



**WITHLACOOCHEE
REGIONAL
WATER
SUPPLY
AUTHORITY**

Board Meeting Package

February 19, 2014
3:30 p.m.

Meeting Location:

Lecanto Government Building
Room 166
3600 W. Sovereign Path
Lecanto, Florida 34461

**MEMORANDUM**

To: Water Supply Authority Board of Directors and Interested Parties

From: Richard S. Owen, Executive Director

Date: February 5, 2014

Subject: Monthly Meeting of the Withlacoochee Regional Water Supply Authority

The next meeting of the Withlacoochee Regional Water Supply Authority will be on **Wednesday, February 19, 2014, 3:30 p.m., at the Lecanto Government Center Building, Room 166, 3600 Sovereign Path, Lecanto, FL 34461.**

Enclosed for your review are the following items:

- Agenda
- Minutes of the January 15, 2014 meeting
- Board Package*

Please note that if a party decides to appeal any decision made by the Board with respect to any matter considered at the above cited meeting, that party will need a record of the proceedings, and for such purpose, that party may need to ensure that a verbatim record of the proceedings is made, which record includes that testimony and evidence upon which the appeal is to be based.

Enclosures

- * Copies of the Board Package are available through the Internet. Log on to www.wrwsa.org. On the Authority's Home Page go to the left side of the page and click on "Meetings." On the slide out menu is a button for the current Board Package. Click on the Board Package to download and print the Board Package.

**WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING**

AGENDA

**LECANTO GOVERNMENT BUILDING
3600 W. SOVEREIGN PATH, ROOM 166, LECANTO, FLORIDA 34461
February 19, 2014 @ 3:30 p.m.**

At the discretion of the Board, items may be taken out of order to accommodate the needs of the Board and the public.

1. Call to Order
2. Roll Call
3. Introductions and Announcements
4. Ceremony to Honor Dennis Damato for Serving as Board Chairman
5. Approval of Minutes
6. Public Comment
7. Northern District Model Expansion . . . Ron Basso, SWFWMD
8. Regional Water Supply Plan Update
 - a. Status Report . . . Gregg Jones, Cardno ENTRIX
 - b. Additional Work Order . . . Richard Owen, WRWSA
9. 2012-2013 Fiscal Year Audit . . . Mark White, Purvis Gray & Company
10. Pilot Irrigation System Evaluation Final Report . . . Nancy H. Smith, WRWSA
11. Executive Director's Report . . . Richard Owen, WRWSA
 - a. Bills to be Paid [provided in hand-out]
 - b. As-Needed Engineering and Technical Services Work Order
 - c. Correspondence
 - d. News Articles
 - e. Other
12. Legislative Update . . . Diane Salz, Governmental Affairs Consultant
13. Attorney's Report . . . Larry Haag, WRWSA Attorney
14. Other Business
15. Next Meeting Time and Location . . . March 19, 2014 3:30 p.m., Lecanto Government Building, Room 166, 3600 W. Sovereign Path, Lecanto, Florida 34461
16. Adjournment

Please note that if a party decides to appeal any decision made by the Board with respect to any matter considered at the above cited meeting, that party will need a record of the proceedings, and for such purpose, that party may need to ensure that a verbatim record of the proceedings is made, which record includes that testimony and evidence upon which the appeal is to be based.

**Item 5.
Minutes**

**WITHLACOOCHEE REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING MINUTES
January 15, 2014**

TIME: 3:30 p.m.
PLACE: Lecanto Government Building
3600 W. Sovereign Path, Room 166
Lecanto, Florida 34461

The numbers preceding the items listed below correspond with the published agenda.

1. Call to Order

Chairman Dennis Damato called the Withlacoochee Regional Water Supply Authority (WRWSA) meeting to order at 3:33 p.m. and asked for a roll call.

2. Roll Call

Mr. Richard Owen, Executive Director, called the roll and a quorum was declared present.

MEMBERS PRESENT

Scott Adams, Citrus County Commissioner
Jim Adkins, *Chairman*, Hernando County Commissioner
Rebecca Bays, Citrus County Commissioner
Ken Brown, Crystal River City Councilor
Al Butler, *Vice-Chairman*, Sumter County Commissioner
Dennis Damato, Citrus County Commissioner
Don Hahnfeldt, Sumter County Commissioner
Stan McClain, *Treasurer*, Marion County Commissioner

MEMBERS ABSENT

Kathy Bryant, Marion County Commissioner
Wayne Dukes, Hernando County Commissioner
Gary Ernst, Belleview City Councilor
Joseph Johnston, Brooksville City Councilor
Nick Nicholson, Hernando County Commissioner
Dale Swain, Bushnell City Councilor
David Russell, Hernando County Commissioner
Carl Zalak, Marion County Commissioner

3. Introductions and Announcements

Members of the audience introduced themselves. There were no announcements.

