards by promoting widespread adoption of environmental landscaping best management practices by builders, developers, and landscape and irrigation professionals to conserve water and reduce environmental damage from improper landscape design, installation and maintenance. The expansion of the program that occurred in October 2007 will increase potential water savings in new construction by including indoor water conservation to the outreach. Thanks to training from the specialist, FYN coordinators who previously focused only on homeowners are being equipped to work with builders and developers interested in incorporating Florida-friendly landscaping principles.

**Costs**

The total proposed cost of the outreach program in FY2009 is \$78,316. The funds will provide for project coordination, program expenses and travel expenses for outreach to all Basins. Basin costs are requested as follows: Alafia River (\$4,710), Hillsborough River (\$10,990), Northwest Hillsborough (\$5,495), Coastal Rivers (\$6,233), Pinellas-Anclote River (\$19,625), Withlacoochee River (\$6,280), Peace River (\$13,208) and Manasota (\$11,775). Budget lines below include costs to manage the project. The University of Florida will support the program by providing education oversight and training opportunities. The addition of indoor water conservation outreach to the program, which occurred in October 2007, caused no increase in funding.

**Additional Information**

Education will be based on the nine Florida-friendly landscaping principles that were created by the University of Florida/Institute of Food and Agricultural Sciences for the FYN program: Right Plant, Right Place, Water Efficiently, Fertilize Appropriately, Mulch, Attract Wildlife, Manage Yard Pests Responsibly, Recycle, Reduce Stormwater Runoff and Protect the Waterfront. Outreach efforts will include conferences, workshops, one-on-one interactions, newspaper articles, electronic media and distribution of printed materials.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	5,383	0	6,246	6,309	0	17,938
013 Hillsborough River Basin	12,561	0	13,386	12,650	0	38,597
014 Northwest Hillsborough Basin	6,280	0	7,798	7,094	0	21,172
015 Coastal Rivers Basin	7,177	0	7,924	7,903	0	23,004
016 Pinellas-Anclote River Basin	22,430	0	20,391	20,425	0	63,246
019 Withlacoochee River Basin	7,177	0	7,816	7,879	0	22,872
020 Peace River Basin	15,252	0	15,786	14,878	0	45,916
021 Manasota Basin	13,458	0	13,311	13,374	0	40,143
				<b>Total</b>		<b>\$272,888</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>FY2007</b>			
Purchase Order Issued:	10/1/06	3/15/07	3/6/07
First Task Report:	3/31/07		3/31/07
Second Task Report:	4/30/07		4/30/07

Third Task Report:	5/31/07	5/31/07
Fourth Task Report:	6/30/07	6/30/07
Fifth Task Report:	7/31/07	7/31/07
Sixth Task Report	8/31/07	8/31/07
Seventh Task Report	9/30/07	9/30/07
Eighth Task Report	10/30/07	10/30/07
Ninth Task Report	11/30/07	12/11/07
Tenth Task Report	12/31/07	12/31/07
Eleventh Task Report	1/31/08	1/31/08
Project Ends	2/29/08	2/29/08
Twelfth Task Report	2/29/08	2/29/08

**FY2008**

Purchase Order Created:	3/1/08	3/3/08
First Task Report:	3/31/08	
Second Task Report:	4/30/08	
Third Task Report:	5/31/08	
Fourth Task Report:	6/30/08	
Fifth Task Report:	7/31/08	
Sixth Task Report:	8/31/08	
Seventh Task Report:	9/30/08	
Eighth Task Report:	10/31/08	
Ninth Task Report:	11/30/08	
Tenth Task Report:	12/31/08	
Eleventh Task Report:	1/31/09	
Project Ends	2/28/09	
Twelfth Task Report:	2/28/09	

**Status As Of:** February 26, 2008

ELM West Coast, Inc. was selected to conduct this work after staff evaluated the proposals submitted. As a result, Angela Maraj began working as the District Regional Builder & Developer Landscape Education Specialist in March 2007. In October 2007, the Basin Boards approved the expansion of the scope of work and title of the program from FYN Regional Builder/Developer Specialist to Water Conservation/FYN Regional Builder/Developer Specialist to allow promotion of indoor as well as outdoor water conservation. In the past month, the specialist, Angela Maraj, met with Sumter County FYN coordinator Jim Davis to help schedule workshops for new residents on Florida-friendly landscaping and properly setting irrigation time clocks. Promotion of the Water-Wise Landscape Awards program continued with the Tampa Bay Builders Association. Four model homes will be reviewed for the award. Discussions began with John Korycki, on presenting a "Grow Smart and Profit" workshop to homeowners associations. Through work with the Citrus and Polk builders associations, and with the help of Audrey Durr, Citrus County FYN coordinator, and Anne Yasalonis, Polk FYN coordinator, the Water-Wise program was successfully launched for the two counties' spring Parade of Homes events. Ways to reach realtors, builders and developers in Marion County were discussed with Kathleen Patterson, Marion County FYN coordinator. A workshop and field trip for the target audiences will be planned Maraj submitted the social marketing concept of having committee members sign a pledge of participation to the Florida Green Building Coalition (FGBC). The idea was accepted and incorporated into new committee guidelines document. The document will be sent to the FGBC executive director for final approval before distribution to membership. In February 2008, staff reviewed and evaluated proposals to continue this work in FY2009. ELM West Coast, Inc. was selected to conduct the work for a second year.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Alafia River, Peace River, Manasota
<b>Cooperator(s)</b>	United States Geological Survey
<b>Project Manager</b>	BEACH, MICHAEL
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The first year of this cooperative project between the U.S. Geological Survey and the District is a pilot study that will compare the hydrologic effects, including water supply demand, of converting land from agricultural to urban-suburban use-types on similar size tracts of land Southern Water Use Caution Areas (SWUCA). The first year study will focus on the effect of converting land in Charlie Creek basin from an agricultural land use to an urbanized land use. Agricultural land use in Charlie Creek basin is well established and the USGS is nearing completion of another project in the basin that provides a detailed look at the water budget for the past few years. GIS modeling will be used to simulate the effects of such change. The scope of work for subsequent years will depend on the outcome of this pilot study. It is anticipated that the form of future work will take the form of a generic, integrated (ground-water and surface water) model. This model will allow the District to simulate land use changes in hydrologic and hydrogeologic conditions found in the SWUCA.

**Benefits**

These conversions will affect runoff and recharge properties of the land, and there may be a difference in the amount of water supply demand. It will be useful to understand what the effects of these conversions will have on water resources. It will also be useful to quantify the differences between water supply demands for the two use types over similar acreages and in similar locations. As such, the project has great potential as a tool for the District and water supply managers as they move forward with water supply planning and recovery in the SWUCA.

**Costs**

The cost of the FY2007 pilot project is \$110,000, to be shared equally between the USGS and the District. District costs will be shared proportionally between the Peace River Basin, the Manasota Basin, and the Alafia River Basin. Because the District and the USGS did not complete the agreement for this pilot project until late in 2007, the study will occur between October 2007 through June 2008. Future funding (FY2008-2010) for this work will be based on the proposal that is developed from the recommendations of the pilot project.

**Additional Information**

In the SWUCA, there is considerable acreage that is used for agriculture, especially citrus or row crops. In the future, some of that land will be converted to suburban, or perhaps urban, land use. In order to quantify the water resource effects of this conversion, the study will develop water budget models that will examine changes in ET, runoff and water use for each use type. Although no such conversion is planned for the Charlie Creek basin, considerable data has recently been collected there in another project by the USGS. The results of the study will indicate the best methods to use in other areas of the SWUCA to evaluate the effect of such land use conversions on the elements of the basin water budget.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	15,870	0	15,979	17,491	0	49,340
020 Peace River Basin	62,470	0	62,579	71,491	0	196,540
021 Manasota Basin	28,470	0	28,579	28,491	0	85,540
<b>Project Funds Not Budgeted by the District</b>						
USGS	55,000		100,000	100,000	0	255,000
				<b>Total</b>		<b>\$586,420</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Joint Funding Argeement	3/31/07		7/16/07
Project Complete	9/30/07		

**Status As Of:** February 21, 2008

1) District staff met (February 18) with the USGS and Dr. B. Dixon, USF Geospatial Analysis Group, to discuss progress of the project. USF is unable to devote time to the project until May and then will require six weeks for their analysis. Based on those findings, the USGS will prepare a detailed proposal for additional work. The proposal is the objective for the FY2007 work. 2) After District review of the findings and the proposal, the District may enter into an agreement with the USGS for additional work. If

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sufficient time remains in FY2008, some of that work could begin this fiscal year, with the remainder of the work extending into FY2009 and FY2010.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	N/A
<b>Project Manager</b>	KARLIN, AL
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

### Description

The NHD is a comprehensive set of Geographic Information System (GIS) data that contains information about surface water features such as lakes, ponds, streams, rivers, springs and wells. This dataset was created by the United States Geological Survey (USGS) in cooperation with the Environmental Protection Agency (EPA) to provide a consistent nationwide database to link water-related data to specific streams and waterbodies. The five water management districts and the FDEP cooperatively created Florida's original version of the NHD in the late 1990's and early 2000's. The dataset was created using the best available information, hydrographic features found on the USGS 7.5 Minute Topographic Quadrangles. While the original NHD supports many District uses, it often does not have the level of information required to support detailed modeling efforts. The funding proposed here will be used to upgrade the NHD dataset for our jurisdiction using detailed hydrographic information captured under the District's Watershed Management Program. Similar efforts are underway at the St. Johns River Water Management District and are being evaluated at the South Florida Water Management District.

### Benefits

Participating in the NHD update effort provides an effective mechanism for integrating our detailed hydrographic information into a nationwide database that is distributed by the USGS. Since the NHD is used by the FDEP and other water management districts, the District's modeling and data collection efforts will benefit from improved data consistency with those agencies. This project benefits federal, state, local, and private entities by providing access to the District's detailed hydrographic data in an industry standard format.

### Costs

The requested FY2008 funds will be used to fund a contract position and supporting services at FDEP to update the NHD and transfer the data to the USGS. Funding is split between the Governing Board and Basin Boards. The Governing Board provides fifty percent of the total project cost with the remainder being split between the Basin Board based on area. It is anticipated that this will be an annual budget request that will continue to provide updates to the NHD in coordination with the District's Watershed Management Program. The FY2009 budget will increase by approximately \$2000 to accommodate the FDEP changes for indirect costs.

### Additional Information

No federal, state or local government currently updates the NHD for our area. The District does not have sufficient in-house resources to support this effort and the funding will be used to outsource this work to the FDEP. FDEP is the primary NHD coordinating body in Florida.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	30,671	15,865	0	46,536
011 Alafia River Basin	0	0	2,052	1,061	0	3,113
013 Hillsborough River Basin	0	0	2,226	1,151	0	3,377
014 Northwest Hillsborough Basin	0	0	472	244	0	716
015 Coastal Rivers Basin	0	0	2,428	1,256	0	3,684
016 Pinellas-Anclote River Basin	0	0	1,108	573	0	1,681
019 Withlacoochee River Basin	0	0	6,000	3,103	0	9,103
020 Peace River Basin	0	0	9,090	4,702	0	13,792
021 Manasota Basin	0	0	3,953	2,045	0	5,998
				<b>Total</b>		<b>\$88,000</b>

### Critical Project Milestones

#### 1. Milestone - Myakka Basin

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Review linear network for Myakka Sub-basin	11/1/07	6/1/08	
Revise NHD network	2/1/08	8/1/08	
Review and revise flowpaths/directions	5/1/08	10/1/08	
Capture lakes/wetlands and QA/QC	6/1/08	12/1/08	

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Upload Data to National NHD	7/1/08	2/14/09
<b>2. Milestone - Sarasota Bay Basin</b>		
Review/revise linear Network	8/1/08	10/1/08
Review/Revise flowpaths	9/1/08	12/1/08
Upload Data to National NHD	9/15/08	2/14/09

**Status As Of:** February 12, 2008

12 Feb 2008 - The District has signed a multi-year contract with FDEP for maintenance of the NHD. Work under this contract will be authorized on an annual basis pending the inclusion of funding in the budget for this project. Staff is currently negotiating the initial work order.

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Flood Protection, Water Quality  
**Basin(s)** Alafia River, Hillsborough River, Peace River, Manasota  
**Cooperator(s)** University of Florida  
**Project Manager** COHEN, RON  
**Task Manager(s)**  
**Status** Ongoing

**Description**

Agriculture is the largest permitted water use in the District and citrus production is the largest of those permitted uses. Over 366MGD are permitted for citrus irrigation and most of that water use is in the SWUCA. This project will help citrus growers reduce their water use by developing tools to automate and improve irrigation scheduling. These tools can be used by the District's FARMS program to further expand their conservation efforts. Although citrus acres have been on the decline it seems to have reached a stabilizing point. With the increase in the recent price of citrus the District might even see an increase in the number of acres. The permitted acres for citrus is still relatively high and even a minor reduction in water use or fertilizer application could have a significant impact on the District's water resources. The proposed project will investigate the use of new low-cost automatic irrigation pump controllers with wireless remote monitoring and control. This low cost system (<\$1,000) will enable growers to optimize the irrigation scheduling and remotely manage over 100 acres. In addition the project will develop and compare new and improved irrigation scheduling tools for citrus trees, particularly for automated systems. In the past the District has funded several citrus irrigation projects. With the introduction on new technology some of the old information is no longer applicable and some of the information needs to be incorporated into new technology. Where applicable this project will build on past projects and use new technology to help reduce water and fertilizer use.

**Benefits**

The actual water savings will depend on acres planted climatic and growing conditions. Assuming a 1% savings this would amount to about a 3.7 million gallons per day reduction of ground water in an area of water use concern. The reduced water use would make more water available for other uses and reduce the amount of funds that need to be invested in alternative water supplies. An added benefit to this project will be that improved irrigation would improve fertilizer use, which will reduce the amount of nutrients available to runoff and pollute the District's water bodies. Also the project's information will provide the FARMS program with another tool to help reduce ground water use.

**Costs**

This will be a four year project and the total cost will be \$150,000. Project costs are divided between four Basin Boards based on the percent water permitted for citrus production within their watersheds. The following is the annual cost break down by Basin Board: Alafia \$4,500, Hillsborough River \$4,000, Peace River \$38,500 and Manasota \$3,000 for FY2008, FY2009 and FY2010.

**Additional Information**

Improved irrigation scheduling can conserve large volumes of water. Since current irrigation scheduling tools are unreliable, growers are prone to over-irrigate to eliminate any risk of drought stress. Manually operated irrigation systems are not adaptable to more efficient frequent, small irrigations or night-time irrigations due to logistics, conflicts in schedules, and the inconvenience factor. Irrigation durations are most often rounded up, rather than down, even after accounting for all these factors. Probability of rainfall is almost never considered and some irrigation systems are even run during rain events. Over-irrigation and nutrient leaching consequently deplete and degrade our limited water resources. The high cost of commercially available automatic control systems has, unfortunately, prevented their widespread acceptance and use. Since often less than 100 acres are supplied per pump, quite commonly a grower will have multiple well pumps to automate in a citrus grove. At a cost to automate of more than \$20,000 per pump, the financial burden is prohibitive, even with cost sharing. In addition, commercial automatic controllers have a limited ability to interface with available soil moisture sensors or with more advanced scheduling tools such as simulation models. Without adequate inputs, the full potential of automatic controllers cannot be realized. There is a great need to develop low-cost automatic irrigation pump controllers to reliably schedule irrigation.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	4,500	4,500	0	9,000
013 Hillsborough River Basin	0	0	4,000	4,000	0	8,000
020 Peace River Basin	0	0	38,500	38,500	0	77,000
021 Manasota Basin	0	0	3,000	3,000	0	6,000
				<b>Total</b>		<b>\$100,000</b>

**Critical Project Milestones** Projected Amended Actual

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Agreement To Contracts	10/1/07	8/30/07
Agreement To IFAS	10/15/07	10/15/07
Notice To Proceed	12/31/07	12/31/07
Data Collection Yr. 1	12/31/08	
Data Collection Yr 2	12/31/09	
Data Collection Yr. 3	12/31/10	
Grower's Field Day	12/15/11	
Completion Report	3/1/12	
Agreement Ends	12/31/12	

**Status As Of:** March 07, 2008

8/31/2007 - Reviewed final scope of work. 11/1/2007 - Agreement mailed to cooperator for review and execution. 1/2/2008 - Notice to proceed sent to IFAS 3/7/2008 - Mobilizing equipment.



## Reducing Nursery and Landscape Water Use by Genetically Altering Nandina Plants

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Water Quality, Natural Systems  
**Basin(s)** Alafia River, Hillsborough River, Peace River, Manasota  
**Cooperator(s)** University of Florida  
**Project Manager** COHEN, RON  
**Task Manager(s)**  
**Status** Ongoing

**Description**

There are over 5,000 acres of nursery production in the central part of our District and typically they are permitted for about 1.7 Million gallons of water per acre. With the increase of urban development it is anticipated that the number of nursery acres will increase and landscape water use will increase. To reduce landscape irrigation and to conserve water, the District has been promoting Florida Friendly principles. One of the first and most important principles of this practice is the selection and use of drought-tolerant plants (Koske and Owings). Nandina is a very popular drought tolerant plant and recently its use has been demising because of it being listed as an invasive species. This project will develop and determine nursery production and urban landscapes water requirements for a drought tolerant variety of Nandina. The industry is supportive of this project and is providing funds.

**Benefits**

It is estimated that each year about 5 million Nandina plants are grown and sold within the central part of the District. The number of acres planted and their water use will change annually based on market and climatic conditions. To quantify an estimated water savings from this project lets assume a Nandina plant covers 12 square feet (3 ft x 4 ft), 3,700 plants per acre, 1,375 acres and a 1% to 5% savings for Nandina Nursery Production. This savings will reduce water use by 332,000 to 66,000 gallons per day. In addition there will be a savings from urban landscape water use. An added benefit to this project is that it will eliminate an invasive plant species. This will save the District and the public having to invest public funds to eliminate an invasive plant.

**Costs**

This five year project will cost the District \$125,000. Funding for this project is prorated between four Basin Boards (Alafia River (22%), Manasota (22%), Hillsborough River (28%) and Peace River (28%)) based on the permitted nursery acres in their watershed. The Nursery industry will provided \$15,000 for this project and the Alafia Basin Board will budget \$5,500, Hillsborough River will budget \$7,000, Manasota will budget \$5,500 and the Peace River will budget \$7,000 for each year in FY2008, FY2009, FY2010, FY2011 and FY2012.

**Additional Information**

Each year a large amount of water is permitted for nursery and landscape irrigation. With the rapid urban development in the District, it is anticipated that the amount of water permitted for these uses will increase. To reduce water use for landscape irrigation and to conserve water, the DISTRICT has been promoting Florida Friendly landscaping principles. One of the first and most important principles of this practice is the selection and use of drought-tolerant plants. Nandina plants are of great potential to reducing water usage in the urban landscape. They are well adapted to Florida soil conditions and well tolerant of droughts. Because of these and their aesthetic values, nandinas are very popular in nursery production and landscape use. They are particularly liked in low-maintenance landscapes and xeriscaping. In addition, these plants are extremely tough and practically pest free, thus requiring little use of pesticides. This characteristic is very beneficial and can help reduce chemical pollution from public or residential landscapes to soil and water and protect water quality. With the production of copious amounts of fruit berries and seeds, nandina plants can escape from cultivation into natural areas. Escaped nandinas can become established in natural areas, wet lands, etc., displacing native plants, disrupting natural plant communities, and changing natural ecosystems. Because of this, nandina is listed as a Class I invasive species by the Florida Exotic Pest Plant Council (<http://www.fleppc.org/>) and not recommended by University of Florida for propagation, production, and sale in central Florida. The primary cause of the invasiveness of nandinas is their production of copious berries and seeds. Recent studies have shown that it is possible to find nandina varieties (one or two) that do not produce berries and seeds, thus not invasive, but this lack of berry or seed production seems to vary from region to region in Florida. For example, two nandina varieties produced lots of fruit in north Florida, but did not produce fruit and seed in south Florida. It is not known whether or not these varieties will produce fruit and seeds in central Florida. In this project, we propose to test these varieties in this District (southwest Florida) for their berry and seed production to confirm whether or not they are not invasive and safe for production and use in this District, to determine their water needs and water conservation values for nursery production and urban landscape use, and to develop new drought-tolerant nandina plants that do not produce seeds and are not invasive, but friendly to the environment.

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

011 Alafia River Basin	0	0	5,500	5,500	0	11,000
013 Hillsborough River Basin	0	0	7,000	7,000	0	14,000
020 Peace River Basin	0	0	7,000	7,000	0	14,000
021 Manasota Basin	0	0	5,500	5,500	0	11,000
				<b>Total</b>		<b>\$50,000</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Agreement to Contracts	8/31/07		8/1/07
Agreement to Cooperator	9/15/07		9/27/07
District Executes Agr.	11/30/07		11/30/07
District Issues NTP	1/5/08		11/16/07
Basin Board Notification	1/31/08		
Data Collection Yr. 1	12/31/08		
Data Collection Yr. 2	12/31/09		
Data Collection Yr. 3.	12/31/10		
Completion Report	10/31/12		
Agreement Ends	5/31/13		

**Status As Of:** March 07, 2008

8/31/2007 - Waiting for final scope of work. 11/1/2007 - Agreement mailed to IFAS. 11/16/2007 - NTP mailed to IFAS 1/2/2008 - Mobilizing equipment to start project. 3/7/2008 - Data collection project continuing as planned.

**Project Type** Basin Initiatives  
**AOR(s)** Water Supply, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** MORALES, JON  
**Task Manager(s)**  
**Status** Ongoing

**Description**

Request funds to complete establishment of minimum flows for the upper Peace River by 2011. By requirements of Florida statutes, the District must establish Minimum Flows and Levels (MFLs) for water bodies within its jurisdiction. This project is to provide technical information to support the adoption of MFLs for the freshwater portions of the upper Peace River system. Low flow thresholds have been established on the upper Peace River. However, methodologies for developing MFLs were not complete when staff first studied the Peace, so high flow restrictions were not established. The District staff now has a methodology for developing high flow restrictions and seeks to complete the MFL of the upper Peace River in 2011. An understanding of ecosystem components is needed so that relationships between minimum flows and significant harm can be evaluated in a defensible manner. It is necessary for a number of reasons to document the abundance, diversity, and distribution of plants and animals that are associated with these resources under seasonally changing flow conditions. Physico-chemical variables (e.g., dissolved oxygen, temperature), drainage alterations, and extensive hydrologic data also need to be evaluated. While much of the data can be, or has been, collected and developed in-house, manpower and time limitations and the specialized expertise required for some analyses dictates that some of it must be consulted out. Funding under this project will accomplish four goals specific to MFLs development: 1) improve the hydraulic model originally used in the first round of MFL development; 2) evaluation of hydraulic characteristics of the stream for the purpose of describing floodplain inundation patterns under various flows; 3) assessment of fish community structure and habitat availability; and 4) assistance in the analysis of hydrologic and biologic data to establish relationships between river hydrology (stage and flows) and the ecologic resources that are supported.

**Benefits**

Completion of this project will support timely adoption of MFLs on this water body consistent with the Board adopted MFLs priority list and schedule. Funding requested in FY2008 is primarily for use in evaluating the potential reduction in fish and macroinvertebrate habitat and loss of floodplain wetland connection due to reductions in flow. The use of external expertise in Geographic Information Systems (GIS) and modeling will allow for the results from the hydraulic to be utilized in a GIS environment and thus, better describe spatial patterns of floodplain inundation. Funding will also provide partial support to a cooperative effort by the Florida Fish and Wildlife Conservation Commission to reassess the fish community of the Peace River. Fish data used in initial MFL development in the upper and middle river relied on information that is now more than 15 years old, and it is currently suspected that several exotic fish species have expanded throughout the system.

**Costs**

Total requested funding in FY2008 is \$121,500. The Peace River Basin Board's contribution is one half of the \$121,500 total, or \$60,750, with the remaining \$60,750 to be funded by the Governing Board. A small amount has been budgeted for travel and parts and supplies.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	64,724	9,031	0	73,755
020 Peace River Basin	0	0	60,250	250	0	60,500
				<b>Total</b>		<b>\$134,255</b>

**Critical Project Milestones**

	Projected	Amended	Actual
<b>1. Flow Measurement and Analysis</b>			
Flow Data Collection from USGS	7/1/10		
Flow Data Analysis Summary	7/30/10		
<b>2. Field Site Selection</b>			
Identify Field Sites and Habitats	7/15/10		
Obtain Permission to Access Private Property	8/1/10		
Map Shoals	8/10/10		
<b>3. Floodplain Vegetation Analysis</b>			
Field Sampling/Survey	9/1/10		
Vegetation Assessment Report	11/30/10		
<b>4. Instream Habitat Assessment</b>			

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Field Data Collection/Survey	9/15/10
Habitat Assessment Summary	11/30/10
PHABSIM Analysis Summary	12/15/10
<b>5. Hydraulic Model Development</b>	
Survey Data Acquisition	11/1/10
HEC-RAS Model Development	1/30/11
<b>6. MFL Report Development</b>	
Data Analysis	3/1/11
Report Preparation	5/1/11
<b>7. Peer Review</b>	
Peer Review	7/30/11

**Status As Of:** February 29, 2008

Data collection efforts occurring on the upper Peace River are in progress. This includes a re-assessment of fish communities in various instream habitats and their composition by Florida Fish and Wildlife Conservation Commission. Their study, beginning in July, will run over three years and will encompass the entire Peace River watershed up to the estuarine zone near shore region. Other components of the study will also look at fish utilization of temporary floodplain pools when flows exceed the river bank. Fish assessment studies are also planned for Charlie Creek and Horse Creek.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Hillsborough River, Coastal Rivers, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This project will compare different irrigation management techniques under real production conditions to determine the most efficient way to irrigate blueberry plants. Due to current market conditions and plant diseases, many Central Florida agricultural producers have converted their production acres to blueberries, which is a high valued cash crop. Some of the newer blueberry growers have relatively little experience with blueberry irrigation and some of the existing producers might not be familiar with better ways to manage different irrigation systems. Researchers will create a demonstration plot in a grower's field. This plot will consist of different soils and irrigation methods to determine which is best for specific growing conditions. The projects results will be presented to the growers during a field day for them to learn and visualize the project's results.

**Benefits**

Information from this project could be used to conserve water. There are about 735 Mgals permitted for annual blueberry irrigation. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions. If we assume a 5% savings from this project, it would conserve about 37 Mgals per year. Information from this project will provide the District's FARMS additional tools to help promote conservation.

**Costs**

This three year project will cost a total of \$69,900. Funding for this project is prorated between five Basin Boards (Peace River - 37%, Withlacoochee River - 22%, Alafia - 13%, Coastal 12% and Hillsborough River 8%) based on the number of permits for blueberry production in their watershed. In FY2009, FY2010, and FY2011, the Basin Boards will budget each year: Peace River - \$9,080, Withlacoochee River - \$5,497, Alafia - \$3,406, Coastal - \$3,105 and Hillsborough River \$2,211.

**Additional Information**

This project was originally proposed in FY2008. At that time it was decided to wait until project B226 (Determine Total Water Budget & Irrig. Req.for Mature Southern Highbush Blueberries) progressed so that information from that project could be incorporated in this project. Blueberries require an acid soil or a soil that is amended to reach a certain acidity level. To reach the proper acidity level, many blueberry growers use pine bark that is 1) incorporated into the upper soil layer, or 2) placed as a layer on top of the soil. There is relatively little knowledge of the water holding capacity or water movement through these two pine bark amended soil systems. Evaluating the soil water characteristics of these two types of blueberry pine bark amended soils is important for efficient and responsible water management. Several new soil moisture-measuring devices have become available in the past five years. These probes are better than tensiometers because they require less maintenance and can show changes in soil water status over time. By telling growers if water has moved below the main root zone, these probes can be beneficial in improving irrigation management. A few of these probes have been evaluated under citrus trees in sandy ridge soils, but have not been tried in pine bark amended ridge soils. Most growers irrigate in a way that they think will meet the water needs of the crop. Blueberries are fairly shallow rooted, and it is not known what irrigation duration is needed with the drip, microsprinkler, or overhead systems to wet the root zone in pine bark amended soil. Soil probes would be beneficial in seeing how far water moves in these soils. Hence, they could potentially help reduce over irrigation and deep percolation loss. Probes would be installed at different depths under the drip, microsprinkler, and overhead systems in the field. Changes in soil water content from the different irrigation systems would be monitored. We would determine how long it takes for irrigation water to reach different depths in the two soil systems. Water holding capacity and bulk density of the two soil systems would be determined in the lab or field. Depth of soil wetting would be determined periodically at different times of the year. The most efficient irrigation system would be determined. Changes in soil water content at different depths (as roots take up water) would be shown to the grower to help him in his irrigation scheduling decisions. Knowledge of when deep percolation loss might occur could help reduce over irrigation.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	3,406	0	3,406
013 Hillsborough River Basin	0	0	0	2,212	0	2,212
015 Coastal Rivers Basin	0	0	0	3,105	0	3,105
019 Withlacoochee River Basin	0	0	0	5,497	0	5,497
020 Peace River Basin	0	0	0	9,080	0	9,080
				<b>Total</b>		<b>\$23,300</b>

Status As Of:

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

#### Description

Due to Citrus Greening, Canker and labor issues the industry has had the University develop different techniques for economical production of citrus in Florida. One of the most promising techniques, which includes high density planting of smaller trees, was developed in Spain and commercialized in South Africa, Australia and California. This project will develop irrigation and nutrient management recommendations for this new method of production to help conserve water and reduce nutrient loading. Although recent citrus acres have declined District wide, it is still the largest permitted agricultural water use. Also, with the decline in development and recent price increases, more citrus growers are planning to expand their operations; therefore, it is important to help find ways for citrus producers to conserve water. This water conservation project will utilize information developed in Spain and commercialized in South Africa, Australia and California. The University will investigate and develop new cultural technology including changes to plant density, nutrient and irrigation management. Plants will be grown with an intensive fertigation management technique that is designed to provide essentially a non-limiting environment to those roots. This new fertilizer program will require changes to existing irrigation management programs.

#### Benefits

Citrus production is the largest agricultural land use in the District. This project will help citrus producers conserve water and reduce pollutant loading for fertilizer leaching. In addition, the information could be used by the District's FARMS program to help design better BMP cost share systems. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions.

#### Costs

This five year project will cost a total of \$182,500. The annual cost will be divided between four Basin Boards based on the permitted citrus acres in their watershed. Funding for this project is prorated between four Basin Boards (Peace River - 78%, Hillsborough River 6%, Alafia - 7%, and Manatee 4%) based on the number of permits for citrus production in their watershed. In FY2009, FY2010, FY2011, FY2012 and FY2013, the Basin Boards will budget each year: Peace River - \$28,106, Alafia - \$3,336, Hillsborough River \$2,979 and Manasota \$2,079.

#### Additional Information

Yield fundamentally drives profit for Florida citrus growers and is thus the key element to a grower's financial success. Yield is tied directly to tree density and growth rate and is a simple function of numbers of trees and the related total canopy volume over the unit area. Research over the last several decades has proven that growth of young trees and productivity of both young and mature trees benefit from high frequency low volume irrigation. Improved tree growth from intensive irrigation management could reduce the time required from planting to economic breakeven production, thus provide management options in light of current devastating diseases such as Canker and Huanglongbing (citrus greening). Florida growers have adopted Best Management Practices (BMPs) that reduce nutrient leaching by limiting the amount of fertilizer that can be applied, and the time of year when fertilizer can be applied. These BMPs are based on research under low-intensity management systems. However, production systems that combine grove design and irrigation management to increase yield and grove operational efficiency have not been studied. High density plantings of sweet oranges on low-vigor rootstocks have known advantages, but their long-term behavior and changes in the functional relationship of tree density, growth rate, and yield over time are not well understood. The central hypothesis of this project is improved and consistent early yields, with increased tree density on low vigor trees and/or improved irrigation/nutrient management systems that would provide proactive management options in light of current devastating diseases such as Canker and Huanglongbing (citrus greening). Growers normally achieve their expected return on investment within 15 to 20 years of planting. If those goals would occur sooner (e.g., 10 to 12 years) through increased early yields, the grower would benefit even if the grove declines over time due to the diseases mentioned above and must be replanted. By knowing how to irrigate and manage their irrigation with this new method of production, the grower would conserve water and reduce the amount of fertilizer that is being leached from the plant root zone while maintaining an economical viable crop.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	3,336	0	3,336
013 Hillsborough River Basin	0	0	0	2,979	0	2,979
020 Peace River Basin	0	0	0	28,106	0	28,106
021 Manasota Basin	0	0	0	2,079	0	2,079

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Total

\$36,500

Status As Of:



**Project Type** Basin Initiatives  
**AOR(s)** Water Supply  
**Basin(s)** Alafia River, Hillsborough River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)** University of Florida  
**Project Manager** COHEN, RON  
**Task Manager(s)**  
**Status** Proposed

**Description**

There are over 5,000 acres of nursery production in the central part of the District and typically they are permitted for about 1.7 million gallons of water per acre. With the increase of urban development, it is anticipated that the number of nursery acres will increase and landscape water use will too. This project will investigate ways to reduce nursery and landscape irrigation by studying the relationships between moderate water stress, photosynthesis and shoot growth of trees. The goal of the project is to develop irrigation management strategies that take advantage of gas exchange properties occurring at moderate water stress. These strategies would be linked to the ongoing projects modeling tree water use based on ETo, further increasing the level of irrigation precision of non-production situations beyond that which will come from the ETo projects. Plant growth is a two stage process. First, new cells are produced by meristematic tissues. Second, these cells enlarge. The first phase mainly requires new cellular components which are derived from photosynthesis and absorbed minerals. The principal requirement for the second phase of growth, cell enlargement, is hydrostatic (turgor) pressure. Plant water status, mainly as it affects cell turgor pressure, is the primary driving force in this second phase. In pecans, nearly all leaf expansion occurred at night (Anderson, 1989). This is the time when water stress in plants is the lowest, and water status and turgor pressure are the highest. This is hypothesized as the primary reason cyclic irrigation of containerized plants accelerates growth, in that it results in higher turgor pressures during the night by making more water available in the root ball late in the day. While this information on leaf expansion was reported in the scientific literature over 10 years ago, it was never pursued much further and will be investigated in this project.

**Benefits**

Information from this project will help nursery producers, commercial landscapers and homeowners reduce water use. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions. Assuming an annual 5% water savings from only nursery production, there would be a total of about 1.9 mgd savings on permitted water use. In addition, information from this project can be used by the District's FARMS program to help promote water conservation.

**Costs**

This four year project will cost the District a total of \$83,875. Funding for this project is prorated between five Basin Boards (Peace River - 23%, Hillsborough River 22%, Alafia - 18%, Manasota 18% and Withlacoochee 11%) based on the number of permits for nursery production in their watershed. In FY2009, FY2010, FY2011, and FY2012 the Basin Boards will budget each year: Peace River \$5,159, Hillsborough River \$5,008, Alafia River \$4,103, Manasota \$4,103 and Withlacoochee River \$2,595.

**Additional Information**

Recently, data collection of a project at MREC supported by the Southwest Florida WMD, Horticultural Research Institute and others quantified the daily water use of live oak and red maple to 7-inch calipers, and Nellie R. Stevens holly to 5-inch calipers. Preliminary modeling of red maple reported a high correlation of predicted and actual water loss based on a algorithm incorporating reference evapotranspiration (ETo) and trunk cross sectional area just below the first major branch (Beeson, 2007). A project with a similar goal using D.D. Blanchard magnolia, Aliee, Chinese elm and slash pine is currently in the second year. Maximum plant growth occurs when transpiration is maximum because transpiration and photosynthesis are tightly linked. Reductions in stomata aperture reduce the flow of carbon dioxide into leaves and water out of leaves. However, for the limited number of tree species studied, slight to moderate reductions in stomatal aperture cause no to small reductions in photosynthesis, but resulted in relatively large reductions in transpiration. Thus under moderate water stress, trees and woody plants, in general, tend become more water efficient with little reduction in photosynthesis (Noble, 1999).

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	4,103	0	4,103
013 Hillsborough River Basin	0	0	0	5,010	0	5,010
019 Withlacoochee River Basin	0	0	0	2,595	0	2,595
020 Peace River Basin	0	0	0	5,158	0	5,158
021 Manasota Basin	0	0	0	4,103	0	4,103
				<b>Total</b>		<b>\$20,969</b>

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Status As Of:

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality
<b>Basin(s)</b>	Alafia River, Hillsborough River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	University of Florida
<b>Project Manager</b>	COHEN, RON
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

#### Description

The plant canopy plays a critical role in the interception of sprinkler irrigation water. Depending on the size and architecture of the canopy, as well as the container spacing, interception of irrigation water can be greater than or less than the amount of irrigation water that would fall into the container. Typically, interception is considered a water loss and not accounted for when supplying irrigation water. This project will quantify the amount of water that is intercepted by the plant and funneled to the plant's container. By accounting for this intercepted water, the overall amount for irrigation management can be reduced. The industry is supportive of this project and will provide funds to reduce the overall project results.

#### Benefits

Information from this project will help container nursery producers improve their irrigation efficiency and conserve water. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions. Using the District's regulatory database and assuming an annual 5% water savings from only nursery production, there would be an annual savings of about 1.9 mgd.

#### Costs

This three year project will cost the District a total of \$91,125. Funding for this project is prorated between five Basin Boards (Peace River - 23%, Hillsborough River 22%, Alafia - 18%, Manasota 18% and Withlacoochee 11%) based on the number of permits for nursery production in their watershed. In FY2009, FY2010, and FY2011 the Basin Boards will budget each year: Peace River \$7,471, Hillsborough River \$7,255, Alafia River \$5,945, Manasota \$5,944 and Withlacoochee River \$3,760.

#### Additional Information

Determining the interception factor (IF) for commonly grown plants with a wide range of plant growth habits (e.g. globose, upright spreading, broad spreading, etc.) and at different spacings between containers, will help growers improve their efficiency and reduce water use. For example, sweet viburnum, which has been found to have an IF of >2 during the last month of production, would only require ¼ inch of irrigation water to supply ½ inch to the container at that latter stage of production. In two experiments where water scheduling was based upon container weight loss, the irrigation rate averaged 0.2 inch/day using IF, but would have averaged 0.3 inch/day ignoring IF. This represented a total water savings of 14 inch (0.1 inch/day over a 140 day crop). As more and more nurseries base irrigation scheduling on evaporative demand (water loss per container) knowing the interception factor at various stages of production would be critical in determining the actual irrigation requirements of a crop. For mixed plantings, this information will add further precision to grouping plants not only by evaporative demand (current BMP), but also by their irrigation interception characteristics. Currently, this information is limited to a few species (Beeson and Yeager, 2003). Data are needed for a wide range of plant growth habits at different stages (sizes) of plant growth with various container spacings in order for this information to be useful for growers and water managers.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	5,944	0	5,944
013 Hillsborough River Basin	0	0	0	7,255	0	7,255
019 Withlacoochee River Basin	0	0	0	3,760	0	3,760
020 Peace River Basin	0	0	0	7,471	0	7,471
021 Manasota Basin	0	0	0	5,945	0	5,945
				<b>Total</b>		<b>\$30,375</b>

Status As Of:

**Project Type** Basin Initiatives  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** HOOD, JASON  
**Task Manager(s)** MATRONE, BARBARA  
**Status** Proposed

**Description**

Request funds to establish minimum flows for Charlie Creek by 2012. Staff anticipates additional requests in the future as the Minimum Flows and Levels (MFLs) are developed for this waterbody. Florida Statutes mandate that the District must establish MFLs for water bodies within its jurisdiction. This project is to provide technical information to support the adoption of MFLs for the freshwater portions of Charlie Creek. An understanding of ecosystem components is needed so that relationships between minimum flows and significant harm can be evaluated in a defensible manner. It is necessary for a number of reasons to document the abundance, diversity, and distribution of plants and animals that are associated with these resources under seasonally changing flow conditions. Physico-chemical variables (e.g., dissolved oxygen, temperature), drainage alterations, and extensive hydrologic data also need to be evaluated. While much of the data can be collected and developed in-house, manpower and time limitations and the specialized expertise required for some analyses dictates that some of it must be consulted out. Funding under this project will accomplish three goals specific to MFLs development: 1) characterization of wetland and floodplain vegetation and soils along the river corridor; 2) evaluation of hydraulic characteristics of the stream for the purpose of describing floodplain inundation patterns under various flows; and 3) assistance in the analysis of hydrologic and biologic data to establish relationships between river hydrology (stage and flows) and the ecologic resources that are supported.

**Benefits**

Completion of this project will support timely adoption of MFLs on this water body consistent with the Board adopted MFLs priority list and schedule. Funding requested in FY2009 is primarily for use in evaluating the potential reduction in fish and macroinvertebrate habitat and loss of floodplain wetland connection due to reductions in flow. The FY2009 funding includes vegetation transect analysis.

**Costs**

Total requested funding in FY2009 is \$54,000. The Peace River Basin Board's contribution is one half of the \$54,000 total, or \$27,000 with the remaining \$27,000 to be funded by the Governing Board. A small amount has been budgeted for travel and parts and supplies.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	33,251	0	33,251
020 Peace River Basin	0	0	0	26,250	0	26,250
				<b>Total</b>		<b>\$59,501</b>

**Status As Of:** February 18, 2008

**Project Type** Basin Initiatives  
**Basin(s)** Peace River  
**Cooperator(s)**  
**Project Manager** HOOD, JASON  
**Task Manager(s)**  
**Status** Proposed

**Description**

Request funds to establish minimum flows for Horse Creek by 2012. Staff anticipates additional requests in the future as the Minimum Flows and Levels (MFLs) are developed for this waterbody. Florida Statutes mandate that the District must establish MFLs for water bodies within its jurisdiction. This project is to provide technical information to support the adoption of MFLs for the freshwater portions of Horse Creek. An understanding of ecosystem components is needed so that relationships between minimum flows and significant harm can be evaluated in a defensible manner. It is necessary for a number of reasons to document the abundance, diversity, and distribution of plants and animals that are associated with these resources under seasonally changing flow conditions. Physico-chemical variables (e.g., dissolved oxygen, temperature), drainage alterations, and extensive hydrologic data also need to be evaluated. While much of the data can be collected and developed in-house, manpower and time limitations and the specialized expertise required for some analyses dictates that some of it must be consulted out. Funding under this project will accomplish three goals specific to MFLs development: 1) characterization of wetland and floodplain vegetation and soils along the river corridor; 2) evaluation of hydraulic characteristics of the stream for the purpose of describing floodplain inundation patterns under various flows; and 3) assistance in the analysis of hydrologic and biologic data to establish relationships between river hydrology (stage and flows) and the ecologic resources that are supported.

**Benefits**

Completion of this project will support timely adoption of MFLs on this water body consistent with the Board adopted MFLs priority list and schedule. Funding requested in FY2009 is primarily for field visits to establish study sites and to determine possible stream gauging needs.

**Costs**

Total requested funding in FY2009 is \$4,000. The Peace River Basin Board's contribution is one half of the \$4,000 total, or \$2,000 with the remaining \$2,000 to be funded by the Governing Board.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	8,251	0	8,251
020 Peace River Basin	0	0	0	1,250	0	1,250
				<b>Total</b>		<b>\$9,501</b>

**Status As Of:**

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	MORALES, JON
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

To further validate existing stream Minimum Flows and Levels (MFL) methodology consistent with peer review recommendation. A frequent focus of criticism of the MFL methodology applied by the District to rivers and estuaries is the use of a 15 percent habitat loss criterion as a threshold for assessing "significant harm." Quoting from the peer review of the Braden River MFL, the panel noted:

" The draft report describes the metrics used to define *the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area* as stated in Florida statutes. The authors note that significant harm was not defined in statute. The District chose to interpret significant harm as the loss of flows associated with fish passage and maximization of stream bottom habitat with the least amount of flow and quantifiable reductions in habitat. Overall, this is a reasonable approach from an ecological perspective and likely satisfies the intent of the statute. The authors state that, *[in] general, instream flow analysts consider a loss of more than 15% habitat, as compared to undisturbed or current conditions, to be a significant impact on that population or assemblage.* The authors further note, in our opinion, correctly, that *there are few `bright lines which can be relied upon to judge when `significant harm occurs. Rather loss of habitat in many cases occurs incrementally as flow decline, often without a clear inflection point or threshold.* Nevertheless, the 15% habitat loss criterion remains one of the least rigorous, most subjective aspects of the District's approach to setting MFLs. Justification for this threshold is based on common professional practice in interpreting the results of PHABSIM analyses (Gore at al. 2002), a review of relevant literature where reported percentage changes ranged from 10 to 33%, and on previous peer reviews that found the 15% threshold to be reasonable and prudent, especially given the absence of clear guidance in the statute or in the scientific literature on levels of change that would constitute significant harm (e.g., Shaw et al. 2005). The draft upper Braden report continues the District's practice of using a 15% change in habitat availability as the threshold for defining significant harm and now applies this threshold broadly to include both spatial and temporal loss of habitat or connectivity. The Panel again acknowledges that the use of this criterion is rational and pragmatic, but also recognizes that the specific value of 15% is subjective and has only modest validation or support from the primary literature. . . . More importantly, however, is the need for the District to commit the resources necessary to validate the presumption, that a 15% decrease in spatial or temporal habitat availability or a 15% increase in violations of the low-flow threshold, does not cause significant harm. "

This project represents the best means for validating the effect that a given flow reduction has on available habitat and the biota of a stream segment. District staff proposes to locate an acceptable stream segment in order to conduct controlled diversions from a defined stream segment in order to evaluate the impact that a range of flow and habitat reductions has on the biota (e.g., fishes, macroinvertebrates) and water resource values. It is envisioned that such a project will require a number of years to complete (possibly a decade), and an annual commitment of significant resources to accomplish.

**Benefits**

If implemented, this project will provide as definitive a test of the 15 percent habitat loss criterion as is practical under field conditions, and the results will be widely applicable to stream assessments and the development of environmental flows though out the country.

**Costs**

Total requested funding in FY2009 is \$155,500. The Basin Board's contribution is one half of the \$155,500 total, or \$77,750, with the remaining \$77,750 to be funded by the Governing Board.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	86,031	0	86,031
011 Alafia River Basin	0	0	0	9,375	0	9,375
013 Hillsborough River Basin	0	0	0	9,375	0	9,375
015 Coastal Rivers Basin	0	0	0	9,375	0	9,375
016 Pinellas-Anclote River Basin	0	0	0	9,375	0	9,375
019 Withlacoochee River Basin	0	0	0	9,375	0	9,375
020 Peace River Basin	0	0	0	9,375	0	9,375
021 Manasota Basin	0	0	0	9,375	0	9,375

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Total

\$151,656

**Status As Of:** February 29, 2008

This is a newly introduced project and staff is still in the planning stages regarding it's implementation. Current activities related to this project involves literature searches and draft outlines of project scope for discussion and refinement. Staff intends to come up with a more realistic project milestone list in time for the next PIMS update.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	MCGOOKEY, SCOTT
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This program provides funding assistance to new developments for the construction of reclaimed water distribution systems. This program was recommended by the District's Reclaimed Water Task Force (RWTF) and approved by the Governing Board for implementation at their February 2008 meeting. The program will provide an incentive to encourage developers and local governments to jointly design and construct reclaimed water distribution systems in new residential developments where other alternative water sources are not available to meet outdoor water needs in the development. The program will promote the construction of reclaimed water distribution systems during the construction of new developments and therefore reduce the need for the costly alternative of retrofitting reclaimed water distribution systems in established residential neighborhoods. The program will be available to new developments where reclaimed water will be available within five years, as indicated in a capital improvement plan.

**Benefits**

This program will promote the construction of reclaimed water distribution systems during the construction of new developments and therefore reduce the need for the costly alternative of retrofitting reclaimed water distribution systems in established residential neighborhoods. The estimated beneficial offset will be based on the number of residential units in the development and the funds available. Historical information shows an average benefit from using reclaimed water would be 300 gpd for each residential unit.

**Costs**

The Basin Board will be asked to annually budget funds for this program based on the projected demand in the basin. The estimated cost for installing the reclaimed water distribution system in a new development is \$1,200 per residential unit. The District will reimburse up to 50 percent of the actual cost and no more than \$600 per residential unit.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	500,075	0	500,075
013 Hillsborough River Basin	0	0	0	500,075	0	500,075
014 Northwest Hillsborough Basin	0	0	0	500,075	0	500,075
015 Coastal Rivers Basin	0	0	0	500,075	0	500,075
016 Pinellas-Anclote River Basin	0	0	0	500,075	0	500,075
019 Withlacoochee River Basin	0	0	0	500,075	0	500,075
020 Peace River Basin	0	0	0	200,075	0	200,075
021 Manasota Basin	0	0	0	503,830	0	503,830
				<b>Total</b>		<b>\$3,704,355</b>

**Status As Of:**



<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	DURELL, SYLVIA
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

#### Description

The Florida Water Star program is a certification program for new homes that provides incentives to builders and developers and encourages indoor and outdoor water efficiency as well as water quality benefits from best management practices in landscapes. The St. Johns River Water Management District (SJRWMD) originated the program to increase the knowledge level of the building industry about water-efficient building practices and to provide educational resources and incentives to make these practices common to the marketplace. Because builder/developer education has been ongoing within the SWFWMD for several years, a more advanced version of the outdoor water use rating criteria was developed to be more closely aligned to the University of Florida/Institute of Food and Agricultural Sciences' Florida Yards & Neighborhoods program's Florida-friendly landscaping principles and landscape best management practices. SWFWMD Research Projects Department staff also provided additions to the indoor water use criteria. The SWFWMD's advanced version will also include criteria that will reduce impacts to water quality. SJRWMD has agreed to support this higher tier of the certification checklist.

#### Benefits

By providing an incentive for builders and developers that will encourage them to incorporate best management practices, the District will realize water savings and water quality protection. The demand for water continues to increase with the expansion in land development, building construction and increased population. Recognizing that the majority of decisions concerning new landscapes are made by builders, developers, landscape and irrigation professionals, the Florida Water Star program provides a plan they can follow that, if successfully implemented, will positively impact water resources. Because of the program's high profile and the involvement of the water management districts, it is of high interest to the target audience. SJRWMD has pilot-tested the program with many early successes.

#### Costs

Proposed cost for the program for FY2009 (\$100,000) includes \$83,500 for a consultant to develop and manage the program and includes travel. Other budgeted funds (\$16,500) will be used for advertising costs to promote the program, memberships in trade and professional associations and fees associated with trade shows and other promotional opportunities. If approved, the District general fund will provide 50% of the funding (\$50,000) and the basins will share the other 50% as follows: Alafia (\$3,000), Hillsborough (\$7,000), Northwest Hillsborough (\$3,500), Coastal Rivers (\$4,000), Pinellas-Anclote (\$12,500), Withlacoochee (\$4,000), Peace (\$8,500) and Manasota (\$7,500). Budget lines below include staff time to manage the project. SJRWMD has pilot-tested all the components of the program making it easier and very cost-effective to begin conducting the program in SWFWMD. Marketing tools are available to SWFWMD for customization.

#### Additional Information

If funded, this program will support the Governor's Climate Change Initiative by promoting public protection, wise use and management of natural resources.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	52,399	0	52,399
011 Alafia River Basin	0	0	0	4,599	0	4,599
013 Hillsborough River Basin	0	0	0	8,599	0	8,599
014 Northwest Hillsborough Basin	0	0	0	5,099	0	5,099
015 Coastal Rivers Basin	0	0	0	5,599	0	5,599
016 Pinellas-Anclote River Basin	0	0	0	14,099	0	14,099
019 Withlacoochee River Basin	0	0	0	5,599	0	5,599
020 Peace River Basin	0	0	0	10,099	0	10,099
021 Manasota Basin	0	0	0	9,099	0	9,099
				<b>Total</b>		<b>\$115,191</b>

Status As Of:

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	N/A
<b>Project Manager</b>	DICKS, STEVE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a continuing initiative with the goal of providing Geographic Information System (GIS), aerial photo interpretation and photogrammetric mapping services to support Governing and Basin Board activities. GIS support includes the input, management, analysis and distribution of spatial data, the design and implementation of databases, software training and map production. Aerial photo interpretation includes land use/cover mapping in support of land acquisition, Surface Water Improvement and Management (SWIM), engineering, planning and environmental studies. Photogrammetric support includes the mapping of topographic information, collection of aerial photographs and satellite imagery and the production of digital orthophotographs. This program also supports the distribution of data to the public and routine maintenance activities. The annual budget includes administrative costs for salaries, travel, training, plotting and photographic supplies, maps and other data purchases, etc.

**Benefits**

Mapping and GIS has been a continuing activity since 1987 and is required to support the District's GIS, digital orthophoto, aerial mapping and other data collection, maintenance and management activities. The District's GIS database is an integral component of planning, engineering, regulatory, and land acquisition and management activities. In a rapidly growing area such as the District, continued maintenance and expansion is needed for the GIS database to meet new demands and is required to protect the historical investment in the system. The data are currently accessed by over 300 District staff using the ArcGIS software, are serves as the foundation for the Water Management Information System. Additionally, the data collected by the Mapping and GIS Section are viewable and downloadable from the District's Internet web site.

**Costs**

In addition to operating costs (plotter and office supplies, equipment maintenance, travel, data purchases, etc.) FY2008 funds include training services in support of GIS software upgrades (\$15,000 in Governing Board only), Land Parcel Ownership Database Update (\$60,000 shared between the Governing and Basin Boards), Roads Database Update (\$102,000 shared between the Governing and Basin Board). Funding for GIS data collection projects (Land Parcel Ownership Database Update and Roads Database Update) is shared between the Governing Board and the Basin Boards is allocated as follows: 1) The Governing Board pays for 50% of the total project cost, plus costs for the Green Swamp Basin. 2) The remainder of the costs are split between the Basin Boards using a formula that accounts for the area and population of each Basin. In addition to operating costs (plotter and office supplies, equipment maintenance, travel, data purchases, etc.) Proposed FY2009 funds include training services in support of GIS software upgrades (\$30,020 in Governing Board only), GIS programming services (\$228,800 in Governing Board only), Land Parcel Ownership Database Update (\$48,000), shared between the Governing and Basin Boards), Funding for the Land Parcel Ownership Database Update is shared between the Governing Board and the Basin Boards is allocated as follows: 1) The Governing Board pays for 50% of the total project cost, plus costs for the Green Swamp Basin. The remainder of the costs are split between the Basin Boards using a formula that accounts for the area and population of each Basin.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	6,881,016	(2,147,395)	936,651	879,524	0	6,549,796
011 Alafia River Basin	131,780	0	36,843	38,384	0	207,007
013 Hillsborough River Basin	147,217	0	39,008	38,859	0	225,084
014 Northwest Hillsborough Basin	121,714	0	35,493	37,434	0	194,641
015 Coastal Rivers Basin	129,585	0	37,129	38,384	0	205,098
016 Pinellas-Anclote River Basin	155,243	0	39,872	40,284	0	235,399
019 Withlacoochee River Basin	156,086	0	39,772	40,284	0	236,142
020 Peace River Basin	189,530	0	44,753	42,659	0	276,942
021 Manasota Basin	155,478	0	39,867	40,284	0	235,629
				<b>Total</b>		<b>\$8,365,738</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>The following are major activities for FY2008</b>			

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Transfer WMIS funds to IRD	10/30/07	10/15/07
Issue purchase order for GDT roads.	10/30/07	10/15/07
Issue work order for parcel update.	12/30/07	
Issue purchase order for roads enhancement.	3/30/08	

**Status As Of:** February 18, 2008

Mapping and GIS is an ongoing support activity and to date there have been no unforeseen expenditures or activities in FY2008. The section will continue supporting ad hoc requests for GIS data as well as conducting routine data maintenance activities. Data will continue to be accessible via the District's Internet site. Funds supporting the Water Management Information System project have been transferred to the Information Resources Department. A purchase order for the roads database purchased from Geographic Data Technologies was issued in October 2007 for the semi-annual update of these data. Negotiations for parcel updates are complete and a multi-year contract with the Florida State University for maintenance has been complete. Work under this contract will be issue via work orders on an annual basis.

**Project Type** Basin Initiatives  
**AOR(s)** Flood Protection, Natural Systems  
**Basin(s)** General Fund (District), Alafia River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)** N/A  
**Project Manager** HAGBERG, JEFFREY  
**Task Manager(s)** MARTIN, MIKE  
**Status** Ongoing

**Description**

Budget amount is for field maintenance activities associated with District water control structures, canals, and well sites. Activities include mowing, painting, tree trimming, and fence repair. Various types of well sites include groundwater sampling wells, data collection wells, and rainfall wells/gauges. Additional requirements at both water control structures and well sites include erosion control, slope stabilization, fencing, along with road, culvert and channel maintenance. These maintenance areas are District owned, but were not acquired using Save Our Rivers (SOR), P2000, and Forever Florida funds and are therefore funded by ad valorem. Currently there are 10 water control structures and 35 well sites to maintain. Field Operations in the Bartow Service Office also perform manual operations of all the water control structures in this basin and collect lake level data as needed.

**Benefits**

Keeping canals and water control structures clear and maintained are required to maintain the designed flow capacity. In addition, well sites are maintained for Hydrologic Data and Resource Data crews to collect data easily and in a safe manner. Repairs as necessary for erosion control and slope stabilization at canals and water control structures are accomplished with the use of materials such as rip-rap rock and filter fabric. In addition, maintenance requirements at well sites include materials for road stabilization and fencing repairs.

**Costs**

The FY2008 budget of includes salaries, central garage charges, rental equipment, parts, supplies, landfill disposal fees, and land maintenance materials (limerock, shell, rock, and fill); \$25,000 for engineering consulting services; \$10,000 for fencing repairs at various structures; and \$135,000 for the Lake Fannie berm repair. The FY2009 budget includes salaries, central garage charges, rental equipment, parts, supplies, landfill disposal fees, and land maintenance materials (limerock, shell, rock, and fill); \$75,000 additional funding for contracted construction for the Lake Fannie berm repair; \$25,000 for engineering consulting services; and \$10,000 for fencing repairs at various structures and canals.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	3,093,393	127,000	601,058	636,318	0	4,457,769
011 Alafia River Basin	254,002	0	73,381	65,356	0	392,739
013 Hillsborough River Basin	1,924,495	600,000	557,009	601,525	0	3,683,029
014 Northwest Hillsborough Basin	186,043	0	30,930	34,452	0	251,425
015 Coastal Rivers Basin	254,830	0	55,569	63,871	0	374,270
016 Pinellas-Anclote River Basin	528,206	0	142,067	135,307	0	805,580
019 Withlacoochee River Basin	642,539	107,000	164,100	164,915	0	1,078,554
020 Peace River Basin	794,931	250,000	335,029	267,795	0	1,647,755
021 Manasota Basin	178,375	0	37,683	36,628	0	252,686
				<b>Total</b>		<b>\$12,943,807</b>

**Status As Of:** February 29, 2008

Field Operations completed routine mowing and maintenance on water control structures and well sites as needed. Crews completed inspections at P-11 Water Control Structure Weed Barrier and sprayed aquatic weeds on Saddle Creek as necessary. Peace Creek Canal maintenance has occurred during this reporting period which included aquatic spraying and mechanical removal of vegetation when needed.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River

**Cooperator(s)**

**Project Manager** BUDE, TANASE

**Task Manager(s)****Status****Description**

The B670 budget provides funding for the annual inspection, operation and maintenance of District water control structures. The District owns, maintains and operates ten water control structures in the Peace River Basin, most controlling regional lake systems which are central to the Lakeland-Winter Haven area of Polk County; these also provide flow to the Peace River. Structures on the eastern chain-of-lakes system in Winter Haven are maintained and operated by agreement with the Lake Region Lakes Management District (LRLMD). The District retains ownership of the four structures, P-5, P-6, P-7 and P-8, and reimburses the LRLMD for O&M costs related to these structures. These four facilities are primarily water conservation structures, but their operation is critical for flood management and mitigation. The Peace Creek Canal, (which is currently under the auspices of the Peace Creek Canal Commission), flows from Lake Hamilton and Structure P-8 near Dundee, south and east for 21 miles across broad flat flood plains. Saddle Creek Canal flows south from Lake Hancock and Structure P-11. These two systems converge near Bartow and form the headwaters of the Peace River. During high rainfall events, waters typically fill the canals and floodplains and discharge very slowly to the south, often creating localized flooding. From the confluence of these systems, the river flows approximately 87 miles into Charlotte Harbor in Charlotte County. Proper operation and maintenance of these Upper Peace Basin structures is critical for water conservation, aquifer recharge, floodplain management and downstream water supplies. Structure G-90 on Lake June-in-Winter in Highlands County is another important Peace Basin structure. The structure discharges flows from Lake Placid and Lake June into Jack Creek and Josephine Creek. Discharge capabilities are limited due to the potential for flooding downstream developments. An Emergency Action Plan (EAP) has been developed for the structure. The document contains detailed information for notification procedures in the event of a developing emergency situation and should be reviewed, updated and tested on a yearly basis.

**Benefits**

Structure Operations involves three areas of responsibility: inspections, maintenance (including construction and repair), and operation. A comprehensive structural/operational inspection program of water control structures, both above and below water, is required to discover deficiencies related to human safety (both public and District personnel), operational viability, and structural integrity of the structures. The objectives and benefits of the District's inspection program, and Structure Operations activities in general, are: (1) early discovery of structural/operational deficiencies and maintenance problems deficiencies, thereby forestalling costly repairs; (2) to find and mitigate safety hazards to District personnel and the public; (3) to prevent/preempt structure failure with thorough, regular inspections, thereby reducing the potential for loss of life and property; and, (4) to comply with applicable state/federal regulations and guidelines for inspection, operation and maintenance of water control structures. The program has one full-time inspector, who performs routine monthly inspections and oversees the reporting/work-order processes. The District also utilizes engineering consultants for inspection services on the more critical structures on a two-year rotational basis. Structure Operations section work orders are generated from inspection reports and the section's Five-Year Plan. Structure Maintenance activities range from routine servicing and replacement of equipment, to repair and construction of water control structures, to perform gate operations under established guidelines in response to developing weather events. The Structure Operations section is additionally responsible for monitoring water levels and rainfall totals across the District, and directing structure gate operations which are accomplished either manually or by remote control.

**Costs**

The FY2008 budget of \$367,950 includes \$180,000 to repair or replace the four 72" corrugated metal pipes at P-8 structure . . . at P-8, \$28,000, is budgeted to replace the four gate lift devices which are in extremely poor condition. \$35,000 is budgeted to LRLMD for the operation and routine maintenance of structures P-5, P-6, P-7, and P-8. Additionally, \$75,000 is provided for emergency/miscellaneous engineering services, inspections, and the update to the G-90 Emergency Action Plan. \$4,000 is budgeted for the installation of a traffic guardrail system at the Structure G-90. Approximately \$54,000 is budgeted for Parts & Supplies, Rental of Equipment, Salaries, Central Garage, etc. related to ongoing routine maintenance and operations. The proposed FY2009 budget includes for non-recurring expenses, \$40,000 for consultant/contractual services related to Emergency Action Plan updating and emergency miscellaneous consultant services, \$35,000 for remotely Control of structure Lake Parker and \$35,000 for operation maintenance of structures P-5,P-6,P-7, P8, by LaLake Region Lakes Management District. The recurring budget of approximately \$36,000 is budgeted for Parts & Supplies, rental equipment, Central Garage, etc. related to ongoing routine maintenance and operations.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	984,892	(16,375)	476,740	402,162	0	1,847,419
011 Alafia River Basin	1,021,906	0	129,885	176,030	0	1,327,821
013 Hillsborough River Basin	5,229,997	(600,000)	672,093	628,058	0	5,930,148
014 Northwest Hillsborough Basin	1,531,277	(6,000)	187,673	409,991	0	2,122,941
015 Coastal Rivers Basin	77,765	0	0	0	0	77,765
016 Pinellas-Anclote River Basin	3,371,795	(2,166,986)	173,474	230,179	0	1,608,462
019 Withlacoochee River Basin	1,916,941	(107,000)	600,448	349,509	0	2,759,898
020 Peace River Basin	1,611,433	(250,000)	392,181	211,798	0	1,965,412
				<b>Total</b>		<b>\$17,639,866</b>

**Status As Of:** March 12, 2008

Lake Region Lakes Management District (LRLMD) continues to operate and perform routine maintenance to structures P5, P6, P7 and P8. The Southwest Florida Water Management District continues with the routine inspections and maintenance to the other structures in the basin. In addition to routine repairs, construction activities have begun for the P-8 pipe culvert replacement project.