STAFF PRESENT

Richard Owen, WRWSA Executive Director
Larry Haag, WRWSA Attorney
Diane Salz, Governmental Affairs Liaison
Nancy Smith, WRWSA Administrative Assistant

OTHERS PRESENT

Alys Brockway, Hernando County Utilities
Debra Burden, Citrus County Water Resources
Veronica Craw, SWFWMD
Al Grubman, CCTF

Jan Grubman, CCTF
Jay Hoecker, SWFWMD
Gregg Jones, Cardno ENTRIX
Joy Kokjohn, SJRWMD
Lois Sorensen, SWFWMD
Tracy Straub, Marion County Engineer
Chris Zajac, SWFWMD

4. Approval of Minutes of November 20, 2013 Meeting

A copy of the minutes was provided in the Board packet for review.

Following consideration, a motion was made by Mr. McClain to approve the minutes for the November 20, 2013 meeting. Mr. Butler seconded the motion, which carried unanimously.

5. Public Comment

There was no public comment.

6. Election of Officers . . . Governing Board

Chairman Dennis Damato passed the gavel to the Vice-Chairman, James Adkins.

Mr. Damato made a motion to nominate James Adkins as the Chairman for the upcoming year. The motion was seconded by Ms. Bays. Ms. Bays moved nominations cease, seconded by Mr. Hahnfeldt. The motions to close nominations and to elect James Adkins as Chairman carried unanimously.

Mr. Owen stated that it is practice of the Authority, that once a new Chairman is elected, that person takes over the meeting as the chairman for the new year.

Mr. Damato made a motion to nominate Al Butler as the Vice-Chairman for the upcoming year. The motion was seconded by Mr. Hahnfeldt. Ms. Bays moved nominations cease, seconded by Dennis Damato. The motions to close nominations and to elect Al Butler as Vice-Chairman carried unanimously.

Mr. Damato made a motion to nominate Stan McClain as Treasurer for the upcoming year. The motion was seconded by Ms. Bays. Mr. Hahnfeldt moved nominations cease, seconded by Mr. Damato. The motions to close nominations and to elect Stan McClain as Treasurer carried unanimously.

7. Regional Water Supply Plan Update . . . Gregg Jones, Cardno ENTRIX

Mr. Jones reported on progress made in drafting the *Regional Water Supply Plan Update* (RWSP) from November 20, 2013 through January 15, 2014. The preliminary water demand through 2035 is 42 million gallons per day for all Public Supply systems. Some of these demands may continue to be met with groundwater, conservation, and reclaimed water, but some members will need to consider alternative sources.

< Scott Adams arrived. >

Mr. Jones explained the methodology used to estimate the need for new wellfields to meet growing public supply demands. If a utility's existing permitted but unused capacity was equal to or greater than the projected increase in demands, no new wellfields would be necessary to meet future demands through 2035. Hernando County appears to have no water supply deficits by

2035. Citrus County will have some localized deficits that may be met by revising wellfield locations proposed in the *2010 Water Supply Plan* or expanding the capacity of the Charles A. Black water supply facilities. By 2035, Sumter County and Marion County will have water supply deficits. Mr. Jones stated that these deficits may be met by moving some 2010 proposed wellfields and by adding Lower Floridan wellfields in areas near projected demands. With these changes, the group is ready to run the Northern District model to determine groundwater availability, potential impacts from production, and to conduct a planning level financial feasibility analysis.

Board discussion covered a range of subjects, including the impact of MFLs on groundwater withdrawals, modeling, wellfield ownership and potential for locating recreation and open space uses on wellfield sites.

Mr. Jones advised that the completion of the RWSP is contingent on the number of iterations needed to complete the model scenarios. Mr. Owen said he would meet with both Gregg Jones and the District to determine if additional time extensions are needed.

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

8. Springs Restoration . . . Veronica Craw, SWFWMD

Veronica Craw, Springs & Environmental Flows Manager, SWFWMD, presented information on the District's plan for springs restoration within Citrus, Hernando and Marion counties. She provided a copy of the District's *2013-2017 Springs Management Plan* to each Board member. The springs' restoration plan includes 13 projects affecting five first magnitude springs within the northern district. The priority of the District's *Strategic Plan* is to improve the condition of northern coastal spring systems. The 2014 budget includes 8.2 million dollars for 13 projects. The District, the cooperators and the Florida Department of Environmental Protection provide funding for these projects. Board members had a number of questions and comments for Ms. Craw.

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

10. Hydrologic Update . . . Lois Sorensen, SWFWMD

Chairman Adkins stated the Hydrologic Update would be considered at this time to accommodate Ms. Sorensen's schedule. Mr. Owen introduced Lois Sorensen, Program Manager, Demand Management, SWFWMD, to discuss local hydrologic conditions. Ms. Sorensen presented rainfall data, groundwater levels and stream flow measurements for the District as a whole and for areas within the District. The counties of Hillsborough, Pasco and Pinellas had below normal rainfall in December with a forecast for below normal rain in the next three months. Ongoing repairs at the C. W. Bill Young Regional Reservoir have reduced the water available for public supply use. Therefore, water restrictions were issued for those counties. The groundwater and surface water conditions in the northern part of the District, however, continue to be within the normal range and do not necessitate water restrictions at this time. These conditions will be monitored closely.

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

9. Executive Director's Report ... Richard S. Owen, Executive Director

a. Bills to be Paid

Mr. Owen presented two sets of bills to the Board. The December 2013 bills were paid in December as usual in the absence of a Board meeting. The December bills are provided in the Board's Packet. Mr. Owen requested the Board ratify the payment of the December 2013 bills totaling \$43,142.95.

Following consideration, a motion was made by Mr. Damato to approve payment of the December 2013 bills of \$43,142.95. The motion was seconded by Mr. Brown and carried unanimously.

Mr. Owen also presented the January 2014 bills, available in a handout, and requested approval for payment of bills totaling \$53,626.67.

Following consideration, a motion was made by Mr. Butler to approve payment of the January 2014 bills of \$53,626.67. The motion was seconded by Mr. Damato and carried unanimously.

Mr. Owen advised the Board that the FY 2012-2013 carry-over balance for the 12-01 work order for Water Resource Associates would be removed from the "Bills to be Paid" as the work order expired on September 30, 2013. If additional services are requested, as Mr. Owen anticipates, a new work order will be recommended to the Board.

b. Status Report on Memorandum of Understanding with the City of Wildwood and Marion County

Mr. Owen provided an update on the status of the Memorandum of Understanding (MOU) between Wildwood, Marion County and the WRWSA. A draft copy of the MOU is included in the Board's packet. If successfully approved by each entity, the WRWSA will have a future role as a water supplier using several Lower Floridan wells that were installed by the City of Wildwood. The City and Marion County are potential customers; however, a future agreement would be required to move forward with a specific project.

The legal staff of all three parties has reviewed the MOU draft. Marion County and the City of Wildwood are scheduling the MOU for action by their respective boards. Mr. Owen will bring the MOU back to the WRWSA Board in February or March, depending on the schedules of Wildwood and Marion County.

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

c. Revised and Restated Interlocal Agreement Update

Mr. Owen advised that the Agreement was approved by Hernando and Sumter counties on December 10, 2013, by Marion County on January 7, 2014, and by Citrus County on January 14, 2014. This is a significant milestone for the Authority and addresses some critical issues. With the revised Agreement, the representation on the Board will total 13, rather than 19, while still meeting the members' need for representation.

Following consideration, a motion was made by Mr. Damato that the executive director send a letter to each member county, to provide information that the Agreement was approved, and that it provides each member government a number of seats, as well as the ability to appoint alternates. The letter would be sent to the each local government's attorney. The motion was seconded by Mr. McClain and approved unanimously.

Following input from the attorney and further consideration, the motion was amended by Mr. Damato to direct the membership letter to each County Administrator, with a copy to each utility director. Mr. McClain amended his second, and the amended motion was approved unanimously.