**Aquatic Plant Management - Peace River Basin**

**Project Type** Basin Initiatives  
**AOR(s)** Flood Protection  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Pinellas-Anclote River, Withlacoochee River, Peace River  
**Cooperator(s)**  
**Project Manager** NELSON, BRIAN  
**Task Manager(s)**  
**Status**

**Description**  
 This project deals with the control of aquatic and ditchbank vegetation within the Peace Basin Canals and District maintained water control structures. This is an ongoing maintenance project.

**Benefits**  
 Excessive amounts of vegetation have the potential to reduce water flow capacity, hinder operation of the water control structures, hinder recreational use and navigation and cause the canals to become an eyesore.

**Costs**  
 The budget for aquatic plant management operations within the Peace River Basin includes salaries/wages, herbicides and central garage charges.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	34,925	0	4,175	4,273	0	43,373
013 Hillsborough River Basin	490,898	0	77,283	78,302	0	646,483
014 Northwest Hillsborough Basin	250,084	0	36,622	37,004	0	323,710
016 Pinellas-Anclote River Basin	51,803	0	3,828	3,968	0	59,599
019 Withlacoochee River Basin	286,132	0	41,700	42,833	0	370,665
020 Peace River Basin	127,364	0	17,531	17,911	0	162,806
				<b>Total</b>		<b>\$1,606,636</b>

**Status As Of:** February 26, 2008  
 No significant work was completed during this period.



<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	PUTNAM, BETH
<b>Task Manager(s)</b>	TORRUSIO, MARY, MAKOID, MARY ALICE
<b>Status</b>	Ongoing

**Description**

This Basin Initiative provides funding for a variety of water resources education programs to county school districts, private schools, homeschool groups and non-formal educators. Program components consist of teacher training workshops, mini-grants for classroom projects, field trip program support, Envirothon support and educational resources for students and educators. Teacher training efforts ensure that teachers understand and are able to teach students about relevant Basin issues. Training sessions provide background information, materials, experiences and opportunities to explore topics of importance in the basin. Teacher workshops are conducted by District staff and/or educators who have been trained by District staff. Participants evaluate the effectiveness of teacher workshops, providing another method of improving performance. Workshops include information about the District and the Basins, as well as basic hydrology and water management issues. The mini-grant program provides funds directly to teachers to implement classroom water education projects centered around current Basin issues. Classroom projects are designed to increase knowledge and understanding of the impacts of human activities on the water resources in their Basin and to effect behavior change in regard to water resources conservation and protection. Mini-grant projects must fall into one of six categories: watersheds, water conservation and supply, water quality, flood protection/drought education, alternative water sources or natural systems. Projects must also support the District Water Management Plan and align with the appropriate Comprehensive Watershed Management Plan. Measurable outcomes include documentation and evaluation of individual mini-grants including pre- and post-assessment scores, sample student work generated from the project, video or photographic documentation, and final reports by teachers and representative students. Mini-grant recipients are required to participate in Annual Sharing Days, which provide an opportunity for mini-grant participants to showcase their projects and provide model programs for other teachers who would like to implement water projects in their classrooms. The District provides a variety of educational resources to educators and students including student newsletters with accompanying teacher's guides, water-testing equipment, surface and groundwater models and others. The District also provides kits and boxes specific to water conservation (the grades K-3 Water Conservation Kit) and watersheds (the grades K-3 and the grades 4-8 Watershed Education Boxes) that teach students about the importance of water conservation and healthy watersheds, while meeting Sunshine State Standards and preparing students for the Florida Comprehensive Assessment Test. Each of these resources includes a big book, several smaller books, a teacher's guide and other tools and materials used for role-playing and demonstrations. Each county has received kits and boxes for circulation, and these materials are available through the mini-grant program.

**Benefits**

The Youth Water Resources Education project forwards the District's mission by providing students, teachers and families classroom materials and opportunities for hands-on learning experiences that equip them to make informed decisions about water resources.

**Costs**

The FY2009 budget for youth education reflects a total \$15,050 increase over the the FY2008 budget. While there have been no increases in Pinellas-Anclote River Basin (\$256,250), Peace River Basin (\$195,550), Manasota Basin (\$87,250), slight increases in the following basins are to address increasing demand for mini-grants: Alafia River (\$60,000 as compared to \$58,900 in FY2007), Hillsborough River (\$135,000 as compared to \$129,600 in FY2007), Northwest Hillsborough (\$63,000 as compared to \$60,050), and both Coastal Rivers and Withlacoochee River (\$62,000 as compared to \$59,200). This highly effective program directly reached 835,656 students and teachers in FY2007 through programs, publications and mini-grants. Because most, if not all, of those involved in Youth Education programs also receive publications, a conservative estimate puts District outreach at 55 percent of the students in the District, at a cost of \$1.18 per person. Budget lines below include costs for staff to manage the projects.

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

010 General Fund (Districtwide)	136,083	0	69,452	63,557	0	269,092
011 Alafia River Basin	356,259	0	70,519	71,665	0	498,443
013 Hillsborough River Basin	768,211	0	143,046	141,720	0	1,052,977
014 Northwest Hillsborough Basin	352,292	0	68,390	68,848	0	489,530
015 Coastal Rivers Basin	356,783	0	69,140	69,801	0	495,724
016 Pinellas-Anclote River Basin	1,845,230	0	270,481	271,095	0	2,386,806
019 Withlacoochee River Basin	352,048	0	68,403	68,891	0	489,342
020 Peace River Basin	877,756	0	209,556	210,079	0	1,297,391
021 Manasota Basin	472,306	0	100,100	101,131	0	673,537
					<b>Total</b>	<b>\$7,652,842</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Program Commence for School Board agreements	8/1/07		8/1/07
Mini-grants selected	10/15/07		10/15/07
Mini-grant projects complete	5/30/08		
School Board agreement program complete	7/30/08		
School Board agreements executed	8/1/08		
Final reports submitted to District	8/30/08		

**Status As Of:** March 03, 2008

Teacher Training: Four Ground Water Institutes for Teachers have been planned for the 2007-2008 school year. The goal of this program is to increase water resources awareness among teachers and students within regional watersheds so that they are empowered to play an active role in protecting these resources. This two-and-a-half-day teacher training targets middle and high school teachers and is funded through the FY2008 Basin Initiative for Youth Education (P259). Youth Education staff is coordinating the trainings with American Ground Water Trust (AGWT) and U.S. Geological Survey (USGS). The Institutes are being promoted to all public and private schools throughout the District. The four 2008 Ground Water Institutes are planned for April 17-19 in Crystal River at the Marine Science Station, May 15-17 at Nature's Classroom in Thonotosassa, June 12-14 at the Girl Scouts of Gulf coast FL in Sarasota and June 19-21 at the Turner Agri-Center in Arcadia. The Crystal River Groundwater Institute has received nine registrations so far. A Project WET workshop is scheduled for Hillsborough County teachers, April 1-2 at Lowry Elementary. Publications: In FY2007 more than 620,000 pieces of Youth Education materials were distributed to students and teachers throughout the District. New materials are continually being developed and existing materials are updated frequently to ensure they contain accurate information. Most recently, Youth Education staff completed the WaterDrops Activity Packet, Sprinkles Water Sources and the grades K-3 Watershed Resource Box. Twenty-four boxes have been distributed to mini-grant recipients. Sumter County is placing one box at each elementary school within its district. Mini-Grants: More than \$322,000 was awarded for the 2007-2008 Splash! Mini-grant cycle, impacting 94,000 students through 137 hands-on water resources projects. Legacy: Youth Education staff and District Land Department staff are working together to expand the Legacy Program to include greater diversity among users of District-owned lands. Legacy, a hands-on program that explores the principles of land management, provides youth an opportunity to serve as land stewards on District or public lands. New Legacy Programs are being planned for Weedon Island Preserve, in partnership with Pinellas County. The scope of work for the Legacy coordinator was finalized and a set of lesson plans and activities about stormwater is being developed. The activities for elementary, middle and high school students are designed for projects that can be done on school sites. Watershed Education: District staff is working with Land Resources staff to design a set of field guides featuring species commonly found at the Green Swamp. These field guides will be used for teacher training and other outreach. On March 8, staff had a booth at the Pier Aquarium's Annual Spa Beach Splash and Water Education Family Day in St. Petersburg. Approximately 75 area residents attended to learn more about watersheds and water conservation practices. Evaluation: The Youth Education section is beginning a three-year program evaluation of the impact and effectiveness of Youth Education publications, mini-grants, field trip programs, teacher training workshops and various interactive District displays at museums and environmental education centers. The evaluation will examine specific behaviors and attitudes about water resources and will help the District to determine the most effective ways of communicating with and educating youth and teachers. The District has contracted with an outside program evaluation expert and the study will conclude in 2010. The first report was received March 7.

<b>Project Type</b>	Basin Initiatives
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	PUTNAM, BETH
<b>Task Manager(s)</b>	ROE, MELISSA, ANTOINE, KENDRA, MORGAN, DORIAN, DURELL, SYLVIA
<b>Status</b>	Ongoing

**Description**

This Basin Initiative provides funding for a variety of projects designed to inform and educate the public about the importance of managing and protecting the water resources. All programs align directly with one or more of the District's areas of responsibilities and with the District's Water Management Plan and Basin priorities. The District's broad range of public education programs and materials reflect the variety of backgrounds and interests of the District's residents and visitors. Some of the projects are implemented Districtwide with support from all the basins, while some are basin specific and supported only by the basin(s) who will benefit from the project(s). Districtwide programs include media messaging, surveys and other evaluation measures, translation services for Spanish materials and Florida-friendly landscaping education. Basin-specific programs reflect differing priorities as well as unique opportunities. Examples are Community Education Grants, watershed education programs, exhibits and signage, virtual watershed tours, special events, partnerships with local environmental education centers and nonprofits and others.

**Benefits**

The programs listed benefit the District through an increase in awareness and understanding of water management and water resource issues, as well as an increase in behaviors more likely to result in conservation and protection of the water resources and watersheds.

**Costs**

Funding for public education is budgeted within the basins for FY2009 as follows: Alafia River - \$59,733; Hillsborough River - \$174,851; Northwest Hillsborough - \$68,164; Coastal Rivers - \$67,533; Pinellas-Anclote River - \$283,842; Withlacoochee River - \$92,502; Peace River - \$158,800; Manasota - \$112,715. In addition to this total of \$1,018,140, if approved, the Governing Board will contribute \$318,600 to support public education within the District in FY2009. Funds support a variety of educational and outreach efforts Districtwide such as media messaging, community education grants, special events, workshops, translation services, Florida-friendly landscape education support, materials production and distribution, and educational program research and evaluation. Basin-specific programs include watershed education, Home Owner Association outreach and the Pilot Irrigation Program. Budget lines below include costs for staff to manage the projects. Based on the total number of people reached through the public education materials and programs in FY2007 (2,000,000+), the cost for FY2009 is projected to be approximately \$0.77 per person. This cost/benefit ratio does not include those reached via media messaging, which is measured in impressions, and is projected to cost the District less than six hundredths of a cent per impression. In FY2009, only three basins reflect increases from FY2008 budgets. Hillsborough River's increase of \$12,777 reflects an increase in the number of special events the District participates in within the basin and a pilot project planned to assess the effectiveness of storm drain marking projects in litter reduction. The \$15,000 increase in the Withlacoochee River basin is in response to Basin Board interest in start-up funding for a Florida Yards & Neighborhoods program in Levy County. Coastal Rivers' \$5,019 increase is to provide support for watershed education efforts within the basin.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	2,193,591	30,000	410,006	399,170	0	3,032,767
011 Alafia River Basin	394,945	6,600	74,408	71,944	0	547,897
013 Hillsborough River Basin	992,266	16,800	179,413	179,780	0	1,368,259
014 Northwest Hillsborough Basin	426,717	8,400	80,882	82,423	0	598,422
015 Coastal Rivers Basin	404,952	11,989	72,832	78,263	0	568,036
016 Pinellas-Anclote River Basin	2,094,307	28,200	320,430	309,077	0	2,752,014
019 Withlacoochee River Basin	546,461	0	90,549	103,188	0	740,198
020 Peace River Basin	850,781	0	181,635	177,193	0	1,209,609
021 Manasota Basin	638,407	0	138,955	117,932	0	895,294
				<b>Total</b>		<b>\$11,712,496</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>FY2007 Irrigation Pilot Project</b>			

Take test meter readings of pilot neighborhoods	9/30/07	10/24/07
Finish focus group research	9/30/07	9/30/07
Finish survey research	2/28/08	4/1/08
Develop pilot project plans	5/31/08	
Implement pilot project in designated neighborhoods	7/1/08	
Take meter read #1	7/31/08	
Take meter read #2	8/31/08	
Take meter read # 3	9/30/08	
Evaluate pilot program based on meter readings	10/15/08	
Implement phase two with needed revisions	1/1/09	
Take meter read #1	1/31/09	
Take meter read #2	2/28/09	
Pilot end date	3/31/09	

**FY2008 Community Education Grant Activities**

Basin Boards informed of grant allocations	2/15/07	2/15/07
Application deadline	8/24/07	8/24/07
Announcement of allocations to CE Grant recipients	1/11/08	1/11/08
Grant recipient required workshops	2/28/08	2/28/08
End of projects' work period	6/30/08	
Final reports due	7/25/08	
Requests for reimbursements	8/20/08	

**FY2008 Media Messaging**

Fall Media Buy	10/1/07	10/1/07
Spring Media Buy	3/1/08	3/1/08
Dry Season Media Buy (contingency)	5/1/08	

**Status As Of:** February 26, 2008

Media Messaging: The "Reduce Your Use" media campaign has begun with the first radio ads running in February followed by the addition of TV, print, and billboards in March and April. The ads feature messages on the drought, efficient irrigation and Florida-Friendly Landscaping. Spanish ads also include the drought and efficient irrigation. The television ads will feature efficient irrigation, resource protection, and Florida-Friendly Landscaping. Print ads feature the Reduce Your Use tagline and encourage homeowners to check for leaks. The District's billboards will also contain the Reduce Your Use slogan and refer viewers to the District's website. Staff contacted local governments and utilities to offer the use of District ads in their media buys. In addition, government access television stations were contacted and copies of the District's TV ads are being sent to each station that agreed to run them during March and April. Florida-Friendly Landscape Education: Staff is working through the Landscape Education Coordination Initiative (LECI) with the two certifying organizations (FNGLA and LMA) and the UF to ensure incorporation of Florida-friendly landscaping principles into landscape maintenance education programs. Staff will help FNGLA and LMA promote the certification programs to landscape maintenance companies and has created logo designs that incorporate the term "Florida-Friendly Yard" into the associations' logos. FNGLA's first Certified Landscape Maintenance Technician Exam will be held March 29 at the Pinellas Technical Education Center in St. Petersburg. A meeting to discuss this District's participation in SJRWMD's Florida Water Star program was held February 19. In the last quarter of FY2007, 38 site visits were conducted and 17 presentations were made to 374 managers and members of community and homeowner associations (HOA) in Pinellas, Hillsborough, Pasco and Polk counties. Community Education Grants: Staff has conducted implementation workshops for the grant recipients and projects will commence March 1, 2008. Watershed Education: Save the Homosassa River Alliance (HRA) is conducting an education program to increase awareness and foster stewardship and protection of the Homosassa River by installing a skimmer to absorb hydrocarbons and improve water quality. The HRA is also partnering with marinas to place educational placards and trash containers on rental boats on the Homosassa. In the Pinellas-Anclote River Basin, staff is working with the Pier Aquarium to educate four HOAs about how to reduce water quality impacts resulting from stormwater runoff. Behavior Change Pilots : The Irrigation pilot program will (1) ask residents in selected neighborhoods in Sumter, Polk and Charlotte counties to take control of their irrigation systems during July, August and September, when rainfall can allow residents to turn off their systems for extended periods of time, and (2) to water only every other week during the months of January and February. To gain information for program design, the audio recordings from focus groups conducted in each of the pilot areas have been used to guide the creation of a telephone survey. Survey data collection is scheduled to begin in March 2008. Staff is continuing to gather water use reports from participating utilities and creating historical water data reports that will be used to measure changes in water use throughout the course of the project. Communications staff is working with the Land Resources Department to create a comprehensive communications plan to promote the value of ecosystem protection through recreation on conservation lands using community-based social marketing tools. As the first step in identifying District residents' knowledge level and opinions about District lands, the Communications project manager worked closely with the Land Resources Department and a research consultant to create and execute a land use public opinion survey. The findings, which were reported to the July 12 joint

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meeting of the Basin Board Education and Land Resources committees, will be used to create strategic recreation plans, tailored pilot projects and defined levels of service for recreational amenities. Staff from the Communications and Land Resources departments have met several times to develop and refine a communications plan of general goals, strategies and tactics. Six sites have been tentatively chosen to receive tailored communication and community-based social marketing plans: Edward W. Chance Reserve Gilley Creek Tract, Green Swamp East Tract, Flatwoods Park at Lower Hillsborough Wilderness Park, Myakka River Deer Prairie Creek, Starkey Wilderness Preserve, and Starkey Wilderness Preserve Serenova Tract. As the first step in creating community-based social marketing programs, a Districtwide Barrier and Benefit survey will be conducted to determine the motivators for specific behaviors related to watershed protection and water conservation. A request for quotes went out in October; however, due to a low response rate, the RFQ was sent out again in December. Proposals were reviewed by a panel and a vendor has been selected. The project will begin in March 2008.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	General Fund (District), Peace River, Manasota
<b>Cooperator(s)</b>	Peace River/Manasota Regional Water Supply Auth.
<b>Project Manager</b>	LISZEWSKI, AUDRIE
<b>Task Manager(s)</b>	ARMSTRONG, BRIAN
<b>Status</b>	Ongoing

**Description**

The Peace River Regional Reservoir Expansion is an alternative water supply project that will expand the surface water storage capacity of the Peace River/Manasota Regional Water Supply Authority's water supply facilities by constructing a six (6) billion gallon reservoir. The total cost to construct the reservoir is estimated at \$77 million.

**Benefits**

In combination with project F033, which will expand the Authority's water treatment plant capacity from 24 to 48 mgd, this project will enable the Authority to supply up to their permitted amount of 32.7 mgd on an annual average basis.

**Costs**

The total estimated project cost is \$77,050,000. The District's anticipated total funding contribution is \$20,596,987. This cost may be reduced depending on future funding received from the State, as described in Senate Bill 444. To date, \$9,576,920 has been budgeted for the project from SB 444. It is anticipated that, of the District's projected total funding contribution of \$20,596,987, the District Governing Board will contribute \$10,300,034, the Manasota Basin Board will contribute \$7,475,450, and the Peace River Basin Board will contribute \$2,821,503.

**Additional Information**

Because of the uncertainty associated with permitting new ASR wells due to mobilization of arsenic in the aquifer, the Authority proposed removing the ASR component of the Peace River Facility Expansion Project (F033). As a result, the Authority needed additional storage capacity and requested amending this project to increase reservoir capacity from two (2) to six (6) billion gallons. In October 2005, the Peace River and Manasota Basin Boards and the Governing Board approved increasing the size of the reservoir and deleting the ASR wells from the Facility Expansion project. The Peace River facility is located in DeSoto County and provides potable water to residents of Charlotte, DeSoto and Sarasota Counties. As configured in 2005, the Facility includes a surface water withdrawal from the Peace River, a 625 million gallon reservoir (85 acres), a 24 mgd surface water treatment plant, and 21 Aquifer Storage and Recovery (ASR) wells capable of storing up to 1 mgd each. Because the Peace River experiences significant periods of low flow, it is important for the Authority to have sufficient capacity to store excess flows during wet periods for use during dry periods when river flows are insufficient to meet demands. Withdrawals from the Peace River are prohibited when flows, as measured at the Arcadia gage, are less than 84 mgd (130 cubic feet per second (cfs)). The Authority's customers have identified an additional demand of 15 mgd beyond the 18 mgd that is currently provided by the Authority's Facility, for a total 2015 demand of 33 mgd. The combination of this project and the Peace River Facility Expansion (F033) will allow the Authority to deliver a permitted capacity of 32.7 mgd to its customers at a total cost of \$167,193,200. The project is a critical component of the District's SWUCA water supply plan by providing users in the coastal areas, where there is the greatest threat of saltwater intrusion, with supplies other than ground water. Of the total project cost (\$77 million), approximately 90 percent (\$69.5 million) is expected to be needed for construction, and the remainder for design, permitting, and administration.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	6,118,183	1,852,024	2,355,877	4,231,542	0	14,557,626
020 Peace River Basin	1,691,280	500,046	630,176	1,143,582	0	3,965,084
021 Manasota Basin	4,419,663	1,351,983	1,703,811	3,087,961	0	10,563,418
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	5,631,698	1,464,277	2,480,945	0	0	9,576,920
<b>Project Funds Not Budgeted by the District</b>						
PR/MRWSA	21,257,161		3,194,109	4,226,926	0	28,678,196
				<b>Total</b>		<b>\$67,341,244</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Design Commence	2/1/03		2/5/03
Draft Agreement to Contract Administration	4/1/03		
Draft Agreement returned from Contract Administration	5/1/03		6/6/07
Peace River Basin Board Approval of Agreement	6/2/03		6/13/03

Governing Board Approval of Agreement	6/2/03	6/24/03
Manasota Basin Board Approval of Agreement	6/2/03	6/18/03
Contract Executed	8/1/03	12/18/03
Notice to Proceed	8/1/03	12/18/03
Basis of Design Report	9/30/05	11/9/05
Execute Amended Agreement	12/31/05	3/28/06
Permitting	9/30/06	5/7/07
Detailed Plans and Specifications	9/30/06	9/30/06
Bidding	11/15/06	6/8/07
Award Construction Contract	11/30/06	7/25/07
50% Construction Completion	11/30/07	
Completion of Construction	10/31/08	
Contract Termination	10/1/16	

**Status As Of:** March 06, 2008

Final design for the Regional Reservoir Expansion has been completed and the Environmental Resource Permit (ERP) was issued. In June, the Authority received three bids for the reservoir expansion. The low bid of \$64,910,500 was 21 percent higher than the engineer's estimate. The Governing Board agreed to fund an additional \$3,703,704 in December as a result of the increased costs. The project Kick-off Meeting was held in late September. Land Resources and Authority staff have met several times to address the issues surrounding the Authority's reservoir expansion project on the RV Griffin Reserve. The Authority defined areas and land interests required to complete expansion of its reservoir and to mitigate for wetland impacts. The Governing Board granted various easements to PR/MRWSA in November after receiving survey information and draft easements. Other issues that the staff is coordinating are public access, land management issues, and reconfiguration of an existing cattle lease. The Authority Board approved the reservoir construction contract at its July 25 meeting and issued a limited notice to proceed to the Contractor to begin initial work and permitting. The contractor and engineer are developing pre-construction submittals. In addition, the Army Corps of Engineers issued the companion permit to the ERP. Consensus was reached on all outstanding issues among District and Authority staff to convey the necessary interests. The District will convey a perpetual exclusive easement and a perpetual nonexclusive easement to the Authority. The District will also convey a conservation easement to the DEP over the mitigation area to satisfy permit requirements established by DEP. District and Authority staff have also agreed on public use issues associated with the Reservoir Expansion project. DEP approved the commencement of construction in December. In preparation for the construction, District and Authority staff relocated all recreational amenities to accommodate the project. The reservoir construction is currently underway. All of the 66-inch raw water steel pipe was delivered to the site with the purpose of connecting the facilities to the reservoir. On-going activities include Gopher Tortoise relocation, the construction of the Bentonite Slurry wall, to prevent horizontal seepage along the lifts, and the deposit and compaction of adjacent soil lifts. The first lifts on the east lift of the embankment have reached a height of four feet out of thirty-five feet.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	General Fund (District), Peace River, Manasota
<b>Cooperator(s)</b>	Peace River/Manasota Regional Water Supply Auth.
<b>Project Manager</b>	LISZEWSKI, AUDRIE
<b>Task Manager(s)</b>	ARMSTRONG, BRIAN
<b>Status</b>	Ongoing

**Description**

The Peace River Facility Expansion is an alternative water supply project that involves expansion of the Peace River Manasota Regional Water Supply Authority's water treatment facilities. Whereas, F032 is for the design and construction of a six billion gallon reservoir, this project is for the design and construction associated with expanding the water treatment plant capacity from 24 to 48 mgd. Additionally, this project will construct five miles of a 20-inch pipeline from the Authority's facilities to extended areas of DeSoto County to supply up to 5.5 mgd to the county.

**Benefits**

In combination with F032, this project will enable the Authority to supply up to their permitted quantity of 32.7 mgd on an annual average basis.

**Costs**

The total estimated project cost is \$90,143,200. The District's anticipated total funding contribution for the project including SB444 funding is \$33,656,838. To date, \$15,918,292 has been allocated to the project from SB 444. It is anticipated that, of the District's projected total funding contribution of \$17,738,542, the District Governing Board will contribute \$8,869,271, the Manasota Basin Board will contribute \$6,474,568, and the Peace River Basin Board will contribute \$2,394,703.

**Additional Information**

The project originally included the construction of 24 Aquifer Storage and Recovery (ASR) wells for storage of excess river flows. However, because of the uncertainty involved in permitting ASR wells due to mobilization of arsenic in the aquifer, the Authority has deferred the ASR component of this project. The Authority provides public drinking water to residents of Charlotte, DeSoto and Sarasota counties. As configured in 2005, the facility includes a surface water withdrawal from the Peace River, a 625 million gallon reservoir (85 acres), a 24 mgd surface water treatment plant, and 21 ASR wells capable of storing up to one (1) mgd each. Because of the Peace River's seasonal flow pattern, characterized by significant periods of low flow that are insufficient for providing potable supply, the Peace River facility must possess the necessary capacity to capture, treat, and store high flows from the river when they occur so that sufficient reserves are available to meet customer demand during low flow periods. The Authority's water use permit allows them to supply up to 32.7 mgd on an annual average basis from the Peace River and prohibits withdrawals when river flow, as measured at the Arcadia gage, is less than 130 cubic feet per second (cfs). The reservoir and ASR wells provide water during the dry season when withdrawal from the river is prohibited to assure the environmental health of the downstream estuary. This project also includes the design and construction of a potable water transmission pipeline known as the DeSoto County Water Transmission Main, which extends from the Peace River Facility south across the Peace River, then south along Hwy 17, to the Wal-Mart Distribution Facility. This supply line is to serve potable water customers that DeSoto County Utilities has identified. The combination of this project and the Peace River Reservoir Expansion (F032) will result in approximately 24 mgd of additional supply at a total cost of \$167,193,200. The project is a critical component of the District's SWUCA water supply plan by providing users in the coastal areas, where there is the greatest threat of saltwater intrusion, with supplies other than ground water. Of the total project cost (\$90.1 million), approximately \$84.7 million is expected to be needed for construction, and the remainder for design, permitting, and administration.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	9,870,792	163	19,701	5,753,822	0	15,644,478
020 Peace River Basin	2,500,172	44	0	1,553,491	0	4,053,707
021 Manasota Basin	6,613,473	121	0	4,200,147	0	10,813,741
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	12,161,596	0	3,756,693	0	0	15,918,289
<b>Project Funds Not Budgeted by the District</b>						
EPA Grant	9,000,000		0	0	0	9,000,000
PR/MRWSA	35,499,860		0	4,196,852	0	39,696,712
				<b>Total</b>		<b>\$95,126,927</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
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Transmission Line Construction Complete		
Transmission Line Design Commence	9/1/02	10/1/03
Consultant Selection	1/1/03	1/1/03
Transmission Line Design Complete	3/1/03	5/1/03
Draft Agreement to Contract Administration	4/1/03	6/9/03
Draft Agreement returned from Contract Administration	5/1/03	
Transmission Line Construction Commence	6/1/03	7/30/04
Peace River Basin Board Approval of Agreement	6/2/03	6/13/03
Governing Board Approval of Agreement	6/2/03	6/24/03
Manasota Basin Board Approval of Agreement	6/2/03	6/18/03
Notice to Proceed	8/1/03	10/15/04
Contract Executed	8/1/03	10/13/04
Transmission Line Construction Complete	3/1/04	9/7/05
Construction Complete	10/31/06	
Bidding	11/15/06	2/8/07
Award Construction Contract	11/30/06	3/19/07
Plans and Specifications	9/30/07	11/30/06
50% Completion	11/30/07	
Contract Closeout	10/1/16	

**Status As Of:** March 07, 2008

In February, the Authority received one bid for Contract 2 for major components of the Facility Expansion. The bid was approximately \$17 million over the original engineer's estimate of probable cost. Since receiving the bid, Authority staff and the contractor have negotiated a revised project cost \$14 million below the original bid price. The Authority's Board approved the revised cost and authorized staff to enter into an agreement with the contractor in April. Even with the newly negotiated bid price, the overall revised project cost remains \$19 million over the original project cost in the contract between the District and the Authority. Construction of the Facility Expansion Project will occur through three separate contracts. The first contract, completed in May, focused on site preparation. The second contract is for construction of a maintenance building, dewatering facility, filters, storage tanks, thickeners, and chemical feed and disinfection stations. The third contract is for construction of an operations center. Construction continues on the Facility Expansion. Recent progress includes completion of concrete work for the powdered activated carbon (PAC) storage tanks, recycle pump station, sludge thickener #2, and storm water pond #2. In addition, wall forming was completed for the PAC contact structure. Over 3,000 feet of ductile iron pipe has been installed connecting the reservoir and the reservoir pump station. The jack in bore for the ductile iron pipe under Kings Highway was accomplished mid-January. Minor components remain outstanding on the installation of this ductile iron pipe. All the restoration required in the contractual agreement between the District and the Authority was completed and received final certification. This has resulted in the restoration of over 1,000 acres of wetlands. Newly completed construction activities include the installation of recycle pump station pumps and the pouring of foundation slabs for all structures except the Maintenance Building. Other ongoing construction activities include concrete work for the walls of the new filter building, construction of the masonry walls for both chemical buildings and the Powdered Carbon Storage Room, and leak testing of solids contact units. In addition, the first chemical storage tanks were delivered to the site.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	DOWNING, HARRY
<b>Task Manager(s)</b>	LETASI, SCOTT
<b>Status</b>	Ongoing

**Description**

The Lake Hancock Lake Level Modification Project is part of the proposed strategy for achieving minimum flows and levels recovery for the upper Peace River established by the District. The goal of the Lake Level Modification Project is to store water by raising the control elevation of the existing outflow structure on Lake Hancock and to slowly release the water during the dry season to help meet the minimum flow requirements in the upper Peace River between Bartow and Zolfo Springs. Historically, Lake Hancock fluctuated more than a foot higher than it has during the past several decades. The project proposes to increase the normal operating level from 98.7 feet to 100.0 feet National Geodetic Vertical Datum (NGVD) by modifying the P-11 outfall structure. See H009 (Lake Hancock Outfall Structure P-11 Modification) for a description of that project. This proposed project will further the District's recent efforts to restore minimum flows in the upper Peace River, which is a major component of the District's SWUCA Recovery Plan. As such, it is funded as a Water Supply and Resource Development (WSRD) project.

**Benefits**

Raising the normal operating water level of Lake Hancock to 100.0 feet NGVD will provide the storage to meet approximately 50% of the Minimum Flows and Levels Requirements of the upper Peace River. It was also determined that raising of the operating level along with other District projects will help restore wetland function for several hundred acres of contiguous lands to Lake Hancock.

**Costs**

This is a multi-year funded project. Funding for this project is shared by the Governing Board (50 percent), Peace River Basin Board (25 percent), Alafia River Basin Board (12.5 percent) and Manasota Basin Board (12.5 percent). Basin Board funding percentages are based on Alafia, Manasota, and Peace Basin impacts to the loss of flows from the upper Peace River Watershed from ground-water withdrawals. As of 2008, the District has budgeted \$5,554,000 of which \$1,350,000 is from state appropriations and Ecosystem Trust Fund. For continued funding of future project steps, District staff is requesting \$500,000 in FY2009 for implementing the project, broken down as follows: District \$250,000 Peace River Basin Board \$125,000, Manasota and Alafia River Boards each \$62,500. The funding is for design, permitting, and construction of project area mitigation and modification or replacement of the P-11 Structure necessary to raise the operating level of the Lake to 100 feet NGVD. Land costs are not included. An additional \$2,500,000 is being funded through field operations (Project H009) for the P-11 structure.

**Additional Information**

This project is being conducted in 3 Steps: Step (1) provided the preliminary evaluations and incremental probable costs for raising the normal high operating levels of Lake Hancock to 99.5, 100.0, and the target 100.5 feet from the current level of 98.7 feet. Step (1) is complete with a recommended target level up to 100.0 feet. The results of Step 1 were presented to the boards with a staff recommendation for moving forward with Step (2) of the project in October 2004. Step (2) involves the generation of the detailed information necessary to submit a complete Conceptual Environmental Resource Permit (ERP) Application, and to specifically identify impacts to private lands for acquisition and other mitigation needs (environmental, facilities, etc). Major components of the Conceptual ERP include: pre and post condition analysis; private property, dwelling, environmental, and infrastructure mitigation; outfall structure operation characteristics; and an anticipated fluctuation schedule for the Lake. Step (3) is the implementation of the mitigation components as specified in the Conceptual ERP. Costs for design, ERPs, and construction for environmental and infrastructure mitigation requirements have not been determined. The Project will be coordinated with H014 which will look at improving water quality released from the lake.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	1,224,286	(9,254)	1,043,387	258,335	7,875,000	10,391,754
011 Alafia River Basin	304,054	0	262,035	66,859	2,043,750	2,676,698
020 Peace River Basin	585,622	0	526,001	169,629	3,562,500	4,843,752
021 Manasota Basin	304,054	0	262,035	66,859	2,043,750	2,676,698
<b>District Budgeted - Outside Revenue</b>						
Ecosystem Trust Fund - Lk Hancock Lk Level	300,000	0	750,000	0	0	1,050,000
Water Protection & Sust T. F. (Surface Wtr Rstr)	300,000	0	0	0	0	300,000
				<b>Total</b>		<b>\$21,938,902</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Step (1) Preliminary Evaluation</b>			
1. Preliminary Identification of Potentially Affected Parcels	10/30/02		10/30/02
2. Advertise Request for Proposals	12/20/02		12/20/02
4. Develop Project Scope of Work	12/30/02		2/27/03
3. Select and Approve Consulting Firm	12/30/02		12/30/02
5. Begin Contract Negotiations	2/27/03		3/15/03
6. Enter into Contract	5/23/03		5/14/03
7. Provide Preliminary Results	4/28/04		6/15/04
8. Board Action for Step (2)	9/27/04		10/26/04
<b>2. Step(2) Preliminary Design and Conceptual Permitting</b>			
1. Amend Contract with BCI, Inc. for Conceptual Permitting	11/3/04		11/3/04
2. Permitting of NCLF Phase III Expansion	3/29/05		3/29/05
3. NCLF Evaluation for Project Effects	3/31/05		12/20/05
4. Develop Project Mitigation Strategies	6/30/05		12/30/05
5. Approve Mitigation Strategies	8/30/05		7/25/06
6. Submit CERP Application	10/14/05		8/31/06
7. Obtain CERP	3/31/06		6/14/07
8. Board Authorization of Project	9/25/07		9/25/07
9. USACE Notice of Intent	9/26/07		
10. Submittal of FDOT Permits	11/19/07		

**Status As Of:** February 24, 2008

Status History: The Preliminary Evaluation Report (Step 1) for Lake Hancock by BCI, Inc., is complete and was approved by the Governing Board in October 2004 for initiating preliminary design and conceptual permitting to raise the lake operating level from 98.7 to 100.0 feet (Step 2). With the approval of the Governing Board (October 26, 2004), District staff amended the contract and entered into a Work Order with BCI Engineers and Scientists, Inc. to begin Step (2) of the project on November 3, 2004. The Governing Board at their January 24, 2006 meeting authorized staff to submit a conceptual ERP application to the FDEP and the United States Army Corps of Engineers to raise the control elevation up to 100 feet NGVD to help meet the low flow requirements of the upper Peace River, upon reaching agreement through a Memorandum of Agreement (MOA) with Polk County. The Board authorized staff to develop a MOA with Polk County for the Lake Level Modification Project. With the approval of the MOA by the District at the July 2006 meeting, a Conceptual ERP application was submitted to FDEP on August 31, 2006 for permitting. A Conceptual ERP was received from FDEP on June 14, 2007. Current Status: The USACE Public Notice of Intent to permit was completed in December 2007, however, a permit has not been received. District staff have met with affected property owners in August and September, 2007 to discuss (1) project effects, (2) whether their property would be needed to implement the project, and (3) Board meetings and schedules. Land Management is currently negotiating with private land owners and purchasing their properties when successful negotiations are achieved. District staff is currently working on FDOT permits for Highway 540 and the Polk Parkway, and is currently negotiating a contract with BCI, Engineers and Scientists, Inc. to implement (Step 3), the design, permitting, and development of construction documents for mitigation required upstream of the P-11 Structure. Request for proposals for replacement or modification of the P-11 Structure and associated control systems were publicly noticed on February 8, 2008.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Flood Protection, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	BUDE, TANASE
<b>Task Manager(s)</b>	LETASI, SCOTT
<b>Status</b>	Ongoing

**Description**

Funding under Project H009 is provided for the replacement of the Lake Hancock P-11 Water Control Structure. This project is directly related to Project H008, Lake Hancock Lake Level Modification. Project H009 is contingent on the successful completion of Project H008 in 3 steps: Step (1) provide the preliminary evaluations and incremental probable costs for raising the normal high operating levels of Lake Hancock to 99.5, 100.0, and the target 100.5 feet from the current level of 98.7 feet. Step (1) is complete with a recommended target level up to 100.0 feet. The results of Step 1 were presented to the boards with a staff recommendation for moving forward with Step (2) of the project in October 2004. Step (2) involves the generation of the detailed information necessary to submit a complete Conceptual Environmental Resource Permit (ERP) Application, and to specifically identify impacts to private lands for acquisition and other mitigation needs (environmental, facilities, etc). Major components of the Conceptual ERP include: pre and post condition analysis; private property, dwelling, environmental, and infrastructure mitigation; outfall structure operation characteristics; and an anticipated fluctuation schedule for the Lake. Step (3) is the implementation of the mitigation components as specified in the Conceptual ERP. Costs for design, ERPs, and construction for environmental and infrastructure mitigation requirements have not been determined. Once these steps have been completed, construction documents will be completed for the replacement of Structure P-11 and the District will post a request for bids. Funding for this project is shared by the Governing Board (50 percent), Peace River Basin Board (25 percent), Alafia River Basin Board (12.5 percent) and Manasota Basin Board (12.5 percent). Basin Board funding percentages are based on Alafia, Manasota, and Peace Basin impacts to the loss of flows in the Upper Peace River Watershed from ground-water withdrawals.

**Benefits**

Raising the normal operating water level of Lake Hancock to 100.0 feet NGVD will provide the storage to meet approximately 50% of the Minimum Flows and Levels Requirements of the upper Peace River. It was also determined that raising of the operating level along with other District projects will help restore wetland function for several hundred acres of contiguous lands to Lake Hancock. Project H009 will involve the actual replacement of the present control structure to achieve these goals.

**Costs**

Funds encumbered under Project H009 were approved in FY2003 in the amount of \$2,500,000. The probable cost are projected to be a total of \$5,000,000 for this structural replacement project. This cost does not include any land acquisition costs. District staff is requesting \$2,500,000 in FY2009 for implementing the structure replacement project. Requested funds for FY2009 are broken down as follows: District \$1,250,000 (50% of the FY2009 funding), Peace River Basin Board \$625,000 (25% of the FY2009 funding) Manasota and Alafia River Boards each \$312,500 (12.5% of the FY2009 funding). The FY2009 requested funds do not include any land acquisition cost.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	1,250,000	0	0	1,250,000	0	2,500,000
011 Alafia River Basin	312,500	0	0	312,500	0	625,000
020 Peace River Basin	625,000	0	0	625,000	0	1,250,000
021 Manasota Basin	312,500	0	0	312,500	0	625,000
				<b>Total</b>		<b>\$5,000,000</b>

**Status As Of:** March 20, 2008

Status History: See Project H008 for a detailed history on the project. As described in the project description steps 1 and 2 have been completed. Current Status: The USACE Public Notice of Intent to permit was completed in December 2007, however, a permit has not been received. District staff have met with affected property owners in August and September, 2007 to discuss (1) project effects, (2) whether their property would be needed to implement the project, and (3) Board meetings and schedules. Land Management is currently negotiating with private land owners and purchasing their properties when successful negotiations are achieved. District staff is currently working on FDOT permits for Highway 540 and the Polk Parkway, and is currently negotiating a contract with BCI, Engineers and Scientists, Inc. to implement (Step 3), the design, permitting, and development of construction documents for mitigation required upstream of the P-11 Structure. Request for proposals on replacement or modification of the P-11 Structure and associated control systems were publicly noticed on February 8, 2008. A pre-proposal meeting was held on March 5, 2008 and 11 engineering consulting firms were in attendance. Proposals are due to the District on April 9, 2008.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Peace River
<b>Cooperator(s)</b>	
<b>Project Manager</b>	HAGBERG, JANIE
<b>Task Manager(s)</b>	

**Status****Description**

The Lake Hancock projects are critical in the District's strategies for meeting the minimum flows in the Upper Peace River, improving water quality in the Peace River, and protecting Charlotte Harbor, an estuary of national significance. The goal of the Lake Hancock Outfall Treatment Project is to improve water quality discharging from Lake Hancock through Saddle Creek to the Peace River. Historical data has shown that the Saddle Creek drainage basin, one of nine sub-basins in the Peace River Watershed, contributes approximately 6 percent of the total flow of the Peace River, yet contributes approximately 13 percent of the watershed's total annual nitrogen load. Nitrogen has been identified as the primary target nutrient in restoring water quality in the Peace River and preventing degradation of Charlotte Harbor, a Surface Water Improvement and Management priority water body. The Peace River ecosystem routinely suffers from algae blooms during periods of low flows and warm weather. These events not only affect the fish and wildlife associated directly with the river and estuary, but also affect the region's largest potable surface water supply system, operated by the Peace River/Manasota Regional Water Supply Authority. Many of the basins along the Peace River, including Lake Hancock, have been identified by the Florida Department of Environmental Protection as impaired under the Clean Water Act, requiring that Total Maximum Daily Loads be established. Furthermore, nitrogen loads have been predicted to increase significantly over the next 20 years as a result of growth. Water quality treatment of discharges from Lake Hancock has been identified as the most cost effective means of reducing nitrogen loads into the Peace River and Charlotte Harbor. The District has acquired the 3,500-acre, planned Old Florida Plantation development property. Portions of this tract of land are planned to be utilized for the outfall treatment project. An engineering consultant has been retained to conduct a feasibility study of applicable treatment technologies; design and permit the selected alternative; and to provide construction management services. The project involves five tasks: (1) Research, Monitoring and Data Acquisition, (2) Feasibility Study, (3) Design and Permitting, (4) Construction, and (5) System Start-up and Operation. Task 1 provides information necessary for evaluation of various treatment technologies and for design of the full-scale treatment system. Task 2, Feasibility Study, involves two elements: a) evaluation of applicable treatment technologies and ranking based on expected performance, cost, proof of concept, and other factors; and b) geotechnical and potential constructability testing. Task 3 involves design and permitting of the selected treatment system and includes preparing construction plans and specifications. Task 4 involves procuring a contractor through the competitive bid process for construction of the treatment system. Task 5 involves treatment system start-up and optimization of system performance to achieve target nutrient removal. The District is responsible for long-term operation and maintenance.

**Benefits**

The project addresses water quality and natural systems District objectives. The project's load reduction goal is expected to offset the load increases projected to occur over the next 19 years to Charlotte Harbor from the Peace River Basin. Water quality improvements in the Upper Peace River from the project will improve natural systems along the river. The creation of an 1,000-acre functional marsh system will provide habitat where historic mining has altered the landscape.

**Costs**

This is a multi-year funded project. A total of \$17,435,446 has been budgeted through FY2008 as follows: \$13,435,446 from Florida Forever, \$1,750,000 from state appropriations, \$1,300,000 from the United States Environmental Protection Agency (USEPA), \$312,500 from the Governing Board, \$312,500 from the Peace River Basin Board and \$325,000 from the Water Protection Sustainability Trust Fund. The proposed FY2009 budget totaling \$1,800,000 includes \$326,950 from the Governing Board, \$326,950 from the Peace River Basin Board, \$653,900 from State SWIM and \$492,200 in revenue from the USEPA. District funds shown in the table include staff salaries.

**Additional Information**

In 1987, the Florida Legislature established the Surface Water Improvement and Management (SWIM) Act, having recognized that water quality and habitat in surface waters throughout the state have degraded or were in danger of being degraded. The Act requires the District to maintain a priority list of waterbodies of regional or statewide significance within their boundaries. Charlotte Harbor is designated as a priority waterbody. Charlotte Harbor was identified by the United States Environmental Protection Agency (USEPA) in 1995 as an estuary of Federal Significance and subsequently included in the National Estuary Program. The Charlotte Harbor SWIM Plan identifies treatment of poor water quality discharging from Lake Hancock as a priority project for the Upper Peace River and Charlotte Harbor. In addition, the Lake Hancock Outfall Treatment Project is specifically identified by the Florida Department of Environmental Protection's Peace River Basin Resource Management Plan (March 2007). The management plan makes a series of recommendations to be undertaken over the next four years to address cumulative impacts in the basin and begin the long road toward recovery.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	123,925	0	356,145	701,244	450,000	1,631,314
020 Peace River Basin	120,390	0	353,286	695,085	1,350,000	2,518,761
<b>District Budgeted - Outside Revenue</b>						
Ecosystem Trust Fund - Charlotte Hbr/Upper Peace	1,450,000	0	300,000	0	0	1,750,000
FL Forever-Lk Hancock Outfall Treatment	13,435,446	0	0	0	0	13,435,446
State SWIM/Surface Wtr Rstr Rbudget Prior Year	0	0	325,000	0	0	325,000
U.S. EPA - Lake Hancock (H014)	500,000	0	0	492,200	0	992,200
U.S.EPA - Upper Peace River Restoration	800,000	0	0	0	0	800,000
				<b>Total</b>		<b>\$21,452,721</b>

**Critical Project Milestones****Projected****Amended****Actual****1. Critical Project Milestones**

Coordination Meeting with District staff	8/15/02		8/15/02
Coordination Meeting with other agencies	9/30/02		11/22/02
Complete Initial Review/Site Visits of Similar Projects	2/1/03		1/31/03
Draft Request for Proposals	3/1/03		3/1/03
Consultant Agreement Executed	1/25/04		1/24/04
Alternative Treatment Technology Evaluation	12/31/04	4/30/06	4/30/06
Monitoring/Data Acquisition/Research	3/31/05		3/31/05
Basis of Design Report	6/30/07	8/31/07	8/31/07
Design/Permitting	12/31/08		
Construction	6/30/10		

**Status As Of:** February 29, 2008

At the February 2006 Governing Board meeting, the Board approved the staff recommendation to adopt a 27 percent nitrogen load reduction goal and to utilize wetlands as the primary treatment component. The District's consultant (Parsons) has completed constructability and the initial geotechnical testing at the proposed location of the treatment wetlands and a Basis of Design Report (BODR). This report establishes the objectives, data, and assumptions that form the foundation of design (configuration of wetland cells and infrastructure). The current phase includes design, permitting and additional geotechnical evaluation. The District initiated the plant establishment study in June 2007 that is scheduled to be completed in August 2008. The objectives of the study are to evaluate wetland construction methods, different types of wetland plants, exotic plant control techniques, and water quality trends. Results of the study show that during the first six months, the planted species have increased in coverage from an initial coverage of approximately 4 percent to over 70 percent. Natural recruitment of wetland vegetation in the cells where initial planting was not conducted has resulted in plant cover gains of 24 percent to 37 percent in the first six months. A vendor demonstration of equipment proposed for use at the proposed pump station was held at District headquarters for Operations Staff on February 19th. A habitat assessment report summarizing conditions at the project site has been completed. This report will be included in permit applications. The design team, along with Department of Environmental Protection permitting staff, attended a tour of the City of Lakeland's Wetland Treatment System Facility on February 28th. Lakeland's facility is used to treat wastewater and consists of a 1,400-acre wetland constructed in old mined lands that included clay settling areas.



**Project Type** WS&R Dev.  
**AOR(s)** Water Quality, Natural Systems  
**Basin(s)** Alafia River, Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** BRUMBAUGH, DAVID  
**Task Manager(s)** COUGHLIN, KEVIN, SUMMERALL, LINDA  
**Status** Ongoing

**Description**

Punta Gorda's in-stream drinking water reservoir is sustained by Class I surface water bodies comprised of the Shell and Prairie Creek watersheds. In 2000, the City of Punta Gorda contacted FDEP and the District with concerns for declining water quality trends observed in the reservoir. Investigations indicated that irrigation pumping from deep wells was a primary source adversely impacting the watersheds through degraded agricultural runoff, ultimately leading to a decline in water quality of the Punta Gorda reservoir downstream. In 2002, the Back-Plugging Program was initiated primarily to improve water quality in the watershed systems of the SWUCA. The back-plugging program was included in the Facilitating Agricultural Resources Management Systems (FARMS) Program in 2005.

**Benefits**

Well back-plugging is recommended for agricultural growers wanting to significantly improve crop yields by decreasing highly mineralized sources of groundwater used for irrigation, and to mitigate potential impacts to public surface water supplies.

**Costs**

Qualifying landowners are reimbursed up to a maximum of \$6,500 per well for back-plugging procedures, with final amounts of reimbursement determined by borehole dimensions of the back-plugged interval. The Shell, Prairie, and Joshua Creek (SPJC) watersheds are considered priority areas for this program.

**Additional Information**

A brochure and webpage is available from SWFWMD summarizing the FARMS Back-Plugging Program.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	589,193	(30,000)	56,875	51,964	0	668,032
011 Alafia River Basin	38,089	0	5,787	7,857	0	51,733
020 Peace River Basin	654,831	0	28,549	21,695	0	705,075
021 Manasota Basin	18,000	0	6,899	8,160	0	33,059
				<b>Total</b>		<b>\$1,457,899</b>

**Status As Of:** February 28, 2008

A total of 59 wells have been back-plugged in the SWUCA overall to date, with 45 of these wells located in the SPJC priority watersheds. Analytical results for samples collected from the 45 back-plugged wells in the SPJC area indicated conductivity, total dissolved solids (TDS) and chloride were decreased by 40%, 39% and 58%, respectively; with pumping yields reduced by 33% as a result of back-plugging procedures. For the 14 wells in the SWUCA (outside of the SPJC area), six wells were back-plugged in the Peace River basin, five in the Alafia River basin, two in the Manasota basin, and one in the Horse Creek watershed. Analytical results for all back-plugged wells combined in the SWUCA indicated conductivity, TDS and chloride were decreased by 47%, 46% and 62%, respectively. Combined SWUCA pumping yields were reduced by 24% as a result of back-plugging procedures. Routine monitoring results of select back-plugged wells so far have indicated sustained improvements to the quality of groundwater used for irrigation purposes.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	Fl. Department of Agriculture & Consumer Services
<b>Project Manager</b>	ORENDORFF, BILL
<b>Task Manager(s)</b>	SUMMERALL, LINDA, ESTES, CAROLE
<b>Status</b>	Ongoing

**Description**

The Facilitating Agricultural Resource Management Systems (FARMS) Program is an agricultural Best Management Practice (BMP) cost-share reimbursement program. The program is a public/private partnership developed by the District and the Florida Department of Agriculture and Consumer Services (FDACS). The purpose of the FARMS initiative is to provide an incentive to the agricultural community, within the District, to implement agricultural BMPs that will provide resource benefits that include water quality improvement; reduced Upper Floridian aquifer withdrawals; and/or conserve, restore, or augment the area's water resources and ecology. FARMS is intended to assist in the implementation of the District's Regional Water Supply Plan.

**Benefits**

The goal for the FARMS program is to offset 40 mgd of ground water within the District by 2025. Ground water use reductions not only benefit the Upper Floridian aquifer but also can improve surface water quality in areas where ground water is highly mineralized. According to the District's Water Management Information System (WMIS), there are 6,395 permitted agricultural permits in the District, with a combined permitted annual average daily ground water quantity of 699,485,000 gpd. Since actual use of permitted quantities is dependent on hydrologic conditions, one of the main goals of the FARMS program is to provide cost-share that helps reduce ground water use, regardless of hydrologic conditions. Therefore, FARMS projects not only offset ground water use with surface water but also try to increase the overall efficiency of irrigation water use. Each project's performance is tracked to determine its effectiveness. To date, total ground water offset accomplished through the FARMS Program by District funding has cost \$1.40 per 1000 gallons.

**Costs**

From the inception of the FARMS Program through FY2007 a total of \$10,837,563 has been spent on FARMS projects with \$4,700,599, or 43.4 percent coming from the farming participants and \$6,136,964, or 56.6 percent, from public funding through the FARMS budget. Public funding sources for total project reimbursement is as follows: basin boards - 6.9 percent, Governing Board - 10.3 percent, State Appropriations - 27.5 percent, and FDACS - 11.8 percent.

**Additional Information**

FARMS also funds a limited amount of non-project related outreach activities and data collection efforts in support of the Program. These include: IFAS Flatwood Citrus BMP Implementation. The District will provide \$50,000 to this project for three years for a total of \$150,000. This is an outreach effort by IFAS that furthers the goals of FARMS Program in the SPJC watersheds, in addition to growers within Manatee, Hardee, Sarasota, DeSoto, and Charlotte Counties. IFAS Row Crop BMP Implementation. The District will provide \$50,000 to this project for two years, and \$55,000 in the final year for a total of \$155,000. This is also an outreach effort by IFAS that furthers the goals of FARMS Program in Hillsborough, Manatee, Hardee, Sarasota, DeSoto, and Charlotte Counties. Finally for the Upper Myakka Surface-Water Quality Monitoring Network - funding for the deployment of data sondes at seven USGS gage sites in the UMRW has been approved. The network will assist in better understanding agricultural impacts on Flatford Swamp and in determining the effectiveness of FARMS projects.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	2,519,300	(885,045)	794,087	838,362	0	3,266,704
011 Alafia River Basin	121,493	(58,325)	103,923	104,811	0	271,902
013 Hillsborough River Basin	0	0	59,311	82,995	0	142,306
019 Withlacoochee River Basin	0	0	82,147	36,423	0	118,570
020 Peace River Basin	1,439,768	(609,470)	332,218	382,604	0	1,545,120
021 Manasota Basin	976,976	224,691	153,986	168,757	0	1,524,410
<b>District Budgeted - Outside Revenue</b>						
DACS - FARMS (H017)	1,183,416	33,495	234,000	0	0	1,450,911
Ecosystem Trust Fund - FARMS	4,000,000	(1,932,370)	1,000,000	1,000,000	0	4,067,630
<b>Project Funds Not Budgeted by the District</b>						
Applicant Contribution	3,086,014		0	0	0	3,086,014
				<b>Total</b>		<b>\$15,473,567</b>

**Status As Of:** February 27, 2008

The FARMS Program has 51 Board Approved projects in five of the District's nine Basins. The Program is intended to address issues within the District with the Southern Water Use Caution Area (SWUCA) and the Northern Tampa Bay Water Use Caution Area being targeted as areas of primary importance. Projected offset from the board approved projects is 11,607,045 gallons per day (gpd).

Peace River Basin The Peace River Basin has 32 board approved FARMS project with a projected offset of 7,100,700 gpd. Of the 32 projects in this Basin, sixteen are operational with average groundwater offsets of approximately 2,41,002 gpd. Six projects are under construction in this basin, and nine more are in the contracting process. Finally one project was terminated due to sale of the land. The Peace River Basin Board includes the Shell, Prairie, and Joshua Creek (SPJC) watershed, which is one of two priority areas designated for the FARMS Program. Twenty-two of the 30 projects, including thirteen of the operational projects, are within the SPJC Priority area.

Manasota Basin The Manasota Basin has eight board approved projects with a projected offset of 4,046,450 gpd. Of the eight projects in the Manasota Basin, seven are now operational, with groundwater offsets of approximately 2,867,878 gpd. One project is under construction. The Manasota Basin includes the other FARMS priority area, the Upper Myakka River Watershed. Six of the eight projects are in the Upper Myakka River Watershed Priority area, including six of the operational projects.

Hillsborough River Basin The Hillsborough River Basin has two board approved FARMS Projects with projected offsets of 40,580 gpd. One project is now operational, Parke Family Hydrofarms, with an average groundwater offset of 16,416 gpd. The other project is in the contracting process.

Green Swamp Basin FARMS has one operational project approximately 1 mile outside the SWUCA in the Green Swamp Basin. This project is offsetting approximately 38,934 gpd of groundwater.

Alafia River Basin The Alafia Basin has five board approved projects. These projects are projected to offset 448,915 gpd. Two projects are operational with groundwater offsets of approximately 335,263 gpd. One project is under construction. Two more projects are in the contracting phase.

FARMS is also providing partial funding for three regional projects. These projects are being coordinated through the Florida Department of Agriculture and Consumer Services. Two of them will help implement BMP programs for citrus growers and row crop farmers, and the other is the Mini-FARMS program that is described in greater detail under project number H529.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Natural Systems
<b>Basin(s)</b>	Alafia River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

#### Description

This project involves the identification and evaluation of potential water resource development projects in the upper Peace River watershed above Zolfo Springs. The vehicle to accomplish this is the District's Watershed Management Program (WMP). The project includes performing the 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the WMP. FY2007 funds were expected to be used to perform the Topographic Information, Watershed Evaluation, and Watershed Management Plan elements for the area contributing flow to the river between the Highway 640 bridge crossing at Homeland, and the river confluence with Bowleggs Creek. However, in order to avoid duplication of effort in the development of detailed junction and reach data for this project and the District's Integrated Model of the Peace River (P687), the Watershed Management Plan element for the area between Homeland and Bowleggs Creek will be postponed so the Topographic Information and Watershed Evaluation elements can be completed for the entire area contributing flow to the river between Homeland and Zolfo Springs. Future funding will be needed to complete the Watershed Management Plan tasks for the area between Homeland and Zolfo Springs. Preferred Best Management Practices (BMPs) will be further developed through the Implementation of BMPs process under separate activity codes, and will require additional funding.

#### Benefits

The water resource development projects that are ultimately selected for implementation will enhance low flows, water quality, and natural systems within the upper Peace River.