Mr. Ken Brown asked why the Hydrologic Update was on the agenda after the Executive Director's report. He stated the Authority should always schedule presentations by outside parties prior to the Executive Director's report so that they need not stay later than necessary. Mr. Owen explained that he agreed, however in this case Ms. Sorensen had requested to be put later on the agenda due to her schedule. It was the consensus of the Board that all presentations be listed on the Agenda prior to the Executive Director's items.

d. Correspondence

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

e. News Articles

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

f. Other

- *Northern District Model.* Mr. Owen stated that Phase 1 of the Northern District Model is complete. He will ask the District staff to present the model to the Board. Phase 2 of the model development has begun, with the St. Johns River Water Management District taking the lead and paying for the costs. Mr. Owen will monitor this project and participate in its further development, as the intent is to have both the St. Johns River and Southwest Florida water management districts use the final model for determining groundwater availability. He will continue to keep the Board informed.
- *Cooperative Funding Initiative (CFI).* The District's sub-committees will begin their review of the 2015 CFI applications on February 5, 2014 in the Brooksville office. The WRWSA has applied for continuation of the regional irrigation system evaluation program. Mr. Owen will attend and will notify Board members of the meeting. The staff review of the WRWSA application is favorable.
- *St. Johns River Water Management District (SJRWMD).* The SJRWMD has prepared a draft water supply plan for its district. The plan breaks the district into four planning regions, with eastern Marion County being included in Region 2. The major conclusion of the plan is that future demands cannot be met solely by fresh groundwater. Alternative water supplies are needed and include water conservation, reclaimed water use, and surface water supplies.
- *WRWSA Logos.* Mr. Owen recommended that the Board authorize staff to utilize Authority funds to set up a logo for application to wearing apparel. Staff and Board Members could then purchase clothing with the WRWSA logo, which could be worn to official functions and serve to enhance name recognition for the WRWSA. The WRWSA would fund the logo creation for a one-time fee of approximately \$150. Thereafter, the WRWSA would pay a small fee for each application. The funds for this purchase would come out of the contingency budget line item.

Following consideration, a **motion was made by Mr. Adams to approve up to \$300 to create the logo and the fee for its application. The motion was seconded by Dennis Damato.**

Discussion by the Board resulted in an amendment to the motion. Mr. Brown suggested that name badges be added to items for purchase. Mr. Damato recommended that the motion be amended to include name badges and that the total funds available be raised to \$400.

Mr. Adams accepted the amendment to add name badges to the list of items purchased and to provide funding up to \$400. Mr. Damato seconded the amendment and the motion, as amended, was approved by a unanimous vote.

11. Legislative Report . . . Diane Salz, Governmental Affairs Liaison

Ms. Salz reported on the American Water Works Association meeting that she attended in December. A summary of the meeting was included in the Board's packet. The AWWA frames its legislative priorities at this meeting. In addition, Ms. Salz discussed the bill tracking report included in the Board's packet. This report will be monitored and amended through the end of the legislative session. She also reported on the draft springs bill that is currently proposed in the Senate. This draft has been revised several times, with more revisions expected. The draft provides for funding from documentary stamps; a July 1, 2015 deadline to delineate springs' protection zones and to set MFLs; provisions to remove septic tanks in certain areas and to make upgrades or connections to sanitary sewer systems in other areas, as well as other provisions related to springs protection and restoration.

Mr. Brown asked about the Basin Boards that previously existed within the water management district and whether these Boards would be reconstituted. Discussion ensued. Mr. Owen summarized the discussion by stating that projects within the District must be competitive on a district-wide basis and that there is a need to ensure that the WRWSA region is adequately represented on the SWFWMD Board.

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

12. Attorney's Report . . . Larry Haag, WRWSA Attorney

Mr. Haag stated that after all members have signed the Revised and Restated Interlocal Agreement, the official document will be recorded with each County Clerk. Once that process is complete, the WRWSA can begin the rule repeal process.

13. Other Business

Mr. Hahnfeldt commented that the WRWSA priorities should support current and future water needs, recognizing where deficiencies exist, seeking solutions to meet deficiencies and focusing on alternative water supply.

14. Next Meeting Time and Location . . .

The next meeting is scheduled for February 19, 2014, 3:30 p.m., at the Lecanto Government Building, Room 166, 3600 W. Sovereign Path, Lecanto, Florida 34461.

15. Adjournment

Chairman Adkins announced there was no further business or discussion to come before the WRWSA and adjourned the meeting at 5:32 p.m.