#### Costs

The anticipated project cost is \$3,150,000. For FY2009, \$250,000 of project funding will be as follows: Governing Board (\$125,000), Peace River Basin (\$62,500), Alafia River Basin (\$31,250), and the Manasota Basin (\$31,250). FY2009 funds will be used to complete Watershed Evaluation and Watershed Management Plan tasks. For FY2008, \$250,000 is appropriated in the following budgets: Governing Board (\$125,000), Peace River Basin (\$62,500), Alafia River Basin (\$31,250), and the Manasota Basin (\$31,250). For FY2007, \$250,000 is appropriated in the following budgets: Governing Board (\$125,000), Peace River Basin (\$62,500), Alafia River Basin (\$31,250), and the Manasota Basin (\$31,250). In FY2007, \$250,000 in revenue will be received from state appropriations and distributed as follows: Governing Board (\$125,000), Peace River Basin (\$62,500), Alafia River Basin (\$31,250), and the Manasota Basin (\$31,250). When each element is completed the project budget and scope may require refinement based upon the information gathered. The District funding amounts shown in the table include staff salaries.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. In 2002, the District completed the technical work necessary for establishing minimum flows in the upper Peace River, and the first draft of the Peace River Cumulative Impacts Analysis Report. The Upper Peace River Watershed has been heavily impacted by mining, development activities, and groundwater withdrawals. Proposed minimum "low" flows are currently not being met at the Bartow and Ft. Meade gage sites. The District has developed the Southern Water Use Caution Area (SWUCA) Recovery Strategy that proposes concepts for development of water resource projects. Two of the concepts are storage of wet season rainfall in surface water reservoirs for later release during periods of low or no flow; and the hydraulic optimization of areas impacted by mining, including the reconnection of closed basin areas. Two projects, the Upper Peace River Minimum Flow Enhancement project (H004), and the Old Lands Phosphate project (H011), were initiated in FY2003 to accomplish similar goals. The Upper Peace River Minimum Flow Enhancement project included funding for a feasibility analysis, and design and permitting of a surface water reservoir on reclaimed mine land. The District evaluated a reservoir site located on the east side of the Peace River just south of County Highway 640, and began the land acquisition process. The property owner rejected the District's offer for purchase, which terminated the efforts for this site. As part of the Old Lands Phosphate project, District staff identified other potential reservoir locations, and areas that no longer contribute runoff to the river as a result of mining activities that could be hydraulically reconnected. Both of these projects are consistent with the Upper Peace River Resource Development project. Projects H004 and H011 will be discontinued as individual projects, and incorporated into the Upper Peace River Resource Development project. Alternative reservoir sites are being evaluated, and District staff are collecting available information from property owners, mine companies, FDEP Bureau of Mine Reclamation, and others. FY2004 funds were used to complete elements of a Watershed Evaluation to identify the connectivity of the Upper Peace River system from the confluence of Saddle Creek and Peace Creek, south to Zolfo Springs. Work Order #1 tasks focused on the identification of system connectivity through phosphate lands located between the confluence of Saddle Creek and Peace Creek, and Zolfo Springs. The First Amendment was executed to expand the scope of work to complete the Watershed Evaluation tasks for the

area above County Highway 640 at Homeland, and to encumber FY2005 funds. The Second Amendment was executed to prepare a Watershed Management Plan for the area that contributes flow to the River between the confluence of Saddle Creek and the Peace Creek Canal, and Homeland; and to encumber FY2006 funds. The Watershed Management Plan element will include a water resource assessment and an alternative analysis that will include a cost/benefit evaluation of potential water resource development projects. A new Agreement will be developed to encumber FY2007 funds, and will include Watershed Management Program elements for the area contributing flow to the river between the Highway 640 bridge crossing at Homeland, and Zolfo Springs. Future funding will be needed to complete the Watershed Management Plan for the area between Homeland and Zolfo Springs. When each task is completed the project budget will be refined based on the information developed. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Polk County. Information developed with this project will be used to update the FIRMs representing this watershed.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	949,734	0	135,442	131,513	6,500,000	7,716,689
011 Alafia River Basin	191,115	0	32,741	32,645	1,750,000	2,006,501
020 Peace River Basin	371,970	0	64,135	63,895	3,843,750	4,343,750
021 Manasota Basin	199,645	0	35,118	32,645	1,625,000	1,892,408
<b>District Budgeted - Outside Revenue</b>						
Ecosystem Trust Fund - Upper Peace Rvr Rstr	250,000	0	0	0	0	250,000
Water Protection & Sust T. F. (Surface Wtr Rstr)	250,000	0	0	0	0	250,000
				<b>Total</b>		<b>\$16,459,348</b>

### Critical Project Milestones

#### 1. Original Agreement

	Projected	Amended	Actual
Draft Original Agreement to Management Services	7/26/04		8/24/04
Draft Original Agreement returned from Management Services	8/26/04		8/25/04
Execute Original Agreement (First Agreement)	9/17/04		9/30/04
Notice to Proceed - Work Order #1	9/24/04		10/22/04
Submittal of Final Report related to Work Order #1	4/22/05		4/22/05
Execute Contract Amendment 1 to the First Agreement	9/21/05		9/21/05
Recognition of the SWFWMD, Peace, Alafia & Manasota Basin Bds. will be provided	10/31/05	12/31/08	
Notice to Proceed - Work Order #3	11/30/05		11/17/05
Notice to Proceed - Work Order #2 for geotechnical testing	11/30/05		1/9/06
Submittal of Final Report related to Work Order #2	2/28/06		4/19/06
Notice to Proceed - Work Order #4	5/19/06		5/19/06
Execute Contract Amendment 2	6/2/06		7/24/06
Submittal of Final Report related to Work Order #3	6/17/06		10/3/06
Notice to Proceed - Work Order #5 for geotechnical testing	7/28/06		7/28/06
Contract Expiration - Original Agreement	7/29/06	12/31/08	
Submittal of Final Report related to Work Order #5	9/28/06		3/27/07
Notice to Proceed - Work Order #6 Watershed Mgt. Plan	10/31/06		10/25/06
Submittal of Final Report related to Task 2.2.7.3 of Work Order #4	12/22/06		
Submittal of Final Report related to Task 2.2.7.2 of Work Order #4	12/22/06		
Submittal of Final Report related to Task 2.2.7.1 of Work Order #4	12/22/06		2/21/07
Notice to Proceed - Work Order #7	7/20/07		7/20/07
Submittal of Final Report related to Work Order #7	8/31/07		8/31/07
Notice to Proceed - Work Order #8	10/31/07		
Submittal of Final Deliverables related to Work Order #8	1/31/08		
Submittal of Final Report related to Work Order #6	11/30/08		

#### 2. Second Agreement

Draft Second Agreement to Management Services	12/1/06		5/29/07
Draft Second Agreement returned from Management Services	1/1/07		6/7/07
Execute Second Agreement - Zolfo Springs	1/31/07		7/11/07
Notice to Proceed - Zolfo Springs Work Order #1	2/9/07		7/20/07
Submittal of Final Report - Zolfo Springs WO #1	2/9/08		
Contract Expiration - Second Agreement	1/31/09		

**Status As Of:** February 14, 2008

Ardaman and Associates has been assigned to this project. The Consulting Services Agreement was executed on September 30, 2004. The tasks associated with Work Orders #1, #2, #3 and #5 have been completed, and the final deliverables for Work Orders #1, #2, #3, and #5 have been reviewed and approved. Tasks related to Work Orders #4, #6, #7 and #8 are on-going. A draft of the first of 3 reports related to Work Order #4 was received on January 26, 2007. Staff reviewed the draft, and provided comments to the consultant on January 30, 2007. The geotechnical report related to Work Order #5 was received on June 8, 2007 and has been approved. Data collection for Work Order #6 has been completed. The final report related to Work Order #6 is due on November 30, 2008. Work Order #7 was issued on July 20, 2007 for the preparation of a summary report to consolidate recent geotechnical and engineering evaluation information regarding the feasibility of using CS-11 as a water storage area for MFL recovery. The water discharged back into the river will need to be of sufficient quantity to overcome the influence of sinkholes in and adjacent to the streambed in order to meet MFLs in the upper river. A draft summary report was received in August 2007. Comments were provided to the consultant. Awaiting receipt of the final version of the WO#7 summary report. Survey data is being obtained to determine if low flows can be redirected around the sinkhole features, and to identify the hydraulic control elevation in the streambed that may be backing water up into these features in accordance with WO#8. An evaluation of the survey data will be conducted as part of the SWUCA Recovery - Upper Peace Karst Berms (H064) project. Please refer to the PIMS entry for H064 for further information on that project. Work Order #8 was executed on December 14, 2007 to perform the survey of the sinkhole areas. Additional survey is also needed for several cross-sections and bridge crossings. Work Order #9 is currently under development for the cross-section survey. A Second Consulting Services Agreement was executed on July 11, 2007. While the original agreement focuses on the area above Homeland, the second agreement focuses on the area contributing flow to the river between Homeland and Zolfo Springs. Work Order #1 was issued against the Second Agreement on July 20, 2007. Hydrologic and hydraulic data collected as part of the Upper Peace River Resource Development project is also being used in the development of the Peace River Integrated Model (P687). Status History: The first contract currently encumbers \$150,000 of FY2004 funds, \$500,000 of FY2005 funds, and \$500,000 of FY2006 funds. The Second Consulting Services Agreement encumbers \$500,000 of FY2007 funds. \$360,000 of H004 Upper Peace River Minimum Flow Enhancement project funds have been transferred to this project to retain a consultant to perform detailed geotechnical analyses, obtain topographic information, prepare cost/benefit analyses, prepare preliminary and final design plans, and obtain permits needed to construct a reservoir. The H004 funds will be encumbered through future contracts or amendments. The amount shown in the Prior Funding column of the funding table has been revised to reflect the funds transferred from the H004 project. The tasks associated with Work Orders #1, #2, #3 and #5 have been completed, and the final deliverables for Work Orders #1, #2, #3 and #5 have been reviewed and approved. Work Order #4 was issued on May 19, 2006 for additional Watershed Evaluation tasks, and Work Order #6 was issued on October 25, 2006 for the Watershed Management Plan for the area above Homeland. Work Order #7 was issued on July 20, 2007 for the preparation of a summary report to consolidate recent geotechnical and engineering evaluation information regarding the feasibility of using CS-11 as a water storage area for MFL recovery. The draft summary report was received on August 31, 2007 and staff provided comments to Ardaman in September 2007. A Final version of the Work Order #7 report has not been received to date. Notice to Proceed for Work Order #8 was issued on December 14, 2007. The survey around the sinkhole areas has been completed, but we have not received the survey data to date. Work Order #9 is currently under development for the collection of cross-section and bridge crossing survey data needed for the surface water model. Second Consulting Services Agreement was executed on July 11, 2007. Work Order #1 of the Second Agreement was issued on July 20, 2007. Tasks related to the First Agreement - Work Orders #4, #6, #7 and #8 are on-going. As of this writing, a total of \$619,943 has been invoiced and paid. Tasks related to the Second Agreement - Work Order #1 are also on-going. No invoices have been received to date for the Second Agreement.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	General Fund (District), Peace River
<b>Cooperator(s)</b>	Charlotte County Utilities
<b>Project Manager</b>	ANTOINE, TAMMY
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This is an ongoing multiyear alternative water supply project that involves the design and construction of 46,100 linear feet of 16-inch diameter and 16,000 linear feet of 12-inch diameter reclaimed water transmission main to be constructed from the Charlotte County East Port Wastewater Treatment Facility (WWTF), west through Port Charlotte. The project will also include the design and construction of two 500,000 gallon storage tanks and associated pumping systems. Customers and reclaimed water use quantities include Charlotte County Stadium (171,000 gpd), Murdock Junior High School (47,000 gpd), Port Charlotte High School (30,000 gpd), New Challenge School (6,000 gpd), VOTECH (8,000 gpd), Port Charlotte Middle School (39,000 gpd), Peace River Elementary (37,000 gpd), Riverwood Golf Club (287,000 gpd)(WUP # 10169), Charlotte County School Board and various offices (294,000), Charlotte County Administration Center (4,000 gpd)(WUP # 12309), Florida Department of Transportation (28,500 gpd), McDonough Park (80,000 gpd), Franz Ross Park (25,000 gpd), Charlotte County ball fields and multiple parks (27,000 gpd)(WUP # 8477), and the medians and park strips on Harbor Boulevard, Kings Highway, and US 41 (189,000 gpd). The remaining customers that will be served receive their water supply from Charlotte County Utilities (WUP # 7104), which imports approximately 96% of it's water supply from the Peace River Manasota Regional Water Supply Authority (WUP # 10420).

**Benefits**

The project will serve recreational/aesthetic and commercial customers to utilize approximately 1,272,500 gpd of reclaimed water and offset approximately 954,250 gpd of traditional supply from the intermediate aquifer.

**Costs**

The total eligible project cost is \$7,250,000, and the District is requested to fund 50 percent, or \$3,625,000. Because this is part of a regional effort to increase the use of reclaimed water, the Peace River Basin budgeted \$221,625 in FY2004, \$600,000 in FY2006, and \$654,525 in FY2008 and the Governing Board budgeted \$221,625 in FY2004, \$600,000 in FY2006, and \$654,525 in FY2008 for this Water Supply and Resource Development Project. Funds in the amount of \$400,000 in FY2006 and \$436,350 in FY2008 have been allocated to the project from the Water Protection and Sustainability Trust Fund Program, these funds will be applied equally to reduce the Peace River Basin Board and Governing Board cost share. In FY2009, the County submitted a funding application requesting a total District funding amount of \$1,090,875 for the fourth and final year of funding this multiyear project. The cost-benefit is \$1.83/1,000 gallons, amortized over 30 years at eight percent interest.

**Additional Information**

This project is proposed for construction in three phases. The capacity of the East Port WRF is 5.0 mgd, and it produces approximately 3.4 mgd of reuse flow. In addition to the immediate offset benefits described above, this project comprises approximately two thirds of the necessary transmission main to interconnect the county's East Port WWTF with the county's West Port WWTF located on the Cape Haze peninsula. Future interconnection and expansion projects are anticipated to begin in the FY2009 time frame. Of the total project cost of \$7,250,000, approximately 86 percent (\$6,250,000) is expected to be needed for construction, and the remainder (\$1,000,000) for design and administration.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	627,728	0	438,150	547,583	0	1,613,461
020 Peace River Basin	626,623	0	438,097	547,534	0	1,612,254
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	400,000	0	436,350	0	0	836,350
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County	3,206,825		0	0	0	3,206,825
				<b>Total</b>		<b>\$7,268,890</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Contracts Administration	10/1/03		7/28/04
Draft Agreement from Contracts Administration	8/15/04		9/16/04
Contract Executed	8/31/04		6/30/05
Design Commencement	9/1/04		11/2/04

Signage Erected	9/1/05	12/1/06	8/29/07
Construction Commencement	9/1/05	12/1/06	8/29/07
Construction Completion	9/1/07	12/31/09	
Contract Close-out	10/1/08	12/31/10	
Offset Report	10/1/11	12/31/11	

**Status As Of:** March 04, 2008

The Peace River Basin Board approved a first amendment to expand the scope of work, extend the timeframe, and increase the total project cost for this project on April 7, 2006; followed by the Governing Board on April 25, 2006. The First Amendment to the project was executed on June 20, 2006. Design for Phases 1A, 1B, and 2 have been completed. Expertech has been selected as the Phase 1A contractor and was given notice to proceed on August 29, 2007. Pipeline Utilities has been selected as the Phase 1B contractor and was given notice to proceed on September 25, 2007. Cardinal Contractors has been selected as the Phase 2 contractor and was given notice to proceed February 2008. The county, in a letter dated October 8, 2007, requested a no cost time extension to extend the contract period and the construction completion date for this project. A second amendment was executed on January 28, 2008. The county has submitted an FY2009 cooperative funding application to request the next installment of funds for this multi-year project. The county also submitted first and second payment requests, a G-2 and grant tracking form have been forward to Finance to reimburse the county \$663,248.70 and \$628,813.45 for design and construction. To date, \$2,952,300 has been encumbered, of which \$663,248.70 has been reimbursed and \$628,813.45 is pending reimbursement.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems, Management Services
<b>Basin(s)</b>	General Fund (District), Peace River
<b>Cooperator(s)</b>	Polk County Natural Resources
<b>Project Manager</b>	SIMS, SHELLEY
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

#### Description

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the Peace Creek Canal Watershed. The watershed covers an area of approximately 230 square miles and is located in Polk County. The District has identified the Upper Peace River watershed, which includes the Peace Creek Canal system, as an area that has undergone significant land alterations including land clearing, draining and re-contouring of lands for residential and commercial purposes, transportation, agriculture, recreation, timbering, power generation, ore and mineral extraction, and other land uses. These activities required extensive withdrawals of groundwater that has resulted in significant declines in the level of the Floridan aquifer and flow in the Upper Peace River. This project is to identify projects that will restore lost basin storage, provide recharge to the aquifer, improve water quality, provide flood protection benefits and improve natural systems. In 2005, the Governing Board and Peace River Basin Board agreed to take on the responsibility to maintain and, where possible, improve the water conveyance/storage capabilities of the Peace Creek Canal. One of the primary tasks includes identification of property ownership, so the District can obtain necessary easements over the system. The District continues to provide aquatic plant maintenance in the canal and implemented a permanent spraying schedule in FY2007. The District also continues to remove sediments in strategic reaches of the canal. In 2007, Polk County requested cooperative funding from the District for the acquisition of 18 residential properties along the canal that repeatedly flooded. The District provided funding (\$250,000) to the County, as matching funds for the Federal Emergency Management Agency (FEMA) grant, to assist in acquiring these properties. The purchase of homes and property within floodprone areas is a Best Management Practice that is consistent with the District's Watershed Management Program.

#### Benefits

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

#### Costs

This is a multi-year funded project. In fiscal years 2005, 2006, 2007 and 2008, \$3,600,000 was budgeted as follows: \$1,262,500 from Peace River Basin, \$1,262,500 from Governing Board, \$950,000 from State appropriations and \$125,000 from the State Surface Water Restoration Fund. The proposed budget for FY2009 is \$350,000, which is split between the Governing Board (\$175,000) and the Peace River Basin (\$175,000). District funds shown in the table include staff salaries.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. With prior year funding the Topographic Information, Watershed Evaluation, portions of the Watershed Management Plan, and immediate maintenance were completed. A cooperative funding agreement with Polk County will be developed for the purchase of the 18 homes in the Peace River Estates.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	937,049	600	410,113	337,924	3,000,000	4,685,686
020 Peace River Basin	944,172	0	447,600	342,736	3,000,000	4,734,508
<b>District Budgeted - Outside Revenue</b>						
Ecosystem Trust Fund - Peace Ck Canal (H034)	250,000	250,000	0	0	0	500,000
Ecosystem Trust Fund - Peace Ck Canal Watershed	700,000	(250,000)	0	0	0	450,000
Water Protection & Sust T. F. (Surface Wtr Rstr)	125,000	0	0	0	0	125,000
<b>Project Funds Not Budgeted by the District</b>						
FEMA	1,500,000		0	0	0	1,500,000
Polk County	250,000		15,000	0	0	265,000
				<b>Total</b>		<b>\$12,260,194</b>

Critical Project Milestones	Projected	Amended	Actual
<b>Critical Project Milestones</b>			
Draft Watershed Management Plan (WMP) Consultant Services	3/15/05		3/8/05
Agreement Executed	4/30/05		5/10/05
Notice to Proceed - WMP Work Order #1	5/15/05		5/20/05
Notification of WMP Contract Execution - Peace Basin Board	8/19/05		8/19/05
Notification of WMP Contract Execution - Governing Board	8/30/05		8/30/05
Impl. of BMPs Peace River Estates Agr. to Management Services	7/18/06		7/18/06
Recognition of the Southwest Florida Water Management District	7/31/06		
WMP Completion	7/31/06	4/30/09	
Contract Expiration	7/31/06	12/31/09	
Contract Amendment #1 Execution	7/31/06	8/14/06	8/14/06
Impl. of BMPs Peace River Estates Agreement Executed	12/12/06		12/12/06
Impl. of BMPs Peace River Estates - Notice to Proceed	12/13/06		12/13/06

**Status As Of:** February 18, 2008

The agreement with PBS&J was executed on 5/10/2005. District's consultant is preparing a Watershed Management Plan (WMP) which includes assessing the surface water resources to identify potential improvement projects. A draft Watershed Management Plan Alternatives Report, which identified restoration opportunities, was completed in December 2006. District Staff is preparing an amendment to the agreement with PBS&J to increase the project budget to include funds necessary to complete the WMP. Canal Maintenance Activities: A Maintenance Evaluation Report was completed by PBS&J in May 2005 which identified short and long term maintenance activities which would improve conveyance in the canal. A Noticed General permit application was submitted to the FDEP in November 2007 for a second phase of sediment removal activities anticipated to be completed by June 16, 2008. The permit has been deemed complete and all License Agreements have been obtained. A pre-bid construction meeting for four sites was held on February 25, 2008 and quotes are due back on March 12, 2008. Aquatic vegetation removal is performed regularly by the Operations Department. Staff is currently in the process of identifying a permanent maintenance corridor along the entire length of the canal.

**SWUCA-Pilot Lake Augmentation**

**Project Type** WS&R Dev.  
**AOR(s)** Water Supply  
**Basin(s)** General Fund (District), Peace River  
**Cooperator(s)**  
**Project Manager** HOOD, JILL  
**Task Manager(s)**  
**Status** Ongoing

**Description**

The purpose of this project will be to evaluate and design a pilot lake augmentation system at Lake Lotela, located in Highlands county and in the Southern Water Use Caution area (SWUCA).

**Benefits**

This project is an important component of the District's SWUCA Recovery Strategy and the options developed will provide an alternative means of achieving minimum levels in the SWUCA.

**Costs**

Total project cost is \$100,000 and has been provided by the District's General Fund in FY2007.

**Additional Information**

The District has developed minimum levels to protect Lake Lotela and other regional lakes from significant harm that may be attributed to water withdrawals. The adopted minimum levels are intended to provide protection for cultural and natural system values associated with the lake. Developing the ability to augment the lake will ensure that these values are protected. This is a pilot project that will review and evaluate the overall conditions of the lake, assess the feasibility of using the surficial and/or Upper Floridan aquifer to augment the lake, and develop design criteria for a potential augmentation system. This project will be outsourced to a hydrologic engineering consultant and requires expertise in groundwater and surface water hydrology. The project is expected to take approximately 18 months to complete.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	100,000	0	2,719	0	0	102,719
020 Peace River Basin	0	0	2,719	0	0	2,719
				<b>Total</b>		<b>\$105,438</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Data Evaluation and Assembly Letter Report	12/31/07		
Model Testing and Verification Letter Report	1/31/08		
Model Development Letter Report	1/31/08		
BMP Alternatives Letter Report	4/30/08		
Selected Alternative Design and Cost Estimate Letter Report	4/30/08		
Final Report and Deliverables (Model and Database)	4/30/08		

**Status As Of:** February 19, 2008

The consultant is revising the draft letter report for Task 2.3.1 to incorporate suggestions by District staff. The consultant is also obtaining the latest version of DWRM2 to prepare for Task 2.4.2, the development of the water budget model.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	General Fund (District), Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	MORRIS, LISANN
<b>Task Manager(s)</b>	BRAUNSCH, WILLIAM, SMITH, RANDY, ARNOLD, DAVE
<b>Status</b>	Proposed

### Description

The Myakka River Watershed is approximately 600 square miles in size and spans about 66 miles from Myakka Head to its outfall in Charlotte Harbor. It includes portions of several counties including Hardee, Desoto and Charlotte with the majority of the watershed located in Manatee and Sarasota counties. The 34-mile segment of the Myakka River in Sarasota county has been designated a Wild and Scenic River by the State of Florida and, together with the estuarine portions of the river, it is designated an Outstanding Florida Water by the Florida Department of Environmental Protection. The river is the second largest source of freshwater inflow for Charlotte Harbor, which is generally viewed as one of the most productive estuaries in Southwest Florida and is a SWIM waterbody. The Initiative is a comprehensive project that will illustrate the effects of land use conversions and alterations and evaluate best management practices (BMPs) for restoration alternatives. The objective of this initiative is to restore water quality, natural system, and floodplain impacts in the watershed in ways that can also provide a benefit to water supplies in the Southern Water Use Caution Area (SWUCA). The Topographic Information, Watershed Evaluation, and Watershed Management Plan elements of the District's Watershed Management Program (WMP) are included in this initiative. Included in this effort, existing data and analyses (such as the Sarasota County Lower Myakka Watershed Management Plan, K487, and the City of North Port Big Slough Watershed Management Plan, K883) will be evaluated along with existing and proposed activities within the watershed, and a list of identified needs and a program to address long-term water resource issues will be developed.

### Benefits

The Initiative will result in a better understanding of the dynamics of the river and watershed, determine how alternations have affected these systems, evaluate potential water resource impacts from future land use changes, and provide alternatives to better manage the water resource within the Myakka River watershed.

### Costs

The estimated cost for this Initiative is approximately \$4.99 million including staff salaries. At the February 21, 2006 Governing Board Meeting, a transfer of funds (\$500,000) from the Water Supply and Resource Development reserves was approved to hire consultants to obtain digital topographic information using LiDAR in eastern Manatee County (\$380,000) and to initiate the water budget analysis for the Upper Myakka watershed (\$120,000). The FY2007 funding (\$2 million) continues the Upper Myakka water budget, the Watershed Evaluation for the entire watershed, and initiates the Watershed Management Plan element within the Upper Myakka. The \$2 million FY2007 budget is being funded as follows: \$575,000 from the Governing Board, \$517,500 from the Manasota Basin Board, \$57,500 from the Peace River Basin Board, and \$850,000 from state appropriations (Water Protection and Sustainability Trust Fund). An additional \$1.77 million is proposed for FY2008 to complete the Watershed Evaluation element, continue the Watershed Management Plan element, complete the Independent quality assurance review of existing parameters and models previously developed for the Myakka River in unincorporated Sarasota County (K487) and the Big Slough tributary (K883), and will be funded as follows: \$635,000 from the Governing Board, \$571,500 from the Manasota Basin Board, \$63,500 from the Peace River Basin Board, and \$500,000 from the State's Water Protection and Sustainability Trust Fund. The funding distribution, percentage wise, is Governing Board (50%), Manasota Basin Board (45%) and Peace River Basin Board (5%). With FY2008 funds consideration is being given to contracting for independent, peer review of the Water Budget for the Upper Myakka and purchasing the necessary software licenses for selected model(s). The remaining \$765,000 in funding will be required in FY2009 to complete the Watershed Management Plan through the Alternatives Analysis. The FY09 funding breakout is as follows: Governing Board (\$382,500), Manasota Basin Board (\$344,250) and Peace River Basin Board (\$38,250). When each element is completed the project budget and scope may require refinement based on the information gathered. The District funding amounts shown in the table include staff salaries. Future funding will be required, under a different project number, for implementation of selected BMPs.

### Additional Information

A WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. Funding is being requested in FY2009 to continue the Watershed Management Plan including: GIS data base development, watershed parameterization, computer modeling, floodplain analysis, floodplain delineation, and alternative analysis of BMPs within the Upper Myakka. Since all task under the Watershed Management Plan will not be completed within FY2008, the necessary funding to complete the project has be distributed between to FY2009. Objectives of the Initiative include: 1) ensuring an adequate supply of the water resource, 2) providing flood protection, 3) protecting and enhancing water quality and preventing the further degradation of the water resource, and 4) preserving, protecting and restoring natural systems. There is a significant amount of research, study and other data available for the watershed from the District and other Myakka stakeholders that can and

will be used during the course of the project. Stakeholder involvement and contribution of available information will be important for the Initiative's ultimate success.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	599,971	500,000	667,127	415,179	0	2,182,277
020 Peace River Basin	69,646	0	78,822	51,192	0	199,660
021 Manasota Basin	539,217	0	601,599	372,283	0	1,513,099
<b>District Budgeted - Outside Revenue</b>						
Ecosystem Trust Fund - Myakka Rvr W/S Init	850,000	0	500,000	0	0	1,350,000
<b>Total</b>						<b>\$5,245,036</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Aerial Mapping Services</b>			
Execute Work Order for Aerial Topographic Mapping	2/24/06		2/24/06
Complete Aerial Topographic Mapping	10/31/06	1/30/06	3/22/07
<b>2. Request for Proposals</b>			
Post Request for Proposals for Consulting Services	5/19/06		5/19/06
Open Proposals	6/20/06		6/20/06
Oral Presentations	7/25/06		7/25/06
Notice of Decision on RFP	8/4/06		8/8/06
<b>3. WMP Consulting Services</b>			
Develop Consultant Services Agreement	8/31/06		10/11/06
Execute Consultant Services Agreement	11/13/06		12/4/06
Execute Work Order #1	12/11/06		12/29/06
Complete Work Order #1	5/8/07		5/8/07
Execute Work Order #2	5/22/07		6/12/07
Execute Work Order #3	6/22/07		8/2/07
Execute Work Order #4	7/13/07		8/2/07
Execute Work Order #5	8/10/07		8/16/07
Complete Work Order #5	9/27/07	4/30/08	
Complete Work Order #4	12/3/07		1/18/08
Complete Work Order #2	2/11/08	3/11/08	
Complete Work Order #3	4/1/08		
SAI Agreement Termination	10/31/10		
<b>3. WMP Consulting Services</b>			
Execute Work Order #6	1/2/08		1/2/08
Execute Work Order #7	2/6/08		2/6/08
Complete Work Order #6	3/3/08		
Complete Work Order #7	5/15/08		

**Status As Of:** February 26, 2008

Status History: At the February 21, 2006 Governing Board Meeting, a transfer of funds (\$500,000) from the Water Supply and Resource Development reserves was approved to hire consultants to obtain LiDAR in eastern Manatee County (\$380,000) and to initiate the water budget analysis for the Upper Myakka watershed (\$120,000). The notice to proceed for the LiDAR work order was executed on February 24, 2006. The LiDAR vendor informed staff that the sensor used to acquire the data earlier this spring experienced hardware problems and the data are not usable. The vendor recollected the LiDAR data and the Eastern Manatee/Upper Myakka LiDAR has been approved and delivered to the WMP consultant. The Request for Proposals to select a consultant to perform the Watershed Management Program elements was posted on May 19, 2006 and a pre-proposal conference was held on June 1, 2006. Oral presentations of the three respondents were given on July 25, 2006. Singhofen & Associates, Inc. (SAI) was selected and approved on August 8, 2006. District staff met with the SAI team on August 21, 2006, to discuss the consulting services agreement and the scope of work. Staff presented this initiative to the Myakka River Management Coordinating Council and Myakka Conservancy. The SAI agreement was executed on December 4, 2006. Copies of the executed agreement were transmitted to Manatee County, City of North Port, Sarasota County, and PRMRWSA. A kick-off meeting was held with the Myakka River stakeholders on February 14, 2007, to present the project and collect information from staff with projects, knowledge, and/or data within the watershed. This meeting was held in conjunction with the Myakka CWM Plan update

being performed by the Planning Department. Work Order #1 deliverables (collecting and reviewing existing information, developing the methodology and approach for completing the surface water, water quality, and water budget modeling and preparing the project management, quality assurance, and outreach plan) have been completed. Work Order #2 was executed on June 12, 2007, to develop the Upper Myakka River water budget model. Work Orders #3 and 4 have also been executed to complete the digital topographic information element, geospatially reference existing survey data from throughout the watershed, develop content for a web page, complete historic land use mapping, and identify model-specific features add to the GWIS. Work Order #5 to conduct the first phase of surveying in the Upper Myakka was executed. The Planning Department informed the Initiative team they will not conduct the update to the Myakka CWM at this time; rather this will be performed once the Myakka River Watershed Management Plan has been completed. Planning staff will continue to support the outreach efforts to Initiative stakeholders. Survey efforts for the Upper Myakka area under Work Order #5 are complete except for some areas in Flatford Swamp remaining. The consultant team performed a topographic accuracy assessment and identified void areas in the terrain data that will need to be filled through survey and/or terrain information from permit documents. Changes in the processes of the Watershed Management Program as a result of FEMA work have delayed the development of Work Order #6. The threemember peer review panel is comprised of Bill Wise, Ph.D., University of Florida, Jennifer Jacobs, Ph.D., University of New Hampshire, and Joe Hughes, Ph.D., of DHI. Imagery (late 1940s and early 1950s) is being utilized for historic land use mapping in the water budget analysis. Training on the Mike SHE (integrated computer model for the water budget) was held for staff at the District. Coordination efforts continue with the H063 PRMRWSA Source Feasibility study. Work Order #6 that includes historic vegetation investigation in Flatford Swamp, and preliminary sub-basin and watershed delineations was executed January 2, 2008. The Purchase Orders for the Peer Review team are complete. Current Status: The kick-off meeting for the peer review was delayed until middle of March 2008. The historic land-use mapping and the digital terrain information are complete. The calibrated Upper Myakka Water Budget model is under review. Sensitivity analysis continues on the model to determine which input parameters effect the output the most. The consultant has begun scenario testing. The consultant is developing a future land use map for a hydrologic scenario run. The historic land use scenario is currently running. Survey in the Upper Myakka will start again. Preliminary sub-basin work has been submitted for review. The Myakka website can now be accessed on [watermatters.org](http://watermatters.org).

**Project Type** WS&R Dev.  
**AOR(s)** Water Supply  
**Basin(s)** General Fund (District), Peace River, Manasota  
**Cooperator(s)** Peace River/Manasota Regional Water Supply Auth.  
**Project Manager** LISZEWSKI, AUDRIE  
**Task Manager(s)** ARMSTRONG, BRIAN  
**Status** Proposed

**Description**

The Regional Integrated Loop System project is a series of transmission pipelines that will be developed to regionally transfer and deliver water from existing and future sources to demand centers within the Peace River/Manasota Regional Water Supply Authority's four county region. This project is the second phase of the Integrated Loop System and proposes to provide additional regional transmission capacity to the public water systems of the City of North Port and Charlotte and DeSoto Counties with future potential connections to Sarasota County, Englewood Water District and the City of Venice. This project is planned for preliminary engineering in FY2007 with engineering design and construction in later years.

**Benefits**

Development of this project will further integrate regional resources, maximize surface water for public supply, provide rotational capacity and the ability to rest sources, provide for reserve capacity for emergency transfers; limit the development of groundwater in the Southern Water Use Caution Area (SWUCA), and better match supply, demand and financial investment on a regional basis.

**Costs**

As presented in the PR/MRWSA's FY2009 funding request, the total project cost is now \$106,378,217 with the District's share being \$53,194,217 and the PR/MRWSA's share being \$53,184,000. District funding will be shared by the Governing Board (\$26,596,661), and the Peace River (\$7,182,616) and Manasota (\$19,414,940) Basin Boards. The FY2009 request is for the third year of funding and is as follows: Governing Board (\$3,250,000), Manasota Basin Board (\$2,340,000) and the Peace River Basin Board (\$910,000).

**Additional Information**

The Loop Feasibility/ Routing Study was authorized by the Authority in May 2005 and a draft report was issued in June 2006. The Feasibility/ Routing Study identified the preferred loop pipeline routing, environmental impacts, major connection points, preliminary pipe sizing, proposed schedule of project phasing, and timeframes for construction. This project connects the Peace River Water Treatment Plant with the North Port Water Treatment Plant and then divides into two segments. The first segment loops northwest to Sarasota County's Carlton Water Treatment Facility and the second segment loops southwest and connects to local public water systems such as Englewood Water District and the City of Venice.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	751,025	(3,200)	1,253,636	3,252,938	20,443,500	25,697,899
020 Peace River Basin	203,277	(2,001)	339,501	911,162	5,519,743	6,971,682
021 Manasota Basin	548,277	(2,001)	914,501	2,341,162	14,923,757	18,725,696
<b>Project Funds Not Budgeted by the District</b>						
PR/MRWSA	1,500,000		1,750,000	6,500,000	43,434,000	53,184,000
				<b>Total</b>		<b>\$104,579,277</b>

**Status As Of:** March 04, 2008

The Authority Board approved the first work order for Phase 2 of the Regional Loop System and issued a notice to proceed. Project kick-off meetings were held in August 2007. In December 2007, King Engineering, the Authority's consultant, released a preliminary report for the Phase 2. As currently envisioned, the Phase 2 pipeline would provide an interconnect between the Authority's Peace River facility and the City of North Port's Water Treatment Plant (WTP). Authority and District staff are developing a contract and scope of work for the first phase (H069) of this three phase project. The Phase 1A contract is anticipated to be executed by April 2008 while the Phase 2 contract is anticipated to be executed by July 2008.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	General Fund (District), Peace River, Manasota
<b>Cooperator(s)</b>	Peace River/Manasota Regional Water Supply Auth.
<b>Project Manager</b>	LISZEWSKI, AUDRIE
<b>Task Manager(s)</b>	ARMSTRONG, BRIAN
<b>Status</b>	Proposed

**Description**

The Regional Integrated Loop System project is a series of transmission pipelines that will be developed to regionally transfer and deliver water from existing and future sources to demand centers within the Peace River/Manasota Regional Water Supply Authority's (Authority) four county region. This project is the third phase of the Integrated Loop System and proposes to construct a pipeline from Sarasota County's Carlton Water Treatment Facility north to both Manatee County's Lake Manatee Water Treatment Plant and University Water Treatment Plant, located on the county boundary between Manatee and Sarasota County. This project is planned for preliminary engineering and land acquisition in FY2007 with engineering design and construction in later years.

**Benefits**

Development of this project will further integrate regional resources, maximize surface water for public supply, provide rotational capacity and the ability to rest sources, provide for reserve capacity for emergency transfers; limit the development of groundwater in the Southern Water Use Caution Area, and better match supply, demand and financial investment on a regional basis.

**Costs**

As presented in the PR/MRWSA's FY2009 funding request, the total project cost is now \$146,207,442, with the District's share being \$73,110,092; the PR/MRWSA's share being \$73,097,350. District funding will be shared by the Governing Board (\$36,554,111), and the Peace River (\$9,871,750) and Manasota (\$26,684,231) Basin Boards. The FY2009 request is for the third year of funding and is as follows: Governing Board (\$4,250,000), Manasota Basin Board (\$22,215,427) and the Peace River Basin Board (\$8,158,446).

**Additional Information**

The Loop Feasibility/Routing Study was authorized by the Authority in May 2005 and a draft report was issued in June 2006. The Feasibility/Routing Study identified the preferred loop pipeline routing, environmental impacts, major connection points, preliminary pipe sizing, proposed schedule of project phasing, and timeframes for construction. This project would provide potable water service to areas of northern Sarasota County and Manatee County.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	676,801	(3,000)	1,253,436	4,251,610	29,647,939	35,826,786
020 Peace River Basin	183,803	(2,001)	339,501	1,190,332	8,004,944	9,716,579
021 Manasota Basin	494,303	(2,001)	914,501	3,060,797	21,642,994	26,110,594
<b>Project Funds Not Budgeted by the District</b>						
PR/MRWSA	1,350,000		1,450,000	8,500,000	61,797,350	73,097,350
				<b>Total</b>		<b>\$144,751,309</b>

**Status As Of:** March 04, 2008

The Authority Board approved the first work order for Phase 3 of the Regional Loop system and issued a notice to proceed. Project kick-off meetings were held in August 2007. As currently envisioned, Phase 3 would be an extension of the Authority's regional transmission system currently terminating at the Carlton WTP. Authority and District staff are developing a contract and scope of work for the first phase (H069) of this project. The Phase 1A (H069) contract is anticipated to be executed by March 2008 while the Phase 3 (H052) contract is anticipated to be executed in July 2008.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	General Fund (District), Peace River, Manasota
<b>Cooperator(s)</b>	Punta Gorda
<b>Project Manager</b>	LISZEWSKI, AUDRIE
<b>Task Manager(s)</b>	ARMSTRONG, BRIAN
<b>Status</b>	Ongoing

**Description**

This project is for the expansion of the City of Punta Gorda's Shell Creek Water Treatment Plant (WTP) from 8 to 10 mgd. Project elements include rehabilitating existing filters and improving the facility's chemical mixing and disinfection processes. Although the facility recently received a facility re-rating from the DEP from 8 to 10 mgd, these improvements are necessary for the plant to treat a sustained capacity of 10 mgd. The Shell Creek facility expansion from 8 mgd to 10 mgd is in the design phase. Construction is scheduled for the 2007 budget year.

**Benefits**

The City of Punta Gorda will have the ability to supply additional water to the regional system. The intent is to make water available to address a potential water supply shortfall that may occur while the Peace River/Manasota Regional Water Supply Authority (Authority) completes its facility expansion in 2008. This project will assist in maximizing surface water for public supply; provide rotational capacity and the ability to rest sources; provide reserve capacity for emergency transfers; limit development of ground water in the Southern Water Use Caution Area; and better match supply, demand, and financial investment on a regional basis.

**Costs**

Total estimated project cost is \$3,000,000 and the District's share is requested to be \$1,500,000 in FY2007.

**Additional Information**

The City of Punta Gorda is planning an expansion of its Shell Creek WTP capacity to meet future public supply demands through 2016. The expansion will occur in two stages, from 8 to 10 mgd by January 2008 and from 10 to 15 mgd by 2014. The City has submitted a separate cooperative funding application for each expansion. This project is only for the expansion from 8 to 10 mgd. The Authority identified the Shell Creek WTP as a potential source for providing 2 mgd towards the Authority's GAP Plan. The GAP Plan addresses a possible water supply shortfall that may occur while the Authority completes its facility expansions in 2008 (F032 & F033). On February 1, 2006, the Authority submitted a conjunctive water use permit application that included Shell Creek as a 2 mgd source. Additionally, the Authority has requested FY2007 funding to construct a 24-diameter pipeline connecting the Shell Creek and Peace River WTP Facilities (H050).

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	751,553	(5,441)	5,441	996	0	752,549
020 Peace River Basin	203,277	(4,533)	4,533	497	0	203,774
021 Manasota Basin	549,053	(4,533)	4,533	497	0	549,550
<b>Project Funds Not Budgeted by the District</b>						
Punta Gorda	1,500,000		0	0	0	1,500,000
				<b>Total</b>		<b>\$3,005,873</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Begin WTP Improvements and re-rate from 8 to 10 mgd	10/1/06		10/1/06
Basin Board Notification of Contract Execution	4/25/07		4/25/07
Contract Executed	6/14/07		6/14/07
Project Completion	1/31/08		
<b>A. Complete Design and Equipment Delivery</b>			
North Filter Improvements	8/10/07	8/21/07	8/21/07
Sludge Bed Refurbishment	8/21/07		8/21/07
Televise Underdrain	9/4/07		7/16/07
Chemical Feed - New Flash Mix System	10/5/07		11/2/07
Solids Contact Unit Equipment Replacement	10/30/07		11/30/07
Dewatering Canopy	11/29/07	4/28/07	
Chemical System Improvements	1/1/08	6/1/08	11/15/07

**B. Complete Construction**

Ground Storage Tank Modification	8/13/07		8/13/07
Sludge Drying Bed Refurbishment	11/6/07	12/20/07	12/20/07
Chemical Feed - New Flash Mix System	11/7/07	12/19/07	
North Filter Improvements	11/15/07	11/19/07	11/15/07
Solids Contact Unit Equipment Replacement	11/16/07	12/21/08	12/20/07
South Filter Improvements	1/3/08	1/1/08	12/21/07
Dewatering Canopy	1/10/08	5/12/08	
Chemical System Improvements	6/1/08	6/1/08	

**Status As Of:** March 05, 2008

The contract has been signed by all parties and executed. Both the Ground Storage Tank Modification and Telvised Underdrain were completed on time and within budget. In addition, the Sludge Drying Bed Refurbishment, Solids Contact Unit Equipment replacement, and North and South Filter tasks are also complete. Minor delays for the Chemical Feed System activities resulted from tardy equipment delivery. Delays also occurred with the Canopy Dewatering due to discrepancies between submittal and existing piping locations. The design of the Chemical System Improvements is complete and currently the contractor is preparing cost estimates. Despite the minor delays, the project is anticipated to be complete within the agreement duration.



**Project Type** WS&R Dev.  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** General Fund (District), Alafia River, Peace River, Manasota  
**Cooperator(s)**  
**Project Manager** KELLEY, MIKE  
**Task Manager(s)**  
**Status** Proposed

**Description**

CF Industries is developing an Aquifer Recharge and Recovery Project (ARRP) on a portion of its South Pasture mine in Hardee County. The project will store mine stormwater in an existing sand-clay mix area; naturally treat the water through two reclaimed wetland cells constructed in an adjacent sand-clay mix area; filter the water through a sand tailings filter basin; and then recharge an estimated 2 to 4 mgd of the naturally treated water into the Floridan aquifer. The goal of the natural treatment system is to treat the water to primary and secondary drinking water standards so that it can be recharged into the Upper Floridan aquifer to increase water levels and provide additional water to help meet local and regional water demands. Project components include design and construction of the treatment wetlands and sand filtration basin; construction of intake control structures to and from the mine, reservoir and treatment systems; and, construction of an injection well and two monitor wells. The project will be conducted in two phases: Phase 1 includes design, permitting, and construction of the wetlands treatment system and sand filtration basin; and, Phase II includes construction and testing of the recharge well. CF Industries' original FY2009 Cooperative Funding request was modified to postpone construction and testing of the recharge well until at least FY 2010. Total District funding now being requested for FY2009 is \$400,675 and will be used for construction of a stormwater collection and discharge system. This will increase the District's previous total funding commitment from \$2,250,000 to \$2,605,729 and result in amending the agreement.

**Benefits**

This is an innovative alternative water supply project that could provide significant benefits to the Southern Water Use Caution Area (SWUCA) by maintaining or increasing Upper Floridan aquifer levels. Utilizing excess surface waters and safely injecting those waters into the aquifer is one of several strategies the District is pursuing as part of its SWUCA Recovery Strategy. The information collected from this project will be used to demonstrate the full-scale feasibility of this type of treatment technology and can be applied to future natural treatment and aquifer recharge projects in the area. This project was identified in the District's most recent update of the Regional Water Supply Plan as a water supply development option under the Heartland Water Alliance planning area.

**Costs**

The original total cost of the project including reclamation funds from CF Industries is \$7,042,314, with the District funding up to 50 percent of eligible costs to a maximum of \$2,250,000. District funding will be shared by the Governing Board (50 percent), Peace River Basin Board (25 percent), Alafia River Basin Board (12.5 percent), and Manasota Basin Board (12.5 percent). CF Industries' original FY2009 Cooperative Funding Initiative request was for \$1,148,445 to complete the project. However, based on discussions with District staff, CF Industries has postponed construction and testing of their recharge well until at least 2010, reducing their FY2009 funding request to \$400,675. The FY2009 Governing and Basin Boards shares are, Peace River Basin Board: \$100,169; Manasota & Alafia River Basin Boards: \$50,084 each; Governing Board: \$200,338. The FY2009 and FY2010 requested funding represents an increase in the District's share of total funding from \$2,250,000 to \$2,605,729. This increase is attributable to a new berm drainage system required by the FDEP permit. The total cost of this project is now estimated to be \$7,042,314.

**Additional Information**

The project consists of constructing the major components required to operate the ARRP, which will include the design and construction of the treatment wetlands and sand filtration basin, intake control structures to and from the mine, reservoir and treatment systems, and the construction of an injection well and two monitor wells. In anticipation of receiving formal approvals and variances from the required regulatory agencies, CF Industries commenced construction of the project in March 2007. It is expected to take approximately two years to complete the installation of the necessary infrastructure. Another two years will be required to thoroughly test the system. Project costs for the first fiscal year, FY2007, are estimated at \$1,751,620, with the District's approved share not-to-exceed \$875,842 (Peace River Basin Board: \$218,985; Manasota & Alafia River Basin Boards: \$109,476 each; Governing Board: \$437,905). These funds were transferred from the Water Supply and Resource Development Reserves to each of the participating boards. Project approved funds for FY2008 were \$1,074,138, with the District's funded share not-to-exceed \$395,789 (Peace River Basin Board: \$97,927; Manasota & Alafia River Basin Boards: \$49,474 each; Governing Board: \$198,914).

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

010 General Fund (Districtwide)	0	437,905	198,914	206,090	422,338	1,265,247
011 Alafia River Basin	0	109,476	49,474	53,721	105,585	318,256
020 Peace River Basin	0	218,985	97,927	103,806	211,169	631,887
021 Manasota Basin	0	109,476	49,474	51,606	105,585	316,141

**District Budgeted - Outside Revenue**

Water Protection & Sust T.F. (Alternative Wtr)	0	0	193,814	0	0	193,814
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**Project Funds Not Budgeted by the District**

CF Industries	2,706,698		484,535	400,675	747,770	4,339,678
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**Total** **\$7,065,023**

**Critical Project Milestones****Phase I**

	Projected	Amended	Actual
Governing Board Approval	11/30/06		11/30/06
Basin Board Approvals	12/15/06		12/15/06
Effective Date	1/2/07		
CF Industries Sitework/Wetland Const. Commence	3/15/07		
Wetland Berm, Pump, Filter Construction Commence	4/1/07		
Execute Contract	4/15/08		
Wetland Berm, Pump, Filter Construction Complete	7/1/09		

**Phase II**

Recharge/Monitor Wells Construction Commence	10/1/09		
Recharge/Monitor Wells Construction Complete	4/1/10		

**Status As Of:** March 10, 2008

Cooperative funding agreement documents have been prepared and they are in the District's Legal Department for the necessary review and approvals. Teleconferences and email communications have been made with Jim Sampson representing CF Industries. CF Industries has modified their Conceptual Reclamation and Wetland Resource permits with four variances from FDEP's mine reclamation requirements. The reclamation variance is with the FDEP in Tallahassee. Orlando Rivera, FDEP, was contacted and this project's permitting was discussed. Also, CF Industries has submitted an underground injection and control (UIC) permit application for the aquifer recharge and recovery well. CF Industries is working with the FDEP UIC department on the request for additional information (RAI). The FY2009 cooperative funding initiative is in review and has been extended into FY2010 future funding. Changes in the drilling and well construction plans postpone this task's start until October 2009 from the April 2009 start date we discussed. This is due to the need for data from concurrent testing at two other sites to reduce the occurrence of arsenic in water injected into the Iridan aquifer. This additional time is also needed to test the wetlands treatment system to produce water at the FDEP drinking water standards for a year.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	General Fund (District), Peace River, Manasota
<b>Cooperator(s)</b>	Peace River/Manasota Regional Water Supply Auth.
<b>Project Manager</b>	MORRIS, LISANN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project will conduct feasibility studies on three potential alternative water supply sources that were identified in the Peace River/Manasota's Regional Water Supply Authority's Integrated Regional Water Supply Master Plan (IRWSMP). The sources include Cow Pen Slough/Dona Bay, Upper Myakka/Flatford Swamp and Shell Creek. The project will provide the following:

- Identify major supply opportunities in the three source areas
- Refine yield estimates
- Identify locations for treatment, storage and pipeline facilities
- Identify associated opportunities to improve environment
- Provide general design criteria for facilities
- Develop potential supply configurations and preliminary cost estimates

**Benefits**

This project and the associated feasibility studies will allow the Authority to move forward with developing its next water supply source\sources through their Regional Resource Development program. The program focuses on maximizing surface water for public supply, reducing development pressure on groundwater in the SWUCA, providing rotational and reserve capacity for resting sources, and optimizing the regional financial investment in water supply and transmission capacity.

**Costs**

The total estimated project cost is \$2,500,000. The District's anticipated total funding contribution for the project is \$1,250,000. It is anticipated that, of the District's projected total funding contribution of \$1,250,000, the District Governing Board will contribute \$612,500, the Manasota Basin Board will contribute \$447,125 (73 percent of the total basin board contribution), and the Peace River Basin Board will contribute \$165,375 (27 percent of the total basin board contribution). Funding from the Ecosystem Management and Restoration Trust Fund in the amount of \$50,000 will be split evenly(\$25,000/\$25,000) between the cooperators to reduce contributions.

**Additional Information**

The Peace River/Manasota Regional Water Supply Authority (Authority) is comprised of Charlotte, DeSoto, Manatee and Sarasota Counties. In accordance with its Master Water Supply Contract, the Authority is obligated to timely develop and deliver new water supply sources and facilities to meet the needs of its customers. Building upon the planning efforts of the Water Planning Alliance, the District, and Local Governments, the Authority has developed a draft IRWSMP which will serve as a road-map for meeting Authority member and customer water needs in the future. The IRWSMP will contain a Regional Resource Development program that will analyze and prioritize potential new water supply sources within the region. Initially the Authority submitted a FY2008 Cooperative Funding application to proceed with preliminary engineering of selected regional water supply source(s). After discussions between the District and Authority staff, the Authority's FY2008 application was revised to only include the feasibility portion of the Regional Resource Development program. It is anticipated that the Authority will need 20% (\$500,000) of the total project cost in FY2007 and the remainder (\$2,000,000)in FY2008. As a result, an out of cycle funding request will be brought to the June Manasota and Peace River Basin Boards and Governing Board for approval. Upon completion of the feasibility analysis, the Authority will move forward with final design and construction of the selected source(s). The first new regional water supply capacity is anticipated to be available in 2014.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	125,000	520,157	18,547	0	663,704
020 Peace River Basin	0	33,750	144,760	4,429	0	182,939
021 Manasota Basin	0	91,250	372,141	10,679	0	474,070
<b>District Budgeted - Outside Revenue</b>						
Ecosystem Trust Fund - Central W Coast SW Enhanc	0	0	50,000	0	0	50,000
<b>Project Funds Not Budgeted by the District</b>						
PR/MRWSA	250,000		975,000	0	0	1,225,000
				<b>Total</b>		<b>\$2,595,713</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
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Contract Approved	8/17/07	9/18/07
Work Order #1-deliverable #1	11/7/07	
Work Order #1-deliverable #2	12/7/07	
Execute Work Order #2	1/10/08	1/10/08

**Status As Of:** February 26, 2008

The Authority received three submittals on April 25 for consultant services to conduct water supply feasibility studies of the Shell Creek, Cow Pen Slough/Dona Bay, and Upper Myakka River Systems. The Authority Board interviewed and ranked the consultants at their June meeting and authorized contract negotiations with the top ranked firm, the PBS&J team. In addition, District staff brought an out of cycle funding request for \$250,000 to the June Peace River Basin Board and Governing Board that was approved, contingent on approval by the Manasota Basin Board In July. The remaining \$1,000,000 being requested by the Authority for this project will be placed in the FY2008 budget for approval. Several scoping meetings have taken place with the consultant and contracts are under development. The District Funding agreement was be executed in September 2007. Scope and Work Order #1 of the Authority's Consultant Contract was approved by their Board. Ongoing activities are existing data collection and evaluation and field reconnaissance visits to all three proposed areas by the consultant, the Authority, and District staff. A Coordination meeting was held between District Ecologic Evaluation staff and Source Feasibility Study team. The first deliverable from Work Order #1 is a technical report summarizing inventoried data and relevant technical reports and/or models and a database of the inventoried data is complete. The second deliverable from Work Order #1 is a document describing preliminary alternatives recommended for efforts conducted in subsequent phases of the feasibility studies. This document was presented to the Authority Board at their December 5, 2007 meeting. The Consultant continues to refine the reservoir siting evaluation. Additional water quality testing for parameters such as corrosiveness, Giardia, Cryptosporidium, TOC (Total Organic Carbon), took place to allow for a balanced comparison between the proposed sites. A two joint meetings were held with the MRWI team to discuss hydrologic alternative scenarios in the Upper Myakka. Current Status: The Authority's consultant has been working on updating the hydrologic analysis and costs for the Dona Bay option. Also they are continuing reservoir siting evaluation on the Upper Myakka and Shell Creek options.

**Project Type** WS&R Dev.  
**AOR(s)** Water Supply, Natural Systems  
**Basin(s)** General Fund (District), Alafia River, Peace River  
**Cooperator(s)** Hillsborough County  
**Project Manager** ANDRADE, ANTHONY  
**Task Manager(s)**  
**Status** Withdrawn

**Description**

The general concept of this withdrawn alternative water supply feasibility project was to provide all uncommitted dry- and wet-weather reclaimed water flows produced by Hillsborough County's South-central Reclaimed Water System for large users in the SWUCA. Hillsborough County originally proposed regional transmission mains, and potentially a reservoir, to serve the needs of one or more large users in west-central Polk County and/or eastern Hillsborough County. Phase I of the project was to be a preliminary permitting, design and engineering study to assess the beneficial use of Hillsborough County's current and future uncommitted reclaimed water from their south/central wastewater facilities, complete approximately 30 percent of the infrastructure design, and cost the project.

**Benefits**

The goal of the overall project was to maximize the use of Hillsborough County's reclaimed water flows while minimizing discharge to Tampa Bay, and offsetting water withdrawals in the SWUCA. The objective of the withdrawn study was to determine the potential reuse sources, flows, offsets, customers, routing and costs for the reuse project(s).

**Costs**

The total cost of the study was originally estimated to be \$1,000,000, of which the District had been requested to fund half (\$500,000). The County notified the District that the County, TECO and Mosaic have decided to fund the study on their own. As such the District commitment (anticipated to be \$125,000 from the Alafia River Basin Board, \$125,000 from the Peace River Basin Board and \$250,000 from the Governing Board) for the project in FY2008 is no longer needed. There was no benefit calculation for this study project, as offsets will be associated with the potential future construction of the project.

**Additional Information**

In May 2007, District staff was made aware of a project proposal developed by Hillsborough County and Mosaic Fertilizer, Inc., that involved bringing reclaimed water from the county's south-central reclaimed water system to Mosaic's Hopewell Mine clay settling areas in Polk County. From there, the reclaimed water would be piped to Mosaic's Bartow and New Wales processing plants also in Polk County, where it would offset up to 10 mgd of Mosaic's groundwater use. The second part of the project would be to assign the offset ground water from Mosaic to municipalities in Polk County, such as Lakeland and Bartow to meet their potable water supply needs. Although District staff agreed that the project proposal had a number of promising elements, staff also had several concerns regarding project details, particularly those surrounding the assignment and compensation of Mosaic's offset ground water. A complicating factor was that the county asked the District to approve the funding for the PD&E study out of cycle, i.e., not as part of the 2008 cooperative funding cycle. This was because the county needed to quickly make a decision on how its wastewater would be utilized to ensure that wastewater disposal issues would not hinder future development. The project was presented by Hillsborough County and Mosaic staff at the May 2007 Governing Board meeting, where the District was requested to fund half of the \$1 million cost of the PD&E study. The Governing Board requested staff proceed with the investigation and review of the project, and work the project into the FY2008 budget process. At their respective July 2007 meetings, the Alafia River and Peace River Basin Boards approved funding (\$125,000 each) for the study. On July 26th, 2007 Hillsborough County informed the District that the County had decided to serve TECO Polk Power Plant as a primary customer, but may decide serve Mosaic at some point in the future. At the July 31st, 2007 Governing Board meeting, District staff presented the project status, and requested the Board set funding aside to be used for the study pending resolution of the concerns District staff had. Because of the degree of uncertainty relative to the project customer, and remaining unanswered questions from the May Board meeting, the Governing Board did not approve staff's request, but left the door open for the county to return with a request once more details were available and Tampa Bay Water was part of the project decision-making team. On August 9th, 2007 Hillsborough County notified the District that it is initiating a \$900,000 feasibility study to take reclaimed water to the TECO facility in southwest Polk County and then possibly later to Mosaic. Hillsborough County, TECO and Mosaic will each put up \$300,000 for the study. The study will place a priority on taking the water to TECO, which will allow Mosaic to complete some additional analysis to determine how much reclaimed water they can ultimately take. If the project(s) is determined to be feasible the County intends to seek District funding for implementation.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	125,000	0	0	125,000
020 Peace River Basin	0	0	125,000	0	0	125,000

**H068**  
**(Withdrawn) Hillsborough County South/Central Regional Reclaimed Water Project**



**Project Funds Not Budgeted by the District**

Hillsborough County	0	500,000	0	0	500,000
			<b>Total</b>		<b>\$750,000</b>

**Status As Of:** November 05, 2007

The project was withdrawn on August 9th, 2007, when Hillsborough County notified the District that it is initiating a \$900,000 feasibility study to take reclaimed water to the TECO facility in southwest Polk County and then possibly later to Mosaic. Hillsborough County, TECO and Mosaic will each put up \$300,000 for the study (no District funding). The study will place a priority on taking the water to TECO, which will allow Mosaic to complete some additional analysis to determine how much reclaimed water they can ultimately take. If the project(s) is determined to be feasible, the County intends to seek District funding for implementation at some point in the future.



**Project Type** WS&R Dev.  
**AOR(s)** Water Supply  
**Basin(s)** General Fund (District), Peace River, Manasota  
**Cooperator(s)** Peace River/Manasota Regional Water Supply Auth.  
**Project Manager** LISZEWSKI, AUDRIE  
**Task Manager(s)** ARMSTRONG, BRIAN  
**Status** Proposed

**Description**

The Regional Integrated Loop System project is a series of transmission pipelines that will be developed to regionally transfer and deliver water from existing and future sources to demand centers within the Peace River/Manasota Regional Water Supply Authority's four county region. This project will connect the water supply systems of the Peace River/Manasota Regional Water Supply Authority, Charlotte County and the City of Punta Gorda. Construction of the interconnect will consist of approximately 10 miles of 24 inch pipe including a 6400 ft sub aqueous crossing of the Peace River.

**Benefits**

Development of this project will integrate regional resources; maximize surface water for public supply; provide rotational capacity and the ability to rest sources; provide for reserve capacity for emergency transfers; limit the development of groundwater in the Southern Water Use Caution Area (SWUCA); and better match supply, demand and financial investment on a regional basis.

**Costs**

As presented in PR/MRWSA's FY2009 funding request, the total project cost is \$19,027,191 with the District's share being \$7,998,490 and Charlotte County's share being \$7,986,301. The remaining \$3,042,400 will be allocated from WPSTFs if available. District funding will be shared by the Governing Board (\$3,999,716), and the Peace River (\$1,080,339) and Manasota (\$2,918,435) Basin Boards. The FY2009 request is as follows: Governing Board (\$289,445), Manasota Basin Board (\$211,295) and the Peace River Basin Board (\$78,150).

**Additional Information**

Initially there were two separate pipelines, the Authority's Integrated Regional Loop system Phase 1 (H050) and Charlotte County's Emergency Interconnect (L636). Phase 1 of the Integrated Loop System was designed to interconnect the Peace River and Shell Creek water treatment plants via an extension of the DeSoto County Regional Transmission System. Phase 1 was canceled by the Authority in June 2006 for lack of a local match to District funding. Charlotte County's emergency interconnect consisted of a sub aqueous crossing of the Peace River, interconnecting the water supply systems of Charlotte County and Punta Gorda. In an effort to achieve the benefits of both pipelines, discussions were initiated to combine Phase 1 and the emergency interconnect. The revised and expanded pipeline was approved by both Charlotte County and the Authority Board in June 2006. This expanded pipeline will be designed to transfer up to 6 MGD between the Authority, Charlotte County and Punta Gorda. In creating this interconnect, water provided by Punta Gorda to Charlotte County will offset the County's Demand on the Peace River. This offset can then be made available to other Members of the Authority or placed into storage to create additional reliability for the regional system.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	3,710,271	292,964	0	4,003,235
020 Peace River Basin	0	0	1,002,189	80,806	0	1,082,995
021 Manasota Basin	0	0	2,707,140	211,959	0	2,919,099
<b>Project Funds Not Budgeted by the District</b>						
PRMRWSA	0		7,407,411	578,890	0	7,986,301
				<b>Total</b>		<b>\$15,991,630</b>

**Status As Of:** March 04, 2008

The PR/MRWSA Board awarded the design consultant contract to DMK Associates for Phase 1A in September 2007. Subsequently in October 17, 2007, the project was issued a notice to proceed and the kick-off meeting transpired. In February 2008, DMK presented the Preliminary Engineering Report which District staff reviewed. District and Authority staff are currently finalizing the cooperative funding agreement and anticipated that agreement will be executed in March 2008.



<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Alafia River, Peace River
<b>Cooperator(s)</b>	Polk County, South Florida Water Management District
<b>Project Manager</b>	LISZEWSKI, AUDRIE
<b>Task Manager(s)</b>	ARMSTRONG, BRIAN
<b>Status</b>	Proposed

**Description**

The Polk County Comprehensive Water Supply Plan will identify and quantify viable public water supply and alternative water supply sources for various public utility systems within Polk County. Recommendations from the plan will include project definitions, specific actions, production rates, schedules, project costs and unit water costs. The total cost for the project is \$955,318.

**Benefits**

Development of this plan will aid in the identification of viable water supply sources for Polk County's increasing water demands, and advance the preservation of natural resources in the Southern Water Use Caution Area (SWUCA) by selecting projects that support limited groundwater use.

**Costs**

As presented in the consultant's proposed Scope of Services and Fee Schedule, the total cost for the project is \$955,318 with the District's share being \$382,127, SFWMD share being \$95,532, and Polk County's share being \$477,659. It is anticipated that, of the District's projected total funding contribution of \$382,127, the Governing Board will contribute \$191,063, the Peace River Basin Board will contribute \$149,030 and the Alafia Basin Board will contribute \$42,034. The cooperative funding agreement is anticipated to be executed in April 2008.

**Additional Information**

Two previous planning studies were commissioned with District funding to investigate the water supply sources of Polk County. The current Polk County Comprehensive Water Supply Plan differs from the previous studies in that this plan will provide Polk County with feasible water supply options, schedules and cost estimates.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	10,197	0	10,197
011 Alafia River Basin	0	0	0	1,926	0	1,926
020 Peace River Basin	0	0	0	7,126	0	7,126
<b>Project Funds Not Budgeted by the District</b>						
Polk County	0		0	477,659	0	477,659
SFWMD	0		0	95,532	0	95,532
				<b>Total</b>		<b>\$592,440</b>

**Critical Project Milestones****Task Description**

- Task 4 - Treatment Transmission and Storage Analysis
- Task 3 - Current Water Supply and Deficit Analysis
- Task 5 - Implementation Plan
- Task 1 - Project Progress and Coordination
- Task 2 - Identify and Quantify Water Supply Alternatives
- Task 6 - Allowance for Other Detailed Investigations

**Status As Of:** March 04, 2008

Polk County awarded the contract to their prequalified consultant, Reiss Environmental Inc. On February 21, 2008, Polk County hosted the project kick-off meeting with attendance by SWFWMD, SFWMD, Polk County and Polk County Utilities. District staff is currently coordinating with Polk County staff to finalize the Cooperative Agreement. The agreement is anticipated to be executed in April 2008.

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Alafia River, Peace River
<b>Cooperator(s)</b>	Polk County Utilities
<b>Project Manager</b>	NOURANI, MEHRSHAD
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed

**Description**

This project consists of the planning, design, permitting and construction of a 1-billion gallon, lined storage reservoir and associated pumping and piping systems to connect to the SWRUSA Reuse System and the City of Lakeland's wetland disposal system. The reservoir will hold water that is captured from the City's wetland treatment system and wet-weather flows from the County's reclaimed water system. The captured water will be later pumped, filtered and treated to be used for irrigation on residential lawns, commercial landscapes and recreational grounds. Additional piping to be designed and constructed with this project is 8,150 ft of pipe along Carter Rd from the reservoir site to connect to the County's reuse transmission line on County Rd 540A. This line will improve pressures and reliability within the eastern portion of the SWRUSA reclaimed water system and to add additional users. The project will be undertaken in 3 phases, the first of which would confirm the feasibility and the available yield from a cooperative Polk County and City of Lakeland reclaim water system and the design of the Carter Rd Extension. The feasibility study is currently underway and will be complete by March 31, 2008. The second phase, for which FY2009 funds are requested, will provide the design and permitting for the reservoir system, the execution of an interlocal agreement with the City to share the land and/or right of way, and to prepare a management plan for the water resource. The third phase will consist of the construction. The County has 2,398 connections (959,200 gpd) in existing or identified future connections that can be served with irrigation water supplied from this project. The type of customers include residential, industrial and commercial. The number of customers for the City of Lakeland will be determined upon completion of the feasibility study being conducted cooperatively by the County and the City.

**Benefits**

The City's projected potable water demand is 2 MGD and the County has 2,398 connections (959,200 GPD) in existing reclaimed water dry-lined or identified future connections that could be served with irrigation water supplied from this project. The related potable offset of the reuse piping along Carter Road is estimated to be 158,000 gallons per day. Also, this project will improve pressures and reliability within the eastern portion of the SWRUSA reclaimed water system and to add additional users.

**Costs**

Total cost of the project over 3 fiscal years is \$18,215,628. Requested FY2009 funding from the District is \$342,500 for the design, and will be shared by the Governing and Basin Boards associated with the population of Polk County's and Lakeland's service areas that will receive the project benefits, as follows: Governing Board = \$171,250 (50%); Alafia River Basin = \$34,250 (10%); Peace River Basin = \$137,000 (40%).

**Additional Information**

The City's projected demand is 2 million gallons per day and the County has .959 mgd of potable water demand. The County has identified 2,398 existing and future residential reclaimed water connections with 959,200 gallons per day reclaimed water flow. The related potable offset of the reuse piping along Carter Road is estimated to be 158,000 gallons per day. The County and the City are currently finalizing an intergovernmental agreement which assigns to each party responsibility for the cost and maintenance of the system. The County and the City are currently conducting a feasibility study (not cost to the District) to confirm the benefits and viability of this project. When finalized, the District will review the study results to confirm District's future funding of this project. The results of the study will be available by the end of March 2008.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	174,311	0	174,311
011 Alafia River Basin	0	0	0	36,043	0	36,043
020 Peace River Basin	0	0	0	138,568	0	138,568
				<b>Total</b>		<b>\$348,922</b>

<b>Critical Project Milestones</b>	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Contract Execution	12/31/08		
Notice to Proceed for Study	3/1/09		
Feasibility Study Completion	9/30/09		
Land Acquisition/Right of Way	6/30/10		

H073

**Polk County SWRUSA Carter Rd 1 Billion Gallon Reclaim Storage & Pumping Station**



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Design/Permitting

9/30/10

Construction Completion

9/30/12

**Status As Of:**

<b>Project Type</b>	WS&R Dev.
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Peace River, Manasota
<b>Cooperator(s)</b>	
<b>Project Manager</b>	HERD, KEN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

In 1997, the Florida Legislature amended the Water Resources Act to clarify the water management districts' responsibilities relating to water supply planning and water resource development. Specifically, the water management districts were directed to complete a district-wide water supply assessment by July 1, 1998. Further, the districts were to develop regional water supply plans for regions where demands are expected to exceed available supplies by 2020. The SWFWMD regional water supply plan encompasses a ten-county area extending from Pasco County in the north to Charlotte County in the south. This region encompasses the northern Tampa Bay region and the Southern Water Use Caution area. Projected water needs increase from 1.4 billion gallons per day (bgd) in 2000 to 1.67 bgd in 2020, a 19 percent increase. Staff has identified over 500 mgd of potential supplies, including demand management, to meet these needs. The reserves for water supply and resource development will be used to cooperatively fund future water supply and resource development projects to meet the needs identified in the regional water supply plan. Potential uses for these funds include restoration of surface water storage throughout the basin.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	118,087,974	(78,050,874)	46,378,151	0	0	86,415,251
011 Alafia River Basin	1,291,582	(216,246)	0	991,182	0	2,066,518
013 Hillsborough River Basin	4,434,490	0	0	0	0	4,434,490
014 Northwest Hillsborough Basin	3,725,900	0	1,000,000	889,857	0	5,615,757
015 Coastal Rivers Basin	631,459	0	10,409	0	0	641,868
016 Pinellas-Anclote River Basin	6,830,729	(866,914)	1,761,126	0	0	7,724,941
020 Peace River Basin	2,759,238	(1,764,655)	499,109	0	0	1,493,692
021 Manasota Basin	6,786,447	(1,552,578)	0	0	0	5,233,869
				<b>Total</b>		<b>\$113,626,386</b>

**Status As Of:** March 03, 2008

At the December 2007 meeting, the Board approved the transfer of \$500,000 for the Peace River Regional Reservoir Expansion project (F032). At the February meeting, the Board approved the transfer of \$186,287 to develop a Polk County Comprehensive Water Supply Plan (H072). The remaining balance in this reserve is \$1,307,405.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County Natural Resources
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project is part of a multi-year funded, multi-phased program to develop a comprehensive surface water maintenance program for the Saddle Creek Watershed. This project is one of the eight intermediate conveyance system projects that were approved through a Letter of Agreement between the District and Polk County dated November 21, 1996. This project includes the preparation of a Watershed Management Plan, and Implementation of Best Management Practices (BMPs). The Saddle Creek Watershed Management Plan Final Report was received on May 27, 2003, and was approved by District staff on July 8, 2003. During the summer of 2003, the County became aware that significant erosion damage was occurring below Lake Parker at a 90 degree turn in the outfall canal. This problem was identified in the Saddle Creek Watershed Evaluation. However, the problem has worsened considerably. The County will perform emergency stabilization measures as part of the Immediate Maintenance task. Final design, permitting and construction of other improvements needed in the Lake Parker outfall canal will be performed as part of the Implementation of BMPs task. Amendment 3 was executed on March 18, 2005 to extend the deadlines for the Immediate Maintenance and Implementation of BMPs tasks to December 31, 2007; and extend the contract termination date to June 30, 2008.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies; and 2) provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

**Costs**

The total funding amount for this project is \$2,400,000, of which the District's share is \$1,200,000. The County will contribute \$1,200,000.

**Additional Information**

The project involves elements of a Watershed Management Program. A Watershed Management Program includes five major elements: Topographic information, Watershed Evaluation, Watershed Management Plan, Implementation of Best Management Practices, and Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The Topographic Information element provides the foundational information used to define the watershed's boundaries, storage and conveyance. The Watershed Evaluation element tasks includes field evaluation of the watershed and its intermediate conveyance system, inventory of water resources and stormwater management infrastructure, data development and GIS processing of watershed parameters, and an immediate maintenance evaluation. The Water Management Plan tasks include survey, data management and development of watershed parameters, GIS processing, computer modeling, floodplain analysis, surface water resource assessment (water quality), establishment of level of services (LOS), and a best management practices (BMP) alternative analysis which includes prioritized recommendations and probable costs.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	1,236,038	0	2,379	0	0	1,238,417
<b>Project Funds Not Budgeted by the District</b>						
Polk County	1,200,000		0	0	0	1,200,000
				<b>Total</b>		<b>\$2,438,417</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Original WMP contract executed	10/2/00		10/2/00
Original WMP contract Notice to Proceed to County	10/3/00		10/3/00

Draft first amendment to Management Services	12/31/00	1/10/00
Basin Board approval of first amendment	2/16/01	2/16/01
Governing Board approval of first amendment	2/27/01	2/27/01
Draft first amendment returned from Management Services	2/28/01	1/24/00
First Amendment executed	5/15/01	5/14/01
Second amendment to Management Services	5/31/01	5/31/01
First Amendment Notice to Proceed	6/1/01	5/15/01
Second amendment returned from Management Services	7/13/01	7/13/01
Second Amendment executed	10/31/01	10/17/01
District logo on report	10/2/02	10/2/02
Watershed Management Plan	10/2/02	5/27/03
Third amendment to Management Services	11/16/04	11/16/04
Third amendment returned from Management Services	12/16/04	12/16/04
Third Amendment sent to County for signature	1/11/05	1/11/05
Third Amendment executed	2/28/05	3/18/05
District logo on sign at construction site	5/1/06	5/1/06
Project Complete	12/31/07	12/31/07
Implementation of BMPs	12/31/07	12/31/07
Immediate Maintenance	12/31/07	
Contract Close Out	6/30/08	

**Status As Of:** February 25, 2008

Project Complete. Final invoice has been processed for payment.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Highlands County, Florida Department of Environmental Protection, City of Sebring
<b>Project Manager</b>	KOLASA, KEITH
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

Little Lake Jackson is a 140-acre lake that discharges into Lake Jackson. The lake and associated watershed comprises approximately 13.5% of the watershed of Lake Jackson, which makes it a significant contributor of water quantity and water quality to Lake Jackson. Water quality in Little Lake Jackson is poor due to the nutrient enrichment associated with urban development.

This project provides the design, permitting, and construction of a stormwater treatment system that uses alum injection to reduce nutrient loads to the lake. The completed project will reduce nutrient loading within the lake's primary drainage inflow from a 400 acre drainage basin. Previous studies documented high nutrient load discharging to the lake through this basin. An additional urban drainage area comprising roughly 80 acres will be directed through the alum treatment system in the future to provide a treatment to almost 60% of the Little Lake Jackson watershed.

**Benefits**

This project will design, permit, and construct a stormwater treatment system that will treat runoff from a 400 acre basin to Little Lake Jackson. The completed project should reduce phosphorus loading from this problematic basin by 60 to 70 percent, therefore, enhancing the water quality of Little Lake Jackson. Reduction of nutrient loads to Little Lake Jackson may improve water quality in Little Lake Jackson by reducing algae blooms and improving water clarity. Reducing nutrient loads to Little Lake Jackson will also reduce nutrient loads to Lake Jackson.

**Costs**

The total project cost not including salaries is \$249,644, and the District's share is \$94,306. A total of \$40,000 was funded in FY1999 for the stormwater assessment and preliminary design. In FY2004, \$209,644 was funded for design, permitting, construction, and water quality monitoring. Funding in FY2007 was provided for staff salaries, travel, and central garage associated with the project's follow-up water quality monitoring.

**Additional Information**

A cooperatively funded (Sebring, Highlands County, District) stormwater assessment was completed in November of 2000. It found that most surface water runoff enters Little Lake Jackson through Sub-basin 1, the largest sub-basin at 497 acres. Continuous flow was observed out of this sub-basin as the result of the shallow water table. The concentrations of nutrients that were measured during the project suggest that anthropogenic sources were significant contributors of nutrients within runoff entering Little Lake Jackson. Land use data suggest that the primary anthropogenic nutrient sources within Sub-basin 1 appear to be both residential and golf course fertilizer. Alum injection was selected as the water quality treatment method of retrofit. Alum injection is highly efficient for reducing phosphorus within runoff. Reducing phosphorus loads within runoff to Little Lake Jackson is desired since the lake is phosphorus limited. Lake restoration activities addressing nutrient reduction typically apply focus on reducing the limiting nutrient. The second phase of the project which included the project permitting and construction was funded in FY2002. As a result of rule changes made by FDEP and a stipulation placed on the project construction, the project design had to be modified to include the addition of a sedimentation pond to collect the alum floc. Due to these changes and the associated increase in the project budget, a new agreement was prepared under the FY2004 budget to include the cost for the pond construction.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	103,352	0	3,199	0	0	106,551
<b>Project Funds Not Budgeted by the District</b>						
FDEP	79,000		0	0	0	79,000
Highlands County	28,588		0	0	0	28,588
Sebring	27,750		0	0	0	27,750
				<b>Total</b>		<b>\$241,889</b>

**Critical Project Milestones**

**1. Contract Development & Execution - Phase I**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Contracts Adm.	4/15/99		6/30/99
Basin Board Approval of Interlocal Agreement	6/15/99		8/20/99
Governing Board Approval of Interlocal Agreement	6/30/99		8/27/99



Agreement Approved By County Commission	7/15/99		9/7/99
Contract Executed	7/28/99		9/29/99
Notice to Proceed	12/31/99		4/17/00
<b>2. Phase I</b>			
Preliminary Design	9/1/00	10/30/01	11/1/01
Final Design	3/30/01	12/30/01	12/20/01
Permitting	5/30/01	1/30/02	9/30/02
<b>3. Close Out - Phase I</b>			
Contract Termination	2/28/01	4/30/02	10/2/02
<b>4. Contract Development &amp; Execution - Phase II</b>			
Draft Agreement to Contracts Adm.	8/15/01		10/5/01
Basin Board Approval of Interlocal Agreement	1/11/02		12/12/03
Governing Board Approval of Interlocal Agreement	1/30/02		12/16/03
Agreement Approved By County Commission and City Council	1/15/04		2/28/04
Notice to Proceed	1/30/04		3/29/04
Contract Executed	1/30/04		3/22/04
<b>5. Phase II</b>			
Redesign and Permitting	6/20/04		6/30/05
Construction	12/15/04	9/14/06	9/14/06
Start-up System and Training	12/30/04	3/14/07	6/30/07
<b>6. Close Out - Phase II</b>			
Contract Termination		4/15/07	8/23/07
<b>7. Water Quality Monitoring</b>			
Water Quality Monitoring	11/30/07	12/30/08	

**Status As Of:** February 25, 2008

The system is complete and training of City staff has been completed. Final invoices were submitted during the second week of August 2007 and have been processed and the project has been closed out. Water quality monitoring will continue as in-kind services from both the County and the District. Water quality monitoring results are being used to evaluate nutrient reduction performance of the completed stormwater treatment system.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County Utilities, Polk County
<b>Project Manager</b>	NOURANI, MEHRSHAD
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project consists of the design and construction of a reclaimed water system in the I-4/US27 area of Polk County in 2 phases. The first phase includes one 3-million gallon capacity storage tank, a reclaimed water pumping facility, and associated on-site equipment and piping. Phase I will coincide with major modifications to the Polk County Northeast Regional Wastewater Treatment Facility (NERWWTF), resulting in a treatment capacity of 2.01 MAGD ultimately upgradeable to 6 MGD. Phase I components will be constructed on the NERWWTF site. The second phase is comprised of a transmission system to service customers in Polk County's Northeast Regional Utility Service Area (NERUSA). This project provides reuse water to approximately 2,200 single family units, 500 multi-family units, and 3 golf courses.

**Benefits**

The project provides 2.01 mgd of reclaimed water for irrigation demand of these areas on build-out. The estimated offset is 1.2 mgd from the Polk County Utilities potable water supply system.

**Costs**

The total project cost is estimated at \$4,815,734. Permitting and design cost estimate is \$481,573; pumping cost estimate is \$500,000; Storage cost estimate is \$700,000; and transmission line cost is estimated at \$3,134,160. The Governing Board' share is \$1,203,933 and the Peace River Basin Board's share is also \$1,203,933. Funds were encumbered in FY2004.

**Additional Information**

The transmission line route lies within the boundaries of the Peace River Basin of the Southwest Florida Water Management District. Phase II is subdivided into Phase 2A and Phase 2B, which initially was located within the SJRWMD. Phase 2A includes approximately 24,500 linear feet of 24-inch diameter reclaimed water transmission main and 12,500 linear feet of 20-inch diameter reclaimed water transmission main north and south of the I-4/US27 intersection. Customers include Deer Creek Subdivision, Deer Creek Golf Course, Royal Palms Subdivision, Rio Ridge Subdivision, Regency Ridge Subdivision, Ridgewood Lakes Subdivision, Ridgewood Lakes Golf Course, Monahan Tract Subdivision, West Haven Subdivision and West Haven Golf Course.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	1,431,413	0	654	0	0	1,432,067
<b>Project Funds Not Budgeted by the District</b>						
Polk County	0		2,407,876	0	0	2,407,876
				<b>Total</b>		<b>\$3,839,943</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Agreement to Contract Administration	11/1/99		11/10/99
Agreement returned from Contract Administration	12/15/99		1/5/00
Contract Executed	2/15/00		2/24/00
Begin Construction	9/30/05		12/31/06
Complete Construction	1/31/08		
Contract Close-out	6/30/08		

**Status As Of:** March 17, 2008

This reclaimed water expansion project is located in the Northeast Regional Utility Service Area (NERUSA). In 2005, the original agreement was amended to change the expiration date from June 30, 2005 to June 30, 2008. In a recent e-mail dated 03/13/2008, the County requested for an additional no-cost time extension from June 30, 2008 to November 30, 2008, in order to complete this project. This request is currently under review. There are also two other projects related to the expansion of reclaimed water service in the NERUSA, which impact this project: F035 and L475. L475, a project to build additional reclaimed water storage tanks, was completed in 2007. F035 is currently on schedule for completion on September 30, 2008. The project's design and construction of the on-site reuse components at the NERWWTF has been completed. The design and construction of off-site reuse transmission system under I-4 from WWTF through relocation of utility lines by FDOT is still underway; North along US-27 construction of transmission line is complete; the East along Dunson Rd, under I-4 and north along I-4 to CR-54 design is

complete but construction has not commenced yet; and offsite transmission from plant site, along Homerun Blvd. to US 27, then South on US 27 to Ridgewood Lake Estates design is complete, but subject to revision per FDOT widening US-27 and construction has not commenced. The offsite portions of the project were originally designed in 2002. Shortly thereafter, the project was put on hold pending an agreement with the FDOT to install utilities by the Department's contractor to coincide with the road widening of US-27, south of I-4; the FDOT project was divided into to segments: northern segment along the US-27, from Homerun Blvd, south to Holly Hill Grove Rd No. 1, and a southern segment along US- 27, from CR-547 to Holly Hill Grove Road. County's accomplishments for this period are related to the US-27 south portion. At this time, the design and construction of on-site reuse components at the NERWWTF and design and construction of off-site reuse transmission system under I-4 from WWTF to Dunson Rd are also completed. The design and construction of on-site reuse transmission system under I-4 from WWTF through relocation of utility lines by FDOT is still underway; the North along US-27 transmission system construction is complete; transmission construction design for under I-4 and north along I-4 to CR-54 is complete, but construction has not commenced; and off site transmission design from plant site to US-27 to Ridgewood Lake Estates is complete but is subject to revision per FDOT widening of US-27. Construction related to the US-27 south portion is complete. The total project cost is \$4,820,902, with the Governing Board and the Peace River Basin Board share totaling \$2,413,035. The Governing Board share of \$1,203,933 and the Peace River Board share of \$1,203,933 were encumbered in FY2004. To date, \$0 has been expended/reimbursed to the County.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Charlotte County School Board
<b>Project Manager</b>	FRIES, GEORGE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a project to perform the Implementation of Best Management Practices (BMPs) element of the District's Watershed Management Program (WMP) for a portion of the Upper Alligator Creek Watershed (North Fork) located in Punta Gorda. Implementation of BMPs includes the following tasks: design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the BMPs and construction engineering and inspection. The study area is 280 acres, bounded by Carmalita Street to the north, Education Avenue to the east, Cooper Street to the west and Taylor Road to the south. The land use is partly residential which was built in the 1960's but it includes four Charlotte County School Board campuses and facilities: Sallie Jones Elementary School, Charlotte High School, Punta Gorda Middle School and the Central Operations Center built in 1956, 1926, 1971 and 1966, respectively. The proposed project consists either of (1) improving +/- 8,600 lf. of an intermediate conveyance way along Education Ave., Henry St. and Cooper St. that includes replacing the inadequate roadway culvert crossings, or (2) collecting the surface water runoff within the complex through a surface water management area on the corner of Henry St. and Education St., and diverting it by gravity to Airport St. through a pipe system along Education St., or (3) combination of both, depending on regulatory constraints.

**Benefits**

The project will improve level of service deficiencies by improving conveyance and providing additional storage within the watershed. The project is also expected to improve water quality by increasing residence times in the storage area.

**Costs**

Funding for this project was provided in the Peace River Basin Board budget for FY2001 (\$280,000). The School Board is also contributing \$280,000 to the cost of the project. The District funding amounts shown in the table includes staff salaries.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems while achieving flood protection. Finish floor elevations are substandard, with shallow and non-uniformly graded road right-of-way conveyances, and mismatched culvert sizes and inverts. A mean annual summer rainfall event will flood these campuses and the adjoining residential areas. The existing collection, storage and conveyance elements will be improved to provide flood protection, and water quality treatment. The improvements will balance on site storage and off site conveyance where downstream property owners will not be adversely impacted. A cooperative funding expenditure agreement with the Charlotte County School Board has been developed to complete the Implementation of this BMP. The School Board is managing the project, where the District project manager must approve any agreements to accomplish project tasks.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	300,952	0	1,943	1,042	0	303,937
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County School Board	280,000		0	0	0	280,000
				<b>Total</b>		<b>\$583,937</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

Construction sign will show District logo **Projected** 4/30/05

**2. Cooperator Agreement**

Draft agreement to Contracts	<b>Projected</b> 12/31/00	<b>Amended</b>	<b>Actual</b> 1/24/01
Basin Board Approval of Interlocal Agreement	2/28/01		2/16/01
Governing Board Approval of Interlocal Agreement	2/28/01		2/28/01
Notice to Proceed	3/31/01		7/16/01
Contract Executed	3/31/01		7/16/01
No cost time extension executed	9/12/05		9/12/05

2nd no cost time extension executed	10/2/06		10/2/06
<b>3. Consultant Services</b>			
Task 1 - Stormwater Mgt. Infrastr. Evaluation & Conceptual Permit	2/28/02	1/31/04	1/31/04
Task 2 - Design, Permitting and Bid Documents	6/30/02	7/31/04	5/10/05
<b>4. Construction</b>			
Task 3 - Commence Construction	11/16/02		10/1/07
Complete Construction	1/16/04	1/31/09	
<b>5. Contract Completion</b>			
Cooperator Agreement Expiration	7/17/05	7/17/09	

**Status As Of:** February 25, 2008

Status History: The project has two distinct parts: the first part is the Cooperative Funding Agreement between the School Board and the District for the on-site improvements and the second part is the Inter-local Services Agreement between the School Board and the County for the off-site improvements. A project kick-off meeting was held on June 2, 2003 and design work began. A contract amendment to extend the completion date to 07/17/2007 was executed. A second no-cost time extension Amendment to the Agreement was executed to extend the contract completion date from July 17, 2007 to July 17, 2009. The County planned on advertising for bids for this project, in conjunction with their Carmelita Avenue project, in March 2007. Right-of-way and easement acquisition are now complete. Bids were received on July 26, 2007. The Board of County Commissioners awarded a construction contract on August 14, 2007. Construction began on October 1, 2007 and work on the stormwater management storage area (SMSA) was expected to be completed by December 31, 2007. Construction of the large collection pipe from Carmelita Avenue into the SMSA will begin once school is out for the holidays. The remainder of the work involves the reconstruction of Carmelita Avenue and is not the subject of this agreement. Current Status: The SMSA has been excavated and the control structures are in place and operational. Work on the remainder of the project is continuing.

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Englewood Water District  
**Project Manager** MCGOOKEY, SCOTT  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This project consists of the design and construction of approximately 7,000 linear feet of 6-inch diameter reuse transmission line from the Englewood Water District's (EWD) existing reuse system to Lemon Bay High School Athletic fields and the proposed Charlotte County Oyster Creek Park.

**Benefits**

The project provides 0.11 mgd of reclaimed water to Lemon Bay High School Athletic fields and the proposed Charlotte County Oyster Creek Park to offset 0.08 mgd of potable groundwater.

**Costs**

The total cost is \$300,000, and the District's share is requested to be \$150,000. The Peace River Basin budgeted \$150,000 in FY2004. The cost, amortized at 8 percent over 30 years, is \$.90 per 1,000 gallons offset. Any additional funds are for staff time.

**Additional Information**

The new main will advance from the present north-south main on San Cas Drive, west to the proposed Oyster Creek Park, and then west on to Lemon Bay High School. The Lemon Bay High School athletic fields currently occupy four irrigated acres and an additional three acres are planned to be constructed in the near future, resulting in approximately 0.06 mgd of potable water irrigation demand. The newly developed Charlotte County Oyster Creek Park includes four baseball fields, two football fields, four soccer fields comprising a total of approximately 11 acres and approximately eight additional acres of other landscaped amenities. If reclaimed water is not provided, the irrigation source would be groundwater from the surficial or upper intermediate aquifer, which is the main potable water aquifer system in the project area. Based on the University of Florida Institute of Food and Agricultural Science (IFAS) irrigation recommendation of 42 inches annually, Oyster Creek Park will have an irrigation demand of approximately 0.06 mgd.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	157,996	0	1,753	3,307	0	163,056
<b>Project Funds Not Budgeted by the District</b>						
Englewood Water District	150,000		0	0	0	150,000
				<b>Total</b>		<b>\$313,056</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Draft Agreement to Contracts Administration	10/1/03		9/17/04
Draft Agreement sent to Cooperator	8/31/04		10/1/04
Contract Executed	9/1/04		8/14/05
Design Commencement	9/1/04	3/1/06	2/28/06
Design Complete	12/1/04	2/1/07	2/23/07
Construction Commencement	1/1/05	3/15/08	3/5/08
Construction Completion	10/1/05	11/1/08	
Contract Termination	10/1/06	12/31/08	
Signage Erected	3/1/07	3/31/08	

**Status As Of:** March 11, 2008

Damage to the school from hurricane Wilma has delayed this project. EWD met with the school board on January 10, 2006 and approved the agreement with the EWD to utilize reclaimed water at the schools athletic fields. The project design was awarded to Giffels-Webster Engineers on February 28, 2006. Design is now complete. Base maps have been prepared and the route of the pipe has been approved by Charlotte County Parks Department. Permits have been processed. A pre-bid meeting was July 17th, 2007 with the bid opening on August 7, 2007. The low bid was submitted by General Contracting. Notice to Proceed and all easements are secured. Construction began March 5, 2008. A no-cost time extension amendment was executed March 22, 2006. The Peace Basin Board encumbered \$150,000 in its FY2004 budget. To date, there has been no reimbursement of funds.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	City of Sebring
<b>Project Manager</b>	FRIES, GEORGE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the City of Sebring Watershed. The watershed covers an area of approximately 51 square miles and is located in northwest Highlands County. Issues in the watershed include rapid growth and potential water quality issues because runoff from the city discharges to Lake Jackson. Since the project began in FY2004 the city has experienced considerable growth in the form of annexation and the city's land area has more than doubled. With prior years funding the Topographic Information, Watershed Evaluation and Watershed Management Plan for the then existing incorporated area of the city were completed. With FY2007 funding the work on the Topographic Information, Watershed Evaluation and Watershed Management Plan elements for the additional incorporated land began. With FY2008 funding the remaining work on the Watershed Management Plan, including the BMP Alternative Analysis and the Surface Water Resource Assessment will be completed.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies, and 2) provides a geodatabase and projected results from watershed model simulations for floodplain management and water quality management.

**Costs**

The total budgeted amount for this project, including the completed FY2004 work, is \$345,000 of which the District's multi-year share is \$258,750. Sebring, located in Highlands County, is a R.E.D.I. community and is seeking a reduction of the standard 50% funding match to one where the Peace River Basin Board will fund 75% of the project costs and the city will fund 25%. For FY2008, \$25,000 is appropriated in the Basin Board's budget with revenue of \$6,250 from the City of Sebring. When each element is completed the project budget and scope may require refinement based on the information gathered. The District funding amounts shown in the table include staff salaries.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A cooperative funding revenue agreement with the City of Sebring has been developed. The District is managing the project and has entered into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	256,988	0	23,758	7,440	0	288,186
<b>District Budgeted - Outside Revenue</b>						
Sebring - Water Mgmt Plan (L151)	80,000	0	6,250	0	0	86,250
				<b>Total</b>		<b>\$374,436</b>

**Critical Project Milestones****1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
District logo will appear on all reports	11/1/05		8/1/05

**2. Cooperator Agreement**

Draft Agreement to Management Services	7/15/03		7/15/03
Draft Agreement Returned from Management Services	7/28/03		7/28/03
Peace River Basin Board Approval of Agreement	8/15/03		8/15/03
Governing Board Approval of Agreement	8/26/03		8/26/03



Cooperator Contract Executed (Revenue Agreement)	10/1/03		10/1/03
First Amend. to Cooperator Contract Executed (Expenditure)	1/30/04		1/30/03
Second Amend. to Cooperator Contract Executed (Revenue)	4/13/04		6/29/04
Third Amend. to Cooperator Contract Executed (FY2005 funding)	10/1/04		12/1/04
Fourth Amend. to Cooperator Contract Executed (FY2007 funding) (Annexed Land)	10/1/06		8/29/06
<b>3. Consultant Agreement</b>			
Consultant Notice to Proceed (Work Order #1 DTI & WE )	1/1/05		12/2/04
Consultant Agreement Executed	1/1/05		12/1/04
<b>3A. Work Order #1</b>			
Element 1, Digital Topographic Information Commence	5/1/04		7/15/04
Element 1, Digital Topographic Information Complete	3/1/05		2/7/05
Element 2, Watershed Evaluation Commence	5/1/05		2/15/05
Element 2, Watershed Evaluation Complete	11/1/05		9/2/05
<b>4. Work Order #2</b>			
Work Order Executed (WMP)	9/13/05		9/13/05
Element 3, Watershed Management Plan Commence	11/1/05		9/13/05
Element 3, Watershed Management Plan Complete	3/1/06	6/1/06	6/1/06
<b>5. Annexed Land</b>			
Consultant Agreement Executed	2/28/07		12/4/06
Element 1, Digital Topographic Information Commence	3/1/07		12/13/06
Notice to Proceed to Consultant	3/1/07		12/13/06
Element 2, Watershed Evaluation Commence	7/1/07		1/22/07
Element 1, Digital Topographic Information Complete	9/1/07		2/18/07
Element 3, Watershed Management Plan Commence	9/1/07		
Element 2, Watershed Evaluation Complete	11/1/07		
Element 3, Watershed Management Plan Complete	9/1/08		
<b>6. Contract Completion</b>			
Cooperator Agreement Expiration (Annexed Land)	12/31/08		
Consultant Agreement Expiration (Annexed Land)	12/31/08		

**Status As Of:** February 25, 2008

Status History: Staff prepared the Cooperative Funding Agreement which was approved by the Boards and signed by the Executive Director on 10/01/2003. District staff prepared an amendment to incorporate the FY2005 funding and the amendment was executed with an effective date of October 1, 2004. The District Staff prepared a contract for engineering services with BCI to perform the Watershed Management Program. The project kick off meeting was held on December 17, 2004. Work on the elements of the WMP for the then existing incorporated areas of the city was completed. The City applied for cooperative funding for FY2007 to continue the WMP in the newly annexed areas of the city south of Little Lake Jackson. The Basin Board budgeted \$120,000 with revenue of \$30,000 from Sebring for FY2007 for the next phase of the WMP for the city. A fourth contract amendment to incorporate the FY2007 funding to complete a WMP for the newly annexed land south of Lake Jackson was executed by both parties. The District continues to be the lead party in this agreement. The project kick off meeting was held on 12/13/2006 and work began. The Digital Topographic Information deliverable has been submitted and approved. Work on the Watershed Evaluation has begun and is continuing. The City applied for additional cooperative funding to complete the remaining elements of the Watershed Management Plan for the annexed land and the Board budgeted \$25,000 in FY2008. **Current Status:** The fifth amendment to the Agreement, to incorporate the FY2008 funding, has been executed. The consultant is continuing work on the model setup and development.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Avon Park
<b>Project Manager</b>	FRIES, GEORGE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

#### Description

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the City of Avon Park Watershed. The watershed covers an area of approximately 16 square miles and is located in northwest Highlands County. Issues in the watershed include unabated, untreated runoff into lakes Isis, Verona, Tulane, Lelia and Lotela causing degradation of the water quality within the lakes. Since the project began in FY2004 the city has experienced considerable growth in the form of annexation. With prior years funding the Topographic Information, Watershed Evaluation and Watershed Management Plan for the then existing incorporated area of the city were completed. With FY2007 funding the work on the Topographic Information, Watershed Evaluation and Watershed Management Plan elements for the additional incorporated land north of the city center began and should be completed. **With FY2008** funding the work on the Topographic Information, Watershed Evaluation and Watershed Management Plan elements for the additional incorporated land north of the Avon Park Airport and west of the city center will begin and should be completed.

#### Benefits

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies, and 2) provides a geodatabase and projected results from watershed model simulations for floodplain management and water quality management.

#### Costs

The total budgeted amount for this project, including the completed FY2004 work, is \$298,000 of which the District's multi-year share is \$223,500. Avon Park, located in Highlands County, is a REDI community and is seeking a reduction of the standard 50% funding match to one where the Peace River Basin Board will fund 75% of the project costs and the city will fund 25%. For FY2008 \$100,000 is appropriated in the Basin Board's budget with revenue of \$25,000 from the City of Avon Park. When each element is completed the project budget and scope may require refinement based on the information gathered. The District funding amounts shown in the table include staff salaries.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A cooperative funding revenue agreement with the City of Avon Park has been developed. The District is managing the project and has entered into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	163,855	0	80,008	7,440	0	251,303
<b>District Budgeted - Outside Revenue</b>						
Avon Park - Water Mgmt Program (L152)	49,500	0	25,000	0	0	74,500
				<b>Total</b>		<b>\$325,803</b>

#### Critical Project Milestones

	Projected	Amended	Actual
<b>1. Critical Project Milestones</b>			
District logo will appear on all reports	9/8/04		8/23/04
<b>2. Cooperator Agreement</b>			
Draft Agreement to Management Services	7/15/03		7/15/03
Draft Agreement Returned from Management Services	7/28/03		7/28/03
Peace River Basin Board Approval of Agreement	8/15/03		8/15/03

Governing Board Approval of Agreement	8/26/03		8/26/03
Cooperator Agreement Executed	10/1/03		10/1/03
<b>3. Consultant Agreement</b>			
Consultant Agreement Executed	2/8/04		2/8/04
Consultant Notice to Proceed Work Order #1 DTI & WE)	2/16/04		2/16/04
Element 1, Digital Topographic Information Commence	2/16/04		2/16/04
Element 2, Watershed Evaluation Commence	4/1/04		4/1/04
Element 1, Digital Topographic Information Complete	5/8/04		5/3/04
Element 2, Watershed Evaluation Complete	9/8/04	3/15/05	11/19/04
<b>4. 1st Amendment to Consultant Agreement (no cost time ext)</b>			
Element 3, Watershed Management Plan Commence	10/30/04		3/15/05
Amendment Executed (including Work Order #2 WMP)	4/14/05		4/14/05
Consultant Agreement Expiration	8/8/05	2/8/06	2/8/06
Element 3, Watershed Management Plan Complete	8/8/05	1/15/06	8/18/06
Cooperator Agreement Expiration	2/16/06		2/16/06
<b>5. Cooperator Agreement (Annexed Land)</b>			
FY2007 Funds Encumbered			10/13/07
Draft Agreement to Contracts Section	7/31/06		7/31/06
Draft Agreement Returned from Contracts Section	8/10/06		8/10/06
Cooperator Agreement Executed	10/1/06		8/27/06
<b>6. Consultant Agreement (Annexed Land)</b>			
Consultant Agreement Executed	2/28/07		11/6/06
Element 1 Digital Topographic Information Commence	3/1/07		
Consultant Notice to Proceed	3/1/07		11/14/06
Element 2 Watershed Evaluation Commence	7/1/07		12/15/06
Element 3 Watershed Management Plan Commence	9/1/07		
Element 1 Digital Topographic Information Complete	9/1/07		
Element 2 Watershed Evaluation Complete	11/1/07		
Element 3 Watershed Management Plan Complete	9/1/08		
<b>7. Contract Completion (Annexed Land)</b>			
Cooperator Agreement Expiration	12/31/08		
Consultant Agreement Expiration	12/31/08		

**Status As Of:** February 25, 2008

Status History: Staff prepared the Cooperative Funding Agreement which was approved by the Boards and signed by the Executive Director on 10/01/2003. The District is the lead party to the Agreement and is responsible for administration of the contract with the consultant. The kick off meeting was held on February 24, 2004. The final WMP for the then existing incorporated areas of the City was submitted and approved. The city applied for cooperative funding for FY2007 to continue the WMP in newly annexed areas of the city. A revenue agreement to incorporate the FY2007 funding to complete a WMP for the newly annexed land north of the existing city was executed by both parties. The District continues to be the lead party in this agreement. The project kick off meeting was held on 12/13/2007. Work on the Digital Topographic Information was delayed because delivery of the LiDAR data from the District was several months behind schedule. The consultant is working on elements of the Watershed Evaluation. The City has received FY2008 cooperative funding to extend the WMP to additional annexed land north of the Avon Park Municipal Airport. Current Status: An amendment to the revenue agreement with the City to incorporate the FY2008 cooperative funding was prepared and is with the City awaiting execution. The consultant submitted the Digital Topographic Information for review. The Watershed Parameterization was submitted and comments were provided to the consultant.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Lake Placid
<b>Project Manager</b>	ANTOINE, TAMMY
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This alternative water supply project includes the design and construction of a reclaimed water pump station and a 500,000-gallon capacity reclaimed water ground storage tank located at the town wastewater treatment facility (WWTF) site, and approximately 6,446 linear feet of 10-inch, 8-inch, and 6-inch diameter reclaimed water transmission main.

**Benefits**

This project will provide approximately 91,000 gallons per day of reuse to the Town of Lake Placid to irrigate town parks and recreation facilities (81,000 gpd)(WUP # 9494) and citrus groves owned by Bob Paul, Inc. (10,000 gpd)(WUP # 10077). The project will offset approximately 55,000 gpd of groundwater use currently used by these properties for irrigation purposes.

**Costs**

The Peace River Basin's total contribution, requested by the Town of Lake Placid, is based on Rural Economic Development Initiative (REDI) consideration. The total estimated project cost is \$1,374,200, with the Peace River Basin's share not to exceed \$962,574, and the Town's share not to exceed \$411,626. This funding contribution ratio represents a 67.5 percent / 32.5 percent District/Town split, as approved by the Peace River Basin Board. The Peace River Basin included \$100,000 for this project in its FY2004 budget and \$414,030 in its FY2005 budget. The Town requested that the Peace River Basin include \$414,030 in its FY2006 budget. However, funds in the amount of \$117,420 were allocated from the Water Protection and Sustainability Trust Fund Program, changing the amount in FY2006 budgeted by the Peace River Basin to \$448,544.

**Additional Information**

The town has also indicated it is pursuing additional reuse customers that may be served in the future. Of the total project cost of \$1,374,200, approximately 90 percent (\$1,234,200) is expected to be needed for construction, and the remainder (\$140,000) for design and administration.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	848,388	0	1,166	1,331	0	850,885
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	117,420	0	0	0	0	117,420
<b>Project Funds Not Budgeted by the District</b>						
Town of Lake Placid	411,626		0	0	0	411,626
				<b>Total</b>		<b>\$1,379,931</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Contracts Administration	7/12/04		9/17/04
Draft Agreement Returned from Contracts Administration	8/12/04		11/10/04
Contract Executed	9/1/04		1/5/04
Design & Permitting Commencement	12/1/04		12/9/04
Design & Permitting Completion	12/31/04	6/30/07	6/30/07
Signage Erected	3/1/05	5/1/08	
Construction Completion	3/1/05	5/1/09	
Construction Commencement	3/1/05	5/1/08	
Contract Close-out	12/31/06	12/31/10	
Offset Report	12/31/09	12/31/11	

**Status As Of:** March 04, 2008

The engineering consultants (Keith & Schnars) were given notice to proceed on March 17, 2005, and as of June 30, 2007 have completed 100% of the design. A no-cost-time extension was executed on September 12, 2005 to allow for the completion of design and for project construction; extending the contract expiration date to December 31, 2008. A second amendment was executed on May 22, 2006 to reflect State of Florida funding participation, SB 444. The Town of Lake Placid requested a third amendment to the project to change the scope of work and extend of the timelines due to a portion of the pipeline being installed

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and paid for under a CDBG, which the Peace River Basin approved at its July 27, 2007 meeting. The third amendment was fully executed by the Executive Director on August 2, 2007. The Department of Environmental Protection issued a permit for the project November 7, 2007 and Keith & Schnars is currently working with the Department of Transportation to obtain the necessary permits to construct the distribution lines along U.S. 27. The town has received bids for this project in two separate phases and it is expected that the town council will select the lowest bidders and give notice to proceed with construction on both phases at their meeting on March 10, 2008. To date, \$962,574 has been encumbered, of which \$0 has been reimbursed.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	City of Sebring
<b>Project Manager</b>	ZAJAC, CHRIS
<b>Task Manager(s)</b>	FRIES, GEORGE
<b>Status</b>	Completed

**Description**

This project involves performing the elements required to establish a stormwater utility. A stormwater utility study provides a method to evaluate the condition of the existing stormwater infrastructure, develop preliminary levels of service, estimate project costs for improving or maintaining system infrastructure, and prepare a billing database to equitably distribute costs. The study includes four major elements: Inventory, Evaluation, Ordinance Preparation and Adoption, and Billing. The Inventory element provides the foundation for the study, and includes a literature review; an inventory of existing stormwater management infrastructure; identification of flood prone areas; and an assessment of maintenance needs. The Evaluation element involves an assessment of infrastructure requirements based upon existing and future land use and Level Of Service (LOS), and development of 5 and 10 year cost projections for system maintenance and improvements. The Ordinance Preparation and Adoption element includes a review of existing city ordinances, and the preparation of all ordinance documents needed to implement a dedicated funding source. The Billing element includes development of a database and billing algorithm, performance of a mock and first billing, and an evaluation of the effectiveness of the mock and first billings.

**Benefits**

If established, a stormwater utility will provide a dedicated funding source for stormwater management in the City of Sebring. The City service area covers approximately 12 square miles.

**Costs**

The original FY2005 total project cost was \$40,000. The Peace River Basin Board budgeted \$30,000 in its FY2005 budget for this project. The cost estimate provided by the City's consultant is \$7,455 over the original contracted amount between the City and the District (\$40,000). At the City's request, the Peace River Basin Board has funded an additional \$5,592 in its FY2007 budget to cover 75% of the additional cost to complete the project. The City will provide \$1,863 (25%) of the additional cost to complete the project. The cooperator has requested funding consideration based on the Rural Economic Development Initiative (REDI), as reflected in the funding distribution. The FY2008 District budget is for staff salary. The District funding amounts in the table include staff salaries, travel and central garage charges.

**Additional Information**

A cooperative funding expenditure agreement with the City has been developed to complete the Stormwater Utility Study. The City will manage the project. The District project manager must approve any agreements to accomplish project tasks. With FY2005 funding, work on the Inventory, Evaluation, Ordinance Preparation and Adoption, and Billing elements will be completed. Issues in the watershed include aging or undersized infrastructure and water quality issues because most stormwater discharges to Lake Jackson.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	41,944	0	1,220	0	0	43,164
<b>Project Funds Not Budgeted by the District</b>						
City of Sebring	11,863		0	0	0	11,863
				<b>Total</b>		<b>\$55,027</b>

**Critical Project Milestones****1. Contract Development & Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Contract Administration	10/30/04		1/11/05
Agreement returned from Contract Admin.	12/30/04		2/2/05
Agreement Approved by City	2/15/05		2/15/05
Contract Executed	2/20/05		3/1/05
Notice to Proceed given to City	2/22/05		3/1/05
First Amendment-No Cost Time Extension	6/26/06		6/26/06
Second Amendment-Add Additional Funds/Time Extension/New Project Schedule	2/1/07		4/6/07

**2. Critical Project Milestones**

Task 1 Perform literature review	6/1/05	3/31/07	3/31/07
Task 2 Prepare inventory of stormwater management infrastructure	7/1/05	3/31/07	3/31/07



Task 3 Perform preliminary field surveys, as necessary	7/1/05	3/31/07	3/31/07
Task 4 Document flood prone areas & perform maint. evaluation	8/1/05	3/31/07	3/31/07
Task 5 Prepare work plan/needs assessment	9/1/05	3/31/07	3/31/07
Task 7 Prepare documentation for establishment of utility	10/1/05	5/31/07	5/31/07
Task 6 Develop 5 & 10 year cost projections	10/1/05	3/31/07	3/31/07
Task 9 Prepare ordinance modifications/documents as necessary	11/1/05	5/31/07	6/30/07
Task 8 Evaluate local ordinances	11/1/05	5/31/07	6/30/07
Task 11 Conduct mock billing and evaluate database performance	12/1/05	8/31/07	10/30/07
Task 10 Identify billing method & select billing database	12/1/05	6/30/07	6/30/07
Task 12 Perform first billing	12/1/05	8/31/07	10/30/07
Task 13 Perform evaluation & prepare report on first billing effort	1/1/06	8/31/07	10/30/07
Task 14 Final Report	3/1/06	8/31/07	12/26/07

**Status As Of:** January 22, 2008

The City has chosen BCI Engineers as its consultant and has provided BCI's response to the RFP. The proposed cost estimate provided by BCI is \$7,455 over the contracted amount between the District and the City (\$40,000). After discussing the project with representatives for BCI it was determined that the cost estimate provided by BCI could not be further reduced and still achieve the goals of the project. At the City's request, District staff has included in its FY2007 budget, \$5,592 (75%-REDI Funding) of the additional cost to complete the project. The Peace River Basin Board has approved the additional funds which are now available. The City has provided the District project manager a copy of the executed contract between the City and BCI. BCI was given a notice to proceed by the City on June 23, 2006. The contract between the City and the District has been amended to provide a no-cost time extension of one year to complete the project. The City was sent their copy of the executed First Amendment on June 27, 2006. A Second Amendment to include the additional funds that were requested, extend the contract expiration date, and amend the project schedule was executed on April 6, 2007. The cooperator was sent their copy of the executed amendment on April 10, 2007. Due to problems with conflicting property data, time constraints in adopting the assessment methodology, and delays in the development of stormwater ordinance language, the cooperator has requested a two-month no-cost time extension. A Third Amendment granting the no-cost time extension of two months has been executed. The District received the draft final report in October and provided comments to the consultant for inclusion in the final report. The District received and approved the final report in December 2007. The District project manager will develop a project completion recap that will be included in the Peace River Basin Board's April 2008 meeting.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Avon Park
<b>Project Manager</b>	ZAJAC, CHRIS
<b>Task Manager(s)</b>	FRIES, GEORGE
<b>Status</b>	Completed

**Description**

This project involves performing the elements required to establish a stormwater utility. A stormwater utility study provides a method to evaluate the condition of the existing stormwater infrastructure, develop preliminary levels of service, estimate project costs for improving or maintaining system infrastructure, and prepare a billing database to equitably distribute costs. The study includes four major elements: Inventory, Evaluation, Ordinance Preparation and Adoption, and Billing. The Inventory element provides the foundation for the study, and includes a literature review; an inventory of existing stormwater management infrastructure; identification of flood prone areas; and an assessment of maintenance needs. The Evaluation element involves an assessment of infrastructure requirements based upon existing and future land use and Level Of Service (LOS), and development of 5 and 10 year cost projections for system maintenance and improvements. The Ordinance Preparation and Adoption element includes a review of existing city ordinances, and the preparation of all ordinance documents needed to implement a dedicated funding source. The Billing element includes development of a database and billing algorithm, performance of a mock and first billing, and an evaluation of the effectiveness of the mock and first billings.

**Benefits**

If established, a stormwater utility will provide a dedicated funding source for stormwater management in the City of Avon Park. The City service area covers approximately 6 square miles.

**Costs**

The total project cost is \$36,000, with the District's share being \$27,000. The Peace River Basin Board has budgeted \$27,000 in its FY2005 budget. The City is funding \$9,000 of the total project cost based on the Rural Economic Development Initiative (REDI). Funds in FY2007 and FY2008 will be used for salary, travel and central garage charges.

**Additional Information**

A cooperative funding expenditure agreement with the City has been developed to complete the Stormwater Utility Study. The City will manage the project. The District project manager must approve any agreements to accomplish project tasks. With FY2005 funding, work on the Inventory, Evaluation, Ordinance Preparation and Adoption, and Billing elements will be completed. Issues in the watershed include aging or undersized infrastructure, water quality degradation, and erosion problems. There are six lakes within the City all of which receive direct stormwater discharges. The lakes within Avon Park are some of the most unique within the state due to their great depths, connection to aquifer, and excellent water clarity. However, the aging stormwater drainage system in place today was originally designed to convey stormwater runoff directly into the lakes and gave little to no consideration to protecting the resources of the town's lakes. Information collected by District staff during the Ridge Lakes Screening (B102) project in 2002 revealed that at least 20 discharges enter the lakes in Avon Park. Lake Verona, which is the only lake with a public beach, has a total of 10 stormwater inflows. Lake Isis and Lake Anoka receive runoff from Highway 27. Improving stormwater treatment in the City will be important for enhancing and protecting lake water quality.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	34,708	0	1,328	0	0	36,036
<b>Project Funds Not Budgeted by the District</b>						
City of Avon Park	9,000		0	0	0	9,000
				<b>Total</b>		<b>\$45,036</b>

**Critical Project Milestones****1. Contract Development & Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Contract Administration	10/30/04		12/30/04
Agreement returned from Contract Admin.	12/30/04		1/13/05
Agreement Approved by City	2/15/05		1/28/05
Contract Executed	2/20/05		2/10/05
Notice to Proceed given to City	2/22/05		2/10/05
First Amendment-To Cost Time Extension	6/2/06		6/2/06
Second Amendment-No Cost Time Extension/New Project Schedule	2/1/07		3/13/07

**2. Critical Project Milestones**

Task 1 Perform literature review	5/10/05	3/31/07	3/31/07
Task 3 Perform preliminary field surveys, as necessary	6/10/05	3/31/07	3/31/07
Task 2 Prepare inventory of stormwater management infrastructure	6/10/05	3/31/07	3/31/07
Task 4 Document flood prone areas & perform maint. evaluation	7/10/05	3/31/07	3/31/07
Task 5 Prepare work plan/needs assessment	8/10/05	3/31/07	3/31/07
Task 7 Prepare documentation for establishment of utility	9/10/05	5/31/07	5/31/07
Task 6 Develop 5 & 10 year cost projections	9/10/05	3/31/07	3/31/07
Task 9 Prepare ordinance modifications/documents as necessary	10/10/05	5/31/07	6/30/07
Task 8 Evaluate local ordinances	10/10/05	5/31/07	6/30/07
Task 12 Perform first billing	11/10/05	8/31/07	10/30/07
Task 11 Conduct mock billing and evaluate database performance	11/10/05	8/31/07	10/30/07
Task 10 Identify billing method & select billing database	11/10/05	6/30/07	8/31/07
Task 13 Perform evaluation & prepare report on first billing effort	12/10/05	8/31/07	10/30/07
Task 14 Final Report	2/10/06	8/31/07	12/26/07

**Status As Of:** January 25, 2008

The City has provided proof of publication and the final RFP that was advertised for the project. The City has chosen BCI Engineers as its consultant and has provided BCI's response to the RFP. The proposed cost estimate provided by BCI is \$1,480 over the contracted amount between the District and the City (\$36,000). After discussing the project with representatives for BCI it was determined that the cost estimate provided by BCI could not be further reduced and still achieve the goals of the project. The City has agreed to cover the additional amount and proceed with the project. The City has provided the District project manager a copy of the executed contract between the City and BCI. The contractor (BCI) was given notice to proceed on June 23, 2006 by the City. The contract between the City and the District has been amended to provide a no-cost time extension of one year to complete the project. The City's copy of the executed First Amendment was sent June 7, 2006. A Second Amendment to extend the contract period and amend the project schedule was executed on March 13, 2007. The contractor was sent their copy of the amendment on March 14, 2007. To date Tasks 1 through 7 are complete. Due to problems with conflicting property data, time constraints in adopting the assessment methodology, and delays in the development of stormwater ordinance language, the contractor has requested a two-month no-cost time extension. A Third Amendment granting the no-cost time extension of two months has been executed. The District received the draft final report in October and provided comments to the consultant for inclusion in the final report. The District received and approved the final report in December 2007. The District project manager will develop a project completion recap that will be included in the Peace River Basin Board's April 2008 meeting.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Highlands County
<b>Project Manager</b>	ARNOLD, DAVE
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the Carter Creek Watershed. The watershed covers an area of approximately 32 square miles in Highlands County, including nine lakes and more than 2,100 acres of surface water. Trends toward lake level declines and degraded water quality are priority issues within this watershed. The project will address these and other issues to improve water quality, natural systems, and flood protection. FY2005 and 2007 funding is budgeted to complete the Topographic Information, Watershed Evaluation, and Watershed Management Plan elements. Topographic information includes the acquisition of data and development of the terrain features in the Geodatabase to be used in the Watershed Evaluation. The Watershed Evaluation includes collection of existing data, GIS processing of the terrain features to establish catchments and connectivity, field reconnaissance, refinement of the terrain features and development of the hydraulic element point features. The Watershed Management Plan element includes: development of watershed parameters for a specific use, GIS processing, computer modeling, floodplain and water quality analysis, surface water resource assessment, establishment of LOS, BMP alternative analysis. The Cooperator submitted the project for REDI consideration.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain and water quality management.

**Costs**

The total budget for this multi-year project is \$650,000, funded in FY2005 and FY2007. Under the REDI project funding split the Peace River Basin's 75% share totals \$487,500, and Highland County's 25% share totals \$162,500. The FY2007 budget is \$385,000, of which \$96,250 is revenue from the County and \$288,750 is the Basin's contribution. When each element is completed the project budget may require refinement based on the information gathered.

**Additional Information**

A WMP includes five major elements: Topographic Information, Watershed Evaluation, Watershed Management Plan, Implementation of Best Management Practices, and Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies. Funding will be used to complete the Topographic Information, Watershed Evaluation, and Watershed Management Plan elements. A cooperative funding revenue agreement with Highlands County has been developed as a multi-year funded project contingent on the approval of future funding to complete the WMP elements through the Watershed Management Plan. This is a multi-year project that requires a cooperative funding request each fiscal year until completed. The District is managing the project and entering into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models. Cooperator submitted project for REDI consideration.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	503,181	0	10,694	10,080	0	523,955
<b>District Budgeted - Outside Revenue</b>						
Highlands Co - Carter Ck WMP (L314)	162,500	0	0	0	0	162,500
				<b>Total</b>		<b>\$686,455</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Agreement to Management Services	1/1/06		1/1/06
Draft Agreement returned from Management Services	4/1/06		2/1/06
Consultant Contract Executed	6/1/06		7/1/06
Watershed Evaluation Start	9/1/06		8/1/06

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Watershed Evaluation Complete	11/1/07
Watershed Plan Start	1/1/08
Watershed Plan Complete	4/1/09
Contract Termination	10/1/09

**Status As Of:** January 10, 2008

Status History: A cooperative funding agreement, consulting services agreement, and contract for LiDAR mapping have been executed. Notice to proceed with watershed consulting services was effective the date of the project kick-off meeting, which was held on August 29, 2006. Current Status: LiDAR mapping is complete/accepted. The consultant has completed compilation of existing information, field reconnaissance, and DTM development tasks, and is working on the watershed parameterization task.

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Polk County Natural Resources, Frostproof  
**Project Manager** ARNOLD, DAVE  
**Task Manager(s)**

**Status**

**Description**

This is a multi-year funded cooperative project with Polk County and the City of Frostproof for Implementation of Best Management Practices element of the District's Watershed Management Program (WMP) for Lake Clinch, located in Polk County and the City of Frostproof. This lake is the second in a chain of lakes (Crooked, Clinch, and Reedy), which drains to the Kissimmee River watershed. This project has two aspects: (1) emergency repairs to the conveyance system between Lakes Clinch and Reedy; (2) replacement of this conveyance system, which will remove restrictions in the Lake Clinch outfall to Reedy Lake caused by conversion of open channels to closed pipes. The two efforts include: (1) Emergency repairs - Funding totals \$75,000 for design and permitting consulting services for emergency repairs made over the summer of 2005 by Polk County, with cost split three ways between Polk County, the City of Frostproof, and the District (\$25,000 each). The District is reimbursing the County for its share by purchase order. Polk County's cost for making the repairs is approximately \$400,000. (2) Lake Clinch Outfall Replacement - At its February 2006 Board meeting, the Peace River Basin Board voted to re-allocate \$960,000 of their Water Supply and Resource Development Reserves (H100) for Phase I of the Lake Clinch outfall replacement. Phase II funding in FY2007 is to complete the project. Based on a cooperative agreement, the replacement is being funded on a 50/50 cost sharing basis between the District and Polk County, at a total budget of \$3,878,000. A portion of the Phase II funding will be offset by an initiative from Senator Alexander's office, which has procured state funding totalling \$1,000,000 for this project (in conjunction with the City of Frostproof). This necessitates Polk County and the District each funding \$479,000 in FY2007 to equal the total project budget.

**Benefits**

This project addresses short-term needs by implementing capital improvements to provide flood protection and lake level management benefits for Lake Clinch, including reducing the probability of damages to the approximate 50 homes on Lake Clinch that flooded in the summer of 2005. It also assists with longer-term goals by removing a key drainage restriction, which opens planning strategies for better management of the entire lake chain and its conveyance system.

**Costs**

The total budgeted amount is \$3,953,000 over FY2005-2007. The Peace River Basin's contribution totals \$1,464,000 with \$25,000 allocated to emergency repairs, and \$1,439,000 allocated to the Lake Clinch outfall replacement. In addition to providing funds for design and permitting, Polk County is providing \$1,464,000. As noted in the project description, \$1,000,000 of the project budget is supplied by the State Legislature. Depending on the outcome of construction bidding and actual construction costs for the outfall replacement, the project budget may require refinement. This project involves construction and easement acquisition through an urban area, where construction scope-of-work, and therefore cost, is subject to revision until final agreements are reached with property owners.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management initiative strategies. The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. Due to the flooding problems experienced on Lake Clinch over the summer of 2005, some BMPs have been implemented via the emergency repairs and planned via the Lake Clinch Outfall Replacement (FY2006-2007). FY2007 funding is also proposed for a related project (L353) to develop a Watershed Management Plan for the lakes and their connecting conveyance systems. A cooperative funding agreement with the County and City has been developed as a multi-year funded project contingent on the approval of future funding to complete the Implementation of BMPs. The County is managing the project, where the District project manager must approve any agreements to accomplish project tasks.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	514,002	960,000	3,262	0	0	1,477,264
<b>Project Funds Not Budgeted by the District</b>						
Frostproof	25,000		0	0	0	25,000
Polk County	1,464,000		0	0	0	1,464,000
State	1,000,000		0	0	0	1,000,000
				<b>Total</b>		<b>\$3,966,264</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Critical Project Milestones</b>			
Emergency repairs commence			8/1/05
BMP design/permitting commence (proposed new outfall)			1/1/06
Emergency repairs complete			10/1/05
Notice to Proceed			8/1/05
Consultant Contract Executed			8/1/05
BMP design/permitting complete (new outfall)	7/1/06		4/1/07
BMP construction start	3/1/07		4/23/07
BMP construction complete (new outfall)	5/1/08		
Project Close-out	8/1/08		

**Status As Of:** March 05, 2008

Status History: Construction of the emergency repairs to the Lake Clinch outfall is complete, consisting of installing a 48 inch plastic pipe to replace undersized piping at several locations. The City of Frostproof, Polk County, District, and Senator Alexander's office have coordinated to secure funding for construction of the new outfall. A preliminary cost estimate indicates a total design and construction cost of \$3,878,000 for this project, which will construct a water control structure on Lake Clinch and a conveyance system between lakes Clinch and Reedy. Funding, on a 50/50 cost sharing basis between the County and District, has been approved through an out-of-cycle request to the Peace River Basin Board at its February 2006 meeting, and the FY 2007 budget. A portion of the County and District funding will be offset by the State funding procured through Senator Alexander's office. This outside funding will be allocated equally to County and District contributions. Chastain Skillman, the consultant for the Lake Clinch outfall replacement has completed construction plans and bid documents. Polk County has finalized acquisition of construction and maintenance easements and ERP permitting for the project, issued an RFB, selected a construction contractor, and given them notice to proceed effective 04/23/07 with completion scheduled by 01/28/08. Current Status: Project construction is substantially complete. The project can be closed out upon acceptance of the project and submittal of final invoices by Polk County.



**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Polk County Natural Resources  
**Project Manager** ARNOLD, DAVE  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This is a cooperative project with the City of Frostproof and Polk County to perform 1) Digital Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the lakes Crooked, Clinch, and Reedy watershed. This watershed covers an area of approximately 65 square miles within Polk County, including the City of Frostproof. Issues within the watersheds include flood damage, rapid growth, water quality issues, and discharges to Outstanding Florida Waters. FY2007 funding is to complete the project. This project focuses on lake level management and enhancement/restoration of the lakes Crooked, Clinch, and Reedy conveyance system. The project includes a BMP plan to provide a balanced water control structure/conveyance system for these lakes that is consistent with the new Lake Clinch outfall (see project # L352).

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

**Costs**

The total budget for this project is \$500,000, of which the District's share is \$250,000. The FY 2007 budget totals \$500,000, of which \$250,000 is revenue from Polk County, and \$250,000 is the Peace River Basin's contribution. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. When each element is completed the project budget may require refinement based on the information gathered. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

**Additional Information**

A WMP includes five major elements: Topographic Information, Watershed Evaluation, Watershed Management Plan, Implementation of Best Management Practices, and Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) management strategies. A FY2007 cooperative funding revenue agreement with Polk County has been executed to complete the WMP elements through the Watershed Management Plan. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	250,183	0	1,029	5,389	0	256,601
<b>District Budgeted - Outside Revenue</b>						
Frostproof - Crooked/Clinch/Reedy RDS (L353)	250,000	0	0	0	0	250,000
				<b>Total</b>		<b>\$506,601</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	Projected	Amended	Actual
Draft Agreement to Management Services	1/1/07		9/1/06
Draft Agreement Returned from Management Services	2/1/07		9/1/06
Cooperator Contract Executed	4/1/07		9/24/07
Consultant Contract Executed	6/1/07		
Notice to Proceed to Consultant	7/1/07		
Watershed Evaluation Commence	1/1/08		
Watershed Evaluation Completion	9/1/08		
Watershed Plan Commence	9/1/08		
Watershed Plan Completion (project complete)	1/1/09		



Project Close-out

6/1/09

**Status As Of:** March 05, 2008

Based on inclusion of the project in the FY2007 budget, the District developed a cooperative funding agreement and sent it to Polk County for review and signature. The County held the agreement pending the outcome of the Lake Clinch Outfall Replacement (project L352) final design and construction bidding. This was done to assure that the L353 watershed plan has accurate information to account for the new Lake Clinch outfall, and determine whether budgeting for the L352 project is sufficient. Upon acceptance of the L352 construction bid, the County decided to move ahead with review/signature of the L353 agreement, and the cooperative funding agreement was executed on 09/24/07. Currently, the project consulting services agreement is in a draft format. The District will issue notice to proceed when this agreement is finalized and executed.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County, Polk County Utilities
<b>Project Manager</b>	NOURANI, MEHRSHAD
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This completed reclaimed water project was a cooperative funding initiative (FY2006) for expansion of the Northeast Regional Wastewater Treatment Facility of Polk County's reclaimed water distribution system, which resulted in construction of two 5 million gallon (MG) ground storage reservoirs for a total system-wide storage capacity of 15 mg; and one high service pumping facility with 3,500 gallon per minute to increase the flow capacity of the reclaimed water system to 10,417 gallons per minute. The project goal was to reduce the existing and future groundwater withdrawal and consumption by increasing reclaimed water flow capacity from the pre-project average 2 million gallons per day to 6 million gallons per day in the Northeast Regional Utility Service Area (NERUSA). This project provides for the diurnal reclaimed water supply-demand imbalance and the lack of sufficient reclaimed water storage by providing additional facilities to store 10 million gallons of water during low demand hours, and then use this stored reclaimed water to supplement the system during high demand hours. The NERUSA is home to approximately 11,000 residential, commercial and recreational customers. The system provides reclaimed water to the active, dryline and planned developments in the NERUSA. All new developments along the existing and planned transmission system include internal reclaimed water distribution systems and all users are individually metered. The total project cost is \$2,794,912 and the District's share is \$920,308. \$134,704 (15%) is provided by the Water Protection Sustainability Trust Fund Program. In FY2006, the Peace River Basin Board share is \$785,604 (85%). Total funding encumbered to date is \$917,352 (100%).