James E. Adkins, Chairman

Richard S. Owen, Executive Director

**Item 7.
Northern District
Model Expansion**

7. Northern District Model Expansion . . . Ron Basso, SWFWMD

At the October 17, 2012 meeting, the Board authorized staff to enter into an appropriate instrument for Authority participation in jointly funding expansion of the Southwest Florida Water Management District's (SWFWMD) Northern District Groundwater model so as to encompass all of Marion County. The Authority staff issued a purchase order in the amount of \$37,500 on November 2, 2012 to the St Johns River Water Management District (SJRWMD) to facilitate the Authority's participation and joint funding of the project. The project is comprised of two phases, with the Authority's funding contribution going only toward Phase 1. Phase 1 entailed utilizing the SWFWMD's Northern District model as a base and expanding the geographic area encompassed by the model to include all of Marion County, and updating the model with the most recent hydro-geologic information available. Phase 2, has recently been initiated by the SJRWMD, which will develop a single groundwater model that will encompass all of central Florida, from the east coast to the Gulf of Mexico. The SJRWMD has not requested any funding contributions from the Authority but has agreed to include the Authority as the project progresses.

Mr. Ron Basso, Senior Professional Geologist with the SWFWMD, will present a summary of the Phase 1 project and final report to the Board.

Staff Recommendation: This item is for information only and no action is required.



Withlacoochee Regional Water Supply Authority
Water Supply Plan Update
Progress Report #11 (January 2014)

Cardno ENTRIX

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USA

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1) Task 2. Availability of Ground- and Surface Water

Continued efforts to work with SWFWMD to coordinate the impact modeling of proposed wellfields. SWFWMD delivered their updated and expanded Northern District model with their calibrated 2035 runs included.

Met with District staff to discuss a number of modeling issues including proxy MFLs for springs, schedules for model runs, and other issues needed to move the modeling forward.

2) Task 4. Development of Final Report

- a. Completed an outline for the structure and format of the report
- b. Completed drafts of Chapter 1 (Introduction) Chapter 2 (Resource Protection Criteria) and Chapter 3 (Population and Water Demand Projections).
- c. Completed significant work on Chapter 4 (Evaluation of Water Supply Sources).
- d. Completed work on the seawater desalination and a Withlacoochee River project options for Chapter 5 (Water Supply Options).

**Item 8.b.
RWSP
Work Order**

8.b. Regional Water Supply Plan Update - Additional Work Order . . . Richard Owen, WRWSA

In February 2013 the Authority entered into an Agreement with Cardno ENTRIX for purposes of updating the Authority's Regional Water Supply Plan. This project is well underway with progress reports being provided to the Board on a monthly basis. The Executive Director has requested Cardno attend various meetings with a number of local governments and utilities, the water management districts and others in an effort to ensure the updated plan reflects the most accurate information available and that these member governments and others have sufficient opportunities to provide input to the update process. The number of meetings Cardno is being requested to attend exceeds the number of meetings set forth in the Agreement. Therefore, the Executive Director recommends additional funds be provided such that the consultant can continue to provide this important service. See the exhibit to this item for the proposed Work Order.

Staff Recommendation: Staff recommends the Board approve Work Order #14-02, as contained in the Exhibit, in an amount of \$18,000, to Cardno ENTRIX for additional meeting attendance associated with the Regional Water Supply Master Plan Update, and authorize the transfer of \$18,000 from the Water Supply Development Reserves for this purpose.

WRWSA
Regional Water Supply Plan Update Services
WORK ORDER No. 14-02
Additional Meetings

INTRODUCTION AND BACKGROUND

This Work Order No. 14-02 “Additional Meetings” is approved this ____ day of _____ 2014 and is incorporated by reference into the Agreement for Regional Water Supply Plan Update Services entered into on February 20, 2013 between the Withlacoochee Regional Water Supply Authority (Authority or WRWSA) and Cardno ENTRIX (Consultant), for Services to update the WRWSA Regional Water Supply Plan.

SCOPE OF WORK

The following is a description of the type and number of meetings that are necessary to complete the Water Supply Plan Update but that are not included in the original scope of work. The categories of additional meetings and why they are necessary are listed below.

- Utilities. The decision to work closely with utilities to understand their needs for new wellfields and where they believe those wellfields should be located has been a complex undertaking and was not included in the original Scope of Work. We anticipate the need for additional meetings to complete this task.
- Water Management Districts. It has been necessary to meet more frequently with the SWFWMD and the SJRWMD due to the complexity of the groundwater modeling effort associated with the update and expansion of the Northern District Groundwater Model. In addition, the decision by the SWFWMD to require the use of the University of Florida’s EZ Guide Water Conservation Model has also required a number of additional meetings to deal with numerous problems encountered in using the model.
- Additional WRWSA Board Meetings. Due to the complexity of the groundwater modeling and EZ Guide water conservation modeling, the scheduled completion date of the project has been extended to July, 2014. This will require additional presentations to update the Board on the progress of the project.