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	788,735	0	3,268	0	0	792,003
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	134,704	0	0	0	0	134,704
				<b>Total</b>		<b>\$926,707</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Signage Erected	1/31/06		
Draft Agreement to Contract Administration	2/9/06		2/15/06
Draft Agreement returned from Contract Administration	5/31/06		5/31/06
Contract sent to Cooperator for signature	6/5/06		6/5/06
Notice to Proceed	8/14/06		8/14/06
Contract Executed	8/14/06		8/14/06
Design Commence	9/1/06		9/12/06
Design Completed	1/31/07		5/31/07
Construction Commence	6/30/07		6/30/07
Contract Termination	12/31/07		
Construction Completed	12/31/07		11/1/07

**Status As Of:** March 17, 2008

This completed reclaimed water project was a cooperative funding initiative (FY2006) for expansion of the Northeast Regional Wastewater Treatment Facility of Polk County's reclaimed water distribution system, which resulted in construction of two 5 million gallon (MG) ground storage reservoirs for a total system-wide storage capacity of 15 mg; and one high service pumping facility with 3,500 gallon per minute to increase the flow capacity of the reclaimed water system to 10,417 gallons per minute. The project goal was to reduce the existing and future groundwater withdrawal and consumption by increasing reclaimed water flow capacity from the pre-project average 2 million gallons per day to 6 million gallons per day in the Northeast Regional Utility Service Area (NERUSA). This project provides for the diurnal reclaimed water supply-demand imbalance and the lack of sufficient reclaimed water storage by providing additional facilities to store 10 million gallons of water during low demand hours, and then use this stored reclaimed water to supplement the system during high demand hours. The NERUSA is home to approximately 11,000 residential, commercial and recreational customers. The system provides reclaimed water to the active, dryline and planned developments in the NERUSA. All new developments along the existing and planned transmission system include internal reclaimed water distribution systems and all users are individually metered. The total project cost is \$2,794,912 and the District's share is \$920,308. \$134,704 (15%) is provided by the Water Protection Sustainability Trust Fund Program. In FY2006, the Peace River Basin Board share is \$785,604 (85%). Total funding encumbered to date is \$917,352 (100%).

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**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Charlotte County Utilities  
**Project Manager** ANTOINE, TAMMY  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This alternative water supply project includes the design and construction of two reuse ponds and related appurtenances to provide diurnal storage at the Deep Creek (WUP# 7815) and Kings Island (WUP# 9066) golf courses. This project provides diurnal storage to allow the golf courses to fully utilize reuse for irrigation purposes by eliminating competition for the use of reclaimed water with other irrigation customers, where otherwise there would be insufficient flow to meet both customers demands at once.

**Benefits**

The remaining project benefit includes 0.516 mgd of reuse flow to two golf courses, offsetting 0.386 mgd Intermediate aquifer withdrawal.

**Costs**

The total project cost of the two reuse ponds, including design, permitting, construction and inspection is estimated at \$1,308,413. The county already budgeted \$600,599 in FY2005. Of the remaining \$707,814, 85 percent (\$601,642) is estimated to be for construction. The Peace River Basin has encumbered \$414,071 in FY2006, of which \$120,328 is expected to be provided by the Water Protection Sustainability Program. The county's remaining share will be \$293,743. The cost in terms of benefit is \$.44/1,000 gallons, amortized over 30 years at eight percent interest.

**Additional Information**

Both of the golf courses associated with the FY2006 project represent new reuse customers to the county's system and will be connected to existing 6-inch diameter reuse transmission mains. The proposed storage pond and associated appurtenances at the Deep Creek Golf Course will be constructed on vacant lands located on a county easement adjacent to the course. The pond located at the Deep Creek Golf Course will have a capacity of 2.12 million gallons and the reuse pond for the King's Island Golf Club includes approximately 1.00 million gallons of diurnal storage for golf course irrigation and will be located on on-site vacant lands. Golf-course-related benefits include providing 0.516 mgd (.258 mgd per course) of reuse flow and offsetting 0.386 mgd (.193 mgd per course) of Intermediate aquifer withdrawal.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	298,301	0	2,913	1,331	0	302,545
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	120,328	0	0	0	0	120,328
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County	894,342		0	0	0	894,342
				<b>Total</b>		<b>\$1,317,215</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Draft Project Agreement	10/31/05		11/22/05
Execute Project Agreement	1/31/06		7/24/06
Begin Design	5/1/06	2/15/07	5/22/07
Complete Design	5/31/07	10/31/07	
Begin Construction	6/30/07	2/15/08	
Complete Construction	7/31/08	11/30/08	
Project Close-out	1/31/09		

**Status As Of:** January 30, 2008

A Cooperative Funding Agreement was executed on July 24, 2006, the agreement has been backdated to be effective October 1, 2005. The county submitted a modified scope of work and an amendment was executed 03/07/07 (associated with the cancellation of cooperative funding project K892). The amendment was approved by the Peace River Basin Board on February 16, 2007. Charlotte County has selected Stantec as the design engineer and notice to proceed was given on May 22, 2007. CCU and Stantec are in the process of securing the use of a County piece of property in the vicinity of the Kings Island Golf Club for a

reclaimed water storage pond. A hydraulic analysis was provided by Stantec to determine if direct pumping of reclaimed water to the Deep Creek Golf Course irrigation system is a viable option if enough land for a storage pond is not found. Stantec is initiating a second round of discussions with Deep Creek GC management on providing space for a storage pond before a decision is made on how to proceed with the design of the reclaimed water delivery system. It is expected that CCU will request a no-cost time amendment to adjust the timelines for this project. To date, \$414,071 has been encumbered, of which \$0 has been reimbursed.

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Charlotte County  
**Project Manager** FRIES, GEORGE  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program for the portion of Charlotte County known as Charlotte Harbor Redevelopment Area. The proposed study area is approximately 2.5 square miles and is located in western Charlotte County. The goal of the project is to create a functional, viable, detailed planning tool with feasible and permittable drainage alternatives. With FY2006 funding work on the Topographic Information and Watershed Evaluation will begin and should be completed. With FY2007 funding the work on the Watershed Management Plan elements will begin and should be completed. Work on the Watershed Management Plan element will include the following tasks: computer modeling, floodplain analysis, surface water resource assessment (water quality), establishment of LOS, and BMP alternative analysis.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies and 2) provides a geodatabase and projected results from watershed model simulations for floodplain management and water quality management.

**Costs**

Funding for this project was provided in the Peace River Basin Board budgets of FY2006 (\$125,000) and FY2007 (\$125,000) for a total funding commitment of \$250,000. The total budgeted amount for this project is \$500,000 of which the District's share is \$250,000. When each element is completed the project budget and scope may require refinement based on the information gathered. The District funding amounts shown in the table include staff salaries.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. With prior years funding the Topographic Information and Watershed Evaluation elements were completed. A cooperative funding revenue agreement with Charlotte County has been developed as a multi-year funded project contingent on the approval of future funding to complete the WMP elements through the Watershed Management Plan. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	258,523	0	5,022	7,453	0	270,998
<b>District Budgeted - Outside Revenue</b>						
Charlotte Co - Charlotte Hbr Redevelopmnt (L486)	250,000	0	0	0	0	250,000
				<b>Total</b>		<b>\$520,998</b>

**Critical Project Milestones**

	Projected	Amended	Actual
<b>1. Critical Project Milestones</b>			
District logo will appear on all reports	12/31/06		
<b>2. Cooperator Agreement</b>			
FY2006 Funds Encumbered			1/3/06
Draft Agreement to Contracts Administration	9/20/05		
Draft Agreement returned from Contracts Administration	10/15/05		1/4/05
Agreement Executed	12/1/05		4/5/06
<b>3. Consultant Agreement</b>			
Consultant Agreement Executed	2/1/06		4/13/06

Notice to Proceed	2/2/06		4/13/06
Task 1- Topographic Information Commence	2/7/06	7/29/06	4/13/06
Task 2- Watershed Evaluation Commence	3/15/06		4/13/06
Task 1-Topographic Information Complete	4/15/06	1/29/07	10/10/06
Task 2- Watershed Evaluation Complete	7/15/06	11/17/06	
<b>4. Amendment 1 to Consultant Agreement</b>			
Notice to Proceed	7/10/06		7/29/06
Amendment Executed	7/10/06		7/29/06
Work Order #2 (WMP) Executed	7/17/06		7/17/06
<b>5. Amendment 1 to Cooperator Agreement (FY2007 Funding)</b>			
Amendment Executed	11/30/06		12/12/06
<b>6. Amendment 2 to Consultant Agreement (FY2007 Funding)</b>			
Task 3- Watershed Management Plan Commence	7/17/06	11/17/06	4/13/07
Amendment Executed	10/26/06		10/26/06
Model Development	8/1/07	10/13/07	
Floodplain Analysis	9/1/07	11/13/07	
Level of Service Determination	10/1/07	12/13/07	
Surface Water Resource Assessment	1/1/08		
BMP Alternative Analysis	4/1/08		
Task 3- Watershed Management Plan Complete	7/1/08		
<b>7. Contract Completion</b>			
Consultant Agreement Expiration	7/29/06	12/31/08	
Cooperator Agreement Expiration	6/30/07	6/30/09	

**Status As Of:** February 25, 2008

Status History: The cooperative funding revenue agreement with Charlotte County was executed on April 6, 2006. The consultant services agreement with Ardaman & Associates was executed on April 13, 2006. A project kick off meeting was held on April 25, 2006 and work began. Work on the project was delayed because the LiDAR data from the District was not available for the consultant until 10/10/2006. The county applied for additional cooperative funding for FY2007 for completion of the WMP including BMP alternative analysis. An amendment to the Revenue Agreement incorporating the FY2007 funds was executed on December 12, 2006. A progress meeting was held on 04/03/2007. The Data Collection, Bibliography and Coverage deliverables were provided to the District on 04/13/2007 and were approved. The Reconnaissance Report, Field Survey Plan and Inventory Coverage were provided to the District and were reviewed and approved. Field Survey work is now complete. Work on the Watershed Management Plan is underway. A project meeting was held on September 6, 2007 to discuss progress and schedule. The Watershed Parameterization work product was submitted for approval on 12/11/2007. The County applied for cooperative funding for FY2009 to begin design work for the stormwater management storage areas within the Redevelopment Area. This request was assigned Activity Number N126. Current Status: Comments on the watershed parameterization were provided to the Consultant on February 4, 2008. The consultant will submit the next phase of the work in early March 2008.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	DeSoto County
<b>Project Manager</b>	LETASI, SCOTT
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the one of the high priority watersheds. Desoto County has identified the Peace River, Thorton Branch, and Joshua Creek Watersheds as high priority watersheds for the WMP. The issues in the watersheds include flood damage, level of service deficiencies, rapid growth, and water quality. The Watershed Management Plan includes the following tasks: survey, data management and development of watershed parameters, GIS processing, computer modeling, floodplain analysis, surface water resource assessment (water quality) establishment of LOS, BMP alternative analysis.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management.

**Costs**

The total budget amount for this project is \$225,000, of which the District's share is \$168,750 from the Peace River Basin, the County will contribute \$56,250. The FY2008 budget included \$168,750 from the Peace River Basin and \$56,250 from the County. Future funding will be required to complete the project. When each element is completed the project budget will be refined based on the information gathered. Desoto County is a REDI community and pays 25% of the projects total cost. The Districts match is 75% of the total project cost.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A cooperative funding revenue agreement with Desoto County will be developed as a multi-year funded project contingent on the approval of future funding to complete the WMP elements through the Watershed Management Plan. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in the County with FY2005 funding (\$770,000). Information developed with this project will be used to update the FIRMs representing these watersheds. Cooperator submitted the project for Rural Economic Development Initiative (REDI) consideration.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	398,113	0	171,853	3,493	168,750	742,209
<b>District Budgeted - Outside Revenue</b>						
DeSoto Co - Stormwater Master Plan (L633)	131,250	0	56,250	0	168,750	356,250
				<b>Total</b>		<b>\$1,098,459</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
County Agreement Executed	7/1/07	7/1/08	
Notice to Proceed	10/1/07	10/15/08	
Consultant Agreement Executed	10/1/07	10/1/08	

**2. Digital Terrain Model**

Digital Terrain Model	11/1/07	12/15/08	
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**3. Watershed Evaluation**

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Begin Watershed Evaluation	12/1/07	1/1/09
Complete Watershed Evaluation	2/1/08	5/15/09
<b>4. Watershed Management Plan</b>		
Begin Watershed Management Plan	2/15/08	6/1/09
Complete Watershed Management Plan	7/1/08	10/15/09

**Status As Of:** February 29, 2008

**Status History:** Meeting was conducted with the County's new project manager on November 9, 2006 to discuss the project and the Cooperative Funding Agreement. In the development of the agreement, the County identified that this project was mistakenly not in the County's FY2007 budget. On February 23, 2007, Desoto County sent a letter to the District indicating the County's budgeting error and its commitment to the Watershed Management Program in FY2008. The FY2007 Peace River Basin Board funds set aside for this project were balanced forward. Therefore, the project was delayed until FY2008 funding were available.

**Status Current:** District Staff is currently preparing an agreement between the County and the District for this project.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Punta Gorda
<b>Project Manager</b>	ANTOINE, TAMMY
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project consists of a reuse feasibility study to identify the technical and financial elements of a reclaimed water system. The City of Punta Gorda owns and operates a 4 mgd wastewater treatment plant, and currently disposes all of its reclaimed water via a deep injection well. The feasibility study would consider a reclaimed water system to treat and deliver reclaimed wastewater for beneficial use as landscape irrigation.

**Benefits**

Upon completion of this project, the City will have a reuse feasibility study considering a reclaimed water system to treat and deliver reclaimed wastewater for beneficial use.

**Costs**

The total estimated cost of this project is \$250,000, of which the Peace River Basin is requested to fund 50 percent, or \$125,000. Funding in the amount of \$125,000 has been budgeted for FY2007.

**Additional Information**

The City wants to develop a reclaimed water system that will assist in achieving goals of the SWUCA, reducing demands from the public water system and reducing demands from groundwater used for irrigation wells.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	127,822	0	1,166	1,331	0	130,319
<b>Project Funds Not Budgeted by the District</b>						
Punta Gorda	125,000		0	0	0	125,000
				<b>Total</b>		<b>\$255,319</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft Project Agreement	10/31/06		9/1/06
Execute Project Agreement	12/31/06		12/20/06
Begin Feasibility Study	12/31/06		1/5/07
Complete Feasibility Study	5/31/07	12/31/07	1/15/08
Project Close-out	12/31/08		

**Status As Of:** March 04, 2008

A Cooperative Funding Agreement was executed on December 20, 2006. Carollo Engineers was given notice to proceed on January 5, 2007 and submitted the draft feasibility study on July 5, 2007. Staff provided comments and suggested changes to the City and engineers on July 24, 2007. The City requested an extension to December 31, 2007 to incorporate comments and finalize the feasibility study. The City submitted the final reuse feasibility study on January 15, 2008 to complete this project. The City has submitted a request for reimbursement in the amount of \$61,480. Staff has requested additional information from the City in order to process the payment request. To date, \$125,000 has been encumbered, of which \$0 has been reimbursed.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Florida Department of Environmental Protection
<b>Project Manager</b>	ZAJAC, CHRIS
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project involves the design, permitting and construction associated with the restoration of natural systems, including a cutthroat grass-dominated seepage slope within Highlands Hammock State Park in Highlands County. In FY2004 the Peace River Basin Board funded the Lake Wales Ridge Public Lands Hydrologic and Water Quality Restoration Project (B171), which has identified Highlands Hammock State Park as a high priority restoration site. The Lake Wales Ridge Public Lands Hydrologic and Water Restoration Project resulted in a final report identifying four recommendations for the restoration of natural systems and water quality within the state park. This project will implement one of those recommendations which is the restoration of eroded jeep trails that have resulted in deep gullies acting as ditches to drain water from adjacent seepage slope wetlands. This affects wetland hydroperiods, water storage, and water flow characteristics in the adjacent natural systems. The FY2008 funds will be used to complete the restoration effort that began with FY2007 funds.

**Benefits**

The project will result in design plans, the necessary permits, and the restoration of eroded jeep trails to restore the hydroperiod and sheet-flow characteristics of approximately 381 acres of seepage slope wetlands and flatwoods communities.

**Costs**

The total project cost is \$100,000. In FY2007, the Peace River Basin Board funded \$25,000 with an equal match from FDEP. The FY2008 budget is \$50,000, with the cooperator and the District each contributing half (\$25,000). The FY2008 District share is split between the Peace River Basin Board (\$12,500) and the Water Protection and Sustainability Trust Fund (\$12,500). The FY2009 District funding amounts shown in the table include staff salaries, travel and central garage charges.

**Additional Information**

The Lake Wales Ridge watershed has undergone substantial hydrologic alterations since the early 1900's, which has resulted in lowered lake levels, deterioration of lake water quality, reduced recharge, and local dewatering of the surficial ground water system. Restoration and retrofit projects to solve these problems may be undertaken on existing publicly owned lands to benefit the region. In FY2004 the Lake Wales Ridge Public Lands Hydrologic and Water Quality Restoration Project (B171) identified four such tracts of land as high priority restoration sites. As a result of this project, a final report identifying several restoration projects within Highlands Hammock State Park was completed in December 2006. The Florida Department of Environmental Protection plans to apply for cooperative funding in the future to complete other restoration projects that were identified as part of the Lake Wales Ridge Public Lands Hydrologic and Water Quality Restoration Project.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	28,160	0	15,789	3,646	0	47,595
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T. F. (Surface Wtr Rstr)	0	0	12,500	0	0	12,500
<b>Project Funds Not Budgeted by the District</b>						
Fl Department of Environmental Protection	25,000		25,000	0	0	50,000
				<b>Total</b>		<b>\$110,095</b>

**Critical Project Milestones****1. Contract Development and Execution**

Purchase order #07POSOW0543 issued

**Projected**

1/17/07

**Amended**

1/18/07

**2. Project Tasks**

FY2007 Project Construction Complete

7/18/07

2/4/08

FY2007 Construction Completion Verification Report

8/18/07

2/4/08

**3. Project Tasks**

FY2008 Project Construction Complete

10/1/08

FY2008 Construction Completion Verification Report

11/2/08

**Status As Of:** February 13, 2008

The District's project manager developed a draft scope of work and sent it to the cooperator for review and comment in August

2006. Upon review of the draft scope of work it was determined that this project may qualify for an exemption from permitting. The cooperator, with assistance from the District's project manager, prepared a Project Evaluation and submitted it to the Bartow Regulation Department for review in October 2006. On November 3, 2006 the Bartow Regulation Department issued a letter granting an exemption from permitting to complete the proposed project. The funds requested for this project are being used for construction rather than design and permitting as the original coop funding application indicated. District staff issued a Purchase Order on January 18, 2007 so that project construction may begin. On June 29, 2007 the cooperator indicated that the project did not receive enough bids and that the project will be rebid in July. The cooperator has reviewed the second round of bidding and has selected a contractor for the project. The contractor recently completed one of four identified areas in need of restoration. Due to the delays in selecting a contractor the cooperator has requested that the Purchase Order be extended by six months. The new expiration date will be July 1, 2008. The District project manager recently filed the appropriate documentation to have a second purchase order developed for the FY2008 funds to complete the remaining three sites.

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Flood Protection  
**Basin(s)** Peace River  
**Cooperator(s)** Polk County  
**Project Manager** MCBRIDE, TAMERA  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This is a flood protection project that will evaluate the feasibility of using a collection of wells to expedite the recharge of excess surface water that is naturally treated by sands in the surficial aquifer. The concept of Recharge Well Fields (RWFs) is to allow water in the lower part of the surficial aquifer, that is filtered and treated as it moves downward through the surficial sediments, to recharge the underlying Upper Floridan aquifer via valve-regulated, gravity-driven connector pipes/recharge wells. For Phase 1 of this feasibility project, the county will construct two surficial aquifer test wells to collect and analyze water quality from the surficial aquifer. This initial data is needed to ensure that the quality of the surficial aquifer ground water will meet the Florida Department of Environmental Protection (FDEP) water quality standards for injection into the Upper Floridan aquifer. Additional monitor wells will also be installed and equipped with continuous recorders to measure water levels. If the quality of the ground water from the surficial aquifer meets FDEP requirements, then the county will proceed with additional feasibility work (Phase 2) to construct an exploratory well and additional funding for future years will be requested. If water quality does not meet FDEP requirements, the project will not go forward and further funding will not be requested. This project directly supports ongoing efforts by the District to restore and enhance historic wetland and floodplain storage in the Peace Creek Drainage District (PCDD).

**Benefits**

This is an innovative project that could help reduce flooding by diverting and expediting the storage of excess surface water through recharge to the Upper Floridan aquifer. The project will support ongoing efforts by the District to restore and enhance historic wetland and floodplain storage in the PCDD. Additional benefits include recharging the Upper Floridan aquifer in the SWUCA and potentially providing future water supplies for the area.

**Costs**

The County withdrew their request for FY2009 funding, based on the projected timeline for completion. The FY2008 funding request was ranked low for the same reason, and did not receive funding. The total FY2007 cost for this project is \$250,000 with the District's share requested to be \$125,000. Funding from the District is being provided by the Peace River Basin Board.

**Additional Information**

A preliminary analysis, conducted for the city by the consultant Schreuder, Inc. identified four potential RWF locations where excess surface water run-off could be detained, and has recommended the installation of surficial test wells at two of the sites: 1) Lake Gwen near Wahneta (Site #1), and 2) Cypresswood Development (Site #2). Polk County will construct and monitor water quality from a surficial aquifer test well at the two sites. Monthly water samples will be collected and analyzed to ensure that the quality of the ground water from the surficial aquifer will meet underground injection control (UIC) water quality standards. Six additional monitor wells will also be installed and equipped with continuous recorders for each site. After one year of monitoring, Polk County will assess the water quality data collected and begin the permitting process needed for the installation and operation of the recharge wells. The consultant's concept of the RWF involves the installation of up to 25 recharge wells per site, with a well infiltration/recharge rate of approximately 50 to 60 gallon/minute per well (72,000 gpd). If four RWF sites were developed, (25 wells per site; 100 recharge wells total) this would represent approximately 7 to 8 million gallons per day of recharge to the Floridan aquifer. It may take an additional two years for the permitting process, the well installation and subsequent testing before a final operational permit can be issued by the FDEP. If the water quality of the ground water from the test wells cannot meet the UIC criteria, the project will not proceed and additional funding will not be requested.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	129,755	0	5,101	5,226	800,000	940,082
<b>Project Funds Not Budgeted by the District</b>						
Polk County	125,000		0	0	32,500	157,500
				<b>Total</b>		<b>\$1,097,582</b>

**Critical Project Milestones**

**Contract Development**

	Projected	Amended	Actual
MSA between County and Ardaman Signed			8/29/07
3rd Draft SOW Submitted			1/16/07
2nd Draft SOW Submitted			10/25/06

1st Draft SOW Submitted		9/27/06
Governing Board Approval		9/26/06
Execute Contract		7/11/07

**Phase 1**

Construct Wells (2) and Monitor Wells	8/11/07	4/1/08
WQ and Data Collection; Interpretation/Analysis	10/11/08	6/1/09

**Phase 2**

- Contract Close-out
- Report Preparation and Review

**Status As Of:** March 07, 2008

Drilling specifications were supplied to Ardaman and Associates (Ardaman), and they submitted a bid dated November 2, 2007. The County called the District's project manager on December 6, 2007 and explained that the bid exceeded the original budget. The Ardaman bid was received by District staff on December 14, 2007. A second drilling company bid (Wellmasters, Inc.) was received by District staff on January 7, 2008. The project manager reviewed the Ardaman bid, but was unable to separate the costs for the surficial and Upper Floridan wells, since they were priced as concurrent installations. The District will not fund installation of the Upper Floridan wells until it is demonstrated that surficial well water quality during testing meets underground injection control standards. The District requested that the Ardaman bid be recalculated under the premise that the surficial wells and Upper Floridan wells will be installed at different times. The bid was revised and provided to the District on January 18, 2008. Laboratory costs by Florida Analytical, Inc. were sent to the District on January 22, 2008. The revised project costs were over budget; however, this became a non-issue when the County notified the District that they obtained additional funding from other sources and would not be requesting additional funding for this phase of the project. Well site locations have been selected and staked, and Polk County staff are working on getting power to both sites. County staff is currently working with the TECO and Progress Energy to complete the easements required at both sites. The County experienced unanticipated complications with connecting power to the Lake Gwen site, because a relatively lengthy utility easement had to be obtained. The County anticipates power access agreements to be established in the next few weeks, after which drilling will begin.



**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection  
**Basin(s)** Peace River  
**Cooperator(s)** Polk County Natural Resources  
**Project Manager** TURNER, DAWN  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This is a multi-year funded project to perform the Implementation of Best Management Practices (BMPs) element of the District's Watershed Management Program (WMP) for the Lake Belle and Tractor Lake Watershed improvement area. The watershed covers an area of approximately 1.4 square miles in southeast Polk County. Proposed BMPs will address level of service deficiencies. Lake Belle and Tractor Lake are currently closed basins. In lieu of a Watershed Management Plan, the County retained Professional Engineering Consultants to prepare a feasibility study. The study entitled Lake Belle Drainage Outfall Evaluation was completed in May 2006, and includes a BMP alternative analysis, preliminary engineering, and cost estimates. The work performed by Professional Engineering Consultants did not include conceptual permitting. Recommended BMPs involve improvements to the stormwater management infrastructure including the installation of a gravity outfall from Tractor Lake to Lake Belle, and a pump outfall from Lake Belle to a borrow pit on the north side of Hunt Brothers Road. The borrow pit discharges to the south under Hunt Brothers Road to a second borrow pit. The second borrow pit discharges to the southeast under U.S. 27, then along the south side of Longleaf Business Park, through the 5R Ranch property to the south loop of the Peace Creek Canal. Maintenance activities will be performed, and improvements may be constructed within the conveyance system between the borrow pits and 5R Ranch. Easements will be obtained to construct the lake outfalls and conveyance system improvements. The pump system will be operated between storm events to recover storage volume above elevation 117.9 feet NGVD, which is 0.9 feet above the adopted low level guidance elevation for Lake Belle. The pump will not be used to discharge water during storm events. The Lake Belle Drainage Outfall Evaluation indicates high water levels in the borrow pits will be increased. Easements may be required over areas impacted by increased water levels to satisfy Environmental Resource Permit requirements.

**Benefits**

The Lake Belle Drainage Outfall Evaluation indicates high water levels and durations within Lake Belle and Tractor Lake will be reduced.

**Costs**

The projected cost for implementation of this project is \$980,000. The District's share is \$490,000, and the County's is \$490,000. In FY2007, the Peace River Basin funded \$265,000 and Polk County funded \$265,000. In FY2008, \$450,000 was provided, with the Basin Board and the County each contributing \$225,000. The estimated cost was obtained from the Lake Belle Drainage Outfall Evaluation, and is based upon preliminary engineering; the costs include the following tasks: design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the BMPs, construction engineering, and inspection. When each element is completed the project budget and scope may require refinement based upon the information developed. As a condition of the funding agreement, the District will not reimburse project costs until all necessary permits have been obtained and construction has commenced. Once construction has commenced, project costs will be reimbursed by the District on a 50/50 cost share basis. District funding amounts shown in the table include staff salaries.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. Following three hurricanes in 2004 and four years of above average rainfall, Lake Belle experienced a dramatic rise in water levels (over 10 feet vertical). This resulted in the flooding of more than a dozen homes and a County road. The Polk County Commission expended tens of thousands of dollars to conduct emergency pumping to relieve the flooding, and determined that a long term solution is necessary. A cooperative funding expenditure agreement with Polk County will be developed as a multi-year funded project contingent on the approval of future funding to complete the Implementation of BMPs. This will require the submission of a cooperative funding request each fiscal year until the project is completed. If approved, this project will be ranked as a 1A project in future fiscal years. The County will manage the project, where the District project manager must approve any agreements to accomplish project tasks. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Polk County. Information developed with this project will be used to update the FIRMs representing this watershed.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	311,924	0	189,930	2,654	0	504,508

**Project Funds Not Budgeted by the District**

Polk County	265,000	225,000	0	0	490,000
			<b>Total</b>		<b>\$994,508</b>

**Critical Project Milestones**

**1. Cooperative Funding Expenditure Agreement**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Cooperative Funding Agreement Executed	10/17/06		10/23/06
Design and Permitting Complete	12/19/07		
District Logo on Plans	12/19/07		
Bidding and Contractor Selection complete	3/31/08		
Land acquisition complete	3/31/08		
Commence Construction	4/30/08		
District Logo on Construction signs	4/30/08		
Complete Construction	4/30/09		
Contract Expiration	12/31/11		

**2. Consultant Services Agreement**

Design and Permitting Complete	12/19/07		
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**Status As Of:** February 25, 2008

The Cooperative Funding Agreement has been executed, and Notice to Proceed was provided to Polk County on October 23, 2006. The County is negotiating with the owners of properties that may be affected by the proposed outfall improvements.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County Natural Resources
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

#### Description

This is a multi-year funded project to perform the Implementation of Best Management Practices (BMPs) element of the District's Watershed Management Program (WMP) for the watershed contributing to Saddlebag Lake, Lake Thomas, Parks Lake, Cypress Lake, Little Gum Lake, Big Gum Lake and Stock Lake. The watershed covers an area of approximately 9.5 square miles in southeast Polk County. Proposed BMPs will address level of service deficiencies. Saddlebag Lake and Thomas Lake are currently closed basins. In lieu of a Watershed Management Plan, the County retained Professional Engineering Consultants to prepare a feasibility study. The study entitled Saddlebag Lake Drainage Outfall Evaluation was completed in May 2006, and includes a BMP alternative analysis, preliminary engineering, and cost estimates. The work performed by Professional Engineering Consultants did not include conceptual permitting. Recommended BMPs involve improvements to the stormwater management infrastructure including the construction of outfall structures and conveyance systems connecting Saddlebag Lake to Lake Thomas, and Lake Thomas to Cypress Lake. Conveyance system improvements will also be constructed between Parks Lake and Cypress Lake, and between Cypress Lake and Little Gum Lake. Implementation of the BMPs will allow water levels within Saddlebag Lake to be controlled at an elevation of 101.5 feet NGVD, which is 0.5 feet below the adopted low level guidance elevation for Saddlebag Lake, and only 0.5 feet above the adopted extreme low elevation. Lake Thomas will be controlled at the adopted low level guidance elevation of 97.0 feet NGVD. Improvements to the conveyance system between Parks Lake and Cypress Lake will control Parks Lake at the adopted low level guidance elevation of 100.0 feet NGVD. Improvements between Cypress Lake and Little Gum Lake will control Cypress Lake at elevation 95.5 feet NGVD, which is 0.5 feet above the adopted low level guidance elevation for Cypress Lake. Easements will be obtained to construct the lake outfalls and conveyance system improvements. The Saddlebag Lake Drainage Outfall Evaluation indicates high water levels in Parks Lake, Cypress Lake, Little Gum Lake, Big Gum Lake and Stock Lake will be increased for one or more design storm events. Easements may be required over areas impacted by increased water levels to satisfy Environmental Resource Permit requirements.

#### Benefits

The Saddlebag Lake Drainage Outfall Evaluation indicates high water levels and durations within Saddlebag Lake and Lake Thomas will be reduced.

#### Costs

The projected cost for implementation of this project is \$2,100,000. The District's share is \$1,050,000, and Polk County's is \$1,050,000. The projected cost was obtained from the Saddlebag Lake Drainage Outfall Evaluation, and is based upon preliminary engineering. In FY2007, the Peace River Basin funded \$525,000 and Polk County funded \$525,000. With FY2007 funding, the implementation of BMPs has been initiated, and includes the following tasks: design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, and the initiation of construction. \$525,000 in FY2008 funding has been appropriated in the Peace River Basin Budget, and Polk County will contribute \$525,000. FY2008 funding will be used for land acquisition, construction of BMPs, construction engineering, and inspection. When each task is completed the project budget and scope will be refined based on the information developed. As a condition of the funding agreement, the District will not reimburse project costs until all necessary permits have been obtained, and construction has commenced. Once construction has commenced, project costs will be reimbursed by the District on a 50/50 cost share basis. District funding amounts shown in the table include staff salaries.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. Following three hurricanes in 2004 and four years of above average rainfall, water levels in Saddlebag Lake and the Lake Thomas increased dramatically. This resulted in the flooding or abandonment of more than 300 homes. Roads and a domestic wastewater treatment plant were impacted, jeopardizing several hundred additional homes. The Polk County Commission expended hundreds of thousands of dollars to conduct emergency pumping to relieve the flooding, and determined that a long term solution is necessary. A cooperative funding expenditure agreement with Polk County will be developed as a multi-year funded project contingent on the approval of future funding to complete the Implementation of BMPs. This will require the submittal of a cooperative funding request each fiscal year until the project is completed. If approved, this project will be ranked as a 1A project in future fiscal years. The County will manage the project, where the District project manager must approve any agreements to accomplish project tasks. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Polk County. Information developed with this project will be used to update the FIRMs representing this watershed.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	529,677	0	529,930	2,654	0	1,062,261
<b>Project Funds Not Budgeted by the District</b>						
Polk County	525,000		525,000	0	0	1,050,000
				<b>Total</b>		<b>\$2,112,261</b>

**Critical Project Milestones****1. Cooperative Funding Expenditure Agreement**

	Projected	Amended	Actual
Executive Cooperative Funding Agreement	11/30/06		
District Logo on Plans	3/19/08		
Design & Permitting Complete	3/19/08		
Bidding and Contractor Selection complete	6/30/08		
Land acquisition complete	6/30/08		
Commence Construction	7/31/08		
District Logo on Construction signs	7/31/08		
Complete Construction	7/31/09		
Contract Expiration	12/31/11		

**2. Consultant Services Agreement**

Design and Permitting Complete	3/19/08		
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**Status As Of:** February 25, 2008

The Cooperative Funding Agreement has been executed, and Notice to Proceed was provided to Polk County on December 5, 2006. The County is negotiating with the owners of properties that may be affected by the proposed outfall improvements.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Hardee County
<b>Project Manager</b>	LETASI, SCOTT
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This is a multi-year funded project to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the Horse Creek Watershed. The watershed covers an area of approximately 124 square miles and is located in Hardee County. The watershed faces flood damage and water quality issues. With FY2007 funding the work on the Horse Creek Watershed Evaluation as one element. Watershed Management Plan elements for Horse Creek will begin, and with the FY2008 funding should be completed for approximately 78 square miles of the north most portion of the Watershed. Future funding will be required for the Watershed Evaluation of the rest of this watershed and other watersheds, Watershed Management Plan for Horse Creek to complete the survey, watershed modeling development, floodplain analysis, LOS, surface water resource assessment, and alternate analysis of BMPs.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management.

**Costs**

The total estimated cost of the project is \$280,000, of which the District's share is \$150,000 from the Peace River Basin and \$80,000 is from FEMA as part of the FIRM Map Modernization (M104). The County will contribute \$25,000 in FY2007 and \$25,000 in FY2008. The District's share from the Peace River Basin is \$75,000 for FY2007 and \$75,000 for FY2008. Hardee County is a REDI Community and will contribute 25% of the project total cost. Future funding will be required to complete the WMPlan for the southern part of Horse Creek Watershed.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A cooperative funding revenue agreement with Hardee County will be developed as a multi-year funded project contingent on the approval of future funding to complete the WMP elements through the Watershed Management Plan. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. If approved, this project will be ranked as a 1A project in future fiscal years. The County will manage the project, where the District project manager must approve any agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	79,363	0	78,103	3,493	0	160,959
<b>District Budgeted - Outside Revenue</b>						
Hardee Co - Watershed Mgmt Plan (L679)	25,000	0	25,000	0	0	50,000
				<b>Total</b>		<b>\$210,959</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
County Agreement Executed	7/1/07		5/1/07
Consultant Agreement Executed	10/1/07		7/11/07
Notice to Proceed	10/15/07		10/2/07

**2. Digital Terrain Model**

Digital Terrain Model	11/1/07		12/12/07
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**3. Watershed Evaluation**

Begin Watershed Evaluation	12/1/07		12/1/07
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Completion of the Watershed Evaluation	2/1/08	4/15/08
<b>4. Watershed Management Plan</b>		
Begin Watershed Management Plan	2/15/08	4/15/08
Complete Watershed Management Plan	8/1/08	

**Status As Of:** February 29, 2008

Status History: Several meetings between District staff and Hardee County staff were performed in November and December 2006 to prioritize the watersheds that will be studied in detail as part of the watershed management program. The County and District are coordinating this project with the FEMA MAP MOD project (M104). Remaining FEMA funds from the MAP MOD project will be combined with this project's funding to accomplish a Watershed Management Plan for a larger part of the priority watershed select by the County. A meeting between the District and the County on March 16, 2007 identified Horse Creek as the priority watershed. Due to the current budget constraints, a watershed management plan can not be performed in the entire 124 square miles of the watershed. The County and District agreed to start in the northern most subbasins of the watershed and work to the south as future funding is available. A Cooperative Funding Agreement between the District and Hardee County was executed on May 1, 2007. The project development of this project has been completed. An agreement between BCI the engineering consultant and the District has been executed and the first work order has been signed. Meetings between all stakeholders have been completed. The stakeholders include: BCI, SWFWMD, Mosaic, CF Industries, and Hardee County. BCI has completed the DTI for Horse Creek. Status Current: BCI has started work on the watershed evaluation and anticipates completion in March 2008. The first amendment to encumber FY2008 funds has been signed by the County and should be executed by the District in March 2008.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Bartow
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing/No FY\$

#### Description

This is a multi-year funded project to perform the Watershed Evaluation element of the District's Watershed Management Program (WMP) for the Bartow watershed. The Bartow watershed is located within the upper Peace River watershed, and covers an area of approximately 40 square miles in Polk County. The Digital Topographic Information element, and the hydrologic feature inventory, identification of survey needs, and surface water resource inventory and approach development tasks of the Watershed Evaluation have already been completed as part of the Upper Peace River Resource Development (H024) project. Portions of the Bartow watershed are highly urbanized, and the City would like to perform an inventory of the stormwater infrastructure that is much more detailed than the one performed for the upper Peace River. With FY2007 funding, the following Watershed Evaluation tasks will be completed for the Bartow watershed: data evaluation and assembly, hydraulic feature inventory, desktop reconnaissance, preliminary junction/reach network development, and immediate maintenance evaluation. FY2008 funding has been requested to complete the field reconnaissance, and deliverables tasks. A Watershed Management Plan is being prepared for the upper Peace River as part of the Upper Peace River Resource Development project. The plan will include the Bartow watershed, but will not utilize the same level of detail for the infrastructure in the urbanized areas. If the City desires a more detailed level of service determination and best management practices alternative analysis for the urbanized areas, additional funding will be required. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Polk County. Information generated through the Bartow Watershed Evaluation and the Upper Peace River Watershed Management Plan will be used to update the FIRMs representing the Bartow area.

#### Benefits

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies; and 2) provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

#### Costs

The total funding amount for this project is \$320,000, of which the District's share is \$160,000. The City will contribute \$160,000. For FY2007, \$160,000 is appropriated in the Peace River Basin's budget with a revenue from the City of Bartow for \$80,000. When each element is completed the project budget and scope may require refinement based on the information gathered. In FY2008, \$160,000 is appropriated in the Peace River Basin's budget with a revenue from the City of Bartow for \$80,000. FY2008 funding will be used to complete field reconnaissance of an estimated 1700 hydraulic features, and complete final project deliverables.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A cooperative funding revenue agreement with the City will be developed as a multi-year funded project contingent on the approval of future funding to complete the Watershed Evaluation, and the following Watershed Management Plan tasks: level of service determination and BMPs alternatives analysis. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. If approved, this project will be ranked as a 1A project in future fiscal years. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	85,800	0	86,120	2,654	0	174,574
<b>District Budgeted - Outside Revenue</b>						
Polk Co - Bartow Watershed Mgmt Plan (L680)	80,000	0	80,000	0	0	160,000
				<b>Total</b>		<b>\$334,574</b>



Critical Project Milestones	Projected	Amended	Actual
<b>1. Revenue Agreement</b>			
Revenue Agreement to Contracts for approval	9/22/06		
Revenue Agreement mailed to cooperator for signature	10/13/06		10/9/06
Revenue Agreement Executed	10/31/06		10/24/06
Revenue Agreement Expiration	1/31/09		
<b>2. Consultant Services Agreement</b>			
Consultant Services Agreement to Contracts for approval	9/22/06		
Consultant Services Agreement mailed to Ardaman for signature	10/13/06		
Consultant Services Agreement Executed	10/31/06		12/12/06
Work Order #1 issued to Ardaman	10/31/06		1/3/07
Consultant Services Agreement Expiration	12/31/08		

**Status As Of:** February 25, 2008

The Cooperative Funding and the Consultant Services Agreement have been executed. Notice to Proceed was provided to Ardaman and Associates on January 3, 2007, and a project kickoff meeting was held on February 20, 2007. Data collection activities have been completed. As part of that work, Ardaman staff coordinated with City staff to review and copy pertinent infrastructure data from City project and permit files. Status History: The City is highly urbanized, and City staff would like to perform a very detailed inventory of the stormwater infrastructure. As part of the Watershed Evaluation, the inventory information will be also linked to GIS. At this level of detail, cost estimates indicate the \$320,000 of anticipated project funds will be sufficient to complete the Watershed Evaluation, but not the Watershed Management Plan. The on-going Upper Peace River Resource Development (H024) project involves the development of a Watershed Management Plan that will include the City of Bartow; but will not utilize the same high level of detail. City staff indicate the level of detail that will be used for the Upper Peace River Resource Development project will meet their needs related to the identification of flood prone areas, and the development of a Watershed Management Plan. In order to stay within the approved project budget, the scope of work for this project will include only the Watershed Evaluation. The Watershed Management Plan element will be performed through the Upper Peace River Resource Development (H024) project. Data developed through the Bartow Watershed Evaluation, and the Upper Peace River Resource Development projects will be used to update the FIRMs representing the Bartow watershed. A total of \$59,632 has been invoiced and paid to date. The City has been invoiced for their share.

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Charlotte County  
**Project Manager** WHITE, BRENT  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This project consists of replacement of existing high-volume toilets (installed with pre-1995 construction) with low-volume models using 1.6 gallons per flush or less, or the high efficiency toilets (HET's) using approximately 1.3 gallons per flush. Approximately 770 toilet rebates of \$100 per year will be offered to multi-family residential and commercial customers. The project will include education designed to help consumers maximize the water-saving capabilities of their toilets. These customers can replace up to two toilets per household. A contractor will administer this program at an estimated \$37 for the first toilet and \$23 for each additional toilet. This is the first year of a potential 5-year effort.

**Benefits**

The project is estimated to provide potable water savings of 18,480 gallons per day or 6,745,200 gallons per year.

**Costs**

The total FY2008 cost for this project is \$100,100 with the District funding 50 percent, or \$50,050 and Charlotte County Utilities funding 50 percent, or \$50,050. The cost-benefit for the project, using a total cost amortized over 20 years at 8% interest, is \$1.50 per thousand gallons.

**Additional Information**

CCU will provide actual billing data, ensure 100 percent fixture inspection, and institute an education program designed to assist customers in long-term maintenance related to water savings, such as selecting replacements necessary to ensure that each toilet remains a water-conserving fixture by focusing in leak detection and proper flapper replacement. The HET models are relatively new to the plumbing industry, and the Environmental Protection Agency recently completed a list of standards to help consumers select properly performing models. The applicant understands they must ensure the HET models associated with this project will meet the EPA standards in order to be eligible for District funding as part of the project.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	52,124	1,761	0	53,885
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County	0		50,050	0	0	50,050
				<b>Total</b>		<b>\$103,935</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Design Advertising/Marketing Program	7/1/07		8/15/07
Outline Education Program	8/1/07		9/1/07
Develop RFP for Contractor	10/1/07		10/1/07
Contractor Selection Completed	1/1/08		
Begin Advertising Program	1/1/08		
Execute Agreement with WMD	2/1/08		2/3/08
Program Implementation	2/1/08		
Draft Distribution Report to WMD	2/1/09		
Final Distribution Report	3/1/09		
Draft Final Report to WMD	3/1/10		
Final Report	4/30/10		
Final Invoice to District	6/1/10		
Project Closeout	1/31/11		

**Status As Of:** March 01, 2008

This agreement was executed by the District on February 3, 2008. Charlotte County utilities has begun the procedures to piggy-back onto Manatee County's agreement for administrative services for the FY2008 project. Advertisement for the project has begun and Charlotte County Utilities has received a strong response from its customers about participation.

**Project Type** Cooperative Funding  
**AOR(s)** Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Highlands County, Lake Placid  
**Project Manager** KOLASA, KEITH  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This project entails the design, permitting, and construction of a stormwater treatment system within the most urbanized sub-basin of Lake Clay, Highlands County. Lake Clay was given a high priority for implementation of water quality and habitat enhancement projects within the assessment of 130 Ridge lakes completed by District staff. One of the purposes of the Ridge lakes assessment was to identify lakes that would benefit from pro active management practices to prevent them from degrading. It is well known that the cost of preventing degradation is much lower than restoration. Lake Clay was identified as a lake that has relatively good water quality and habitat that is in need of protection. The lake is frequently used for recreational purposes including fishing, boating, and skiing and in turn is an economic resource to the local community. The completed stormwater BMP will reduce pollutant loads entering the lake through stormwater runoff and will be a pro active measure towards protecting the lakes water quality and habitat. It is anticipated that reducing pollutant loads from this highly urbanized basin will protect the lake's existing water quality and habitat. The stormwater retrofit will include the installation of French drains along existing County and City road easements and also within parking lots of private businesses. Conceptual design plans and a project cost estimate have already been completed for Lake Clay under project B196, Ridge Lakes Stormwater Evaluation. District staff will manage the project.

**Benefits**

The completed stormwater treatment system will reduce pollutants to Lake Clay entering through the most urbanized and problematic basin. Stormwater is currently discharged directly to the lake without any form of treatment. Treating this runoff is anticipated to enhance the lake's water quality and prevent degradation of its relatively good water quality and protect the existing recreational uses of the lake.

**Costs**

The FY2008 budget is \$250,000, of which \$31,250 is revenue from the City of Lake Placid, \$31,250 is revenue from Highlands County, \$93,750 is provided by the State Surface Water Restoration Fund, and and \$93,750 is the Basin's contribution. Under the REDI project funding split the District's 75% share is expected to be \$187,500 and the Cooperator's 25% share will be \$62,500 (equally divided between Highlands County and City of Lake Placid). The District share of \$187,500 will be split between the Peace River Basin and the State Surface Water Restoration Fund. Design and permitting represents 12 percent (\$30,000), and the project construction represents 88 percent (\$220,000).

**Additional Information**

Lake Clay, a 368 acre lake located in the Grassy Creek watershed, on the northeastern corner of the town of Lake Placid in Highlands County, has been identified by the SWFWMD staff as receiving significant direct stormwater discharge (Ridge Lakes Screening, SWFWMD 2003). Lake Clay was also included in the Ridge Lakes Stormwater Evaluation Project (B196) completed in FY2007 in which conceptual design plans were developed to treat some of the stormwater discharging to Lake Clay. The total watershed draining immediately to Lake Clay consists of 949 acres, which the Evaluation divided into four subbasins. The dominant land use on one subbasin, designated CL000-B, was a combination of low, medium, and high density residential, commercial structures and highways. Additionally, this subbasin includes steep slopes, with an elevation change of 70 feet over a 1000 foot run. All of the development in this subbasin is served by a privately-owned central waste water treatment system. Lake Clay was identified as a lake needing proactive measures to prevent water quality degradation (Ridge Lakes Screening, SWFWMD 2003), primarily due to the good water quality recorded in the lake, the extensive development in the watershed, and the absence of stormwater treatment for the watershed. The Town of Lake Placid has identified this portion of the Lake watershed as a "hot spot" of concern for surface water quality. On numerous occasions, a central sewer lift station has been documented as overflowing, with the effluent flowing directly to Lake Clay. Additionally, stormwater runoff from parking lots and roads in this subbasin carries unabated pollutants directly to Lake Clay. Contaminant levels, measured in samples collected by the County, in this runoff water has elevated levels of heavy metals, bacteria, and nutrients. Given the documented stormwater contamination to Lake Clay in this subbasin, work to retrofit the stormwater flows is needed. The Water Resource Evaluation completed for Lake Clay (BCI 2006) recommended French drains under parking lots and under right of way areas as the primary stormwater BMP. The BCI report indicated that this particular technology should work well because of the well drained soils, Astatula sand, located in this subbasin. This project may also require the acquisition of additional right of way and installation of other measures to reduce stormwater runoff to Lake Clay from this and other subbasins.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	100,317	7,566	0	107,883

**District Budgeted - Outside Revenue**

Highlands Co - Lake Clay SW Retro (L897)	0	0	31,250	0	0	31,250
Lake Placid - Lake Clay SW Retro (L897)	0	0	31,250	0	0	31,250
Water Protection & Sust T. F. (Surface Wtr Rstr)	0	0	93,750	0	0	93,750
				<b>Total</b>		<b>\$264,133</b>

**Critical Project Milestones****Contract Development and Execution**

	Projected	Amended	Actual
Draft Agreement sent to Cooperators	11/30/07		11/30/07
Agreement sent to Management Services	12/30/07		
Agreement returned from Management Services	1/30/08		
Agreement sent to Cooperators	2/15/08		
Signed Agreement returned from Cooperator	4/15/08		
Contract fully executed	4/30/08		

**District Consultant Procurement**

Consultant Selection	1/15/08		
Consultant Agreement	2/20/08		
NTP	5/15/08		

**Project Design and Permitting**

30% Plans	10/20/08		
60% Plans and Pre-Application	1/30/09		
Final Design and Permit	4/30/09		

**Status As Of:** February 25, 2008

District staff drafted a scope of work for the project agreement. The draft agreement was sent to the County in November for their review. District staff have also drafted an agreement with the project consultant. A meeting was held on Jan. 31, 2008 in Sebring to review the draft contract and scope of work, and to review easement needs. The County and City will provide additional information on the existing easements. The City will meet the owner of one of the effected parking lot where stormwater treatment is needed. Two agreements have been drafted and are being revised based on new information obtained on the existing easements. A third agreement is currently being drafted between the District and the District's consultant.

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Dundee  
**Project Manager** BEACH, MICHAEL  
**Task Manager(s)**  
**Status** Ongoing

**Description**

This is a preliminary investigation project to determine the feasibility of using poor quality water from the Lower Floridan aquifer to supplement reuse supplies for the Town of Dundee. The project will determine the degree to which the likely water quality must be treated for the intended use: landscape irrigation and other outdoor use. The project will also determine the likely cost to treat the water, including costs associated with disposal of treatment byproducts (e.g., concentrate disposal). The project should also determine the likelihood that such a project would be permitted.

**Benefits**

The Lower Floridan aquifer is a potential alternative source of groundwater to the stressed Upper Floridan aquifer in the SWUCA. This project will explore the feasibility of using naturally occurring low-quality water from the Lower Floridan aquifer to supplement reuse water supplies for the Town of Dundee in Polk County. Feasibility will depend on the degree and costs of treatment required for the intended use and the likelihood of permitting such a project. These costs, information, and assessments would be transferable to other utilities in the area. The costs of the project will be much lower than drilling a new well because the feasibility will be based on data collected at the ROMP 74X site near Davenport, Florida.

**Costs**

The Town of Dundee has been approved for Rural Economic Development Initiative (REDI) funding. The costs for the project are based on a revised estimate by the Town of Dundee's consultant.

Engineering Dundee \$ 19,000 District \$ 57,000 Total \$ 76,000

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**Additional Information**

As originally proposed by the applicant the project called for a Lower Floridan aquifer well to be constructed for the The Town of Dundee, on the Lake Wales Ridge. The purpose of the project would be to determine the feasibility of using water from this source to supplement the reuse supply available from the Town of Dundee's waste water treatment facility. Reuse lines from this facility are currently being cooperatively funded (Project L553). If feasible, the exploratory well would then have been used for supplemental supply. However, there are several issues that need to be resolved prior to constructing the well that can be addressed based on existing data. First, to what level must the water from this source, known to be of extremely poor quality, be treated if it is to be used to supplement reuse? Second, what will the cost of this treatment be and the cost of any by product produced during treatment? And third, is it reasonable to supplement reuse from any source? To answer these questions, the likely water quality and productivity of the aquifer needs to be known. The District has previously constructed a well into Lower Floridan aquifer about 10 miles north of the town of Dundee at ROMP 74X near Davenport. Water quality samples were collected and an aquifer performance test was conducted. It is also known that water quality generally degrades in the Lower Floridan aquifer as one moves from north to south. Therefore, it would be expected that water quality and productivity found in a Lower Floridan well near Dundee would be no better than that found at ROMP 74X. Because the costs to date of drilling wells into the Lower Floridan aquifer have proven to be very high, it is prudent to do a feasibility study of the alternative supply based on data from the ROMP 74X site data. It would also be useful to investigate the costs of developing storage for reuse from a water management perspective since it is probably better to retain an existing source than exploit a new one. The Town of Dundee has been deemed eligible for the Rural Economic Development Initiative (REDI) program. As such they would provide 25% of the cost of the project rather than the usual 50%.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	62,948	6,228	0	69,176
<b>Project Funds Not Budgeted by the District</b>						
Town of Dundee	0		19,000	0	0	19,000
				<b>Total</b>		<b>\$88,176</b>

**Status As Of:** February 01, 2008

1) The draft agreement is nearly complete and will be circulated for approval in the next week. Agreement with the Town of Dundee is expected by February 29, 2008.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	City of Lakeland
<b>Project Manager</b>	WHITE, BRENT
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project offers financial incentives to water customers within the City of Lakeland's service area for replacement of existing high-volume indoor plumbing fixtures including showerheads (replacing those using 4.0 gallons per minute, or gpm, or greater with those using 2.5 gpm or less), faucet aerators (3.0 gpm or greater with 2.2 gpm in kitchens and 1.5 gpm in bathrooms) and toilets (3.5 gallons per flush (gpf) or greater with 1.6 gpf or lower). Approximately 84 percent of Lakeland's 46,155 residential accounts were built or improved before 1995 (~38,770 homes), making them eligible for plumbing retrofit incentives. In FY2008, The City of Lakeland expects to distribute 2,200 retrofit kits (maximum two per customer) and to retrofit up to 4,390 single family and multi-family toilets through an outside contracted consultant. Single-family residences will be offered up to two toilet rebates per home while multi-family dwellings, with appropriate representation, will be encouraged to replace all devices at one time. These quantities are planned each year for a term of five years.

**Benefits**

This project will provide potable water savings of 113,197 gallons per day, or 41.31 million gallons per year for toilet savings and 41.86 gallons per day, or 15,278 gallons per year for the plumbing retrofits (showerheads and aerators). The total savings is 128,475 gallons per day or 46.89 million gallons per year.

**Costs**

The total FY2008 cost for this project is \$600,000 with the District 50 percent funding level allocated amongst the Peace River basin (\$210,000), the Hillsborough River basin (\$60,000) and the Alafia River basin (\$30,000). The City of Lakeland's 50 percent share is \$300,000. The cost benefit for the project using the total cost amortized over 20 years is \$1.33 per thousand gallons of water.

**Additional Information**

The City of Lakeland will provide actual billing data, ensure 100 percent fixture inspection, conduct a scientifically significant survey to determine customer satisfaction with low-volume devices and institute an education program designed to assist customers in long-term maintenance related to water savings. The educational portion will provide participants with materials on leak detection and replacement of devices at the end of the life cycle. Marketing for the project will begin February 2008 and the distribution of the kits will begin no later than Oct. 1. Approximately 2,200 kits will be distributed by Sept. 30, 2008. A draft annual distribution report, describing and relating the number of kits distributed, and the demographics of participating customers will be provided to the District by March 2009 and a final distribution report incorporating District comments will be provided on May 2009.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	31,011	1,141	0	32,152
013 Hillsborough River Basin	0	0	60,581	642	0	61,223
020 Peace River Basin	0	0	211,061	1,189	0	212,250
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	0		430,000	0	0	430,000
				<b>Total</b>		<b>\$735,625</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Develop RFP for Contractor	10/1/07		10/3/07
Agreement with SWFWMD	1/1/08		11/21/07
Begin Advertising Program	2/1/08		2/1/08
Program Implementation	3/1/08		
Draft Distribution Report	3/1/09		
Final Distribution Report	5/1/09		
Draft Final Report	3/1/10		
Final Report	4/1/10		
Final Invoice to District	6/1/10		
Project Closeout	1/31/11		

**Status As Of:** March 01, 2008

The City of Lakeland has decided to piggyback on Manatee County's contract for toilet rebate administrative services. Cooperator has continued to work on drafts of promotional and education materials for the marketing and advertising campaign. Advertisement of the program will now begin as soon as a contract for administrative services is put into place.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	City of Lakeland
<b>Project Manager</b>	WHITE, BRENT
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

The City of Lakeland proposed a pre-rinse spray valve replacement and conservation education program for the City's food service industry. The program will focus on replacing high water use spray valves utilized to clean food from dishes, utensils, and pots and pans. The FY2008 project targets water customers in the food service industry to replace spray valves in 300 locations at no cost to the water customer. Conventional pre-rinse spray valves utilize from 2.65 to 4.0 gallons per minute and can be responsible for up to fifty percent of food service industry total dish washing water use. Water efficient pre-rinse spray nozzles use approximately 1.6 gallons per minute. The "Potable Water Conservation Best Management Practices for the Tampa Bay Region Report" (Tampa Bay Water, 2003) identifies the use of water-efficient pre-rinse spray valves as a best management practice in Industrial, Commercial and Institutional facilities (ICI).

**Benefits**

The total estimated water savings is 60,000 gallons of potable water per day or 21.9 million gallons per year.

**Costs**

The total project cost is \$45,000. The breakdown of District funding is: Peace River Basin Board - \$15,750, Hillsborough River Basin Board - \$4,500 and the Alafia River Basin Board - \$2,250. The City of Lakeland's share is 50 percent, or \$22,500. The cost benefit for this project, using the total cost amortized over 5 years at 8% interest, is \$0.50 per 1000 gallons of water.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	2,756	571	0	3,327
013 Hillsborough River Basin	0	0	5,006	571	0	5,577
020 Peace River Basin	0	0	16,761	1,141	0	17,902
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	0		22,500	0	0	22,500
				<b>Total</b>		<b>\$49,306</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Develop RFP	10/1/07		10/3/07
Evaluate RFP's and Select Contractor	11/1/07		12/31/07
Choose Consultant	12/1/07		2/5/08
Transfer All Necessary Data to Contractor	12/31/07		2/20/08
Program Implemented	1/1/08		3/1/08
Develop Survey Instrument	4/1/08		
Installation Completion of 300 units	9/1/08		
Mail All Surveys	11/1/08		
Begin Program Evaluation	1/1/09		
Final Report to District	1/1/10		
Program closeout	1/31/11		

**Status As Of:** March 01, 2008

The contract for administrative services has been awarded for this project and total implementation is on schedule. A preliminary meeting between the contractor and the City of Lakeland has been scheduled for 2/20/2008 to discuss the exportation of customer billing data for marketing purposes.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	Polk County
<b>Project Manager</b>	KOLASA, KEITH
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project will complete electronic bottom contours (elevation models) of 85 lakes located in Polk County for inclusion as a data layer in multi-agency Geographic Information System (GIS) databases. This project will use lake elevation data that has been previously collected by a District survey consultant and convert it into lake bottom contour maps and stage volume data. Information relative to lake level monitoring stations and existing public boat ramps will be included. The deliverables will be uploaded into the County's and District's GIS databases. The updated bottom contour information will be used for water quality restoration work, water budgets, lake volume calculations, and flood protection models. Obtaining bottom contours in a digital format will provide a much more accurate calculation of the lake volume needed for implementation of these type projects.

**Benefits**

Digital elevation models of lakes are currently a data gap within various hydrologic studies and analyses. Completed elevation models are needed to calculate accurate lake volumes and to determine lake water budgets. This information will be used for SWUCA related hydrologic studies such as the determination of relationships between lake levels and the Floridan aquifer. The data will also will be used for setting Minimum Flows and Levels (MFLs) of these lakes.

**Costs**

The total project cost is \$20,000, with the County and District each contributing half (\$10,000) in FY2008. The District's share is split between the Peace River Basin (\$7,400), Hillsborough River Basin (\$1,500) and Alafia River Basin (\$1,100). The District funding amounts shown in the table include staff salaries.

**Additional Information**

The majority of the maps were published over 30 years ago as hard copy files and need to be updated as digital elevation models that can easily be integrated into modern water resource model applications. The completed maps will be made available to other governmental agencies and the public via the internet and as part of the Polk County Lakes Access Directory. Coverage will be countywide and include lakes in the Alafia River, Hillsborough River, and Peace River Basins.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	1,100	0	0	1,100
013 Hillsborough River Basin	0	0	1,500	0	0	1,500
020 Peace River Basin	0	0	10,198	1,841	0	12,039
<b>Project Funds Not Budgeted by the District</b>						
Polk County	0		10,000	0	0	10,000
				<b>Total</b>		<b>\$24,639</b>

**Critical Project Milestones****1. Contract Development and Execution**

	Projected	Amended	Actual
Agreement Sent to Management Services	9/4/07		10/25/07
Agreement returned from Management Services	9/25/07		11/27/07
Agreement sent to Cooperator	10/2/07		12/3/07
Signed Agreement Returned from Cooperator	10/30/07		2/6/08
Contract fully executed	11/13/07		
Notice to Proceed	12/17/07		

**2. Data Processing and Review**

12/30/08

**3. Bathymetric Map Production**

4/30/09

**4. Electronic Deliverables**

6/30/09

**5. Data upload to Internet**

8/30/09

**Status As Of:** February 25, 2008

District and County staff held a meeting on June 14, 2007 to review the existing contour data and data requirements and to exchange bathymetry methodologies. The information was used to develop a cooperative agreement between the District and the County. District staff recently provided all available bathymetric data to Polk County so that County staff can review the data and determine the level of detail that is needed for their reporting needs. The cooperative agreement was prepared and submitted for internal review on Oct. 2, 2007. The agreement was mailed to the County in November and was approved by the County on Feb 06, 2008.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Lake Wales
<b>Project Manager</b>	NOURANI, MEHRSHAD
<b>Task Manager(s)</b>	NOURANI, MEHRSHAD
<b>Status</b>	Ongoing

**Description**

This project consists of a reclaimed water system to be completed in three phases: Phase I consists of the construction of a 2 mgd capacity pumping station at the existing Lake Wales wastewater treatment plant (WWTP) and 14,000 linear feet of 20-inch diameter transmission main from the WWTP to a cluster of 7 rapid infiltration basins (RIBS) on City-owned property southwest of the WWTP. Phase II consists of the design and construction of a high service pumping station and a 2-mg reclaimed water storage tank at the RIB site. Phase III consists of design and construction of approximately 20,970 linear feet of transmission line from the RIB site to the Lake Wales Country Club golf course, Mayfair residential/commercial development, City-owned soccer fields, City-owned groves, Whispering Ridge residential development, and Long Leaf Business Park. Phase I and II are complete. Phase III design was completed in January 31, 2008. Due to multiple scheduling delays and overlaps by the City, Phase III construction is also scheduled to begin in January 31, 2008 and complete by July 31, 2009.

**Benefits**

This project provides 2.025 mgd of reclaimed water, offset approximately 1.245 mgd of ground water from the Floridan Aquifer.

**Costs**

The total project cost is \$5,626,387 and the District's share is \$2,092,000. The City is completing this project with District Cooperative Funding Program dollars and DEP State Revolving Fund (loan) dollars. The Peace River Basin Board budgeted \$699,500 in FY2002, and the remaining portion of the District's share in the future. Budget below does not reflect prior year funding for \$562,500 in FY1997, \$130,000 in FY1998 and \$700,000 in FY1999. Total amount encumbered to date is \$2,092,000. Total amount expended to date is \$1,011,855 and \$1,073,917 will remain to complete this project by December 2009.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	703,869	0	3,268	4,479	0	711,616
<b>Project Funds Not Budgeted by the District</b>						
City of Lake Wales	0		0	0	1,080,145	1,080,145
				<b>Total</b>		<b>\$1,791,761</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Contract Execution	1/31/97	1/31/98	1/2/99
Phase I Commence Construction	10/31/97		10/31/00
Phase I Completion	6/30/98		5/31/98
Phase II Design Commence	4/25/99		1/30/98
Phase II Complete Design	2/28/01	2/3/03	1/6/05
Phase III (delayed by the City) Desing Commence	3/1/02	9/30/05	5/30/07
Phase III (delayed by the City) Design Complete	12/29/02	3/31/06	1/31/08
Phase III Construciton Commence	1/31/08	12/31/07	1/31/08
Phase III Construction Complete	7/31/09		

**Status As Of:** March 17, 2008

This multi-year, multi-phase project was initiated in 1997 with the City of Lake Wales for design permitting and construction of the City's reclaimed water system. The system includes a reuse pumping facility, a three-million-gallon reuse storage tank, and approximately 47,900 linear feet of reuse transmission main. Customers include residential, commercial and recreational that will utilize 1.390 million gallons a day of reclaimed water, offsetting approximately 0.834 million gallons per day of withdrawal from the Floridan Aquifer. Phase I and II, reuse storage and pumping components and a portion (14,000 linear feet) of the transmission main are complete. The remainder of the transmission line necessary to connect the City-owned grove and the new residential developments is not complete. To date, the District has reimbursed the City for \$1,011,855 toward Phase I and II eligible project costs. This agreement has gone through multiple amendments for no-cost time-extensions (2000, 2002, 2003, 2004, 2007). Delays due to City staff changes, hurricane and City's lack of cooperation and its inability to move forward with the project have led to the design of the last amendment to successfully complete the project. Phase I and Phase II are complete and the District

issued the final reimbursement check for the amount of \$353,065 for completion of Phase II. As of June 29, 2005, \$2,092,000 has been encumbered, \$1,011,855 has been expended and \$1,073,917 will remain to complete this project by December 2009. All \$1,011,855 has been disbursed for completed and approved work. On January 18, 2008, an expired Agreement for Phase III of this project was forwarded to the City for signature. Following a City's request in January 2008, the District waived the contractor selection requirements, which allowed the City to use the existing Polk County contractor to construct the reuse lines instead of using the bidding process. The City affirmed this procedure was in the best interest of the city and the District and complied with the City of Lakes Wales Purchasing Ordinance 95-01 Sec. 2-404. The City anticipates considerable savings in money and time by using the existing contractor as there will not be a bidding process and mobilization charges incurred. The City's first progress report for Phase III is due by the end of March 2008.

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection  
**Basin(s)** Peace River  
**Cooperator(s)** Polk County Natural Resources  
**Project Manager** TURNER, DAWN  
**Task Manager(s)**  
**Status** Completed

**Description**

This is a multi-phase, multi-year funded project. Phase III (Improvements Implementation) includes: (1) acquisition of all rights-of-way and easements, permanent and temporary, necessary for construction and future maintenance and operation activities; (2) construction of the permitted improvements; and (3) for areas outside of the permitted improvement area, conduct ditch maintenance including the removal of excess sediment and woody vegetation. The total budget for Phase III is \$1,464,148. The District's share (budgeted in FY1999) is \$732,074. Phase IV (Storage Improvements) Polk County gained control of the Wahneta Drainage System after the Wahneta Drainage District was dissolved. Before that time, maintenance of the system had been neglected. Consequently, previous cooperative efforts were focused on restoration of the conveyance system (refer to Phases I, II and III). While Phases I, II and III involved immediate maintenance, and the design and construction of conveyance improvements, Phase IV involves the creation of additional storage capacity within the watershed to enhance water conservation and flood protection. Opportunities for providing additional storage capacity in the Wahneta Drainage System will be evaluated; a restoration plan will be prepared for Lake Gwyn; and an operational assessment of the Winter Haven Chain of Lakes, including the Lake Lulu outfall structure, will be performed. Phase IV also includes updating two elements of the Watershed Management Program: the Watershed Evaluation, and the Watershed Management Plan. Updates for each element will be developed in accordance with the District's Watershed Management Program Guidelines and Specifications. Phase IV is a revenue contract. Therefore the total project amount of \$400,000 was budgeted in FY2002, and has been encumbered by the District. Polk County will reimburse the District for 50% of the project costs.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies; and 2) provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

**Costs**

The total funding amount for this project is \$320,000, of which the District's share is \$160,000. The City will contribute \$160,000.

**Additional Information**

In 1996, a comprehensive water management funding program was developed between Polk County and the District. The funding program was formalized through the "Letter of Agreement between the Southwest Florida Water Management District and Polk County", dated November 21, 1996 (LOA). The Peace Creek Canal/Wahneta Drainage System is one of the project areas identified in the LOA. The 225 square mile watershed has been experiencing flooding problems around lakes in the Winter Haven and Lake Hamilton Chain of Lakes in the northern part of the watershed. Flooding has also been experienced along the Peace Creek Canal and the Wahneta Drainage System in the southern part of the watershed. The project involves enhancing the Peace Creek Canal/Wahneta Drainage System to more effectively convey stormwater and discharge from the Winter Haven and Lake Hamilton Chain of Lakes; and to improve flood protection by creating additional stormwater storage where possible.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	1,189,949	0	2,379	0	0	1,192,328
<b>District Budgeted - Outside Revenue</b>						
Polk Co - Peace Ck/Wahneta Drainage Sys (P730)	1,137,500	0	0	0	0	1,137,500
				<b>Total</b>		<b>\$2,329,828</b>

**Critical Project Milestones**

**1. Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Signage for Phase III construction	7/31/03		5/23/05
Recognition on Phase IV deliverables	8/21/05		4/8/05

**2. Phase III**

Cooperative Funding Agreement (CFA) execution	6/30/00		6/19/00
Notice to proceed to Polk County	7/31/00		6/19/00
3. Maintenance (outside permitted improvement areas)	7/31/03	7/31/07	7/31/03
1. Land & Easements Acquisition	7/31/03	7/31/07	7/31/03
2. Construction at Improvement Areas	7/31/04	7/31/07	6/30/06
Contract termination	7/31/05	7/31/07	
<b>3. Phase IV</b>			
Cooperative Funding Agreement (CFA) execution	4/30/02		5/19/03
1st Work Order assigned	7/19/03		8/21/03
Consultant Services Agreement (CSA) executed	7/19/03		8/16/03
Element 2, Wahneta Canal - Watershed Evaluation Commence	8/21/03		8/21/03
Element 1, Digital Topographic Information Commence	8/21/03		8/21/03
Element 3, Wahneta - Watershed Management Plan Commence	11/21/03		2/27/04
Element 1, Digital Topographic Information Complete	12/21/03		4/6/04
Element 2, Wahneta Canal - Watershed Evaluation Complete	12/21/04	3/21/04	7/20/04
Element 3, Wahneta - Watershed Management Plan Complete	2/21/05		4/8/05
CFA expiration	12/31/06		12/31/06
Consultant Services Agreement expiration date	12/31/06		12/31/06

**Status As Of:** February 25, 2008

Project Complete.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Charlotte County Utilities
<b>Project Manager</b>	ANTOINE, TAMMY
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

#### Recommendation

Fund as a 1A. This is a multiyear project in its fourth of five years of requesting funding. It is consistent with basin priorities in that it maximizes the reuse of reclaimed water and offsets potable supplies. This project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action, and is potentially eligible for state funding through the Water Protection Sustainability Program.

#### Description

This ongoing, multiyear, alternative water supply project consists of a feasibility study to evaluate the alternatives for installation of a reclaimed water ASR and, if feasible, the conversion of one (1) existing potable water supply well located in the Rotonda area to an Aquifer Storage and Recovery (ASR) well for reuse. Upon the successful completion of the feasibility study and favorable outcome of the preliminary permitting, Charlotte County Utilities will proceed with the design, final permitting, construction and testing of the recommended ASR well system and associated piping to directly connect the ASR well to the reclaimed water transmission system. The ultimate goal of the project is to create an underground storage reservoir for reuse water produced initially by the Rotunda Wastewater Treatment Facility (WWTF), and eventually for the combined reuse water in the west county and possibly central county areas.

#### Benefits

This project will help to satisfy the short term need to provide wet weather storage space for reuse water, beyond what currently exists at the Rotonda Water Reclamation Facility, which is minimal. The longer term need served by this project is to provide regional storage capacity for excess wet weather reuse for the entire west county area and ultimately for the central portion as well, and facilitate the eventual interconnection of the central and west county reuse systems to provide adequate reuse water for the entire region.

#### Costs

The total project cost for the feasibility study and ASR well system is estimated to be \$3,000,000. The District is requested to reimburse Charlotte County for up to 50 percent of the eligible project costs up to a maximum of \$1,500,000. The Peace River Basin budgeted \$100,000 in FY2005, \$380,450 in FY2007, and \$240,000 in FY2008. Funds in the amount of \$90,900 in FY2007 and \$80,000 in FY2008 have been allocated to the project from the Water Protection and Sustainability Trust Fund Program; these funds will be applied to reduce the Peace River Basin Board cost share. The County submitted a funding application requesting a total District funding amount of \$432,500 in FY2009 for the fourth year of this five-year project. It is expected that the county will request the final amount of funding, \$432,500 in FY2010. No cost-benefit is calculated for this project, as it provides additional storage.

#### Additional Information

Charlotte County Utilities (CCU) previously completed a feasibility study indicating that such a conversion would be feasible. However, upon completion of the ASR Reuse Feasibility Study, CCU determined that a new ASR well system at Rotonda would be advantageous and submitted an application for construction of a Class V Well at the Rotonda site to the Department of Environmental Protection. Factors determining that the conversion of the potable well would not work included the capacity and recovery rate of the well and the current DEP stance on permitting ASR wells. Thus, it was determined a new well would be constructed at Rotonda in a non-drinking water standard zone (greater than 10,000 tds). CCU will proceed with the design, final permitting, construction and testing of the recommended ASR well system and associated piping to directly connect the ASR well to the reclaimed water transmission system. The predicted recovery rate for the ASR well is expected to be between 70% and 90% (700,000gpd to 900,000gpd) of the estimated recharge after the buffer zone is achieved. The amount of water to be stored and delivered during recharge (including the buffer zone) upon the ASR well being placed into service is expected to be between 100 to 150 million gallons and 1,000,000 gpd, respectively. The county is also currently cooperating with the District on a project to interconnect its two major WWTF's. The Charlotte County Regional Reclaimed Water Expansion project (H027) will construct a major portion of the necessary transmission piping to interconnect Charlotte County's East Port and West Port WWTF's. CCU's current demand for reclaimed water exceeds 2,000,000 gallons per day (gpd), but the facility can only produce up to 800,000 gpd and supplemental surface water sources are being utilized to make up for the additional demand (1,200,000 gpd). This is a stand-alone project; however, upon successful implementation of the single ASR well system, it is expected that two more ASR well systems will be completed as a second phase of this project. Of the total project cost of \$3,000,000, approximately 73 percent (\$2,200,000) is expected to be needed for construction, and the remainder (\$800,000) for design and administration.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	396,913	0	164,710	435,978	432,500	1,430,101
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	90,900	0	80,000	0	0	170,900
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County	349,550		200,000	432,500	432,500	1,414,550
				<b>Total</b>		<b>\$3,015,551</b>

Critical Project Milestones	Projected	Amended	Actual
Draft Agreement to Contracts Administration	9/1/05		9/8/05
Contract Executed	11/30/05		1/31/06
Design Commencement	1/1/06	4/1/07	
Feasibility Study Completion	10/1/06		1/8/07
Permit Received	1/31/08		
Signage Erected	10/1/09		
Construction Commencement	10/1/09		
Construction Completion	10/1/11		
Contract Close-out	1/31/12		
Offset Report	1/31/13		

**Status As Of:** March 04, 2008

A Cooperative Funding Agreement (effective October 1, 2005) was executed on January 31, 2006. Malcom Pirnie submitted the final Reuse ASR Feasibility Study on January 8, 2007. An application for permit to construct the ASR well was submitted to DEP. A no cost amendment was executed on 02/02/07. This amendment added additional language and requirements due to Water Protection and Sustainability Trust funds being allocated in FY2007. CCU has submitted a response to DEP's first request for clarification and additional information for the construction permit and received a second request for additional information from DEP on June 22, 2007. CCU submitted a second response to DEP on August 3, 2007 and January 18, 2008, requesting an additional six month time extension to complete the ASR well design and bid documents as requested by DEP. As of March 3, 2008, CCU has completed 30 percent of the ASR well design plans as required by DEP. A second amendment was executed on January 28, 2008 to reflect the project changes approved during the regular cooperative funding cycle. The county has submitted an FY2009 cooperative funding application to request the next installment of funds for this multi-year project. The county also submitted first and second payment requests, a G-2 and grant tracking form have been forward to Finance to reimburse the county \$86,377.50 and \$2,338.75 for design. To date, \$720,450 has been encumbered for this project of which \$86,377.50 has been reimbursed and \$2,338.75 is pending reimbursement.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Highlands County
<b>Project Manager</b>	ARNOLD, DAVE
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as a 1A priority. Completing elements of the District's Watershed Management Program is a District priority for managing the water resource, and providing information to local governments to address land use changes and stormwater management within a specific watershed. The cooperator submitted the project for REDI consideration.

**Description**

This is a multi-year funded cooperative project with Highlands County to perform 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the Lake Placid Watershed. The watershed covers an area of approximately 20 square miles and is located in Highlands County. Issues in the watershed include rapid growth, natural systems preservation, flood protection, and water quality. Prior year funding is to complete Topographic Information and a portion of the Watershed Evaluation. FY2008 funding should complete the Watershed Evaluation and watershed parameterization and model development tasks of the Watershed Plan. Future funding is required to complete the Watershed Plan. Topographic information includes the acquisition of data and development of the terrain features in the Geodatabase to be used in the Watershed Evaluation. The Watershed Evaluation includes collection of existing data, GIS processing of the terrain features to establish catchments and connectivity, field reconnaissance, refinement of the terrain features and development of the hydraulic element point features. The Watershed Management Plan element includes: development of watershed parameters for a specific use, GIS processing, computer modeling, floodplain and water quality analysis, surface water resource assessment, establishment of LOS, BMP alternative analysis.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

**Costs**

The total budget for this project is multi-year funded project is \$800,000, to be funded in FY2006 and FY2008-2009. Under the REDI project funding split the Peace River Basin's 75% share totals \$600,000, and Highland County's 25% share totals \$200,000. The FY2008 budget totals \$350,000 with the County revenue of \$87,500 and the Basin Board contributing \$262,500. Proposed FY2009 funding is needed to complete the project. When each element is completed the project budget may require refinement based on the information gathered.

**Additional Information**

A WMP includes five major elements: Topographic Information, Watershed Evaluation, Watershed Management Plan, Implementation of Best Management Practices, and Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies. The prior funding and proposed FY2008-2009 funding will be used to complete the Topographic Information, Watershed Evaluation, and Watershed Management Plan elements. A cooperative funding revenue agreement with Highlands County will be developed as a multi-year funded project contingent on the approval of future funding to complete the WMP elements through the Watershed Management Plan. This multi-year funded project requires a cooperative funding request each fiscal year until completed. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. Future cooperative funding requests and agreements will be required for the Implementation of BMPs and Maintenance of Watershed Parameters and Models.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	83,916	0	268,842	273,433	0	626,191
<b>District Budgeted - Outside Revenue</b>						
Highlands Co - Lake Placid WMP (L473)	25,000	0	87,500	87,500	0	200,000
				<b>Total</b>		<b>\$826,191</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Critical Project Milestones</b>			
Draft Agreement to Management Services	5/1/06		7/1/06
Draft Agreement Returned from Management Services	7/1/06		8/1/06
Cooperator Contract Executed	9/1/06		10/1/06
Consultant Contract Executed	12/1/06		10/1/06
Notice to Proceed to Consultant	1/1/07		12/7/06
Watershed Evaluation Commence	1/1/07		5/21/07
Watershed Plan Commence	1/1/08		
Watershed Evaluation Completion	1/1/08		
Watershed Plan Completion (project complete)	2/1/10		
Project Close-out	6/30/11		

**Status As Of:** March 05, 2008

Agreements between the District and Highlands County for cooperative funding, and the District and Brown and Caldwell for consulting services have been executed. Brown and Caldwell has executed an agreement with 3001, a District approved mapping vendor, to provide LiDAR mapping for the project. Flights for the LiDAR were done over the winter, with processing is scheduled for completion by August 2007. 3001 has delivered draft LiDAR products, and final deliverables are expected by the end of September. Notice to proceed with work order #1 was issued to Brown and Caldwell on 05/21/07. This work order is work order is to review existing water quality data and produce a water quality monitoring plan. A draft monitoring plan is expected to be complete in April.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Dundee
<b>Project Manager</b>	NOURANI, MEHRSHAD
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as a 1A priority. This project addresses basin water supply priorities in that it reduces groundwater withdrawals from the Floridan Aquifer in the SWUCA. This project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action, and is potentially eligible for state funding through the Water Protection and Sustainability Program.

**Description**

This alternative water supply project includes the design and construction of approximately 3,900 linear feet of 16-inch and 11,800 linear feet of 12-inch, and 3,100 linear feet of 10-inch reclaimed water transmission main, a high service pump station (1,000 gallon per minute), two 2.25 million gallon storage tanks with a combined storage capacity of 4.5 million gallons, and other necessary appertences. The project will store, pump, and transmit reclaimed water from the Dundee Regional Wastewater Treatment Facility to the Dundee Regional Utility Service Area for reuse on commercial, residential, and institutional sites for irrigation.

**Benefits**

The project will provide 0.37 mgd of reclaimed water to 1,821 residential irrigation customers and commercial/industrial customers to offset a combined project total of mgd 0.18 mgd of potable quality water.

**Costs**

The cooperator has submitted the project for Rural Economic Development Initiative (REDI) funding consideration. The total project cost is estimated to be \$4,016,000 and with the cooperator seeking REDI consideration, the District's share is expected to be \$3,012,000 (75 percent) and the Town's share is \$1,004,000. The Peace River Basin Board encumbered \$208,905 in FY2006 and \$421,223 in FY2008, no funding was requested for FY2007. The construction portion of this project qualifies for Water Protection Sustainability Trust Fund for a total of \$136, 867. The remaining estimated balance of \$1,004,000 will be funded by the Town from the Utilities reserves, connection fees, and other loans. The Town is seeking grants and loan funding through the USDA Rural Utilities Service which, if received, will reduce the total project cost for both parties. The USDA RUS program funded the initial design and construction of the WWTF.

**Additional Information**

Of the total project cost, \$421,000 is allocated for design costs, and the remaining \$3,595,000 is allocated for construction costs.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	208,905	0	421,223	2,914,000	0	3,544,128
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T.F. (Alternative Wtr)	0	0	136,867	0	0	136,867
<b>Project Funds Not Budgeted by the District</b>						
Town of Dundee	0		0	1,004,000	0	1,004,000
				<b>Total</b>		<b>\$4,684,995</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Contract to Cooperator for signature	6/13/06		7/11/06
Contracted Executed	7/14/06		7/14/06
Notice to Proceed	7/17/06		8/14/06
Design Commenced	9/1/06		11/10/06
Design Completed	11/30/07		11/30/07
Bid List to District	2/28/08	5/30/08	
Bid Award/Notice to Proceed	3/31/08	6/30/08	
Construction to Begin	11/30/08	2/28/09	
Construction Completion	12/31/08	7/31/09	
Contract close-out	1/31/09	9/30/09	

**Status As Of:** March 13, 2008

The Town opened contractors bids for the Reuse Project on February 14, 2008. The construction cost of the bids received was \$4,396,000, approximately \$450,000 more than the Town's budgeted funds for this project (including the Town's contingency funds). In a meeting with the Town Manager on March 13, 2008, the Town proposed three cost saving modifications to the design, which would not materially affect the project deliverables and re-advertise for bids. The proposed cost saving modifications to the design include: 1) removal of tank roofs; 2) removal of one (1) reuse pump and associated electrical equipment; and 3) installation of two (2) 1.25 mg tanks instead of two (2) 2.25 mg reclaimed water reservoir tanks. The revised project will have two (2) 2,500 gpm pumps and one (1) 700 gpm backup pump, for a total capacity of 5,700 gpm, which exceeds the capacity required in the agreement. The proposed reduction in total reservoir capacity will not reduce the reclaimed water flow or offset to the groundwater withdrawals. The design flow capacity of the system remains 1.5 mgd, with a potable offset of approximately .750 mgd. The District is currently awaiting the Town's written request for the abovementioned modifications to the project design. A basin board recap will be prepared to include the staff recommendation for the appropriate Peace River Basin Board meeting date.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	Polk County Natural Resources
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

#### Recommendation

Fund as a 1A priority. Completing elements of the District's Watershed Management Program is a District Strategic Priority for managing the water resources and providing information to local governments to address land use changes and stormwater management within a specific watershed. FY2009 funds will be used to complete Topographic Information, Watershed Evaluation and Watershed Management Plan tasks in the Hillsborough River and Green Swamp Watersheds. If approved, this project will be ranked as a 1A project in future fiscal years.

#### Description

This is a multi-year funded project to perform the development of 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for watersheds in Polk County. Polk County encompasses approximately 2009 square miles within central Florida, of which 1,586 square miles are located within the District. The County is experiencing very rapid growth, which threatens to expand into areas that are subject to recurrent flooding. Within the District, Polk County has 25 major watersheds. Of these, all or portions of 11 watersheds have already been, or currently are the subject of a Watershed Evaluation and Watershed Management Plan including: Peace Creek Canal, Lake Hamilton, Lake Lulu, Saddle Creek, Itchepackesassa Creek, McCullough Creek, Gator Creek, Bowlegs Creek, Crooked Lake, Lake Reedy, and the Poley Creek portion of the North Prong Alafia River. This project will involve the development of Topographic Information, including 1-foot topographic contour maps using LiDAR data obtained by the District in 2005; the development of Watershed Evaluations and Watershed Management Plans for the remaining 14 watersheds; the development of Watershed Evaluations and Watershed Management Plans for the remaining portion of the North Prong Alafia River Watershed (including a Watershed Evaluation for the Christina Watershed); and an update of previous Watershed Evaluations to reflect changes in the watersheds and make the information consistent with the District's Guidelines and Specifications. The Polk County watersheds will be prioritized, and work orders will be issued to consultants for individual watersheds.

#### Benefits

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) with their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies; and 2) provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

#### Costs

The total funding amount for this project is \$2,505,455 of which the District's share will be \$1,252,727. Polk County will contribute \$1,252,727. For FY2007, \$836,574 is appropriated in the following Basin budgets: Governing Board acting for the Green Swamp Basin (\$289,978), Peace River Basin (\$336,140), Alafia River Basin (\$136,326), and the Hillsborough River Basin (\$74,130). \$418,287 in revenue will be received from Polk County, and distributed as follows: Governing Board (\$144,989), Peace River Basin (\$168,070), Alafia River Basin (\$68,163), and the Hillsborough River Basin (\$37,065). Basin funding and revenue distributions are based upon the percent project area within the Basin. With \$836,574 in FY2007, the Topographic Information and Watershed Evaluations for the Polk City and Christina Watersheds will be completed. Watershed Evaluations will also be initiated for other priority watersheds, including the Reedy Creek and Bowleggs Creek watersheds. Watershed Evaluation updates will be initiated for the Itchepackesassa Creek and Poley Creek watersheds. \$550,000 in FY2008 funding is appropriated in the following Basin budgets: Governing Board acting for the Green Swamp Basin (\$96,500) Hillsborough Basin (\$178,500) Polk County (\$275,000). FY2008 funding will be used to complete Topographic Information, Watershed Evaluation and Watershed Management Plan tasks for Hillsborough River and Green Swamp watersheds. With FY2008 funds, the Polk City Watershed Management Plan will be initiated, and an update of the Itchepackesassa Creek Watershed Management Plan will be completed. \$594,000 in FY2009 funding (\$74,250 Governing Board, \$74,250 Alafia Basin, \$74,250 Hillsborough Basin, \$74,250 Peace Basin, and \$297,000 Polk County) has been requested. FY2009 funding will be used to complete Topographic Information, Watershed Evaluation and Watershed Management Plan tasks for Polk County watersheds. \$524,880 will be needed in future years to update or complete Watershed Evaluations and Watershed Management Plans for all of the Polk County watersheds. As tasks are completed, the project budget and scope will be refined based on the information developed. The District funding amounts shown in the table include staff salaries.

#### Additional Information

Polk County desires to create a county-wide Stormwater Master Plan to include data from previous Watershed Evaluations,



Watershed Management Plans, Stormwater and Basin Master Plans, stormwater land development regulations, standards and criteria, recommended actions to satisfy new regulatory programs (NPDES and TMDL), operation & maintenance plans, and recommended BMPs. The vehicle to develop this information is the District's Watershed Management Program. The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A cooperative funding revenue agreement with the County will be developed as a multi-year funded project contingent on the approval of future funding to complete Watershed Evaluations and Watershed Management Plans for all of the watersheds. This will require the submission of a cooperative funding request each fiscal year until the project is completed. If approved, this project will be ranked as a 1A project in future fiscal years. The District will manage the project and enter into purchase orders and agreements to accomplish project tasks. Cost estimates will be developed for Watershed Management Plans upon completion of the associated Watershed Evaluation. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Polk County. Information developed with this project will be used to update the FIRMs representing this watershed.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	149,483	0	102,446	77,985	65,610	395,524
011 Alafia River Basin	70,777	0	6,294	78,316	65,610	220,997
013 Hillsborough River Basin	39,679	0	180,038	75,826	65,610	361,153
020 Peace River Basin	170,499	0	1,364	75,660	65,610	313,133
<b>District Budgeted - Outside Revenue</b>						
Polk Co - Watershed Evaluation (L672)	418,287	0	275,000	297,000	262,440	1,252,727
<b>Total</b>						<b>\$2,543,534</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Revenue Contract</b>			
Contract to Polk County for signautre	11/7/06		11/7/06
Contract presented to County Commission	1/24/07		1/24/07
Contract Executed	2/28/07		2/13/07
First Amendment Executed	3/10/08		3/10/08
Contract Expiration	1/31/10		
<b>2. Consultant Services Agreement</b>			
PO issued to Woolpert to process LiDAR	2/28/07		2/22/07
LiDAR processing complete	7/31/07		7/31/07
One-foot contour shapefile complete	10/31/07		
<b>3. Consultant Services Agreement</b>			
Agreement executed with BCI	2/28/07		2/26/07
Notice to Proceed - Polk City Watershed Evaluation	2/28/07		3/12/07
First Amendment to BCI Agreement Executed	10/1/07		
Notice to Proceed - Polk City Watershed Management Plan	10/31/07		
Polk City Watershed Evaluation complete	2/28/08		
Polk City Watershed Management Plan Complete	12/31/08		
BCI Contract Expiration	1/31/10		
<b>4. Consultant Services Agreement</b>			
Notice to Proceed - Christina Watershed Evaluation	2/28/07		3/14/07
Agreement executed with PBS&J	2/28/07		2/26/07
First Amendment to PBS&J Agreement Executed	6/19/07		6/19/07
PBS&J Contract Expiration	7/31/07	10/31/08	
Christina Watershed Evaluation complete	7/31/07	10/31/07	8/8/07
Notice to Proceed - Poley Creek Watershed Evaluation	9/28/07		
Second Amendment to PBS&J Agreement Executed	9/28/07		8/13/07
Poley Creek Watershed Evaluation Complete	10/31/08		
<b>5. Consultant Services Agreement</b>			
Notice to Proceed - Bowlegs Creek Watershed Evaluation	9/28/07		
Agreement with Ardaman Executed	9/28/07		

Bowlegs Creek Watershed Evaluation Complete	12/31/08	
Ardaman Contract Expiration	12/31/09	
<b>6. Consultant Services Agreement</b>		
Notice to Proceed - Reedy Creek Watershed Evaluation	9/28/07	
Agreement with Boyle Executed	9/28/07	
Reedy Creek Watershed Evaluation Complete	12/31/08	
Boyle Contract Expiration	1/31/10	
<b>7. Consultant Services Agreement</b>		
Notice to Proceed - Itchepackesassa Creek Watershed Evaluation	9/28/07	
Notice to Proceed - Itchepackesassa DTM	9/28/07	2/14/08
Agreement with Keith and Schnars Executed	9/28/07	9/3/07
Itchepackesassa DTM Complete	5/14/08	
Itchepackesassa Creek Watershed Evaluation Complete	7/31/08	
Keith and Schnars Contract Expiration	1/31/09	

**Status As Of:** March 13, 2008

The Cooperative Funding Revenue Agreement was executed on February 13, 2007. The First Amendment to the Agreement was executed on March 10, 2008 to encumber FY2008 funds. A Purchase Order was issued to Woolpert on February 22, 2007 to complete the processing of LiDAR information, and produce 1 foot topographic contours. The LiDAR processing and 1 foot contour coverage deliverables are currently under review. Consultant Services Agreements for development of Digital Topographic Information and preparation of Watershed Evaluations for the Christina (PBS&J) and the Polk City (BCI) watersheds have also been executed. The associated Work Orders and Notices to Proceed were issued on March 14, 2007 and March 12, 2007 respectively. A public kickoff meeting was held for the Christina Watershed Evaluation in the District's Bartow Service Office on April 19, 2007. The meeting was intended to notify area residents and other interested parties about the project, and solicit input. About 25 residents attended, and participated in a lively discussion about flooding and water quality problems in the watershed. The First Amendment to the Agreement with PBS&J was executed on June 19, 2007 to extend the contract expiration from July 31, 2007 to October 31, 2007 to provide sufficient time for additional coordination with affected residents. Draft deliverables for the Christina Watershed Evaluation were received in August 2007, and Final deliverables will be submitted by December 31, 2007. The Second Amendment to the Agreement with PBS&J was executed on August 13, 2007 to add funds for the Poley Creek Watershed Evaluation. The Polk City Watershed Evaluation is currently ongoing. An amendment to the agreement with BCI has been prepared to encumber FY2008 funds and expand the scope of work to include Watershed Management Plan tasks. The amendment is awaiting final execution. The Agreement with Keith and Schnars was executed on September 3, 2007. The first watershed assigned to Keith and Schnars is the Itchepackesassa Creek watershed. The Itchepackesassa Creek Watershed was the subject of a previous Watershed Evaluation. However, the Digital Topographic Information and Watershed Evaluation were completed prior to the development of the District's 2005 LiDAR data for this area. Project funds will be used to incorporate the District's LiDAR data and changes that have occurred in the watershed. The First Amendment to the Keith and Schnars agreement executed on February 4, 2008 encumbered FY2008 funds, and expanded the scope of work to include Watershed Management Plan tasks. The Notice to Proceed for Work Order #1 for Itchepackesassa Creek DTM generation and the initiation of Watershed Evaluation tasks was issued on February 14, 2008. Work Order #2 for completion of the Itchepackesassa Creek Watershed Evaluation and initiation of Watershed Management Plan tasks is under development. Agreements with Ardaman and Associates and Boyle Engineering Corporation are also under development for the Bowlegs Creek and Reedy Creek respectively. FY2008 funding will be used to expand the scope of work to include Watershed Management Plan tasks for watersheds within the Hillsborough River and Green Swamp Basins, including the Itchepackesassa Creek and Polk City watersheds. Status History: The County requested that FY2007 funds approved for the recently withdrawn Stormwater Assessment Study and GIS parcel digitization (L675) project be transferred to this project. The total project budget will remain the same. The revised FY2007 amounts were presented to the Governing Board, Alafia River Basin Board and Hillsborough River Basin Board at their August 2006 meetings. The funding amount for the Peace River Basin was not changed for FY2007. The FY2007 and future funding amounts shown in the table above have been revised accordingly. The County requested out-of-cycle FY2007 funding for the Christina Watershed Management Plan. At their December 2006 meeting, the Alafia River Basin Board approved funding the Christina Watershed Management Plan as a separate FY2007 project. Please refer to project number L702 for additional information. FY2008 funding will be used to expand the scope of work to include Watershed Management Plan tasks for watersheds within the Hillsborough River and Green Swamp Basins, including the Itchepackesassa Creek and Polk City watersheds. The total project budget is \$1,386,574. Of this, the following has been invoiced and paid: \$482,971 by Woolpert for LiDAR processing and the generation of 1 foot contours; \$48,428 by PBS&J for the Christina Watershed Evaluation; and \$38,175 by BCI for the Polk City Watershed Evaluation. As consultant invoices are paid, Polk County is being invoiced for their share.

**Water Exhibits in the Glazer Children's Museum of Tampa**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)** The Children's Museum of Tampa  
**Project Manager** PUTNAM, BETH  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Ranked 1-A. This project's funding request was split into three phases for FY2007, FY2008 and FY2009. This is the final phase. This project is recommended for funding because of the facility's high profile in the region, the potential numbers reached, and alignment with the District mission as a result of input from District staff and Basin Board Education Committee members in the conceptual planning of the exhibits.

**Description**

The Glazer Children's Museum of Tampa is relocating to a new museum site in Riverfront Park in downtown Tampa. This project is part of the City of Tampa's efforts to revitalize the City's downtown business district. In FY2007, the District funded the planning and development phase for interactive water exhibits. FY2008 funds will pay for detailed specifications, structural engineering, fabrication of support structure, construction of entrances, partial platform construction, and other expenses related to fabrication. In the conceptual phase, District staff and BBEC members have been included in several planning sessions for the design of the interactive water exhibits to ensure that they incorporate the District's message. These exhibits include Water's Journey, which is a three-story climbing structure where visitors "become" a drop of water and make their way across the watershed, down through the aquifer, up to the city, down a storm drain and into a swamp. Another exhibit is the Water Bank, which is styled to look like an ATM. Here visitors explore some of the issues of water supply and demand. Sample depositors of water into the ATM are rain, reservoir, desalination plants, etc. Withdrawals of water are made by wildlife, wetlands, cities, people, industry, agriculture, etc. Interest is earned by saving water through a variety of water conservation actions, such as turning the water off when brushing teeth, using Florida-friendly landscaping principles, etc. The FY2009 funding is requested for exhibit construction and installation.

**Benefits**

The exhibits are multi-disciplinary, integrating Sunshine State Standards and diverse learning styles. This project has the potential to reach 100,000 people annually. The interactive water exhibits address all elements of the District's AORs, in simple, easy-to-understand terms. Additionally, this project targets children ages 0-10 years and accompanying adults. This segment of the population was identified in a 2002 independent evaluation of the District's Youth Education Program as one to which the District needed to expand its reach. This project will help accomplish this goal.

**Costs**

The total cost of the project (including building construction and all exhibits throughout the museum) is estimated to be \$20 million. The total contribution from the District, including FY2007, FY2008 and FY2009 is \$617,442. In FY2007, the basins shared \$112,500 for the planning and development phase for interactive water exhibits. FY2008 funds are for detailed specifications, structural engineering, fabrication of support structure, construction of entrances, partial platform construction, and other expenses related to fabrication. FY2009 funds are requested for completion of the exhibit fabrication, installation and education program development. The museum is scheduled to open to the public November 2009.

Phase 3, FY2009 funding request of \$252,471 is requested as follows:

Alafia: 12% \$29,968  
 Hills: 27% \$68,900  
 NW: 15% \$37,340  
 CR: 9% \$22,249  
 P-A: 14% \$35,396  
 With: 5% \$12,821  
 Peace: 8% \$20,550  
 Man: 10% \$25,247

The funding splits for this project are based on cooperator-supplied projections of museum attendance. This project anticipates reaching 100,000 people per year at a cost (for the total project, all phases) to the District of \$6.18 per person. Typical museum exhibits have a 10-year life span. This project, therefore, has the potential to reach 1 million visitors over a 10-year period at a cost to the District of \$0.62 per person.

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**Water Exhibits in the Glazer Children's Museum of Tampa**
**District Budgeted - Ad Valorem Based Revenue**

011 Alafia River Basin	14,850	0	29,968	29,968	0	74,786
013 Hillsborough River Basin	33,075	0	69,100	69,090	0	171,265
014 Northwest Hillsborough Basin	19,575	0	37,340	37,340	0	94,255
015 Coastal Rivers Basin	2,973	0	22,987	23,171	0	49,131
016 Pinellas-Anclote River Basin	28,125	0	35,396	35,396	0	98,917
019 Withlacoochee River Basin	2,381	0	13,559	13,743	0	29,683
020 Peace River Basin	6,167	0	21,288	21,472	0	48,927
021 Manasota Basin	5,354	0	25,985	26,169	0	57,508

**Project Funds Not Budgeted by the District**

Glazer Children's Museum of Tampa	37,463		253,994	5,231,463	0	5,522,920
Other Funding Sources	1,322,500		4,750,000	13,018,602	0	19,091,102
				<b>Total</b>		<b>\$25,238,494</b>

**Critical Project Milestones**

	Projected	Amended	Actual
FY2007 Purchase order opened	4/30/07		4/26/07
Confirmation and layout of exhibits in building	6/30/07		6/30/07
Building construction complete, exhibits installed and Museum grand opening	12/30/07	11/30/09	
Schematic design and fabrication documents	12/30/07		12/14/07
FY2008 purchase order opened	3/15/08		
FY2008 components completed	6/30/08		

**Status As Of:** February 28, 2008

Staff met with cooperator to receive project update and view prototypes of exhibits. Scope of work for FY2008 funding is being finalized.

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection  
**Basin(s)** Peace River  
**Cooperator(s)** Lake Wales  
**Project Manager** FRIES, GEORGE  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a 1A priority. The District provided one-half of the requested funding in FY2008, the remainder is requested with this application. This project is implementation of BMPs. This project will provide a level of flood protection for the Twin Lakes area by diverting flood flow via a high-capacity pump to Lake Altamaha for subsequent discharge to Peace Creek through the existing 48-inch diameter outfall. A senior administrator has provided confirmation that the city will budget the project for FY2008 funding.

**Description**

This is a multi-year funded project to perform the Implementation of Best Management Practices (BMPs) element of the District's Watershed Management Program (WMP) for the Twin Lakes Watershed. Implementation of BMPs includes the following tasks: design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the BMPs and construction engineering and inspection. The watershed covers an area of 0.6 square miles and is located in the City of Lake Wales. The goal of this improvement is to minimize flooding in the residential areas surrounding Twin Lakes. A Watershed Management Plan for the City of Lake Wales has been completed through a cooperative funding agreement with the District (K734). The WMP study area included the City of Lake Wales as well as areas outside the City limits that are served by the City's drainage system. One of the projects identified in the WMP for providing adequate flood protection is the Twin Lakes Flood Protection project. In FY2008 the City requested \$300,000 in cooperative funding to design and construct a 23-cfs pumping station and force main from Twin Lakes to Lake Altamaha for subsequent discharge to Peace Creek through the existing 48-inch diameter outfall. A channel/pipe connection will be constructed between the east and west lakes so they can be controlled and pumped from a single location on the westerly edge of the two lakes. The Basin Board provided \$150,000 in cooperative funding. For FY2009 the City is requesting the remaining \$150,000 in cooperative funding for the project.

**Benefits**

The project will provide the City with the ability to manage water elevations in Twin Lakes and prevent extensive structural flooding, as well as road flooding for adjacent roads, including potentially S.R. 60. Water quality benefits may be provided if pump discharges are run through a pre-fabricated treatment system such as a CDS or Vortex unit.

**Costs**

The total budgeted amount for this project is \$600,000 of which the District's share is \$300,000 and the City's share is \$300,000. Since this is a multi-year funded project, for FY2008 \$150,000 is included in the Basin Board's budget; future funding is required to complete the project. The probable construction costs are based on a BMP alternative analysis developed by the cooperator. For FY2009 the remaining \$150,000 of cooperative funding has been requested. The District's funding amounts shown in the table include staff salaries.

**Additional Information**

Water levels in Twin Lakes rose significantly during 2004 and 2005. The water elevation reached 124.5 NAVD, that is 5.4 feet above the low lake guidance level of 119.10 NAVD. Seven apartments in an apartment complex located east of the lakes flooded once and two apartments flooded on a second occasion during this time frame. Computer modeling results indicate that flooding elevations during the 100 year/5-day storm event would exceed those in 2004-2005 by over 14 inches. Under those conditions, numerous other apartment units would also experience flooding and water elevations would be within two feet of the S.R. 60 road grade. S.R. 60 is an evacuation route. In addition, it is anticipated that a 100-foot portion of Grove Avenue would experience flooding depths up to 18 inches. Currently the City does not have a readily available way to reduce lake levels. The pumping facility will utilize a portable pumping unit to allow use of the pump at other locations and to reduce maintenance costs. The facility will include pump connections for rapid installation of the portable pump. Funding is included to begin the implementation of the BMP. A cooperative funding expenditure agreement with the City will be developed contingent on the approval of future funding to complete the Implementation of BMPs. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. The project will be ranked and compete for funding in future fiscal years. The City will manage the project, where the District project manager must approve any agreements to accomplish project tasks.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	152,126	153,301	0	305,427
<b>Project Funds Not Budgeted by the District</b>						
Lake Wales	0		150,000	150,000	0	300,000

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**Total**

**\$605,427**

**Status As Of:** February 25, 2008

Status history: Only one-half of the City's requested cooperative funding was provided in the FY2008 budget. A cooperative funding agreement is being drafted. Current status: The cooperative funding agreement was sent to the City for execution on 12/18/2008. The City has applied for the remaining one-half of the cooperative funding for this project for FY2009.



**Avon Park - Imp. BMPs Avon Park Executive Airport**

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection  
**Basin(s)** Peace River  
**Cooperator(s)** Avon Park  
**Project Manager** FRIES, GEORGE  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a 1-A priority. The District provided one-half of the requested funding in FY2008, the remainder is requested with this application. This project is implementation of BMPs. Construction of the BMPs will provide some relief from periodic flooding at the municipal airport as well as at adjacent residential areas. A senior administrator has provided confirmation that the City will budget the project for FY2009 funding. The City has ranked this project second of 2 submitted for cooperative funding.

**Description**

This is a multi-year funded project to perform the Implementation of Best Management Practices (BMPs) element of the District's Watershed Management Program (WMP) for the Avon Park Executive Airport (APEA) Watershed. Implementation of BMPs includes the following tasks: design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the BMPs and construction engineering and inspection. The airport occupies an area of 350 acres and is located west of the City of Avon Park. In 2003 the City of Avon Park listed a stormwater conveyance improvement project at the airport as the number one Local Mitigation Strategy Initiative and applied for funding under the FEMA Hazard Mitigation Grant Program. The project has 75% funding obligated but has yet to receive the grant contract for Phase I design and permitting. In FY2008 the Board provided one-half of the requested funding of \$322,148. For FY2009 the City is requesting \$161,074 in cooperative funding representing the remaining local match requirement of 25% of the project cost being split equally between the City and the District.

**Benefits**

Construction of the BMPs will relieve potential flooding in the Bonny Brae Mobile Estates (BBME) mobile home park and at the Bell Street Water Treatment Plant (BSWT), both of which have flooded with as little as 2 inches of rain.

**Costs**

The total project cost is estimated at \$2,577,182 of which the Federal Emergency Management Agency through the Hazard Mitigation Grant Program will pay 75% or \$1,932,886. The local sponsor, Avon Park, is responsible for 25% or \$644,296 of which the District's share is \$322,148 and the city's share is \$322,148. Since this is a multi-year funded project, for FY2008 \$161,074 is included in the Basin Board's budget; future funding is required to complete the project. The probable construction cost is based on a BMP alternative analysis developed by the cooperator.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices (BMPs), and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. A WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. Since 1998 the APEA, BBME and BSWT have experienced flooding events with as little as 2-inches of rain. A rainfall of 1.5-inches will result in flooding of the Bell Street Water Treatment Plant; a rainfall of 3-inches will result in flooding at BBME adjacent to the airport property. During the 1998 flooding event Highlands Aviation, Inc., located at the airport suffered flooding damage of \$275,000. A cooperative funding expenditure agreement with the City will be developed. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. The City will manage the project, where the District project manager must approve any agreements to accomplish project tasks.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	163,200	164,375	0	327,575
<b>Project Funds Not Budgeted by the District</b>						
Avon Park	0		161,074	161,074	0	322,148
FEMA HMGP	0		1,932,886	0	0	1,932,886
				<b>Total</b>		<b>\$2,582,609</b>

**Status As Of:** February 25, 2008

Status history: Only one-half of the City's requested cooperative funding was provided in the FY2008 budget. A cooperative



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funding agreement is being prepared. Current status: The City has applied for the remaining one-half of the cooperative funding for this project for FY2009.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Charlotte County
<b>Project Manager</b>	FRIES, GEORGE
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

#### Recommendation

Fund as a high priority. This project is implementation of BMPs. The structures will improve flood protection on several intermediate system waterways through Greater Port Charlotte with some water quality benefits. A senior administrator has provided confirmation that the County will budget the project for FY2009 funding.

#### Description

This is a multi-year funded project to perform the Implementation of Best Management Practices (BMPs) element of the District's Watershed Management Program (WMP) for a portion of Greater Port Charlotte in Charlotte County. Implementation of BMPs includes the following tasks: design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the BMPs and construction engineering and inspection. The Greater Port Charlotte area was developed prior to District flood protection and current water quality regulations (pre-1984). Residential development coverage is in a range of 50-70 percent impervious. Property damage, with numerous repetitive flood loss claims and roadway washouts are flood damage issues to be addressed by the proposed improvements to the stormwater management infrastructure.

Approximately 10 square miles of the residential area has significant yard flooding with moderate property damage for a 25-year storm event and significant flood damage occurs in homes during a 100-year storm event. The resolution of flood Level of Service (LOS) deficiencies lies in a comprehensive approach to watershed management and resolution of development practices within the 100-year floodplain. In FY2008 the County received \$500,000 in cooperative funding to construct Structures FOR 2.77 and DOR 3.70. In addition, the County deleted four structures from the agreement (FOR 3.21, NIA 4.30, ELK 3.22, and YAL 3.61) and added nine structures (DOR 4.75, DOR 4.89, SUN 4.70, LIO 4.34, LIO 4.03, MOR 5.08, FOR 1.63, ELK 1.55 and POMP 2). This brought the total number of structures covered by this project to 36. For FY2009 the County is requesting \$1,800,000 in cooperative funding to construct structures SUN 4.27, LIO 2.87, FOR 1.72 and ELK 1.61.

#### Benefits

This project will improve level of service deficiencies in Greater Port Charlotte by providing increased flood protection to the homes and businesses along the waterways. The existing flood control structures were constructed thirty to thirty-five years ago of galvanized steel sheeting and are rusted and deteriorated. The replacement structures of reinforced concrete will have a substantially longer lifespan and will be better able to control water surface elevations in the area.

#### Costs

Funding for this project has been provided in the Peace River Basin Board budgets for FY2000 (\$708,558); FY2001 (\$791,500); FY2002 (\$487,000); FY2003 (\$500,000); FY2004 (\$75,000); and FY2008 (\$500,000) for a total funding commitment through FY2008 of \$3,062,058. The County did not apply for cooperative funding in FY2005, FY2006 or FY2007. The total projected funding for this project through FY2009 is \$11,930,325 of which the District's multi-year share is \$4,862,058 and the County's share is \$7,068,267. For FY2009 the funding amount is \$3,600,000 of which the Basin Board's share is \$1,800,000 and the county's share is \$1,800,000. Based on the most recent cost estimates in the County's Stormwater Management Master Plan an additional \$19 million may be needed in future years for implementation projects. The County is requesting cooperative funding of up to 50% of these costs in future years. The District funding amounts shown in the table includes staff salaries.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of BMPs, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems while achieving flood protection. In 1996, the District and the County completed a Stormwater Management Master Plan, targeting the Newgate and Oyster Creek intermediate conveyance systems in the Cape Haze Area, which is located in west Charlotte County. In 1998 the District and County completed a Stormwater Management Master Plan, targeting nine major intermediate conveyance systems, four in the Greater Port Charlotte Area and five in the South County Area. Both master plan efforts constitute the Greater Port Charlotte Stormwater Management Master Plan, which outlines a 5-year implementation plan of stormwater management infrastructure improvements to improve the LOS to the targeted levels expressed in the County's Comprehensive Plan. The total amount identified in the master plan's implementation plan for stormwater management infrastructure improvements was projected to be \$13,496,842 in 1998 and is now (2008) estimated to cost \$32,000,000. FY2000, FY2001 and FY2002 funding provided for the replacement of 16 structures in the Fordham Watershed and 7 structures in the Little Alligator Watershed. FY2003 funding was for the design and construction of 2 structures in the Fordham Watershed and FY2004 funding was for design and permitting of 6 structures for a total of 31 structures. The total contract amount is now \$11,930,325 with the District's share of \$4,862,058. A cooperative funding expenditure agreement with

Charlotte County has been developed to complete the Implementation of this BMP. This is a multi-year funded project that will require a cooperative funding request each fiscal year until completed. The County is managing the project, where the District project manager must approve any agreements to accomplish project tasks.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	2,588,582	0	502,335	1,802,458	9,500,000	14,393,375
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County	2,908,167		2,360,100	1,800,000	9,500,000	16,568,267
				<b>Total</b>		<b>\$30,961,642</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Critical Project Milestones</b>			
Original contract execution	7/13/00		7/13/00
<b>2. First Amendment (FY2001 Funding)</b>			
Basin Bd approval of 1st amendment	12/31/00		12/8/00
Gov Bd approval of 1st amendment	12/31/00		12/8/00
1st Amendment to Charlotte County	1/31/01		1/22/01
1st Amendment Execution	2/28/01		3/15/01
<b>3. Second Amendment (FY2002 Funding)</b>			
2nd amendment to Charlotte County	11/30/01		11/15/01
Basin Bd approval of 2nd amendment	12/31/01		10/16/01
Gov Bd approval of 2nd amendment	12/31/01		10/25/01
2nd amendment execution	1/31/02		1/7/02
<b>4. Third Amendment (FY2003 Funding)</b>			
Basin Bd approval of 3rd amendment	6/11/03		6/11/03
Gov Bd approval of 3rd amendment	6/24/03		6/24/03
3rd amendment to Charlotte County	7/15/03		6/11/03
3rd amendment execution	10/15/03		7/9/03
<b>5. Fourth Amendment (FY2004 Funding)</b>			
4th amendment approved by Charlotte County	12/7/03		12/7/03
4th Amendment Execution	12/31/03		12/23/03
<b>5A. Fifth Amendment (Time Extension)</b>			
Basin Board Approval of 5th Amendment	10/8/04		10/8/04
Governing Board Approval of 5th Amendment	10/26/04		10/26/04
5th Amendment Executed:	11/15/04		1/27/05
<b>5B. Sixth Amendment (FY2008 funds)</b>			
Draft Amendment to Contracts Administration	8/15/07		11/29/07
Draft Amendment Returned from Contracts Administration	9/1/07		12/7/07
Amendment Executed	10/1/07		2/8/08
FY2008 Funds Encumbered	10/15/07		12/7/07
<b>6. Greater Port Charlotte Area</b>			
11. Structure NIA 2.90	12/31/01		12/31/01
24. Structure LIO 3.52	12/31/01		12/31/01
6. Structure FOR 5.11	9/30/02		
13. Structure ELK 2.67	12/31/02	9/30/08	
9. Structure NIA 5.72	12/31/02		
8. Structure NIA 5.09	12/31/02		
7. Structure NIA 3.48	12/31/02	12/31/07	9/15/07
23. Structure HAV 4.84	12/31/02		
22. Structure HAV 4.33	12/31/02		
19. Structure MOR 2.50	12/31/02		12/31/02
17. Structure ELK 4.56	12/31/02		
16. Structure ELK 1.61	12/31/02		
15. Structure ELK 3.45	12/31/02		12/31/02

14. Structure ELK 2.15	12/31/02	12/31/04	12/31/04
4. Structure YAL 3.90	12/31/02		12/31/02
12. Structure ELK 3.00	12/31/03	9/30/08	3/15/07
10. Structure NIA 4.30	12/31/03		
5. Structure FOR 1.72	12/31/03		
18. Structure ELK 3.22	12/31/03		
3. Structure FOR 2.49	12/31/03	12/31/07	6/30/07
2. Structure FOR 2.77	12/31/03		
1. Structure FOR 3.21	12/31/03		
30. Structure YAL 3.61	9/30/04		
29. Structure FOR 4.60	9/30/04		
28. Structure SUN 3.65	9/30/04		
27. Structure MOR 4.42	9/30/04		
26. Structure DOR 4.22	9/30/04		
25. Structure SUN 4.27	9/30/04		
31. Structure HAV 5.72	12/31/07		
20. Structure DOR 3.70	12/31/08		
33. Structure MOR 5.08	12/31/09		
32. Structure SUN 4.70	12/31/09		
21. Structure MOR 3.91	12/31/09		
36. Structure POMP 2	12/31/10		
35. Structure ELK 1.55	12/31/10		
34. Structure FOR 1.63	12/31/10		

**7. Contract Complete**

Cooperator Agreement Expiration	12/31/05	12/31/11
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**Status As Of:** February 25, 2008

Status History: The contract is amended each year when new funding is made available through the Basin Board. The First Amendment was executed for a total contract amount of \$3,432,000, with the District funding up to a maximum of \$1,500,058. The Second Amendment revised the Proposed Project Plan to readjust for completed improvements, to incorporate FY2002 funds and added eight structures in the Greater Port Charlotte area. The amended total contract amount was \$4,346,436 with the District funding up to a maximum of \$1,987,058 (previous fiscal years \$1,500,058 plus \$487,000 from FY2002). The Third Amendment added four structures and the Fourth Amendment added six structures. The County has found the actual contract costs for the structures to be significantly higher than 1997 cost estimates from the Master Plan. These increases in the project costs are mainly because of price increases in concrete and reinforcing steel. The County prepared new cost estimates that are reflected in the Revised Proposed Project Plan. The Fifth Amendment to the agreement revised the contract amount to be \$5,470,225 with the District funding up to a maximum amount of \$2,562,058, and with the County's share of the cost being \$2,908,167. The Fifth Amendment revised the funding timetable, changed the project completion date from December 31, 2007 to December 31, 2009 and added one additional structure to the project. The County did not request any additional cooperative funding for FY2005, FY2006 or FY2007 but did request funding for FY2008. In addition the County is deleting 4 structures from the project plan and adding 9 others. The estimated total overall cost for the structure replacement plan is now \$30,000,000. Work on structures ELK 3.00; FOR 2.49 and NIA 3.48 is complete and the County has been reimbursed by the District for its share of the project costs. This brings the number of completed structures to nine of the 36 total structures. The County requested \$1,420,000 in cooperative funding for FY2008, however, the Basin Board budgeted \$500,000. An amendment to the cooperative funding agreement to incorporate the FY2008 funds has been drafted. Bids for the construction of structure DOR 3.70 were received on January 9, 2008. Structure FOR 2.77 will be out for bids in the next few months. The County has requested \$1,800,000 in cooperative funding for FY2009. Current Status: The 6th Amendment to the Agreement, incorporating the FY2008 funding, has been executed. A contract for construction of structure DOR 3.70 was awarded and construction began on 2/19/2008.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	Polk County
<b>Project Manager</b>	DURELL, SYLVIA
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as high priority. The Polk County FYN Program continues to offer significant value to the District, especially considering that FYN programs have documented both knowledge gain and behavior change within their targeted audiences.

**Description**

The Polk County Florida Yards & Neighborhoods (FYN) program provides education on Florida-friendly landscaping primarily to homeowners but also includes efforts toward students, builders/developers and irrigation and landscape professionals. Outreach efforts will include workshops, one-on-one interactions, newspaper articles, electronic media, school visits and distribution of printed materials.

**Benefits**

Approximately 53,000 people receive education either on a personal basis or through materials distribution each year. Mass media is also used extensively. Education addresses three of the Basin Boards priority concerns -- water quality, water supply, natural systems, flood protection. Education promotes widespread adoption of environmental landscaping best management practices to reduce environmental damage from improper landscape design, installation and maintenance.

**Costs**

The total cost for the proposed FY2009 program is \$119,598, which includes an approximate 5% increase in the overall program costs. A 2% decrease is proposed for the coordinator's salary and benefits. The District's share, \$51,208, includes about one-half of a percent increase and supports the coordinator's salary and benefits, educational materials, postage, advertising and travel and training expenses. The proposed District's cost for postage, advertising and travel and training expenses has increased by 3%. Based on reaching 53,000 residents of Polk County, the cost of outreach per contact is approximately \$2.25; depending on the type of outreach provided. The District's total is shared by three Basin Boards: 11% from the Alafia River Basin Board (\$5,633), 15% from the Hillsborough River Basin Board (\$7,681) and 74% from the Peace River Basin Board (\$37,894). Budget lines below include costs for staff to manage the project.

**Additional Information**

The District has supported the Polk County FYN Program since 2002. Education is based on the nine Florida-friendly landscaping principles that were created by the University of Florida/Institute of Food and Agricultural Sciences (UF/IFAS) for the FYN program: Right Plant, Right Place, Water Efficiently, Fertilize Appropriately, Mulch, Attract Wildlife, Manage Yard Pests Responsibly, Recycle, Reduce Stormwater Runoff and Protect the Waterfront. The following outreach was accomplished in FY2007: 51 programs/workshops with 1,226 contacts, 12 exhibits with 2,886 contacts, 3,848 phone consultations/letters/emails; 10,257 pieces of literature distributed; 33 youth activities with 9,674 participants, 34 articles/mass media activities with 1,800,500 recipients, 69,060 web site hits and 552 hours contributed by volunteers.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	23,165	0	6,374	6,433	0	35,972
013 Hillsborough River Basin	26,628	0	8,413	8,481	0	43,522
020 Peace River Basin	202,071	0	40,069	39,532	0	281,672
<b>Project Funds Not Budgeted by the District</b>						
Polk County	264,622		62,310	68,390	0	395,322
UF/IFAS	22,000		0	0	0	22,000
				<b>Total</b>		<b>\$778,488</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>FY2008</b>			
Purchase order issued:	10/1/07		10/2/07
First Task Report:	1/31/08		1/31/08
Second Task Report:	4/30/08		
Third Task Report:	7/31/08		

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Project Complete:	9/30/08
Fourth Task Report:	10/31/08

**Status As Of:** February 08, 2008

The following outreach was accomplished by the Polk County FYN coordinator Anne Yasalonis in the first task period of FY08: 13 programs/workshops with 224 contacts; 6 exhibits with 8,950 contacts; 892 phone consultations/letters/emails; 5,625 pieces of literature distributed; 5 youth activities with 590 participants; 1 yard recognition; 11 newsletter articles with 706,908 recipients; 3 media activities; 5 contacts with builders, developers and homeowner associations; 2,290 web site hits and 109 hours given by 22 volunteers. In October, 2007, the FYN coordinator helped promote the District's Water-Wise Award program in Polk County. Mark McDowell of Tapia Construction won the award. His model home's landscape featured micro-irrigation, drought-tolerant plants, proper planting techniques and recycled mulch. The positive response from the Polk County Builders Association members will help create interest for the award for the next Parade of Homes event. The 2008 Lake Morton Neighborhoods Association Home and Garden Tour will again feature a Florida-friendly yard. Last year's spotlighted Florida-friendly landscaped inspired positive changes in neighboring yards. This year's makeover recipient was chosen out of three applicants. The yard is currently in full-sun and consists only of turfgrass and is in a high-traffic area. The tour will take place on March 8, 2008.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River, Manasota
<b>Cooperator(s)</b>	Charlotte County, Manatee County, Sarasota County, Charlotte Harbor National Estuary Program, Sarasota Bay Estuary Program
<b>Project Manager</b>	DURELL, SYLVIA
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as high priority. The FYN Builder/Developer Program in Charlotte, Manatee and Sarasota counties continues to offer significant value to the District, especially considering that FYN programs have documented both knowledge gain and behavior change within their targeted audiences. The education on Florida-friendly landscaping best management practices presented to builders, developers and landscape professionals is an important part of the District's efforts to change water-use and water-protection behaviors.

**Description**

The Florida Yards & Neighborhoods (FYN) Builder/Developer Program in Charlotte, Manatee and Sarasota counties provides education on Florida-friendly landscaping primarily to builders, developers and landscape and irrigation professionals. Outreach efforts will include conferences, workshops, one-on-one interactions, newspaper articles, electronic media and distribution of printed materials. Charlotte, Manatee and Sarasota counties lie within the largest and fastest urbanizing portion of the Southern Water Use Caution Area.

**Benefits**

The demand for water continues to increase with the expansion in land development, building construction and increased population. Recognizing that the majority of decisions concerning new landscapes are made by builders, developers, landscape and irrigation professionals, this program benefits water resources by promoting the use of the nine Florida Yards & Neighborhoods principles to that audience. It achieves its goals primarily through consultation with builders, developers, landscape and irrigation professionals and county officials. Much of the success of this program involves extensive one-on-one situations to nurture and "sell" a professional on the program's benefits. Outreach through personal meetings and workshops averages about 5,000 contacts per year.

**Costs**

The total proposed cost of the FY2009 project is \$141,000. The District's share of \$70,500 represents no increase over the FY2008 funding. The proposed District funds will support the contracted outreach coordinator's salary, travel, training and materials (\$57,000) and office expenses, office supplies, postage and promotional materials (\$13,500). The District's total will be shared by two Basin Boards: 75% from the Manasota Basin Board (\$52,875) and 25% from the Peace River Basin Board (\$17,625). The cooperators' proposed match includes dollar value for in-kind contributions for supervision and support from Charlotte County (\$15,000) and Sarasota County (\$6,000). Manatee County is proposing to provide in-kind support valued at \$30,000 for administrative and supervisory support and \$16,000 for support of office expenses including a computer, telephone system, office supplies and promotional materials. In addition, \$3,500 for outreach expenses is expected from the Sarasota Bay National Estuary Program. Budget lines below include costs for staff to manage the project.

**Additional Information**

The District has supported education outreach to builders and developers in Sarasota County through the FYN Program since 2002. In FY2005, that outreach was expanded to Charlotte and Manatee counties. Education is based on the nine Florida-friendly landscaping principles that were created by the University of Florida/Institute of Food and Agricultural Sciences for the FYN program: Right Plant, Right Place, Water Efficiently, Fertilize Appropriately, Mulch, Attract Wildlife, Manage Yard Pests Responsibly, Recycle, Reduce Stormwater Runoff and Protect the Waterfront. Recognition of the Southwest Florida Water Management District and Manasota and Peace River Basin Boards is required as a condition of District funding. In 2006, the District project manager for Florida-friendly landscaping created a five-year plan for the District's support of the FYN outreach. Part of the plan includes education of county administrators on the value of the FYN outreach with the goal of more proportionate financial support of the programs.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	55,750	0	20,492	20,064	0	96,306
021 Manasota Basin	169,750	0	54,718	53,729	0	278,197



**Project Funds Not Budgeted by the District**

Charlotte County	30,000	15,000	15,000	0	60,000
Manatee County	55,000	40,000	46,000	0	141,000
Sarasota Bay Estuary Program	46,500	6,500	3,500	0	56,500
Sarasota County	97,000	6,000	6,000	0	109,000
			<b>Total</b>		<b>\$741,003</b>

**Critical Project Milestones****FY2008**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Purchase Order Created:	10/1/07		10/1/07
First Task Report:	1/17/08		1/17/08
First Advisory Committee Meeting:	1/17/08		1/17/08
Second Advisory Committee Meeting:	4/17/08		
Second Task Report:	4/17/08		
Third Advisory Committee Meeting:	7/24/08		
Third Task Report:	7/24/08		
Project Complete	9/30/08		
Fourth Advisory Committee Meeting:	10/23/08		
Fourth Task Report:	10/31/08		

**Status As Of:** February 28, 2008

Michelle Atkinson has been the FYN Builder & Developer Coordinator for Charlotte, Manatee and Sarasota counties since April 2007. In that time she has continued to review landscapes of homes seeking Florida Green Building Coalition certification. In this past task period two models in Port Charlotte and three in Sarasota were reviewed. In many instances, the homes do not meet the landscape requirements necessary thereby creating education opportunities. She continues to educate local landscape professionals for the District's Water-Wise Landscapes Awards Program's Parade of Homes competitions by conducting the workshop, "How to Create an Award-Winning Landscape." Parade of Homes events are being conducted in Charlotte, DeSoto, Manatee and Sarasota counties. The report on activities in the first task period of FY2008 also includes presenting a "Build Green & Profit" workshop to the Sarasota Builders Association. In addition, landscapes at four Sam Rodgers Homes models in Gran Paradiso were certified as Florida-friendly.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	City of Lakeland
<b>Project Manager</b>	KOLASA, KEITH
<b>Task Manager(s)</b>	TURNER, DAWN
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. This project is implementation of BMPs. The BMPs will provide both treatment of water quality and improvement of flood protection. This request is the final phase of an ongoing agreement in which construction costs were phased over multiple years: FY2007, FY2008, and FY2009. The amount requested in FY2009 will complete the project.

**Description**

This project entails the engineering design, permitting, and construction of a stormwater treatment system within the southwest basin of Lake Parker, the most urbanized basin draining to Lake Parker. Earlier studies completed for Lake Parker indicated that this basin discharges high pollutant loads into the lake. Funds requested for FY2008 are for project construction. The design and permitting for these stormwater retrofits were funded in previous years. The completion of the project is contingent upon the City acquiring the land to construct the project. This project will build upon previous City and District efforts in this problematic basin. The first treatment system was constructed at the lake shore or downstream portion of this drainage basin (Lake Parker Southwest Outfall Retrofit, P742), and included a large system of baffle boxes to stop sediments and trash from reaching the lake. This project will focus on the upper reaches of the watershed and will provide much needed attenuation of stormwater upstream of the first completed project. This upstream project will provide significant pollutant load reductions and will increase the effectiveness of the first completed treatment system. The long-term benefits of the project include a reduction in the loading of sediments, trash, and nutrients to Lake Parker.

**Benefits**

These systems will provide much needed attenuation of stormwater within the most urbanized basin in Lakeland and will significantly enhance the treatment efficiency of the stormwater system that was constructed along the lake shore during FY2005 under project P742 (Lake Parker Southwest Outfall Retrofit). Once completed the stormwater systems will provide significant pollutant load reductions to Lake Parker including sediments, trash, and nutrients.

**Costs**

The total project cost is \$2,767,100 of which 50% will be funded by the City of Lakeland (\$1,383,550) and 50% will be funded by the District (\$1,383,550). The Peace River Basin Board provided \$42,600 in FY2003 and \$62,500 in FY2005 for design and permitting services. Funding for project construction will be phased over multiple years. The Basin Board provided \$336,725 in the FY2007 budget to begin the first phase of project construction. For FY2008, the Basin Board's share is \$470,862.50. The amount requested in FY2009 is \$807,587. The combined total requested for project construction from the Peace River Basin Board for FY2007, FY2008, and FY2009 is \$1,615,174.50

**Additional Information**

Lake Parker is listed as an impaired waterbody by the Florida Department of Environmental Protection. The need for treating stormwater from this basin was identified in the Lake Parker Diagnostic Feasibility Study published by the District and the City of Lakeland in 1993. The 595-acre sub-basin on the southwest portion of Lake Parker is highly urbanized and was shown to be a major source of pollutant loading in the Study. Annual loading of total nitrogen (TN) and total phosphorus (TP) from this basin is 3,970 Kg and 998 Kg, respectively. This represents 10% and 12% of the total external loading to the lake of TN and TP, respectively. A BMP evaluation of this basin was completed in FY2004 (Project K857) and identified four retrofit sites in which wet detention ponds could be constructed. The FY2005 project currently underway will design and permit the retrofit sites identified in the FY2004 BMP evaluation. The design and permitting is contingent upon the City acquiring the land for these projects.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	451,182	0	476,262	813,230	0	1,740,674
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	441,825		470,862	807,587	0	1,720,274
				<b>Total</b>		<b>\$3,460,948</b>

**Critical Project Milestones**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
<b>1. Contract Development &amp; Execution</b>			
Agreement Approved By City Council	2/15/05		7/18/05
Agreement sent to Contracts Administration	2/15/05		7/18/05

Contract Executed	5/15/05	8/1/05
Notice to Proceed	6/1/05	8/8/05
<b>2. Meetings</b>		
City's kick-off meeting	8/10/05	11/20/05
<b>3. Preliminary Design</b>		
Preliminary Design Plans	1/30/07	4/20/07
<b>4. Land Acquisition</b>		
Land Acquisition	5/31/07	
<b>5. Design and Permitting</b>		
60% Design	6/30/07	12/30/07
Pre-application meeting	9/30/07	12/30/07
Permit Application and RAI	10/15/07	4/15/08
100% Design	10/30/07	3/30/08
Engineer's Construction Cost Estimate	12/31/07	5/15/08
<b>6. Construction</b>		
Erosion Control Plan and Local Permits	5/30/08	
Construction and Inspections	10/30/08	
Punch List and Certification of Completion	12/30/08	
As-builts and Project Close-out	4/30/09	

**Status As Of:** February 25, 2008

This project will provide the design and permitting of a stormwater treatment system, pending the City's success in acquiring lands to construct the stormwater treatment system. The project has been divided into two phases. The land acquisition and completion of preliminary designs will be completed in the first phase, with final design and permitting to follow in the second phase. The final agreement was approved by the District and City on July 18, 2005. The City executed a contract with CH2MHill for the design and permitting work. The City completed an updated site evaluation report on January 19, 2006. The City has completed initial survey work and completed the preliminary design. The City has encountered delays with the land acquisition process due to the complexity of land ownership in this highly urbanized area of the City of Lakeland. The City will continue their land acquisition efforts. The 30% design plans were completed on April 20, 2007 for all four ponds. The City elected to dismiss their existing consultant and hire a new consultant to review the 30% design plans and revise them if needed. The new consultant will complete the remaining design plans and permitting. Due to the delays associated with these changes and the delays with land acquisition, the City requested a time extension. A time extension was prepared and was executed at the end of July 2007. Although delays have occurred with the land acquisition, the City and District have prepared an agreement for the construction phase of the stormwater retrofits. The agreement for the construction phase of the project was executed by the District on March 20, 2007. Funding to complete the construction is being requested over multiple years (2007, 2008, and 2009). An amendment has been prepared to add funds approved in the FY2008 budget to the existing FY2007 construction agreement. The amendment has been executed by both the City and the District. The City has prioritized the preliminary design plans based on nutrient load reduction goals and land cost (best acquisition potential). The City is moving forward with the 60% design plans and is continuing land acquisition.

**Project Type** Cooperative Funding  
**AOR(s)** Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** City of Lakeland  
**Project Manager** ZAJAC, CHRIS  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. This FY2009 funding request is for additional funds needed to continue the project due to a redesign of the original FY2006 proposed project plan. The funding request is for construction only. The cooperator will request funds in FY2010 to complete the project. The project redesign is complete and the appropriate permit application has been submitted.

**Description**

This project entails the installation of underground hydrodynamic separators for the stormwater treatment of four sub-basins totaling 217 acres on the west side of Lake Hollingsworth, Lakeland. The project involves treating stormwater runoff from thirteen (13) outfalls to Lake Hollingsworth. The requested funds for this project will be used for construction only as the City has funded the design and permitting of this project.

**Benefits**

This project will provide improved treatment of stormwater from a 217 acre sub-basin along the lake's edge. This project, in conjunction with other ongoing and completed capital improvement projects, will have a positive cumulative impact on the long-term water quality of Lake Hollingsworth and downstream receiving waterbodies.

**Costs**

The total project cost for construction of this project is \$1,400,000. The Peace River Basin Board budgeted \$189,216 for the project in its FY2006 budget and the City budgeted \$189,216. The City is requesting the Peace River Basin Board fund \$420,304 in FY2009 with the City contributing \$420,304. The District funding amounts shown in the table include staff salaries, travel and central garage charges.

**Additional Information**

Lake Hollingsworth is a headwater lake of the Peace River. Hollingsworth discharges into Banana Lake, Lake Hancock and ultimately the Peace River. Lake Hollingsworth is listed as an impaired waterbody by the FDEP for five parameters including nutrients. Land use within the project area has been classified as 88% residential, 6% commercial, and 6% recreational or open space. The original project design involved the construction of wetland strands to treat stormwater before discharging into Lake Hollingsworth. The original design would have required the City to purchase privately owned lands along the lake's edge to complete the project. Due to rising land values the City has chosen a design alternative that includes underground hydrodynamic separators installed on existing City-owned property. The City funded the design and permitting portion of this project.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	200,885	0	2,057	424,622	90,480	718,044
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	189,216		0	420,304	90,480	700,000
				<b>Total</b>		<b>\$1,418,044</b>

**Critical Project Milestones**

	Projected	Amended	Actual
<b>1. Contract Development &amp; Execution</b>			
Contract Executed	10/1/05		2/28/06
Notice to Proceed	10/17/05		3/2/06
First Amendment-No Cost Time Extension	8/14/06		8/14/06
<b>2. Critical Project Milestones</b>			
Select Contractor	5/30/08		
Begin Construction	6/30/08		
Construction Complete	1/30/09		
Contract Close Out	3/30/09		

**Status As Of:** February 13, 2008

The contract was executed on February 28, 2006 by the District's Executive Director. The project was originally designed to include wetland strands which would involve the purchase of privately owned lands along the lake's edge. Due to rising land costs

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the City has requested several no-cost time extensions until land acquisition was complete. Because of these rising land values, the City evaluated alternative designs to complete the project and reduce costs associated with land acquisition. The City has recently chosen an alternative design that involves the installation of underground hydrodynamic separators to treat stormwater rather than the originally planned wetland strands. The alternative design will allow the City to complete the project without acquiring privately owned lands, which should result in significantly reduced total project costs. The City is currently modifying their existing permit and is requesting cooperative funding consideration in FY2009 to complete the project. The second amendment to the contract was executed on January 28, 2008 which extends the contract expiration date from December 31, 2008 to March 31, 2009.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	City of Lakeland
<b>Project Manager</b>	ZAJAC, CHRIS
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. This FY2009 funding request is for additional anticipated funds needed to continue the FY2008 proposed project plan. The cooperator will request funds in FY2010 to complete the project. The Peace River Basin Board cooperatively funded the Lake Gibson Watershed Management Plan and the design and permitting phase of this project in FY2004 and FY2007 respectively under separate contracts.

**Description**

This project involves the engineering design, permitting, and construction to retrofit the stormwater management system of Lake Gibson's southwest drainage sub-basin. In 2004, the City of Lakeland received funding from the Peace River Basin Board (L145 - Lake Gibson Southwest Area: Watershed Management Plan) to conduct a diagnostic evaluation of the southwest basin to identify the sources of erosion, pollutant loading and flooding. One task in the evaluation was the design of conceptual plan options to address the issues noted above. The City has chosen one of the conceptual plan options and has decided to move forward with final design, permitting and construction. The conceptual plan option that was chosen involves the construction of three wet detention ponds designed to capture and treat stormwater prior to discharging into the existing conveyance stream which discharges to Lake Gibson. The design will include components that will reduce peak flows and enhance base flows through storage and release, provide water quality treatment using treatment wetlands, and reduce flooding through attenuation and downstream channel restoration. Due to the complexity of the project, it is anticipated that the design and permitting phase will take approximately nine months to one year to complete. Land acquisition and construction will take approximately three years to complete. All lands acquired will be used solely for the proposed project. The FY2007 project deliverables will include sealed construction plans and specifications for all project elements, bid documents and all necessary state/federal permits. Construction is scheduled to occur in FY2008, FY2009 and FY2010.

**Benefits**

The design will include components that will reduce peak flows and enhance base flows through storage and release, provide water quality treatment using treatment wetlands, and reduce flooding through attenuation and downstream channel restoration. The project will treat stormwater from 245 acres of highly urbanized land.

**Costs**

The total project cost for design, permitting, land acquisition and construction is \$4,650,000. The FY2007 cost for design and permitting is \$150,000. The Peace River Basin Board has approved funding in the amount of \$75,000 in FY2007 while the City will fund the remaining \$75,000. The Peace River Basin Board has budgeted \$562,500 in FY2008 while the cooperator will contribute \$750,000. The cooperator has requested the Peace River Basin Board fund \$750,000 in FY2009. The cooperator will match \$750,000 in FY2009 and will request the remaining funds in FY2010. The District funding amounts shown in the table include staff salaries, travel and central garage charges.

**Additional Information**

Lake Gibson is a 489-acre, headwater lake in the Peace River Basin. Lake Gibson flows into Lake Parker which discharges into Lake Hancock via Saddle Creek. Lake Gibson is included on the Florida Department of Environmental Protection verified list as being impaired for nutrients. The southwest sub-basin of Lake Gibson is 245 acres of highly urbanized land. This sub-basin includes portions of the Lakeland Mall, US 98 North and a variety of large commercial properties. A deeply incised creek conveys surface flows from the sub-basin to Lake Gibson. Slopes along the creek are moderate to severe. The extensive development of land and the associated impervious cover has greatly increased the peak run-off rates and volumes, and reduced base flow through the creek. This has resulted in erosion of the stream channel with the deposition of eroded sediments in Lake Gibson, as well as flooding of some downstream residential properties. A large sediment delta has formed at the confluence of the stream and lake. Stormwater run-off quality has been sampled and is characterized as poor. Although the southwest sub-basin is relatively small in size, this tributary to Lake Gibson is a significant source of pollutant loading to the lake. Correcting the deficiencies in this basin will be an important first step in addressing nutrient enrichment impairment of Lake Gibson.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	78,160	0	565,789	755,013	937,500	2,336,462
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	75,000		750,000	750,000	937,500	2,512,500

	Total		\$4,848,962
Critical Project Milestones	Projected	Amended	Actual
<b>1. Contract Development &amp; Execution (Design and Permitting)</b>			
Agreement sent to Management Services	9/21/06		9/28/06
Agreement returned from Management Services	10/15/06		10/19/06
Agreement sent to Cooperator	11/1/06		11/9/06
Signed Agreement returned from Cooperator	12/1/06		12/15/06
Notice to Proceed	12/15/06		12/29/06
Contract Executed	12/15/06		12/20/06
<b>2. Project Tasks (Design and Permitting)</b>			
Select Consultant	3/29/07		1/30/07
Project Design	9/29/07	2/28/08	
Acquire Permits	11/29/07	4/30/08	
Final Construction Plans/Permits	12/29/07	5/31/08	
<b>3. Contract Development (Construction)</b>			
Agreement sent to Management Services	8/1/07		8/6/07
Agreement returned from Management Services	8/21/07		8/24/07
Agreement sent to Cooperator	9/4/07		8/30/07
Signed Agreement returned from Cooperator	9/18/07		9/18/07
Contract Executed	10/1/07		10/1/07
Notice to Proceed	10/8/07		10/11/07
<b>4. Project Tasks (Construction)</b>			
Select Contractor	1/1/08		
Begin Construction	2/1/08		
Construction Complete	12/1/08		
Approved As-Builts	12/31/08		

**Status As Of:** December 21, 2007

The agreement between the cooperator and the District (Design and Permitting) was executed on December 20, 2006. The cooperator was issued a Notice To Proceed on December 29, 2006. The cooperator entered into an agreement with its selected consultant on January 30, 2007. The cooperator provided the District project manager a copy of the agreement with its consultant on April 3, 2007. The design phase of this project is ongoing. The FY2008 contract (Construction) was executed on October 1, 2007 and Notice To Proceed given on October 11, 2007. The cooperator has requested a no-cost time extension to complete the design and permitting. The First Amendment (Design and Permitting) was sent to the cooperator for signature in December 2007. The amendment will extend the contract by five months.



<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	Lakes Education/Action Drive (LE/AD)
<b>Project Manager</b>	ANTOINE, KENDRA
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. LE/AD is an educational organization that teaches an estimated 28,000 Polk County citizens annually to follow best management practices related to water quality protection and water conservation. If funded, LE/AD will create programs to educate residents to adopt behaviors that protect their local watershed and water resources.

**Description**

The Lakes Education/Action Drive (LE/AD) program is designed to educate Polk County residents on water resource and water quality issues, as well as lake preservation and protection. LE/AD encourages residents to adopt behaviors that encourage protection of their local watershed. The LE/AD will implement numerous watershed education projects, which include organizing and hosting several community events, distribution of a quarterly newsletter, coordination of quarterly PREEN meetings, creating lakeside display signs, pet waste stations and a water resource conference.

**Benefits**

Water resources will be protected as a result of approximately 28,000 Polk County residents receiving education about water resources, watershed protection, improvement of natural systems and water conservation. The LE/AD program will educate the public to understand how their actions affect water resources and encourage citizens to adopt behaviors that protect their local watershed.

**Costs**

The total cost of the FY2009 program is \$31,516, with the District's share proposed to be \$14,026, reflecting a \$5,129 (27%) decrease from FY2008. This decrease in funding is the result of a reduction in the number of programs offered. The Alafia River Basin Board is requested to fund \$1,402 (10%), the Hillsborough River Basin Board \$2,104 (15%) and the Peace River Basin Board \$10,520 (75%). The dollar amount allocated per basin is determined by the population within each basin. If approved, District funding will be allocated toward special events, coordination of the PREEN network, a water resource conference, lakeside display signs and pet waste stations. The program is estimated to reach approximately 28,000 Polk County residents, giving a cost-benefit ratio for the District's share of \$.50. Budget lines below reflect costs for staff to manage the project.

**Additional Information**

In FY2007, LE/AD received basin initiative funding to conduct education outreach. The LE/AD submitted its first cooperative funding proposal in FY2008. The funding was approved, and the cooperator is on-track to complete all FY2008 proposed deliverables.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	2,901	2,152	0	5,053
013 Hillsborough River Basin	0	0	3,538	2,854	0	6,392
020 Peace River Basin	0	0	14,909	11,328	0	26,237
<b>Project Funds Not Budgeted by the District</b>						
Other Funding Sources	0		19,397	0	0	19,397
				<b>Total</b>		<b>\$57,079</b>

**Critical Project Milestones****FY2008 Budgeted Funds**

	Projected	Amended	Actual
Initiate Purchase Order	10/1/07	10/31/08	10/31/08
Water, Wings & Wild Things Event	5/12/08		
Lakes Appreciation Month Celebration	8/1/08		
Cardboard Boat Challenge & Lakeshore Festival	8/2/08		
Project Close	9/16/08		

**Status As Of:** February 25, 2008

To date, the LE/AD distributed the fall newsletter to approximately 750 residents. The quarterly newsletter contained a survey to determine the effectiveness of the articles within the newsletter. The LE/AD also coordinated and conducted a quarterly PREEN meeting at the Ft. Meade Outdoor Recreation Park on December 6. The purchase order has been extended through the end of

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November to accommodate the annual Water, Wings & Wild Things event, which has been moved to November 1, 2008.

<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Flood Protection, Water Quality, Natural Systems
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Polk County Natural Resources
<b>Project Manager</b>	SIMS, SHELLEY
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project was identified within the Watershed Management Plan completed for the Wahnetta Canal and will improve natural systems and water quality.

**Description**

This project is in response to a cooperative funding request from Polk County for the restoration of Lake Gwyn, a 120 acre depositional wetland east of the community of Wahnetta located within the Wahnetta Canal watershed that drains directly to Peace Creek. This project was one of three projects identified for restoring floodplain storage and wetland functions in this watershed. The Wahnetta Canal Watershed Management Plan, funded by the County and Basin Board, was completed in 2005. The Wahnetta Canal watershed covers an area of 43 square miles and is a sub-basin within the Peace Creek 232 square mile watershed, which is part of the Peace River headwaters. The restoration of Lake Gwyn was identified in the WMP as the most viable option since most of the land needed for the project is under ownership by the State of Florida. The restoration project will include the placement of a control structure at the outfall of the lake in order to restore floodplain storage and wetland functions, while also improving flood conveyance within the Wahnetta Canal drainage area. Restoring the natural storage and wetlands within the study area through the use of a control structure will also provide additional storage that can be released when needed to help restore the required minimum flows of the upper Peace River.

**Benefits**

The project will re-establish the historic surface water levels to provide additional storage volume to attenuate flooding of the Peace Creek canal and assist in maintaining the minimum flows in the Upper Peace River. The additional open water will provide aquatic habitat, an improved fishery, and increase recharge of the groundwater sources in the area.

**Costs**

The FY2008 project cost is \$150,000 for a feasibility study, with Polk County contributing \$75,000 and the District contributing \$75,000. The FY2009 project cost is \$250,000 for design, permitting and land acquisitions/easements, with Polk County and the District each contributing half (\$125,000). It is anticipated that the County will request future funds for construction once design is complete. District funds shown in the table include staff salaries.

**Additional Information**

Lake Gwyn was once an open water body drained following the construction of the Wahnetta Farms Canal that bisects the lake diagonally from north to south. Although control structures were installed in an attempt to maintain lake levels, the historic inflows from Winter Haven now bypass the lake due to high berms along the canal, resulting in dry conditions the majority of the time. In 2005, Polk County entered into a 50 year lease agreement with the State of Florida's Board of Trustees for 67.90 acres which encompass the western shoreline of the lake. This lease secures half of the property under State ownership. Obtaining easements over the remainder of the lake bottom is required in order to complete restoration of the entire lake.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	45,484	129,540	250,000	425,024
<b>District Budgeted - Outside Revenue</b>						
Water Protection & Sust T. F. (Surface Wtr Rstr)	0	0	37,500	0	0	37,500
<b>Project Funds Not Budgeted by the District</b>						
Polk County Natural Resources	0		75,000	125,000	250,000	450,000
				<b>Total</b>		<b>\$912,524</b>

**Critical Project Milestones****1. Contract Development and Execution**

	<b>Projected</b>	<b>Amended</b>	<b>Actual</b>
Draft agreement sent to Management Services	12/31/07		12/17/07
Agreement returned from Management Services	3/14/08		
Agreement sent to Cooperator	3/21/08		
Signed agreement returned from Cooperator	4/11/08		
Agreement fully executed	4/25/08		
Notice to Proceed	4/30/08		

**2. Project Tasks**

Feasibility Study

12/31/08

**Status As Of:** February 18, 2008

An agreement has been drafted and is currently routing for signature.

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Auburndale  
**Project Manager** ANDRADE, ANTHONY  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The utility is requesting funding of a one year reclaimed water master plan project. The project addresses the water supply priorities of the basin by planning for an expansion of the reclaimed water system to maximize the offset of groundwater use. There was adequate information available to evaluate the project and the cooperator has confirmed it has included the necessary matching funds in its pending capital budget in FY2009. The project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action. The cooperator ranked this project as their top priority on their list of two FY2009 District funding requests. This master plan does not include the construction of infrastructure that would make an alternative water supply available to water users, and is thus not eligible for state funding through the Water Protection Sustainability Program.

**Description**

The project consists of a master plan to examine the feasibility of expanding the City of Auburndale's existing reclaimed water system. In particular, the study will investigate the best use of the city's existing 0.5 mgd excess reclaimed water supply and the 1.0 mgd of previously used reclaimed water (by the Calpine Power facility) that is disposed of via sprayfield. The report would identify the potential users, quantities, and offsets, address the required components, along with sizing and cost, associated with the design and construction of the necessary storage, pumping, transmission, and distribution systems. The provided options would optimize the beneficial use of reclaimed water flows and include a multi-year plan for implementing the recommended options.

**Benefits**

The project would provide options to optimize the beneficial use of reuse flows and create a multi-year plan for implementing the recommended options.

**Costs**

The project cost is \$100,000, of which 50 percent, or \$50,000, is requested from the Peace River Basin Board in FY2009.

**Additional Information**

The City of Auburndale has adopted ordinances that mandate the use of low-volume toilets and low flow shower heads and faucets in all construction requiring a building permit. The City also has a school based education program and inclining rate structure to encourage water conservation. The City has adopted ordinances and regulations to regulate and restrict uses in zoning districts designated as Flood Hazard Districts. These regulations are intended to protect and preserve natural open spaces, park lands, swamp lands, water sheds, recharge areas, and lakes and their canals. To those ends, permitted and permissible uses are basically limited to conservation agriculture, low intensity recreation, and, with certain limitations, uses otherwise not contrary to the character of these districts.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	53,197	0	53,197
<b>Project Funds Not Budgeted by the District</b>						
Auburndale	0		0	50,000	0	50,000
				<b>Total</b>		<b>\$103,197</b>

**Status As Of:**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Alafia River, Hillsborough River, Peace River  
**Cooperator(s)** Polk County Builders Association  
**Project Manager** DURELL, SYLVIA  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as high priority. The Polk IS Florida-Friendly project will supplement current water-conservation and water quality protection educational projects in Polk County. The diverse list of partners -- including government entities and private businesses -- will help deliver the messages to previously unreached audiences.

**Description**

The Polk County Builders Association proposes a public education program that will provide widespread promotion of Florida-friendly landscaping through educational presentations, demonstration sites and the development and distribution of materials. Materials will include a printed guide of Florida-Friendly yards and demonstration landscapes throughout Polk County and an illustrated list of plants most suited to the county. A companion electronic presentation and a DVD will also be produced for use in workshops and community events throughout the year. Focus groups will be convened to identify barriers to water use changes and what incentives might foster sustainable changes. The county's code enforcement will compare the number of watering restriction citations issued monthly pre-project with the number of citations issued post-project. Partners in this project include Polk County Natural Resources, Polk County Utility Department, the City of Lakeland, the City of Winter Haven, the City of Haines City, Polk County Florida Yards & Neighborhoods program and the Friends of the Parks.

**Benefits**

The multi-organization program will promote widespread adoption of Florida-friendly landscaping best management practices including reducing water use and protecting water quality through proper landscape design, installation and maintenance in a county-specific way. The educational materials created will be specific to Polk County and will provide consistent Florida-friendly landscaping messaging to diverse audiences countywide. Based on reaching the estimated 87,000 Polk County residents, the cost per person is approximately \$.27.

**Costs**

The total cost of the proposed FY2009 Polk IS Florida-Friendly project is \$59,480. The proposed District share is \$23,718, which is requested from the following Basin Boards: Alafia River (\$2,609), Hillsborough River (\$3,558) and Peace River (\$17,551). If approved, District funds will provide for printing, materials, travel and contract services for preparation and implementation of educational programs.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	3,409	0	3,409
013 Hillsborough River Basin	0	0	0	4,358	0	4,358
020 Peace River Basin	0	0	0	18,351	0	18,351
<b>Project Funds Not Budgeted by the District</b>						
Polk County Builders Association	0		0	35,763	0	35,763
				<b>Total</b>		<b>\$61,881</b>

Status As Of:

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Water Quality, Natural Systems  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)** The Florida Aquarium, Inc.  
**Project Manager** MAKOID, MARY ALICE  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as high priority. The Florida Aquarium Watershed Education Initiative enhances the District's watershed education efforts by providing participants with a better understanding of Florida's ecology through workshops, hands-on field experiences and stewardship activities. District staff supports this project's goal to teach minority and at-risk students the importance of water quality, water conservation and habitat protection. This is an audience the District has identified for additional outreach.

**Description**

The Florida Aquarium provides a comprehensive water resources education initiative that focuses on three distinct programs for elementary, middle and high school students and teachers. These programs include Art-O-Fishal Fun summer camp, Science Education at Sea (SEAS) teacher training program and Regional Ocean Conference for Students (ROCS) workshop for teachers and students. While the initiative primarily reaches students and teachers throughout Hillsborough County, it also draws schools from Polk, Pinellas, Pasco and Manatee Counties. (1) Art-O-Fishal Fun is a summer camp program designed to teach low-income, at-risk upper elementary and middle school students from local YMCAs and Boys and Girls Clubs in Hillsborough County the importance of water quality, water conservation and habitat protection. Students apply lessons to their home and family, devising practical ways that they can encourage water conservation and water quality protection at home. At the end of the program, each student is required to develop a work of art and a writing sample related to the camp curriculum. The works will be exhibited at the Florida Aquarium and then travel for display at other interested facilities, such as District offices, government buildings, libraries and local banks. The program tries to build impact through family participation. (2) SEAS is a teacher education program that provides workshops for elementary, middle and high school teachers, focusing on coastal resources and incorporating the learning objectives of the Florida Comprehensive Assessment Test. It allows teachers to explore current and future environmental issues and challenges facing those resources. (3) The ROCS workshop component is an innovative addition to the project. It gives middle and high school students the opportunity to study several major water quality issues associated with local watersheds. Students identify the issues and create action plans that are achievable and beneficial for the environment. SWIM staff participate in this conference.

**Benefits**

The cooperator estimates that this program will reach 140 students and 79 teachers directly and 6,000 students indirectly. The FY2009 addition of ROCS strengthens the project. ROCS is an intensive workshop experience for high school students, providing opportunities for them to learn about local issues and related science, then create action plans that will result in positive environmental changes within their communities.

**Costs**

The total FY2009 project cost is \$42,944, with the District's share proposed to be \$21,194. The Basins are requested to share the funding as follows: Alafia River \$5,273, Hillsborough River \$5,274, Northwest Hillsborough \$5,273, Coastal Rivers \$1,054, Pinellas-Anclote River \$1,056, Withlacoochee River \$1,154, Peace River \$1,055 and Manasota \$1,055. Basin budget breakdowns were established based on a list of program participants provided by the cooperator. District funding will be used to fund a summer camp, teacher training programs and a workshop for teachers and students. This innovative and high quality program will reach 140 students and 79 teachers directly and 6,000 students indirectly, which provides a cost-benefit ratio of \$3.53. Budget lines below include costs to manage the project.

**Additional Information**

This project is currently being funded in FY2008 through Basin Initiative dollars (P259) at a cost to the District of \$12,415. Cooperator increased the scope of this proposal and requested FY2009 cooperative funding dollars at staff's request.

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

011 Alafia River Basin	0	0	0	6,195	0	6,195
013 Hillsborough River Basin	0	0	0	6,196	0	6,196
014 Northwest Hillsborough Basin	0	0	0	6,195	0	6,195
015 Coastal Rivers Basin	0	0	0	1,976	0	1,976
016 Pinellas-Anclote River Basin	0	0	0	1,978	0	1,978
019 Withlacoochee River Basin	0	0	0	2,076	0	2,076
020 Peace River Basin	0	0	0	1,977	0	1,977
021 Manasota Basin	0	0	0	1,977	0	1,977
<b>Project Funds Not Budgeted by the District</b>						
The Florida Aquarium, Inc.	0		12,700	21,750	0	34,450
				<b>Total</b>		<b>\$63,020</b>

Status As Of:

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** Winter Haven  
**Project Manager** ROE, MELISSA  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project will expose an estimated 33,000 residents of Winter Haven to watershed education through exhibits and signage featuring the Peace River watershed, the Chain of Lakes and Florida-friendly landscaping. It will also provide as many as 5,000 participants with workshops on Florida-friendly landscaping. This is an important geographic area, one where the District funds several water resources programs, and focused education is warranted. The project targets behavior change and will deliver evaluation through surveys and observation. In addition, the education center's LEED certification, water conservation devices and corresponding education components will also provide a model of sustainable practices for visitors. At staff's request, the cooperator has agreed to phase the project over three years, which better reflects funding needs for the project.

**Description**

The Chain of Lakes Natural Resource Center is adjacent to Lake Hartridge Nature Park and Lake Hartridge, the northernmost lake on the Southern Chain of Lakes in Winter Haven. This proposal is to provide environmental education, programs, workshops and demonstrations to educate citizens about watersheds, water quality, water conservation, flood protection, natural systems and sustainability. Program participants will be encouraged to take action in their home, school, church and workplace to help protect the watershed and conserve water. Measurements of behavior change as a result of the program will be taken utilizing surveys and observation. The program will be phased over three years. Phase 1 will consist of planning and design of a LEED Certified center including water conservations devices and fixtures that will be used as part of the education for visitors and design of Florida-friendly demonstration gardens. Phase 2 will include design, fabrication and installation of the watershed exhibit and the design of the interpretive signs. Phase 3 will include the installation of the Florida-friendly demonstration gardens, the installation of the interpretive signage, development and implementation of the various Florida-friendly Landscaping workshops and the publishing and printing of materials for the various workshops. By the time the three phases are complete, the cooperator estimates reaching 33,000 people per year. The building, gardens and other components will act as models of sustainable behavior, especially water conservation for the visitors to the center.

**Benefits**

This project enhances the outreach of the District's Peace River watershed protection and water conservation education efforts. Programs will be housed in the new building (not part of this proposal) which will serve as a model for green building practices and state-of-the art water conservation devices. In addition, the center will highlight the environmental benefits of Florida-friendly Landscaping. The project proposes to target behavior change by incorporating elements of community-based social marketing and includes evaluation.

**Costs**

The total proposed cost of the project to the District for all three phases is \$178,749, all of which is requested in the Peace River Basin Board. The total cost to the District in Phase 1 (FY2009 ) is \$46,499 and will consist of planning and design of a LEED certified center including water conservations devices and fixtures that will be used as part of the education for visitors and design of Florida-friendly demonstration gardens. Phase 2 (FY2010) is proposed to be \$55,500 and will include design, fabrication and installation of the watershed exhibit and the design of the interpretive signs. Phase 3 (FY2011) is proposed to be \$76,750 and will include the installation of the Florida-friendly demonstration gardens, the installation of the interpretive signage, development and implementation of the various Florida-friendly Landscaping workshops and the publishing and printing of materials for the various workshops. The project will be completed in Phase 3, with an estimated 33,000 residents exposed to the educational programming annually. The estimated cost per person to the Peace River Basin Board will be \$5.42.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	47,240	132,250	179,490
<b>Project Funds Not Budgeted by the District</b>						
City of Winter Haven	0		0	86,001	1,005,000	1,091,001
				<b>Total</b>		<b>\$1,270,491</b>

Critical Project Milestones	Projected	Amended	Actual
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Status As Of:

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Haines City  
**Project Manager** ANTOINE, TAMMY  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project is consistent with basin priorities in that the reuse of reclaimed water is maximized to offset groundwater use. This project has been identified in the City's reuse master plan as a source to offset new demands from traditional groundwater withdrawal. Agreements with the customers listed are currently being finalized. This project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action.

**Description**

This alternative water supply project consists of a portion of the first phase of three phases in the master plan to expand the City's Reclaimed Water System to the eastern and southern portion of the City's potable water service area. The project consists of design and construction of approximately 17,430 linear feet reclaimed water transmission main ranging in diameter from 24 to 30 inches, an interim reclaimed water booster pumping station, and necessary appurtenances. This project will offset the irrigation demands on the City's potable water system and potable source water supply.

**Benefits**

The project will serve the Haines City High School (.033mgd), a cemetery (.004mgd), one commercial customer (Paver Modulus / .029mgd)(WUP # 9412), and an industrial customer (Cellynne / .246mgd)(WUP # 12794), providing 312,000 gpd of reclaimed water and offset approximately 302,000 gpd of traditional groundwater supply (WUP # 8522).

**Costs**

The total cost of this project is estimated to be \$4,302,000, of which the Peace River Basin is requested to fund 50 percent, or \$2,151,000. Funding in the amount of \$1,075,500 is requested in FY2009 and it is expected that \$1,075,500 will be requested in FY2010. The cost-benefit is \$3.44/1,000 gallons, amortized over 30 years at eight percent interest.

**Additional Information**

The goal of this project is to replace existing potable water and potable quality groundwater used for irrigation with reclaimed water. The City of Haines City's overall reclaimed water objective is to develop a system that will offset potable quality water by providing reclaimed water for irrigation and other approved non-potable uses. Existing customers include the Southern Dunes Golf Course, City's East Park including a ball field, a small citrus grove adjacent to the Wastewater Treatment Facility, and internal reuse water at the City's Wastewater Treatment Facility (WWTF). In addition, the Resnick Property, north of the WWTF is presently being used by the City as a spray field for pasture. The City developed and passed an ordinance/code stating "all new developments within the City of Haines City that will be receiving reclaimed water within 7 years will be required to install dual distribution lines (reclaimed and potable) as part of the development." This city expects to complete the expansion of their WWTF from 3.0mgd to 6.0mgd by 2011 then to 8.0mgd by buildout and add reuse customers from the four zones indicated in their master plan over three phases. Customers indicated above are only a portion of those indicated in the City's master plan for zone 4 of phase 1. The lines and pumping station proposed in this phase of the project are being built to coincide with the overall plant expansion. Although benefits are listed above, the total benefits of this project will not be seen until all three phases are complete. The project (phase 1) is expected to take approximately two years to complete and has been identified as a potential project in the City's reuse mater plan. Of the total project cost of \$4,302,000, approximately 87 percent (\$3,742,000) is expected to be needed for construction, and the remainder (\$560,000) for design and administration.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	1,078,980	1,075,500	2,154,480
<b>Project Funds Not Budgeted by the District</b>						
City of Haines City	0		0	2,151,000	0	2,151,000
				<b>Total</b>		<b>\$4,305,480</b>

Critical Project Milestones	Projected	Amended	Actual
Execute Agreement	10/1/08		
Begin Design	10/1/08		
Complete Design	12/1/08		
Begin Construction	3/20/09		

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Complete Construction	8/20/09
Contract Closeout	8/20/10
Offset Report	8/20/11

Status As Of:

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection, Water Quality  
**Basin(s)** Peace River  
**Cooperator(s)** Haines City  
**Project Manager** KOLASA, KEITH  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project is implementation of BMPs. The BMPs will target the improvement of water quality treatment. The FY2009 funding request represents the funding needed to complete the project. A senior administrator has provided confirmation that the City has budgeted the project in their FY2008 budget.

**Description**

The purpose of this Lake Eva stormwater project is to reduce nonpoint source pollutant loadings to the lake and downstream water bodies. The proposed structure is a nutrient separating baffle box strategically located to collect untreated stormwater runoff from a 180-acre urban basin, approximately 25% of the Lake Eva watershed. This stormwater BMP project will reduce a significant amount of pollutant loading to the lake and the downstream water bodies. Currently, less than 1% of the total contributing area to Lake Eva is served by a permitted stormwater management system. This project was recommended within the recently completed Haines City Watershed Management Plan (cooperatively funded by SWFWMD). This proposed stormwater project is ranked third within the City's Capital Improvement Projects (CIP)s with funding allocated for the project through the City's stormwater utility.

**Benefits**

This project will enhance water quality of Lake Eva within the heart of Haines City by treating stormwater runoff in a highly urbanized basin. The basin that will be retrofitted has had a history of water quality related to untreated runoff. TSS loading from the downtown drainage basin is estimated to be 18,749 lb/yr while nutrient loading (nitrogen and phosphorus) is estimated to be 620 lb/yr. The installation of the nutrient separating baffle box will reduce TSS by approximately 80% and the nutrient loading by approximately 60%. The project will be located on City owned land to eliminate land costs, will minimize culvert relocations to lower overall construction costs and the BMP structure will be located in an accessible area for ease of maintenance.

**Costs**

The FY2009 budget is \$500,000, of which 50% has been funded by Haines City (\$250,000) in their FY 2008 budget, and 50% is requested to be funded by the the Peace River Basin Board (\$250,000).

**Additional Information**

The BMP for this water quality improvement project is a nutrient separating baffle box to be installed along an existing outfall pipe to Lake Eva. The proposed system will capture treat runoff at the 5th Street outfall where the majority of the downtown drainage basin flows into Lake Eva(sub-basin of the Lake Eva basin). Lake Eva outfalls to the Haines City Drainage District (HCDD) Ditch watershed, which drains to Lake Hamilton and ultimately to the Peace Creek Drainage Ditch. The project will be located on City owned land to eliminate land costs, will minimize culvert relocations to lower overall construction costs and the BMP structure will be located in an accessible area for ease of maintenance. The unit will be placed entirely underground. Ground level hatches are opened and the foliage and sediment is vacuumed out of the unit during maintenance. A preliminary ICPR model was run to evaluate peak discharge through the outfall pipe. Model results indicate that the 25 year, 24-hour storm event will produce a discharge rate of 118 cfs through the pipe. The dimensions of the baffle box proposed for this location are 10-foot by 16-foot by 10.5-foot, which be able to handle the 25-yr, 24-hr discharge rate through the 60-inch culvert. In combination with the BMP, the existing outfall pipe will be slip-lined with HDPE, an end-wall treatment will be constructed and downstream erosion control will be provided. The outfall pipe discharges to an open ditch that has severely eroded during past years. The banks of the ditch are very steep and continued erosion causes bank failure. This stormwater BMP project will also include bank excavation to reduce the steep slope, bank stabilization with geo-textile and sodding/landscaping. Landscaping will include upland and wetland native species. A preliminary spreadsheet pollutant load analysis was performed for the downtown drainage basin using EMC values presented in the Watershed Management Plan. TSS loading from the downtown drainage basin is estimated to be 18,749 lb/yr while nutrient loading (nitrogen and phosphorus) is estimated to be 620 lb/yr. The installation of the nutrient separating baffle box will reduce TSS by approximately 80% and the nutrient loading by approximately 60%. A pre-application meeting was held with a SWFWMD permitting engineer and environmental staff on December 12, 2007. SWFWMD staff indicated that the project was feasible and could be permitted through a General Permit based on the presented information.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	252,914	0	252,914
<b>Project Funds Not Budgeted by the District</b>						
City of Haines City	0		250,000	0	0	250,000

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	<b>Projected</b>	<b>Total</b>	<b>\$502,914</b>
<b>Critical Project Milestones</b>		<b>Amended</b>	<b>Actual</b>
<b>1. Contract Development &amp; Execution</b>			
Agreement Sent to Contracts Administration			
Agreement Approved by City Council			
Notice to Proceed			
Contract Executed			
<b>2. Meetings</b>			
<b>3. Preliminary Design</b>			
<b>4. Design and Permitting</b>			
<b>5. Construction</b>			

Status As Of:



**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Winter Haven  
**Project Manager** ANTOINE, TAMMY  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project is consistent with basin priorities in that it will use reclaimed water to offset groundwater. This project has been identified in the City's reuse master plan (L483, funded in FY2006) as a source to offset new demands from traditional groundwater withdrawal. This project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action.

**Description**

This is an alternative water supply project in the Northern reuse service area of that involves the design and construction of approximately 21,600 linear reclaimed water transmission main ranging in diameter from 8 to 12 inches and necessary appurtenances. The project will first connect Baynon Haines City and Lake Smart Estates to the existing 20-inch main on CR544, then continue by connecting Harper, Lakes at Lucern, and the North Lake Lucern developments to the existing 12-inch main located on Lake Lucern Loop, and finally extend the reclaimed water system along Lake Shipp to the Normandy Heights developments. In all, the project area includes 2,019 potential customers. The City anticipates a 75% (1,514 hook-ups) connection rate.

**Benefits**

The project will provide .908 mgd of reclaimed water to 1,514 customers, offsetting 0.45 mgd of traditional groundwater supply.

**Costs**

The total cost of this project is estimated to be \$2,204,000, of which the Peace River Basin is requested to fund 50 percent, or \$1,102,000. Funding in the amount of \$551,000 is requested in FY2009 and it is expected that \$551,000 will be requested in FY2010. The cost-benefit is \$1.17/1,000 gallons, amortized over 30 years at eight percent interest.

**Additional Information**

The effluent from the city's Plant 2 WWTP is identified as the source for the project. Currently, reclaimed water is being used for irrigating golf courses, cemeteries, residential developments and numerous parks. The City requires new development to install the internal reclaimed water distribution mains and dedicate them to the city, so that when reclaimed water mains are extended in the location of these developments, they can be connected to the City. The project is expected to take approximately two years to complete and has been identified as a potential project in the City's reuse mater plan. Of the total project cost of \$2,204,000, approximately 94 percent (\$2,075,000) is expected to be needed for construction, and the remainder (\$129,000) for design and administration. The project offsets are related to WUP #4607.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	554,430	551,000	1,105,430
<b>Project Funds Not Budgeted by the District</b>						
City of Winter Haven	0		0	1,102,000	0	1,102,000
				<b>Total</b>		<b>\$2,207,430</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Execute Agreement	11/30/08		
Begin Design	1/1/09		
Complete Design	6/1/09		
Begin Construction	9/1/09		
Complete Construction	4/1/10		
Contract Closeout	4/1/11		
Offset Report	4/1/12		

**Status As Of:**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Alafia River, Hillsborough River, Peace River  
**Cooperator(s)** City of Lakeland  
**Project Manager** WHITE, BRENT  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project addresses water supply and education priorities of the basin by saving water. There was sufficient information provided to evaluate the project and the cooperator has confirmed it will include the necessary matching funds in its capital budget for FY2009. This project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action.

**Description**

This project offers financial incentives to water customers within the City of Lakeland's service area for replacement of existing high-volume indoor plumbing fixtures including showerheads (replacing those using 4.0 gallons per minute (gpm) or greater with those using 2.5 gpm or less), faucet aerators (3.0 gpm or greater with 2.2 gpm in kitchens and 1.5 gpm in bathrooms) and toilets (3.5 gallons per flush (gpf) or greater with 1.6 gpf or lower). Approximately 84 percent of Lakeland's 46,155 residential accounts were built or improved prior to 1995 (~38,770 homes), making them eligible for plumbing retrofit incentives.

**Benefits**

This project will provide an estimated potable water savings of 187,616 gallons per day (gpd), or approximately 68.4 million gallons per year. The toilet savings is estimated to be 110,968 gpd, the aerators 46,332 gpd and the showerheads 30,316 gpd.

**Costs**

The total cost for this project is \$624,000 with the District 50 percent funding level allocated amongst the Peace River Basin Board (\$218,400), the Hillsborough River Basin Board (\$62,400) and the Alafia River Basin Board (\$31,200). The City of Lakeland's 50 percent share is \$312,000. The cost benefit for the project amortized using a weighted average due to the varying life expectancies of the retrofit devices is \$1.20 per 1,000 gallons saved.

**Additional Information**

In FY2008, the City of Lakeland expects to distribute 4,400 retrofit kits (maximum two per customer) and to retrofit 4,400 single family, multi-family and commercial toilets through an outside contracted consultant. Single family residences will be offered up to two toilet rebates per home while multi-family dwellings, with appropriate representation, will be encouraged to replace all devices at one time. These quantities are planned each year for a term of five years. The City of Lakeland will provide actual billing data, ensure 100 percent fixture inspection, conduct a scientifically significant survey to determine customer satisfaction with low-volume devices and institute an education program designed to assist customers in long-term maintenance related to water savings. The educational portion will provide participants with materials on leak detection and replacement of devices at the end of the life cycle. Marketing for the project will begin February 1, 2009 and the distribution of the kits will begin no later than October 1, 2009. A draft annual distribution report, describing and relating the number of kits distributed, and the demographics of participating customers will be provided to the District by March 2010 and a final distribution report incorporating District comments will be provided in May 2010.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	31,821	0	31,821
013 Hillsborough River Basin	0	0	0	63,021	0	63,021
020 Peace River Basin	0	0	0	219,021	0	219,021
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	0		0	312,000	0	312,000
				<b>Total</b>		<b>\$625,863</b>

Critical Project Milestones	Projected	Amended	Actual
Agreement with SWFWMD	2/1/09		
Begin advertising program	2/1/09		
Program implementation	3/1/09		
Draft distribution report	3/1/10		
Final distribution report	5/1/10		
Draft final report	3/1/11		

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Final report	4/1/11
Final invoice to District	6/1/11
Project closeout	1/31/12

**Status As Of:** March 01, 2008

The FY2009 application for this project has been evaluated by the project manager. The water supply and education priorities, including cost-efficiency, savings and applicability to the Basin's mission were all considered in the initial ranking.

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Charlotte County Utilities  
**Project Manager** WHITE, BRENT  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a high priority. The project addresses water supply and education priorities of the basin by saving water in the SWUCA. There was sufficient information provided to evaluate the project and the cooperator has confirmed it will include the necessary matching funds in its capital budget for FY2009. This project is within the District's statutory authority to fund and is not the result of a permit requirement or enforcement action.

**Description**

This project consists of the replacement of existing plumbing fixtures (Toilets, showerheads and aerators) with water saving fixtures. The project will replace high-volume toilets (pre-1994) with ultra-low volume (ULV's) or high-efficiency toilets (HET's) by offering 770 rebates of \$100 per year to single family, multi-family and commercial customers of Charlotte County Utilities. Single and multi-family customers may replace up to two toilets per dwelling and commercial customers are encouraged to replace all toilets within their facility. The project will also replace up to 1,440 showerheads and aerators. This project will also focus on education HET and ULV users on the proper maintenance necessary to ensure that each toilet remains a water-conserving fixture over a 20-year life expectancy by focusing on leak detection and proper flapper management.

**Benefits**

It is anticipated that the replaced toilets, once all 770 are rebated, will save approximately 16,282 gallons per day. The showerheads are expected to save an estimated 8,319 gallons per day and the aerators are anticipated to save 12,714 gallons per day. The total project savings is projected to be 37,315 gallons per day, or 13,619,997 gallons per year.

**Costs**

The total project cost is \$114,020, with the Peace River Basin Board and Charlotte County Utilities each funding a 50 percent share, or \$57,010. The cost amortized at 8 percent over 20 years, is \$1.13 per thousand gallons saved (calculated using a weighted average based on the total benefit for the life of the project).

**Additional Information**

One year of account-level metered water-use data prior to and one year of metered water use after the retrofit installation will be collected as the raw data for the final savings analysis. Charlotte County Utilities will provide actual billing data and ensure 100 percent fixture inspection through the contractor who is doing the collection. This project will also institute an educational program designed to assist customers in long-term maintenance related to water savings, such as selecting parts for repairs, leak detection and choosing proper replacement flapper models for their HET or ULV toilets. This effort will ensure the retrofit fixture will remain a water-conserving fixture of its life-expectancy. Bi-monthly status reports will be provided to the District to update project accomplishments.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	58,823	0	58,823
<b>Project Funds Not Budgeted by the District</b>						
Charlotte County Utilities	0		0	57,010	0	57,010
				<b>Total</b>		<b>\$115,833</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Design advertising program	7/1/08		
Outline education program	8/1/08		
Program Implementation	2/28/09		
Execute Agreement with SWFWMD	2/28/09		
Draft Distribution Report	2/28/10		
Final Distribution Report	4/30/10		
Draft Final Report	2/28/11		
Final Reports	4/30/11		
Final Invoice to District	6/1/11		
Contract closeout	1/1/12		

**Status As Of:** March 01, 2008

The FY2009 application for this project has been evaluated by the project manager. The water supply and education priorities, including cost-efficiency, savings and applicability to the Basin's mission were all considered in the initial ranking.



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Preliminary Design and Permitting  
Construction

Status As Of:



**Project Type** Cooperative Funding  
**AOR(s)** Water Quality  
**Basin(s)** Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota  
**Cooperator(s)** University of Florida  
**Project Manager** SMITH, RANDY  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as medium priority. This is a research project designed to provide scientific data on the fertilizer needs of common landscape plants. The data collected will be used to develop more accurate fertilizer recommendations and validate existing and proposed landscape fertilizer BMPs. District staff is working with IFAS to evaluate revisions to the scope of work, therefore, the ranking may change.

**Description**

The objective of this project is to verify the accuracy of the Florida Yards and Neighborhoods (FYN) and Florida Green Industries best management practices (BMPs) fertilizer recommendations across a wide range of common landscape plants. Plant growth, biomass allocation, shoot nutrient status, foliar characteristics and aesthetic quality will be evaluated. Plants will be irrigated uniformly as needed according to IFAS recommendations. Irrigation amounts will be recorded and will allow for water-use efficiency to be calculated when combined with plant biomass measurements. The interaction between fertilizer rates and water-use efficiency of plants will offer insight into the effect of fertility recommendations on landscape water consumption. Soil nutrient status will also be monitored over the evaluation period. Non-point nutrient losses in stormwater runoff and leachate from urban landscapes have been implicated in the degradation of water quality in Florida. Information on the nutrient requirements of plant material in a landscape setting is very limited, most of which pertains only to trees and shrubs. Therefore, there is a critical need to develop more accurate fertilizer recommendations and validate existing and proposed landscape fertilizer BMPs to quantify their impact on water consumption and quality. In order to make reasonable fertilizer recommendations, it is necessary to have information about the nutritional requirements of the most demanding components of the landscape. Additionally, knowledge of the nutrient requirements allows plants to be zoned based on their fertilizer requirements, similar to the zoning recommendations for water requirements promoted by FYN (right plant/right place). This zoning will result in a more targeted and efficient approach to fertilizer application and reduce nutrient losses to the environment.

**Benefits**

This project represents a significant step to develop and implement accurate, science-based fertilizer BMPs for urban (residential and commercial) landscapes. This study aims to improve the quality of stormwater that leaves an urban landscape by influencing the amount of fertilizer that is applied to these landscapes. The results of the project will be applicable to ornamental plants grown in residential and commercial landscapes basin-wide. This research will provide scientific data on the fertilizer needs of landscape plants and will improve the accuracy, credibility and long-term viability of statewide BMP programs, such as the Florida Yards and Neighborhoods (FYN) program.

**Costs**

The total budget request for the first phase of the project in FY2009 is \$79,400, with the University of Florida - IFAS contributing \$39,700 worth of in kind services and \$39,700 to be funded by the District. Additional funds are anticipated to be requested in FY2010. The requested FY2009 District funding amount includes staff salaries, travel and central garage charges.

**Additional Information**

The University of Florida - IFAS is committed to the development of science-based water conservation and flood protection ordinances and state-of-the art best management practices. The research activities of the faculty help to provide the important scientific data to make these ordinances and BMPs possible. In addition, Extension activities of faculty at the University of Florida - IFAS help to ensure that these science-based ordinances and BMPs are implemented.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	8,174	0	8,174
013 Hillsborough River Basin	0	0	0	4,963	0	4,963
014 Northwest Hillsborough Basin	0	0	0	4,962	0	4,962
015 Coastal Rivers Basin	0	0	0	4,963	0	4,963
016 Pinellas-Anclote River Basin	0	0	0	4,963	0	4,963
019 Withlacoochee River Basin	0	0	0	4,962	0	4,962
020 Peace River Basin	0	0	0	4,962	0	4,962
021 Manasota Basin	0	0	0	4,962	0	4,962

**N013**  
**Development of Landscape Fertilizer BMPs for Long-Term Urban Sustainability**



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**Project Funds Not Budgeted by the District**

University of Florida - IFAS	0	0	39,700	0	39,700
			<b>Total</b>		<b>\$82,611</b>

**Status As Of:**

**Project Type** Cooperative Funding  
**AOR(s)** Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** City of Lakeland  
**Project Manager** KINSMAN, GRANVILLE  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund the engineering design as a medium priority in FY2009. Full-scale project construction and implementation in FY2010 and 2011 will require a significant investment.

**Description**

The City of Lakeland proposes to construct a Supervisory Control And Data Acquisition (SCADA) system to monitor and remotely operate waterway control structures for management of lake levels and to collect environmental data on 18 lakes within City limits and in areas planned for annexation. Currently, staff manually controls all water levels in City-domain lakes by observing levels, comparing levels to fluctuation schedules and operating water level control structures. Existing gate structures are either bottom-opening or open pipe systems that present significant deficiencies in both control and accuracy of data acquisition.

**Benefits**

This proposed real-time SCADA system will monitor lake levels and/or operate structures on Lakes Hunter, Wire, Beulah, Bonny, Morton, Hollingsworth, Bentley, Gibson, Parker, Crago, John, Somerset, Horny, Mirror, Meadowview, Holloway, Deeson, and Crystal. Many of these "Ridge Lakes" have a significant impact on the Peace River and Hillborough River watersheds in terms of both wet and dry weather contributions. The goal of this project is to develop a system that represents the most compatible technology to support not only the needs of the City's Public Works Department, but other entities with a vested interest in real-time surface water flow and environmental data.

**Costs**

In FY2007, the City of Lakeland fully-funded and completed a \$50,000 feasibility study to determine infrastructure needs and calculate costs to install such a system. The City's consultants coordinated with the SWFWMD Operations Department and internal City of Lakeland departments that are currently employing telemetry networks toward developing a comprehensive system. The feasibility study estimated the cost to retrofit 11 control structures with real-time, PC-based monitoring and control systems to be \$1,306,800. The request for FY09 funding would extend this effort to help fund engineering design of the automation system. This funding request represents engineering and design of the system, with phased construction to begin with the FY2010 funding cycle.

**Additional Information**

The City of Lakeland's efforts to enforce the water restrictions include using City law enforcement officers to issue citations for violators. The City continues to participate in the National Flood Insurance Program (NFIP) administered through the Federal Emergency Management Agency (FEMA). The City's Community Rating System (CRS) was recently reviewed and evaluated by FEMA in 2003. The City provides for flood protection including restricting development in the 100-year flood plain, reviewing site plans before development, developing or revising flood protection ordinances and Land Development Regulations (LDRs), and identifying capital improvement projects (CIP) designed specifically for reducing flooding. All development is required to submit site plans to receive building and site alteration permits before site development. Approved site plans must comply with City ordinances and LDRs. The City passed the Stormwater Utility in 2000 to provide a dedicated funding source for addressing flooding and water quality needs. The following are the most recent Capital Improvement Projects (CIPs): The Anchor Park Treatment Wetland Project consists of a 2.5-acre treatment wetland that provides treatment to a 66-acre sub-basin on the northwest side of Lake Hollingsworth. The North Lakeland Regional Stormwater Master Plan will abate flooding conditions for single-family and commercial properties within the project boundary of North I-4, East to Lakeland Hills Boulevard, South of Griffin Road and West to US 98. The Buckingham Ditch Wetland Enhancement and Flood Control Project re-established wetland habitat and flood control for Buckingham Avenue and adjacent single-family residents. The Lake Mirror Water Quality and Flood Control Project included components to correct downtown flooding and provide for the treatment of stormwater runoff.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	50,000	0	50,000
<b>Project Funds Not Budgeted by the District</b>						
City of Lakeland	0		0	50,000	603,400	653,400
				<b>Total</b>		<b>\$703,400</b>

Critical Project Milestones	Projected	Amended	Actual
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Engineering Design Complete

9/30/10

Status As Of:





**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River, Manasota  
**Cooperator(s)** Peace River/Manasota Regional Water Supply Auth.  
**Project Manager** MORRIS, LISANN  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a medium priority. This has the potential to be an outstanding project, developing regional alternative water supply in the SWUCA, while providing environmental benefits to areas impacted by system alterations. As submitted, no specific project is available to review in a detailed manner. If a specific configuration of source(s) can be agreed to before finalization of the FY2009 budget, opportunities exist to raise the ranking much higher.

**Description**

The Regional Resource Development Phase I project will develop up to 20 mgd in average daily capacity from alternative/conjunctive drinking water supplies identified in the Authority's Source Water Feasibility Study (Project H063) by 2014. The new capacity is needed to meet growing regional needs. The Phase I project will include capacity development in one or more of the following source areas: Flatford Swamp/Upper Myakka system, Dona Bay - Cow Pen Slough system, Shell-Prairie Creek System. The Phase I source configuration will be determined by the Authority Board in late 2008, so no specific project is available to review at this time.

**Benefits**

The Regional Resource Development program will focus on the objectives listed below: Maximize surface water for public supply which in turn limits development pressure on groundwater in the SWUCA; Provide rotational and reserve capacity enabling improved resource management opportunities such as source resting; Participate in conjunctive projects that improve resource conditions while yielding economical water supply; Optimize the regional financial investment in water supply and transmission capacity;

**Costs**

Funding for FY2009 is scheduled for preliminary design along with some final design activities when the configuration is set at a cost of \$10,000,000. District funding of \$5 million would be distributed as follows: Manasota Basin Board, \$3,650,000 and Peace River Basin Board, \$1,350,000. Total project cost of developing all three sources has a conceptual estimate of \$514,000,000.

**Additional Information**

The Peace River/Manasota Regional Water Supply Authority (Authority) is comprised of Charlotte, DeSoto, Manatee and Sarasota Counties. In accordance with its Master Water Supply Contract, the Authority is obligated to timely develop and deliver new water supply sources and facilities to meet the needs of its customers. The Authority's Integrated Master Water Supply Master Plan (December 2006 draft) identified a need of up to 51.4 mgd of additional supply development to reliably meet member demands by 2025, and also evaluated six potential supply sources to meet future needs. The Source Water Feasibility study, initiated in July 2007 focus' on the three sources identified above as the highest potential future sources for the region. Development of new sources identified above will be conducted in phases during the next 20 years to meet growing demands and critical system reliability requirements.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	1,350,229	68,040,000	69,390,229
021 Manasota Basin	0	0	0	3,650,584	183,960,000	187,610,584
<b>Project Funds Not Budgeted by the District</b>						
PR\MRWSA	0		0	5,000,000	141,750,000	146,750,000
				<b>Total</b>		<b>\$403,750,813</b>

Status As Of:



**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Flood Protection, Water Quality, Natural Systems  
**Basin(s)** Peace River  
**Cooperator(s)** Polk County  
**Project Manager** TURNER, DAWN  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a medium priority. This project is implementation of BMPs. The BMPs will protect, enhance, and restore water quality and natural systems, while achieving flood protection. A senior administrator has provided confirmation that the County will budget the project for FY2009 funding. Implementation of BMPs includes design, development of construction documents, construction permitting, land acquisition, bidding and contractor selection, construction of the BMPs and construction engineering and inspection. Future funding may be required to complete construction of the BMPs.

**Description**

This is one of the original multi-year funded watershed projects as the District was developing their current guidelines and specifications for the Watershed Management Program. A Watershed Management Plan was developed for the Saddle Creek Basin. After reviewing the BMPs proposed in the plan, it was determined that we would concentrate on the maintenance activities proposed due to the cost to benefit evaluation of the flood protection projects. Over the past few years the County has performed maintenance activities throughout the basin but we have concentrated on looking at the bank stabilization along the Lake Parker Outfall that goes from Lake Parker to Saddle Creek Park. Phase I looked at the most downstream section of the outfall where severe erosion was occurring along portions of the outfall that the County did not have any easements over. The County obtained easements and developed a plan for providing bank stabilization through this portion of the outfall and constructed this project in 2006. Since that time the County has been designing and permitting a second phase to the Lake Parker Outfall project using the balance of the funding left for this project. The County anticipates the design and permitting of Phase II to be completed in FY2008. The County is requesting FY2009 funding to construct Phase II of the Lake Parker Outfall Bank Stabilization and Flood Protection project.

**Benefits**

The project includes construction of BMPs in the Lake Parker Outfall system to maintain conveyance capacity and reduce erosion of the sidebanks, undercutting of the channel bottom, and the transport of sediments.

**Costs**

The projected cost for this project is \$540,000. The District's share is \$270,000, and the County's is \$270,000. FY2008 funding will be used for the construction of BMPs in the Lake Parker outfall system. When each task is completed the project budget will be refined based on the information developed.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	272,672	0	272,672
<b>Project Funds Not Budgeted by the District</b>						
Polk County Natural Resources	0		0	270,000	0	270,000
				<b>Total</b>		<b>\$542,672</b>

Critical Project Milestones	Projected	Amended	Actual
Design and Permitting Complete			
Start Construction			
Complete Construction			

**Status As Of:**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Alafia River, Hillsborough River, Peace River  
**Cooperator(s)** Polk County Natural Resources  
**Project Manager** MUSICARO, MELISSA  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a low priority. The District and Polk County entered into an agreement for a project (H072) that will produce a water supply plan for the entire County, which will identify conservation options and include a strategy to ensure county-wide conservation efforts are effective. District staff would consider this current FY2009 retrofit project a viable project for the future, if in the water supply plan the County addresses implementation and evaluation issues. As proposed, Polk County would distribute water conserving plumbing devices throughout the County, including in municipalities within the County. At the same time, Lakeland and Winter Haven have proposed their own plumbing retrofit programs for FY2009. It is yet unclear how the County plans to incorporate the municipalities' ongoing and proposed programs into this proposed project, and coordinate with all municipalities within the County. It is recommended the County further evaluate this project as part of the ongoing, county-wide water supply planning effort. The project addresses water supply priorities of the basin board by saving potable water supplies. The cooperator has confirmed it will include the necessary matching funds in its capital budget in FY2009. There was sufficient data submitted to evaluate the project, it is within the basin board's statutory authority to fund, and it is not the result of a permit requirement or enforcement action.

**Description**

The Polk County Natural Resources is proposing a pilot project aimed to reduce water usage in the home by replacing high-flow plumbing fixtures with low-flow water conserving fixtures in approximately 10,200 homes. This plumbing fixture retrofit project will operate as an exchange program open to all Polk County residents. The residents will bring their existing non-conserving showerheads, aerators, and/or broken garden hose sprayers and in return be provided with the replacement water efficient fixture. All fixtures distributed will have on/off shut off valves/controls - low-flow showerheads, kitchen swivel sprayer, bathroom/kitchen aerator, and garden hose sprayer. Educational material on indoor/outdoor water conservation will be distributed to each recipient and an exchange form will be completed identifying the water provider. This project will be managed by the County water conservation coordinator.

**Benefits**

The estimated water savings is 408,000 gallons per day.

**Costs**

The total project cost is estimated to be \$61,200 and the Alafia River, Hillsborough River and Peace River Basin Boards are requested to fund \$10,200 each in FY2009. The cost benefit of the proposed project, based on the total cost amortized at 8% interest over 5 years, is \$.10 per thousand gallons saved.

**Additional Information**

As proposed, Polk County would distribute water conserving plumbing devices throughout the county, including in municipalities within the county. At the same time, Lakeland and Winter Haven have proposed their own plumbing retrofit programs for FY2009. It is yet unclear how the county plans to incorporate the municipalities' ongoing and proposed programs into this proposed project, and coordinate with all municipalities within the county. It is recommended the county further evaluate this project as part of the ongoing, county-wide water supply planning effort.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	3,366	0	3,366
013 Hillsborough River Basin	0	0	0	4,590	0	4,590
020 Peace River Basin	0	0	0	22,644	0	22,644
<b>Project Funds Not Budgeted by the District</b>						
Polk County Natural Resources	0		0	30,600	0	30,600
				<b>Total</b>		<b>\$61,200</b>

Critical Project Milestones	Projected	Amended	Actual
Advertise Program			
Implement Project			
Purchase fixtures			

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Project completion

Status As Of:

**Conservation: Everyone's Business - Polk County**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Alafia River, Hillsborough River, Peace River  
**Cooperator(s)** Polk County Natural Resources  
**Project Manager** ROE, MELISSA  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a low priority. The District and Polk County entered into an agreement for a project that will produce a water supply plan for the entire County. The plan will identify conservation options and include a strategy to ensure that county-wide conservation efforts are effective. This project was submitted to Polk County to determine whether it would be identified in the water supply plan as an effective option for the county in terms of potential water conserved. It was not. While the project goal of reducing water use through education is a good one and there are innovative aspects to this project, the cooperator needs to prove the effectiveness of this project in terms of potential water conserved and reduce costs. Staff has requested that the businesses be chosen prior to asking staff to consider the project and an potential water savings be quantified. That way evaluation could be based on actual water usage and thus on concrete savings potential. By taking these steps first, project costs associated with recruiting the businesses would also be reduced, improving the cost/benefit ratio. The cooperator has met minimum requirements: by addressing water supply priorities of the basin board by saving potable water supplies, by confirming it will include the necessary matching funds in its capital budget in FY2009, by submitting sufficient data to evaluate the project, and by ensuring the project is within the basin board's statutory authority to fund and is not the result of a permit requirement or enforcement action.

**Description**

This pilot project is designed to reduce water usage indoors and outdoors with major office-based employers and their employees. The goal is to demonstrate how making management changes can result in substantial water (and cost) savings. The cooperator proposes to competitively recruit up to 5 businesses with at least 100 employees each. These 5 businesses must meet specific criteria including willingness to make changes in their water use habits, to document water saving results and to allow a simultaneous conservation outreach program for their employees. The participants must also be served by a public utility. A water conservation plan will then be developed for each business. Water usage will be tracked prior to and following recommended changes. By communicating the results through media and direct means, the cooperator proposes to help educate those who are not directly involved in this pilot demonstration project by publicizing results through news releases. The cooperator plans to seek donated prizes to offer additional incentives. A similar program in Broward County resulted in a single business saving five million gallons annually.

**Benefits**

The proposed benefit of the project to the District is a reduction in water use as a result of direct education to the 5 businesses and their employees. The program also proposes to communicate these savings to the citizens within Polk County via news releases. Water use of the participating businesses and employees will be compared before and after taking part in the project.

**Costs**

The total cost of this FY2009 project is proposed to be \$75,000, shared among the following basins: Alafia River (\$8,597), Hillsborough River (\$11,087), and Peace River (\$55,316). These costs are divided based on population. The project will attempt to reach five businesses with a total of 100 employees each through direct education and communicate successes to the community through media. The cost per business is \$15,000. The cost per person for the 500 employees is \$150. Cooperator also hopes to reach 116,200 through local media via news releases.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	9,338	0	9,338
013 Hillsborough River Basin	0	0	0	11,828	0	11,828
020 Peace River Basin	0	0	0	57,538	0	57,538
<b>Project Funds Not Budgeted by the District</b>						
Polk County	0		0	75,000	0	75,000
				<b>Total</b>		<b>\$153,704</b>

**Status As Of:**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply  
**Basin(s)** Peace River  
**Cooperator(s)** Auburndale  
**Project Manager** ANDRADE, ANTHONY  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a low priority. The project is premature as the City has not completed their reclaimed water expansion planning. District staff recommends the cooperator complete the other FY2009 requested reclaimed water master plan (project N001) prior to the pursuit of a reclaimed water supply project. There was adequate information available to fully evaluate the project. The applicant is requesting funding of a one year, local in nature project in the SWUCA. The applicant ranked this project second on their list of two FY2009 District funding requests. This project includes the construction of infrastructure that would make an alternative water supply available to water users, and is thus potentially eligible for state funding through the Water Protection Sustainability Program.

**Description**

This alternative water supply project consists of the design and construction of reclaimed water distribution piping to Lake Myrtle Park in Auburndale. The project includes approximately 9,000 linear feet of 12-inch diameter reclaimed water lines to provide an initial 83,000 gpd of reclaimed water for the irrigation of City-owned softball and soccer fields to offset an initial 62,000 gpd. These fields will host national college tournaments and represent an excellent opportunity to showcase the District's reuse efforts.

**Benefits**

The project will provide an initial 83,000 gpd of reclaimed water for the irrigation of City-owned softball and soccer fields to offset an initial 62,000 gpd.

**Costs**

The project cost is \$1,000,000, of which 50 percent, or \$500,000, is requested from the Peace River Basin in their FY2009 budget for this fast-tracked project. The cost, amortized at 8% over 30 years is \$3.89 per 1,000 gallons offset.

**Additional Information**

At build-out the City anticipates developing and serving almost 200 acres of park land and sports fields with 0.55 mgd of reclaimed water to offset a potential 0.41 mgd; however the offsets above and the cost/1000 gallon offset below only include the initial offsets from the 22 acres of existing and under-construction softball and soccer fields. The City of Auburndale has adopted ordinances that mandate the use of low-volume toilets and low flow shower heads and faucets in all construction requiring a building permit. The City also has a school based education program and inclining rate structure to encourage water conservation. The City has adopted ordinances and regulations to regulate and restrict uses in zoning districts designated as Flood Hazard Districts. These regulations are intended to protect and preserve natural open spaces, park lands, swamp lands, water sheds, recharge areas, and lakes and their canals. To those ends, permitted and permissible uses are basically limited to conservation agriculture, low intensity recreation, and, with certain limitations, uses otherwise not contrary to the character of these districts.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
020 Peace River Basin	0	0	0	500,000	0	500,000
<b>Project Funds Not Budgeted by the District</b>						
Auburndale	0		0	500,000	0	500,000
				<b>Total</b>		<b>\$1,000,000</b>

Status As Of:

**Mulberry Reclaimed Water Interconnect**

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** Alafia River, Peace River  
**Cooperator(s)** Mulberry  
**Project Manager** ANDRADE, ANTHONY  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

Fund as a low priority. The project is premature. The applicant is requesting funding of a one-year project of which the majority of the required planning and supply permits/agreements have not been completed. The project addresses water supply by transferring the city's reclaimed water to Polk County, however the city and county have not negotiated a service agreement. The District and County entered into an agreement for a project (H072) to develop a water supply plan for the county, including reclaimed water options; therefore, District staff recommend the cooperator coordinate with the County during the water supply planning effort to identify the most effective options for maximizing reclaimed water. There was not adequate information available to fully evaluate the project. The applicant ranked this project on the top of their FY2009 District funding request; however it also indicated the recent Legislative taxing issue may affect city budgets. The project is located in the SWUCA, and due to the interconnect is potentially regional in scale. This project includes the construction of infrastructure that would make an alternative water supply available to water users, and is thus potentially eligible for state funding through the Water Protection Sustainability Program.

**Description**

The project as envisioned by the City of Mulberry would entail a combined effort between the City and Polk County to include the design and construction of a reclaimed water interconnect between Mulberry and Polk County's reclaimed water system and a pump station at the Mulberry WWTP.

**Benefits**

The conceptual project would provide a minimum of 75,000 gpd of reclaimed water to Polk County immediately upon completion of the project, with more to be available as agreed upon between the City of Mulberry and the County. The 75,000 gpd of initial flows would offset an estimated 45,000 gpd of undetermined groundwater flows (assuming a 60% offset efficiency). Future reclaimed water customers along the transmission main are envisioned by the the City of Mulberry as it develops. The benefits would occur in both the Alafia River and Peace River basins.

**Costs**

The total cost of this project is estimated to be \$1,600,000 and the District's share is requested to be 50 percent or \$800,000,000. The Alafia River Basin Board is requested to fund \$400,000 in FY2009, and the Peace River Basin Board is requested to fund \$400,000 in FY2009. The cost amortized at 8 percent over 30 years is \$8.57/1000 gallons offset.

**Additional Information**

Polk County (a required project participant) has not completed their reclaimed water planning, nor have they indicated their willingness to participate with Mulberry in the project.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	400,000	0	400,000
020 Peace River Basin	0	0	0	400,000	0	400,000
<b>Project Funds Not Budgeted by the District</b>						
mulberry	0		0	800,000	0	800,000
				<b>Total</b>		<b>\$1,600,000</b>

**Status As Of:**





<b>Project Type</b>	Cooperative Funding
<b>AOR(s)</b>	Water Supply, Water Quality
<b>Basin(s)</b>	Alafia River, Peace River
<b>Cooperator(s)</b>	Water Partners, Inc.
<b>Project Manager</b>	RAMOY, ALISON
<b>Task Manager(s)</b>	
<b>Status</b>	Proposed Coop. Funding Application

#### Recommendation

No staff ranking is provided at this time as too many questions remain in regard to the applicant's ability (WPI) to meet the statutory public interest test and the many unanswered questions on project elements and resource benefits. At this time, only funding for Phase 1 is being considered. In addition, the project will not offset existing or future groundwater or potable alternative sources. Because of this, the typical cost/benefit evaluation staff uses as a ranking guideline is not appropriate. Several details about this multi-partner, multi-component project are still being developed, including verification of estimated component costs which are being compared for consistency to similar projects that have been recently completed or approved under the cooperative funding program. Information on supply and user agreements, including twenty-year user agreements between the reclaimed water suppliers and customers are also pending. As it currently stands, the project provides reclaimed water flows from a county WWTP, located in the Alafia Basin to a single user which is located in the Peace River Basin. This does not elevate it to a regional project which might qualify for Governing Board funding. Benefits to the Peace Basin are limited as they do not fund projects benefitting Tampa Bay water quality, and also limited to the Alafia Basin as there is no offset of water as a result of this project. Staff will continue to evaluate requested technical and other information, including agreements with Tampa and end users that are being negotiated. A final staff recommendation will be made once all information is received.

#### Description

This alternative water supply project is proposed to maximize the beneficial use of reclaimed water flows that are not currently being beneficially used by Hillsborough County (county) and the City of Tampa (city). The project is unique in that it was submitted by Water Partners, Inc (WPI), a not-for-profit entity, with involvement from the county, Tampa Electric Company (TECO) and Mosaic Fertilizer. The project will be implemented in several phases and therefore staff has broken it down into phases. The first phase requesting District funding involves design, permitting and construction of pumping facilities, transmission pipelines and improvements to a Mosaic impoundment to be used for storage, to transport reclaimed water from the county's Valrico WWTP, located in east/central Hillsborough County (Alafia River Basin) to TECO's southeast power plant, located in southwest Polk County, (Peace River Basin) for storage. This phase (Phase 1), utilizing intermittent flows (0 to 12 mgd) from the Valrico WWTP and utilizing storage at the Mosaic impoundment will provide an annual average reuse quantity of 6 mgd to TECO to meet 2012 total water demands of 8 mgd associated with their projected power generation expansion. The 6 mgd of reclaimed water, along with 2 mgd of groundwater TECO currently is not using under their existing permit (WUP# 11747), is for new power generation. No offset of existing or future groundwater will occur as a result of this project phase. A second phase (Phase 2) also proposes to provide TECO with reclaimed water to meet additional power generation expansion at both the Bayside (3 mgd demand) and southwest Polk (another 8 mgd demand - 6 mgd from reclaimed water) plants, planned for 2015. The source of needed freshwater for the 2015 expansion is not known at this time. The source of reclaimed water for this second expansion is the City of Tampa's Howard F. Curren WWTP (HFCWWTP) since the county does not anticipate it can provide anymore flows, beyond what is identified in Phase 1. Phase 2, requires infrastructure improvements at Tampa's HFCWWTP, construction of a transmission pipeline from the plant under McKay Bay and east through the Port Sutton area of Hillsborough County, where TECO Bayside is located. An additional transmission pipeline is proposed that would connect the city pipeline to the Phase 1 pipeline. The applicant (WPI) would have to reach contractual agreements with the city to implement this phase. Also, pipe capacities of Phase 1 are being oversized in anticipation of Phase 2 flows. A third related phase of the project is WPI's request to investigate bringing reclaimed water from the city and/or county to Mosaic's Hopewell Mine with the concept to recharge the aquifer. While that project proposes to utilize the sources and network of transmission pipelines associated with Phases 1 and 2, it is not critical to TECO's needs and therefore has been broken out into a separate project. See Project Number N127 for details and staff recommendation. At this time no reclaimed water is proposed for use by Mosaic. The applicant seeks to have the District fund 50% of eligible project costs with matching funds derived from investors. As proposed, Hillsborough County is not currently contributing to the cost of the above mentioned project phases.

#### Benefits

The project provides TECO with approximately 12-15 mgd of reclaimed water for future power generation expansion. It does not offset existing or available future groundwater. The utilization of reclaimed water from the county and the city would eliminate current equivalent discharges to Tampa Bay, which would result in a reduction of nitrogen. However, both the county's and city's wastewater discharges are currently constrained by quantity and quality parameters in discharge permits issued by the FDEP. The county has several discharge permits and the city has one. Permits are currently capped and with Total Maximum Daily Load (TMDL) implementation, neither entity, as with other National Pollutant Discharge Elimination System (NPDES) permits, can expect an increase in permitted discharge amount and may be required to reduce discharges. The county is currently near its permitted maximums from its South/Central facilities and by providing this quantity of reclaimed water, it will

free up capacity under the discharge permit(s), capacity that is expected to be replaced in the future by new growth, unless future reuse projects are implemented. Typically, reclaimed water projects' benefits are determined by the amount of groundwater or potable water they offset, or will offset.

**Costs**

The total project cost \$166,800,000, and the District is being asked to fund \$83,400,000. Funding requested in FY2009 is for the first portion of construction of the Valrico WWTP to the TECO Polk County Power Station and the design of the Falkenburg WWTP to Valrico WWTP reclaimed water jumper pipe. The total cost for FY2009 is \$32,900,000, and the District is requested to fund \$16,450,000. The Alafia River Basin Board is requested to fund \$8,225,000 and the Peace River Basin Board is requested to fund \$8,225,000. Since there is no offset associated with the project, a cost/benefit cannot be determined.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
011 Alafia River Basin	0	0	0	8,227,331	33,475,000	41,702,331
020 Peace River Basin	0	0	0	8,227,331	33,475,000	41,702,331
<b>Project Funds Not Budgeted by the District</b>						
Water Partners, Inc.	0		0	16,450,000	66,950,000	83,400,000
				<b>Total</b>		<b>\$166,804,662</b>

Critical Project Milestones	Projected	Amended	Actual
Contract Execution	10/1/08		
Commence Design	10/1/08		
Commence Construction	1/1/09		
Signage Erected	1/1/09		
Complete Construction	9/30/14		
Project Closeout	12/31/15		

Status As Of:

**Project Type** Cooperative Funding  
**AOR(s)** Water Supply, Water Quality  
**Basin(s)** General Fund (District), Alafia River, Peace River, Manasota  
**Cooperator(s)** Water Partners, Inc.  
**Project Manager** RAMOY, ALISON  
**Task Manager(s)**  
**Status** Proposed Coop. Funding Application

**Recommendation**

No recommendation is available at this time as staff continues to seek additional information on the project and related benefits from the applicant (WPI). A request for a detailed description of the demonstration project has been made. Included in the staff's concerns is whether this project will duplicate two ongoing similar projects (CF Industries and Progress Energy) currently being funded by the District. Among the information requested is a description of what the study will entail, and what kinds of benefits are anticipated by which entities. A staff recommendation will be provided once all necessary information has been received.

**Description**

The project was proposed as part of a larger reclaimed water project (N093). However, the projects are independent of each other and the outcome of one does not affect the other. This project will first study the ability to use Mosaic's Hopewell Reservoir and the old Sydney mine near the Valrico WWTP for groundwater recharge. If the study's outcome in FY2010 is positive, design would commence in FY2012.

**Benefits**

The potential project benefit is recharge to the upper Floridan aquifer of the SWUCA in the vicinity of Mosaic's Hopewell Mine in eastern Hillsborough County. The permitability of the project has yet to be determined. Also, the quantity of recharge has not been quantified and therefore a benefit cannot be determined until the completion of the demonstration project. In addition to questions on recharge quantities, no plan or proposal has been submitted in regard to utilization of recharge quantities. The current SWUCA rule does not address this type of project.

**Costs**

The total project cost is \$20,000,000. The District's share is requested to be \$10,000,000. In FY2009, District is requested to fund \$250,000 towards a demonstration project. The potential benefit would be aquifer recharge to the SWUCA. Based on the location of potential project benefits, the Alafia River and Manasota Basin Boards are each requested to fund \$31,250, the Peace River Basin Board is requested to fund \$62,500, and the Governing Board is requested to fund \$125,000. The remainder of the funds are anticipated to be requested in future fiscal years based on a successful demonstration project. Due to the uncertainty of the outcome of the study a cost/benefit cannot be determined at this time.

**Additional Information**

It has not yet been determined if there are any special permitting requirements for this project, which may affect the cost and project schedule. The District is currently funding two similar projects (F027 and H062), in that they also are studying recharge potential on previously mined phosphate lands.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	0	125,000	4,875,000	5,000,000
011 Alafia River Basin	0	0	0	31,250	1,218,750	1,250,000
020 Peace River Basin	0	0	0	62,500	2,437,500	2,500,000
021 Manasota Basin	0	0	0	31,250	1,218,750	1,250,000
<b>Project Funds Not Budgeted by the District</b>						
Water Partners, Inc.	0		0	250,000	9,750,000	10,000,000
				<b>Total</b>		<b>\$20,000,000</b>

**Critical Project Milestones**

	Projected	Amended	Actual
Execute Agreement	10/1/08		
Begin Demonstration/Study	10/1/08		
Complete Demonstration/Study	9/30/10		
Begin Hopewell and WISE Design	10/1/11		
Begin Hopewell and WISE Construction	10/1/12		
Complete Project	9/30/14		

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Status As Of:

<b>Project Type</b>	FEMA/Map Mod.
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	Bowling Green, Federal Emergency Management Agency, Hardee County, Zolfo Springs, Wauchula
<b>Project Manager</b>	LETASI, SCOTT
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project is to perform map modernization which includes 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the Hardee County Watershed. The watershed covers an area of approximately 637 square miles and is located in Hardee County. The watershed faces flood damage and water quality issues. With FY2005 funding the work on the Map Modernization will begin and County-wide Digital Flood Insurance Rate Maps will be produced. In addition to the DFIRM production, this project will also include five Watershed Management Plans (WMPs). WMPs will be performed in the these priority watersheds: Alligator Branch, Buzzards Roost Run, City of Wauchula, Upper Horse Creek, and Thompson Branch.

**Benefits**

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management through the Total Maximum Daily Loads (TMDL) process for their National Pollution Discharge Elimination System (NPDES) permit requirements.

**Costs**

The total budget amount for this project is \$737,000. FEMA will contribute \$737,000. With FY2005 funding the work on the Map Modernization will begin. When each element is completed the project budget will be refined based on the information gathered. Future funding will be required for the Watershed Evaluation of other watersheds to complete the survey, watershed modeling development, floodplain analysis, LOS, surface water resource assessment, and alternate analysis of BMPs. An additional \$75,000 is being requested in FY2009 to perform public meetings for completed Watershed Management Plans. The District's FY2009 funding will be used for public meetings and staff salary.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies. The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Hardee County. Information developed with this project will be used to update the FIRMs representing this watershed. Staff has worked with the Federal Emergency Management Agency (FEMA) to improve and formalize the District's relationship with a federal agency that shares flood protection responsibilities. FEMA and the District executed a Cooperating Technical Partners (CTP) Memorandum of Agreement on September 14, 2001. As a CTP, the District is eligible for federal grants and matching funds to further efforts to modernize the flood insurance rate maps (FIRMs). Funds will be used to perform elements of the District's Watershed Management Program (WMP) within Hardee county. The District will execute a Mapping Activity Statement with FEMA that identifies costs, responsibilities, and specific activities to complete the FEMA Map Modernization effort for watersheds in Hardee county. The District will coordinate with the local government(s), will manage the project, and will enter into purchase orders and agreements to accomplish project tasks. With FEMA funding several tasks of the Watershed Evaluation and Watershed Management Plan elements for priority watersheds within Hardee county will be accomplished. Watersheds will be prioritized based on the needs of the local governments and the District. Because of funding constraints some watersheds will not be studied in detail. The risk information from the current FIRMs will be transferred to the modernized, digital maps. These watersheds will be studied in detail when additional funding is available through the cooperative funding process. Work on the Watershed Management Plan element for the priority watersheds will include the following tasks: survey, data management and development of watershed parameters, GIS processing, computer modeling, and floodplain analysis. Development of countywide, digital FIRMs and outreach for the successful adoption of the FIRMs will also be performed. When each element is completed the project budget will be refined based on the information gathered. Future cooperative funding request(s) will be required to complete remaining Watershed Evaluation and Watershed Management Plan tasks (e.g. LOS determination, surface water resource assessment, and BMP alternative analysis).

Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
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**District Budgeted - Ad Valorem Based Revenue**

010 General Fund (Districtwide)	13,071	0	8,355	88,253	0	109,679
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**District Budgeted - Outside Revenue**

FEMA Mapping Activity Statement	737,000	0	0	0	0	737,000
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**Total** **\$846,679**

**Critical Project Milestones**

**Projected** **Amended** **Actual**

**1. Critical Project Milestones**

Cooperating Tech. Partners Memorandum of Agreement	9/14/01		9/14/01
Cooperating Technical Partners Agreement Executed	8/12/02		8/12/02
Mapping Activity Statement Executed	9/30/05		12/20/05
Develop Scoping Consultant Agreement	11/7/05		11/7/05
Draft Consultant Agreement to Management Services	11/7/05		11/7/05
Draft Agreement returned from Management Services	12/1/05		11/30/05
Scoping Consultant Notice to Proceed	12/30/05		2/1/06
Scoping Consultant Contract Execution	12/30/05		1/12/06
Scoping Consultant Contract Termination	7/21/06		12/15/06
DFIRM Consultant Contract Executed	4/15/07		3/28/07
Alligator Branch WMP Consultant (K&S) Contract Executed	5/15/07		6/6/07
Thompson Branch WMP Consultant (K&S) Contract Executed	5/22/07		6/6/07
City of Wauchula WMP Consultant (K&S) Contract Executed	6/1/07		6/6/07
Buzzards Roost Run WMP Consultant Contract Executed	6/15/07		6/19/07
Horse Creek WMP Consultant Contract Executed	7/1/07		7/16/07

**2. Digital Topographical Information**

Begin DTI for Thompson Branch	6/21/07		6/21/07
Begin DTI for City of Wauchula	6/21/07		6/21/07
Begin DTI for Alligator Branch	6/21/07		6/21/07
Begin DTI for Buzzards Roost Run	7/15/07		8/9/07
Begin DTI for Horse Creek	7/21/07	9/17/07	10/1/07
Complete DTI for Thompson Branch	9/7/07		8/30/07
Complete DTI for City of Wauchula	9/7/07		8/30/07
Complete DTI for Alligator Branch	9/7/07		8/30/07
Complete DTI for Buzzards Roost Run	10/1/07		2/8/08
Complete DTI for Horse Creek	10/7/07		12/12/07

**3. Watershed Evaluation**

Begin WE for Thompson Branch & City of Wauchula Watersheds	9/1/07		8/30/07
Begin WE for Alligator Branch	9/1/07		8/30/07
Begin WE for City of Wauchula Watershed	9/1/07		8/30/07
Begin WE for Buzzards Roost Run	9/21/07		2/1/08
Begin WE for Horse Creek	10/1/07		12/1/07
Complete WE for City of Wauchula Watershed	1/21/08		12/19/07
Complete WE for Thompson Branch & City of Wauchula Watersheds	1/21/08		12/19/07
Complete WE for Alligator Branch	1/21/08		12/19/07
Complete WE for Buzzards Roost Run	2/15/08	3/31/08	
Complete WE for Horse Creek	2/21/08	3/31/08	

**4. Watershed Management Plan**

Begin WMP for Thompson Branch & City of Wauchula Watersheds	1/7/08		2/1/08
Begin WMP for City of Wauchula Watershed	1/7/08		2/1/08
Begin WMP for Alligator Branch	1/7/08		2/1/08
Begin WMP for Buzzards Roost Run	1/31/08	3/15/08	
Begin WMP for Horse Creek	2/7/08		2/1/08
Complete WMP for Thompson Branch & City of Wauchula Watersheds	6/21/08		
Complete WMP for Alligator Branch	6/21/08		
Complete WMP for City of Wauchula Watershed	6/21/08		
Complete WMP for Buzzards Roost Run	7/15/08		
Complete WMP for Horse Creek	7/21/08		



Preliminary DFIRM and FIS Report	12/15/08
Post-Preliminary Processing	10/15/09

**Status As Of:** February 29, 2008

Status History: The Mapping Activity Statement (MAS) was executed on December 20, 2005 by the Executive Director and FEMA's Regional Project Officer. The Scoping Meeting was conducted on July 17, 2006 in the City of Wauchula's Government Building. Representatives of the SWFWMD, Hardee County, City of Wauchula, and City of Zolfo Springs attended the scoping meeting. Participants were asked to identify areas of particular concern for their community. Hardee County, City of Wauchula, and City of Zolfo Springs were also asked to execute a Community Partner Memorandum of Agreement to confirm their commitment to work with the District and the FEMA to produce updated, digital FIRM maps for their community. The Scoping Report has been completed and the MOAs between the District and the following communities have been executed by the District: Hardee County, City of Zolfo Springs, and City of Wauchula. The MOAs have been sent to FEMA for signature and upon return the communities will receive a fully executed MOA and a copy of the Final Scoping Report. An Agreement with URS has been executed to provide consultants services for the DFIRM Production. In addition to the DFIRM production, this project will also include five Watershed Management Plans (WMPs). An agreement with Keith & Schnars (K&S) was executed in April 2007 to perform a WMP in the Alligator Branch, City of Wauchula, and Thompson Branch Watersheds. An agreement with URS was executed in June 2007 to perform a WMP in the Buzzards Roost Run. An agreement with BCI was executed in July 2007 to perform a WMP in the Upper Reaches of the Horse Creek Watershed. The remaining funds, after the completion of the DFIRM production and the five WMP, will be used for Outreach. All of the digital topographic information (DTI) element of the WMPs have been completed. for Alligator Branch, City of Wauchula, and Thompson Branch Watersheds. Status Current: The watershed evaluations for Alligator Branch, City of Wauchula, Horse Creek, and Thompson Branch Watersheds are being finalized and the WMPs have begun. URS is working on the redelineation of effective detailed studies within the county with the new topographic data. The District is working with a consultant to develop an Outreach Plan for Hardee County.



<b>Project Type</b>	FEMA/Map Mod.
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	Peace River
<b>Cooperator(s)</b>	South Florida Water Management District, Avon Park, Federal Emergency Management Agency, Highlands County, Lake Placid, Sun N' Lake of Sebring, City of Sebring
<b>Project Manager</b>	LETASI, SCOTT
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

**Description**

This project is to perform map modernization which includes 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP) for the Highlands County Watershed. The County's area within the District is approximately 400 square miles which separated into 14 watersheds. The watershed management plan will address flood protection and water quality issues. With FY2006 funding the work on the Map Modernization will begin. District funding in FY2009 will be used for public meetings and staff salary.

**Benefits**

The District is cooperating with FEMA to modernize the flood insurance rate maps (FIRMs) in Highlands County. The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management, and water quality management.

**Costs**

The total budget amount for this project is \$550,000 and FEMA will contribute the \$550,000. With FY2006 funding the work on the Map Modernization will begin. When each element is completed the project budget will be refined based on the information gathered. An additional \$75,000 is being requested in FY2009 to perform public meetings for completed Watershed Management Plans.

**Additional Information**

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies. Information developed with this project will be used to update the FIRMs representing this watershed. Staff has worked with the Federal Emergency Management Agency (FEMA) to improve and formalize the District's relationship with a federal agency that shares flood protection responsibilities. FEMA and the District executed a Cooperating Technical Partners (CTP) Memorandum of Agreement on September 14, 2001. As a CTP, the District is eligible for federal grants and matching funds to further efforts to modernize the flood insurance rate maps (FIRMs). Funds will be used to perform elements of the District's Watershed Management Program (WMP) within Highlands county. The District will execute a Mapping Activity Statement (MAS #8) with FEMA that identifies costs, responsibilities, and specific activities to complete the FEMA Map Modernization effort for watersheds in Highlands County. The District will coordinate with the local government(s), will manage the project, and will enter into purchase orders and agreements to accomplish project tasks. Because of funding constraints some watersheds will not be studied in detail. The risk information from the current FIRMs will be transferred to the modernized, digital maps. These watersheds will be studied in detail when additional funding is available through the cooperative funding process. Work on the Watershed Management Plan element for the detailed watersheds will include the following tasks: survey, data management and development of watershed parameters, GIS processing, computer modeling, and floodplain analysis. Development of countywide, digital FIRMs and outreach for the successful adoption of the FIRMs will also be performed. Future funding will be required for the Watershed Evaluation of other watersheds to complete the survey, watershed modeling development, floodplain analysis, LOS, surface water resource assessment, and alternate analysis of BMPs.

	<b>Prior Funding</b>	<b>Cumulative Transfers</b>	<b>FY2008 Funding</b>	<b>FY2009 Funding</b>	<b>Future Funding</b>	<b>Total Funding</b>
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	0	0	7,422	83,261	0	90,683
<b>District Budgeted - Outside Revenue</b>						
FEMA Mapping Activity Statement	600,000	0	0	0	0	600,000
<b>Project Funds Not Budgeted by the District</b>						
FEMA	550,000		0	0	0	550,000
				<b>Total</b>		<b>\$1,240,683</b>

Critical Project Milestones	Projected	Amended	Actual
<b>1. Critical Milestones</b>			
Execute DFIRM Consultant Agreement	4/1/07		3/20/07
Perform Scoping Meeting	7/1/07		6/27/07
Complete Scoping Report	8/15/07		10/9/07
Execute WMP Consultant Agreement	12/1/07	4/15/08	
<b>2. Digital Terrain Model</b>			
Complete County-wide DTM	10/1/07	4/15/08	
<b>3. Watershed Evaluation</b>			
Begin Watershed Evaluation	1/1/08	2/15/08	
Complete Watershed Evaluation	4/15/08		
<b>4. Watershed Management Plan</b>			
Begin Watershed Management Plan	5/1/08		
Complete Watershed Management Plan	12/1/08		
Preliminary DFIRM and FIS Report	7/1/09		
Post-Preliminary Processing	5/1/10		

**Status As Of:** February 29, 2008

Status History: Mapping Activity Statement (MAS) with SWFWMD and FEMA was executed on December 18, 2006. The District has executed an agreement with Dewberry & Davis to perform the Scoping Meetings and digital FIRMs production. A prescoping meeting was held on May 9, 2007 in the Engineering Training Room of the Highlands County Building. Highlands County, City of Avon Park, and City of Sebring were in attendance. Participants were asked to provide data and information for their community to update the existing flood insurance rate maps (FIRMs). A scoping meeting was held on June 27, 2007 in the Highlands County Agricultural Civic Center. Highlands County, City of Avon Park, City of Sebring and Town of Lake Placid were in attendance. Participants were asked to identify areas of particular concern for their community (i.e. flood prone areas, new development). The communities were also asked to execute a Community Partner Memorandum of Agreement (MOA) to confirm their commitment to work with the District and the FEMA to produce updated, digital FIRM maps for their community. Dewberry & Davis submitted the Highlands County Scoping Report to FEMA on the behalf of both Water Management Districts. Status Current: Dewberry & Davis has prepared the second work order to perform the DFIRM production. They should be given the notice to proceed in March 2008. Dewberry & Davis is preparing a third work order to address items identified in the scoping report. District staff is currently working on an amendment to the exist Dewberry & Davis contract to perform the work specified in the third work order.

<b>Project Type</b>	FEMA/Map Mod.
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Peace River
<b>Cooperator(s)</b>	Federal Emergency Management Agency
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

### Description

The project involves performing tasks included in the Topographic Information, Watershed Evaluation, and Watershed Management Plan elements of the District's Watershed Management Program for priority watersheds in Polk County; and the development of countywide digital Flood Insurance Rate Maps (FIRMs). Public education and outreach will also be performed to facilitate successful adoption of the FIRMs. The District obtained LiDAR topographic information and digital orthophotos for most of Polk county as part of the Peace River Topographic Mapping project (P692). Through the District's cooperative funding program, the District and County have prepared or are in the process of preparing Watershed Management Plans for all or portions of 11 of the 25 identified watersheds. With Federal Emergency Management Agency (FEMA) funding, these plans will be updated to include recent alterations within the watersheds, and to meet the standards described in the District's Guidelines and Specifications. The remaining watersheds will be prioritized based on the needs of local governments and the District. Appropriate Watershed Evaluation and Watershed Management Plan tasks will be accomplished for priority watersheds. However, some of the lower priority watersheds will not be studied in detail because of funding constraints. In these watersheds the risk information from the current FIRMs will be transferred to the modernized, digital maps. Future cooperative funding request(s) will be required to complete Watershed Evaluation and Watershed Management Plan tasks for lower priority watersheds, and for those tasks that are not associated with the FIRM map updates (e.g. LOS determination, surface water resource assessment, and BMP alternative analysis). The District will manage the project, coordinate with local government(s), and enter into purchase orders and agreements to accomplish project tasks. A portion of Polk county is located within the South Florida Water Management District (SFWMD). The SFWMD will pursue FEMA funding to update the Polk county FIRMs in their area. The District executed a joint Mapping Activity Statement with FEMA and the SFWMD that identifies costs, responsibilities, and specific activities to complete the FEMA Map Modernization effort for watersheds within Polk county.

### Benefits

Identification of floodprone areas is critical for the effective implementation of local, state and federal programs including the regulation of land use changes and site development, emergency preparedness, and emergency response. The information is also used by public and private entities to assess risk, and make development decisions.

### Costs

The Federal Emergency Management Agency provided \$1,200,000 for this project.

### Additional Information

FEMA is a federal agency with flood protection responsibilities that include the preparation of FIRMs to identify flood hazards zones. Staff has been working to improve and formalize the District's relationship with FEMA. On September 14, 2001, FEMA and the District executed a Cooperating Technical Partners (CTP) Memorandum of Agreement. As a CTP, the District is eligible for federal grants and matching funds to further efforts to modernize the FIRMs. In FY2004, FEMA provided over \$6 million in grant funds to the District to modernize the FIRMs in Hernando, Marion, Pasco, and Sarasota counties. In FY2005, FEMA provided an additional \$2.7 million in grant funds to the District to modernize the FIRMs in Polk, Hadee and DeSoto counties. \$1.2 million of the FY2005 funding was allocated to the area of Polk county located within the District. These funds will be used to update previous studies to meet District Guidelines and Specifications, perform elements of the District's Watershed Management Program (WMP) for priority watersheds, and develop countywide digital FIRM maps. A WMP includes five major elements: Topographic information, Watershed Evaluation, Watershed Management Plan, Implementation of Best Management Practices, and Maintenance of Watershed Parameters and Models. The Topographic Information element provides the foundational information used to define the watershed's boundaries, storage and conveyance. The Watershed Evaluation element tasks includes field evaluation of the watershed and its intermediate conveyance system, inventory of water resources and stormwater management infrastructure, data development and GIS processing of watershed parameters, and an immediate maintenance evaluation. The Water Management Plan tasks include survey, data management and development of watershed parameters, GIS processing, computer modeling, floodplain analysis, surface water resource assessment (water quality), establishment of level of services (LOS), and a best management practices (BMP) alternative analysis, which includes prioritized recommendations and probable costs. Implementation includes design, construction permitting, development of construction documents, land acquisition, and construction of the BMPs. Maintenance of Watershed Parameters and Models are required in order to maintain the watershed parameters and model based on land alteration occurring within the watershed. When each element is completed, the project budget is refined based on the information gathered. The District's FY2006 funding shown in the table below will be used for staff time.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	20,680	0	25,346	10,323	0	56,349
<b>District Budgeted - Outside Revenue</b>						
FEMA Mapping Activity Statement	1,200,000	0	0	0	0	1,200,000
				<b>Total</b>		<b>\$1,256,349</b>
<b>Critical Project Milestones</b>			<b>Projected</b>	<b>Amended</b>	<b>Actual</b>	
<b>1. Cooperating Technical Partners Agreement</b>						
Cooperating Tech. Partners Memorandum of Agreement			9/14/01			9/14/01
Cooperating Technical Partners Agreement Executed			8/12/02			8/12/02
<b>2. Mapping Activity Statement</b>						
Mapping Activity Statement Executed			9/30/05			2/6/06
<b>3. Consultant Agreement - Scoping</b>						
Develop Scoping Consultant Agreement			11/7/05			11/7/05
Draft Consultant Agreement to Management Services			11/7/05			11/7/05
Draft Agreement returned from Management Services			12/1/05			11/30/05
Scoping Consultant Notice to Proceed			12/30/05			2/1/06
Scoping Consultant Contract Execution			12/30/05			1/12/06
Scoping Consultant Contract Termination			7/31/06			7/31/06
Polk County Scoping Report complete			1/23/07			1/23/07
<b>4. Consultant Agreement - DFIRM generation</b>						
Consultant Agreement to Contracts for approval			4/1/07			6/12/07
Consultant Agreement back from Contracts			4/30/07			6/15/07
Agreement mailed to Consultant for signature			5/14/07			6/21/07
Notice to Proceed to Consultant			6/14/07			8/2/07
Consultant Agreement executed			6/14/07			7/30/07

**Status As Of:** February 25, 2008

The Consultant Services Agreement with Watershed Concepts has been executed, and Notice to Proceed was given on August 2, 2007. The Agreement includes DFIRM map generation and related tasks for the area of Polk County that is within the District. The SFWMD will contract with a consultant separately for the generation of DFIRM maps for the portion of Polk County that is located within the SFWMD. Status History: The Mapping Activity Statement (MAS) was executed by both Water Management Districts and FEMA as of February 6, 2006. Project funds have been placed in the District's Smartlink account. The Governing Board approved encumbering the funds without a contract, because the funds were included in District's FY2005 budget. The consultant services agreement with Tampa Bay Engineering (TBE) and the first work order for scoping services have been executed. District and TBE staff conducted a pre-scoping meeting on April 19, 2006. Representatives of the District, Polk County, the City of Winter Haven, and the SFWMD attended the pre-scoping meeting. The project scope and schedule, and data needs were discussed. The scoping meeting was conducted on June 22, 2006 in the Bartow Service Office. Representatives of the District, the SFWMD, Polk County, Mosaic, the cities of Winter Haven, Lake Wales, Lakeland, Frostproof, Lake Alfred, and Auburndale attended the scoping meeting. Participants were asked to identify areas of particular concern for their community; and to provide information such as current city limits that will be used in the preparation of the digital FIRM maps. Each local government was also asked to execute a Community Partner Memorandum of Agreement to confirm their commitment to work with the District, the SFWMD and the FEMA to produce updated, digital FIRM maps for their community. The Scoping Report was provided to local governments for review and comment on January 23, 2007. One comment was received, and the scoping map was revised accordingly, and the Scoping Report was submitted to FEMA. After the Scoping Report was submitted to FEMA, District staff were notified that the SFWMD would receive \$250,000 from FEMA, and that the SFWMD would obtain LiDAR data for the SFWMD portion of Polk County. In addition, it has been determined that the Post Preliminary Processing task will take at least 11 months to complete. The Scoping Report is being revised to reflect the funding provided to the SFWM and the addition of the LiDAR data for the SFWMD portion of Polk County; and to revise the project schedule to reflect a longer period for the completion of the Post Preliminary Processing task, and an associated reduction in the amount of time provided for the completion of model development and mapping related tasks. SFWMD prepared an amendment to the Mapping Activity Statement (MAS) agreement with the District and FEMA to reflect the additional FEMA funding and LiDAR data. The MAS amendment has been signed by the SFWMD, and is currently being routed for signature by the District. After the MAS amendment is signed by the Executive Director, it will be sent to FEMA for final signature. The revised Scoping Report will be submitted to FEMA after the MAS amendment has been signed by FEMA. Staff is continuing to work with each local government to execute a Community Partner Memorandum of

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Agreement to confirm their commitment to work with the District, and the FEMA to produce updated, digital FIRM maps for their community. To date, three MOAs have been received from local governments (Lake Alfred, Polk City and the City of Auburndale). The total budget for this project is \$1,200,000. Of this, \$39,800 was paid to TBE for consulting services related to project scoping and the development of the original Scoping Report. \$697,010 has been encumbered to the agreement with Watershed Concepts for DFIRM generation. No invoices have been received to date from Watershed Concepts.



<b>Project Type</b>	FEMA/Map Mod.
<b>AOR(s)</b>	Flood Protection
<b>Basin(s)</b>	General Fund (District), Alafia River, Hillsborough River, Northwest Hillsborough, Coastal Rivers, Pinellas-Anclote River, Withlacoochee River, Peace River, Manasota
<b>Cooperator(s)</b>	Federal Emergency Management Agency
<b>Project Manager</b>	TURNER, DAWN
<b>Task Manager(s)</b>	
<b>Status</b>	Ongoing

#### Description

This project is to provide management support for Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) modernization projects throughout the District (please reference projects M101-M116). Under these Map Modernization projects the FIRMs will reflect updated flood hazard risk areas and be modernized to a digital product. The updated flood hazard risk areas are being developed by the District through the 1) Topographic Information, 2) Watershed Evaluation, and 3) Watershed Management Plan elements of the District's Watershed Management Program (WMP). Map Modernization management support (MMMS) funds supplement the ongoing activities already being performed by staff including, but not limited to coordination and effort in building partnerships, information technology systems, program management planning, hydrologic and hydraulic review, and outreach.

#### Benefits

The WMP provides a method to evaluate the capacity of a watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The information developed provides the science for the District's Resource Management and Environmental Resource Permitting (ERP). It assists local governments: 1) With their land management responsibilities by establishing a level of service and developing Best Management Practices (BMPs) to address level of service deficiencies. 2) Provides a Geodatabase and projected results from watershed model simulations for floodplain management and water quality management. The FIRMs are used by local governments for land management and building permitting to satisfy the minimum requirements of the National Flood Insurance Program.

#### Costs

The total amount for MMMS is \$1,013,240 to be funded by FEMA. The District has received a total of \$713,240 in FEMA MMMS to date that has been included in the Governing Board's FY2005, FY2006, and FY2007 budgets as revenue. District Staff anticipate an additional \$150,000 to be funded by FEMA for ongoing MMMS activities in both FEMA's FY2008 and FY2009 (\$300,000 in total). Each year FEMA notifies the District how much funding is available for MMMS. The District funding amounts shown in the table represents staff salaries.

#### Additional Information

The WMP includes five major elements: 1) Topographic Information, 2) Watershed Evaluation, 3) Watershed Management Plan, 4) Implementation of Best Management Practices, and 5) Maintenance of Watershed Parameters and Models. Implementing elements of the WMP with local governments is one of the Comprehensive Watershed Management (CWM) initiative strategies and one of the District's Strategic Priorities. The District is cooperating with FEMA to modernize the FIRMs throughout the District. Staff has worked with the FEMA to improve and formalize the District's relationship with a federal agency that shares flood protection responsibilities. FEMA and the District executed a Cooperating Technical Partners (CTP) Memorandum of Agreement on September 14, 2001. As a CTP, the District is eligible for federal grants and matching funds to further efforts to modernize the FIRMs. Each year the District enters into a cooperative agreement with FEMA for MMMS funding that defines the activities that will be performed. \$250,000 in funding (grant EMA-2004-CA-5038) for FY2005 is being used to provide a meeting facilitator for ongoing coordination meetings between the water management districts, FEMA Region 4, and the Florida Department of Community Affairs; develop a District-wide FIRM paneling scheme; determine the feasibility of expanding the District's role in distributing digital FIRMs to the public; maintaining the digital FIRMs; and revising the FIRMs simultaneously with the ERP application review. For FY2005, a total of \$300,000 was actually budgeted in the General Fund with associated revenue. The \$50,000 difference between expected funding and actual was rolled into the FY2006 budget. For FY2006 FEMA has granted (EMA-2005-CA-5244) the five water management districts \$120,000 in MMMS to hire an outreach facilitator and develop design storm rainfall depth criteria for the entire State. The District will manage the project and contract with consultants on behalf of the other water management districts. In addition, the District received additional MMMS (\$144,000) in FY2006 to support outreach efforts, allow the District to develop quality control/quality assurance tools, and support staff travel to meetings and conferences related to this effort. For FY2007, the District has received \$129,620 from FEMA (grants EMA-2006-CA-5631 and EMA-2006-CA-5624) for continued travel support, outreach efforts, management assistance, and an XML-based export to for the District's Geographic Watershed Information System to populate FEMA's database. The District has recently received an additional \$69,620 under EMA-2007-CA-5723 for continued travel and programmatic assistance. For FY2008, the District is proposing to budget \$150,000 in revenue for continued MMMS. The District will coordinate with the local government(s), will manage the project, and will enter into purchase orders and agreements to accomplish project tasks.

	Prior Funding	Cumulative Transfers	FY2008 Funding	FY2009 Funding	Future Funding	Total Funding
<b>District Budgeted - Ad Valorem Based Revenue</b>						
010 General Fund (Districtwide)	11,308	0	8,787	32,084	150,000	202,179
<b>District Budgeted - Outside Revenue</b>						
FEMA Mapping Activity Statement	800,000	0	150,000	150,000	150,000	1,250,000
				<b>Total</b>		<b>\$1,452,179</b>
<b>Critical Project Milestones</b>			<b>Projected</b>	<b>Amended</b>	<b>Actual</b>	
<b>1. Critical Project Milestones</b>						
FEMA & District Recognition on Reports						
<b>2. FY2005</b>						
Develop Mutually Agreeable Scope of Work for MMMS			9/30/04			9/30/04
Execute FEMA Agreement Articles and Related Forms			11/30/04			11/24/04
Develop Consultant Agreement			11/30/04			11/19/04
Draft Agreement to Management Services			1/7/05			1/7/05
Draft Agreement returned from Management Services			1/21/05			2/4/05
Notice to Proceed			3/4/05			3/1/05
Contract Execution			3/4/05			3/1/05
Develop First Amendment to Consultant Service Agmt			7/7/06			8/2/06
Draft Amendment to Management Services			7/12/06			8/2/06
Contract Termination			7/21/06	3/1/08		
Amendment Execution			9/18/06			9/18/06
<b>3. FY2006 - District</b>						
Develop Cooperative Agreement for MMMS (District)			6/7/05			6/1/07
Execute FEMA Agreement Articles and Related Forms			10/31/05			12/2/05
District Outreach Facilitator Purchase Order Execution			2/28/06			3/2/06
District Outreach Facilitator Purchase Order Termination			12/31/06			12/31/06
<b>3. FY2006 - FL WMD</b>						
Develop Application for competitive MMMS (FL WMD)			6/1/05			5/18/05
Execute FEMA Agreement Articles and Related Forms			10/31/05			12/2/05
Develop State Outreach Facilitator Purchase Order			1/30/06			2/21/06
State Outreach Facilitator Purchase Order Execution			2/28/06			3/2/06
Develop Rainfall Frequency Analysis Purchase Order			6/1/06			6/1/06
Rainfall Frequency Analysis Purchase Order Execution			6/30/06			7/20/06
State Outreach Facilitator Purchase Order Termination			12/31/06			12/31/06
Rainfall Frequency Analysis Purchase Order Termination			6/30/07	9/30/07		
<b>4. FY2007</b>						
Develop Application for competitive MMMS			3/27/06			3/27/06
Develop Cooperative Agreement for MMMS			5/26/06			5/26/06
Execute FEMA Agreement Articles and Related Forms			9/22/06			9/29/06
Execute FEMA Agreement Articles and Related Forms			9/22/06			9/28/06
XML-base Export System Purchase Order Execution			11/30/06			
Develop XML-base Export System Purchase Order			11/30/06			
Develop Map Modernization Program Assistance Agreement			7/31/07			
XML-base Export System Purchase Order Termination			9/30/07			
Map Modernization Program Assistance Agreement Execution			9/30/07			

**Status As Of:** February 25, 2008

FY2005: A fully executed FEMA Form 76-10 to MMMS Grant, EMA-2004-CA-5038 has been returned to the District. The form awards funds pursuant to the approved Statement of Work. Forms SF424 and FEMA 20-20 have also been executed by the Executive Director and transmitted to FEMA to support these funds. The consultant agreement with URS Corporation Southern was executed on March 1, 2005. All FY2005 funds have been encumbered via an amendment to URS' agreement, which was executed in September 2006. Work Orders #1, #2, and #3 have been executed. Work Order #1 is to incorporate a Hazard Mitigation Component into the District's Business Plan for Map Modernization. Work Order #2 is to develop a District-wide flood insurance rate map (FIRM) paneling scheme to support the District's efforts in modernizing and updating the FIRMs throughout the



District. The draft paneling scheme has been prepared and submitted to surrounding water management districts (South Florida, St. Johns River, and Suwannee River). Work Order #3 supplies a moderator for ongoing coordination meetings among staff from the five water management districts regarding Map Modernization and a Sharepoint site for staff to access minutes and associated documents. Work Order #5 has been executed as of February 23, 2007, to determine the District's ability and resulting issues of reviewing Letters of Map Change (LOMC) simultaneously with ERPs. Two meetings have been held with District staff (MAN, TPA-REG, RPM), FEMA Region 4, and Hillsborough County staff. A sixth work order is being developed to allow the consultant team to present how different types of developments are reviewed and permitted by the District, FEMA, and local government (Hillsborough County). FY2006: An additional \$120,000 in funds have been approved by FEMA for the five Florida water management districts. These funds were approved to facilitate Map Modernization outreach for all five districts and to support the development of statewide isopluvial maps for various design storm events. The District will contract with consultants and manage the projects on behalf of the other four water management districts. A purchase order has been developed with UCF for \$60,000 to begin resolving design rainfall depth differences between WMDs. UCF has completed the literature review, data collection, data quality assurance, statistical analysis of the rainfall data, and an initial spatial analysis of the data. UCF has requested a no-cost time extension to complete the project by December 30, 2007. Secondly, the District has authorized a purchase order for outreach consulting services to support the Map Modernization effort of all the WMDs (\$45,000) and specific needs of the District (\$48,000). Bender Consulting is providing outreach planning support to review completed and ongoing outreach efforts associated with each project and provide messages and direction to enhance future outreach. Bender Consulting has completed all tasks and the purchase order has been closed out. A total of \$63,000 in funds for the quality control and assurance tools has been encumbered through an amendment to JEA's service agreements for the Sarasota County Map Modernization (M115) project. The FY2005 consultant agreement with URS has been amended to include FY2006 and FY2007 funds for ongoing meeting facilitators services. Work Order #4 has been executed with URS to provide facilitation services for four (4) additional quarterly meetings. Remaining funds are to reimburse the District for travel and video conferencing expenses. Funds that have not been expended have been board encumbered (\$13,000). FY2007: The District has been granted an additional \$60,000 in competitive MMMS for FY2007 to develop tools to export from the District enhanced ArcHydro database to FEMA's data capture standards. In addition, the District has been awarded \$69,200 in MMMS from FEMA to continue travel associated with Map Modernization, coordination meeting facilitation, and programmatic assistance. The FEMA forms to encumber these funds have been executed. A Purchase Order has been executed with ESRI to develop the export tool within the ArcHydro environment. Staff is developing an agreement with Dewberry for Map Modernization programmatic assistance, which will encumber FY2007 and FY2008 funds allocated for this activity. Travel funds were board encumbered (\$10,000) at the end of the fiscal year. FY2008: The District was awarded \$69,620 for ongoing programmatic assistance and to reimburse the District for travel expenses related to Map Modernization projects.

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## **PEACE RIVER BASIN STRATEGIC BUDGET PRIORITIES**

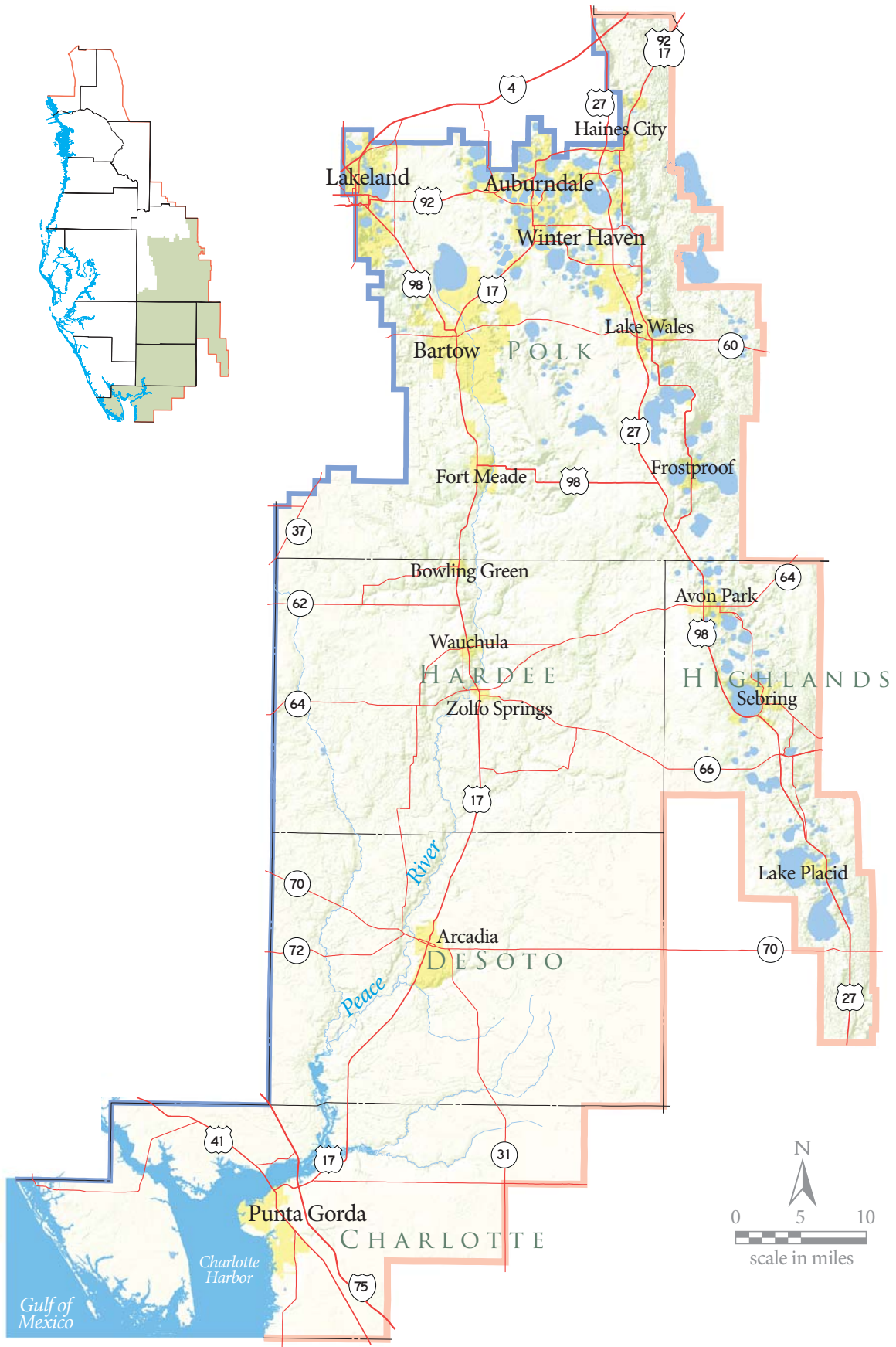
On October 5, 2007, the Peace River Basin Board held its annual planning workshop for the purposes of reviewing recent accomplishments, identifying emerging issues and setting strategic budget priorities for Fiscal Year 2009. These priorities provide guidance to District staff and the Basin Board's cooperators in identifying and scoping projects for potential Basin Board funding.

- Implementation of the SWUCA Recovery Strategy
- Alternative Water Source Planning and Development
- Emergency Management/Watershed Management Program
- Public and Youth Education
- Adequate Funding for Cooperative Projects
- Pursuit of Outside Funding Sources

While the above priorities were developed to help ensure that the most critical needs of the Basin are addressed, the Basin Board funds a wide variety of projects to assist in the achievement of the mission of the Southwest Florida Water Management District. These include projects that fall within each of the District's four areas of responsibility: *water supply, flood protection, water quality and natural systems.*

# PEACE RIVER BASIN

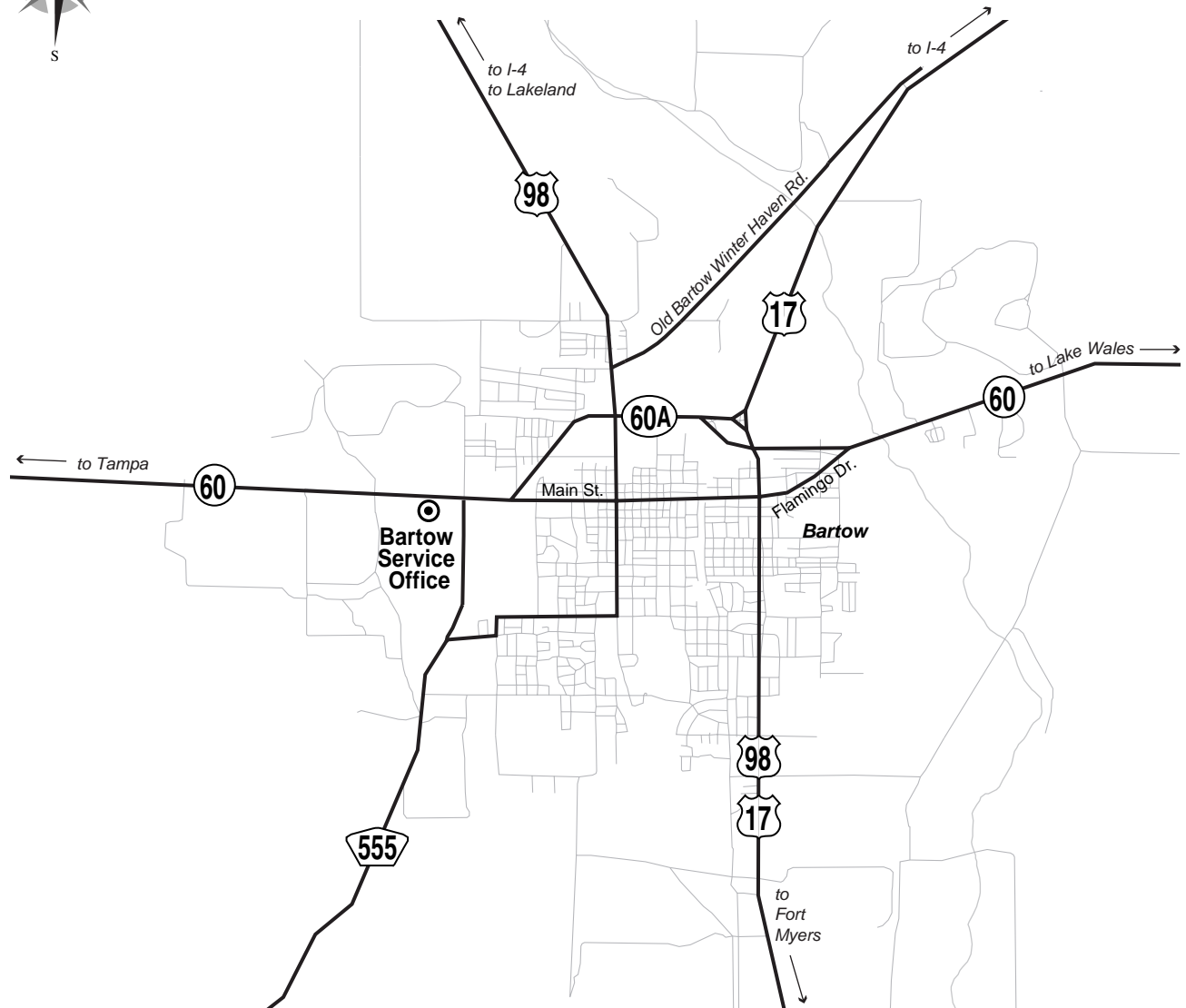
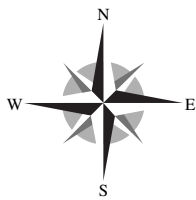
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT



# Location Map: Bartow Service Office

170 Century Boulevard, Bartow, FL 33830-7700

Phone (863) 534-1448, 1-800-492-7862 or SUNCOM 572-6200



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**Directions:** Traveling west, follow Highway 60 through the business section of Bartow; after County Road 555, look for buildings with blue roofs on the left; turn left at the USX Commercial Park marker onto Century Boulevard.

Traveling east on Highway 60: from Mulberry, go approximately 7 miles; turn right at the USX Commercial Park marker onto Century Boulevard.

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