The table below shows the type, number, and estimated cost of additional meetings likely to be necessary to complete the project that were not included in the original scope of work. A range of costs for each meeting is provided because it is not yet known what will be required for the meeting in regard to preparation of data and presentations, how many Cardno staff will be required to attend, travel time, and follow-up actions that may be necessary. The total estimated cost of \$18,000 is the not to exceed cost. The actual cost may be lower but will not be higher.

COMPENSATION

The Consultant shall receive compensation and reimbursement for travel and other expenses not to exceed the sum of \$18,000, consistent with the payment schedule below.

Meeting Type	Additional Meetings Outside the Original Project Scope	Estimated Cost Per Meeting	Estimated Total Cost
Utilities	5	\$700 - \$1,400	\$3,500 - \$7,000
Water Management Districts	5	\$700 - \$1,600	\$3,500 - \$8,000
WRWSA Board	3	\$700 - \$1,000	\$2,100 - \$3,000
Total			\$9,100 - \$18,000

SCHEDULE

The schedule for Consultant services will commence upon execution of this Work Order by the Authority and will continue through August 30, 2014.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the day and year first written above.

WITHLACOOCHEE REGIONAL WATER SUPPLY
AUTHORITY

Richard S. Owen Date
Executive Director

CARDNO ENTRIX

Title: Date

APPROVED BY:

Larry Haag
General Counsel for
Withlacoochee Regional Water Supply Authority

Item 9.
FYE 2013 Audit

9. FY 2012-2013 Annual Audit . . . Mark White, Purvis Gray and Company

Purvis Gray and Company has prepared the annual audit of the Authority's financial statements for the Fiscal Year ending September 30, 2013. The audit report will be provided at the Board meeting and will be summarized by Mr. Mark White, CPA, Partner with Purvis Gray & Company, LLP.

Staff Recommendation: Staff recommends Board approval of the Annual Financial Report and Fiscal Year 2012-13 Financial Audit Report as presented at the meeting.

Item 10.
Pilot Irrigation System
Final Report

10. Pilot Irrigation System Evaluation Final Report . . . Nancy H. Smith, WRWSA

The Pilot Irrigation System Evaluation Program was conducted over the past two and a half years as part of a water conservation program funded in partnership through the Southwest Florida Water Management District's Cooperative Funding Initiative. The irrigation system evaluation program was implemented in coordination with Citrus County, Hernando County, Marion County, and two of the Villages utilities in Sumter County. The final report on the program is included in the Board's packet.

The program combined direct contact with residential customers, educational information, rain sensor installation or adjustment and specific recommendations for each irrigation system to achieve enhanced efficiency. In summary, the program achieved significant water savings through implementation of various irrigation system adjustments. The gallons of water saved in the year following the evaluations compared to the prior year water use is listed below:

- 29 million gallons of water saved in 1 year
- 79,352 gallons of water saved per day
- 353 gallons of water saved per account per day
- 141 to 250 gallons of water saved per capita per day

On-Site Evaluations: 230 on-site evaluations were completed.

Follow-up Inspections. Follow-up inspections were completed for 89 accounts, or 38.7 percent of the on-site evaluation participants.

Customer Satisfaction Surveys. 73 participants, or 32 percent, completed customer satisfaction surveys. The results show a high degree of satisfaction from the survey respondents:

- 96% made changes to their irrigation systems;
- 97% would recommend the program to their neighbors; and
- 97% were pleased or very pleased with the irrigation system evaluation.

Staff Recommendation. Staff recommends the Board accept the *Regional Irrigation System Evaluation Pilot Program, 2011 – 2014, Final Report, January 31, 2014.*

Regional Irrigation System Evaluation Pilot Program 2011 - 2014



**A Cooperative Funding Initiative
(N278)**

**Prepared for the Withlacoochee Regional
Water Supply Authority**

January 31, 2014

Prepared by
Nancy H. Smith Inc.



Acknowledgements Page

**Cooperative Funding Initiative N278
Between the
Southwest Florida Water Management District and the
Withlacoochee Regional Water Supply Authority**



**With funding by the
Coastal Rivers Basin and Withlacoochee River Basin Boards**



and

**Citrus County Water Resources
Hernando County Utilities
Marion County Board of County Commissioners
North Sumter County Utility Dependent District
Villages Community Center Development District**

**Withlacoochee Regional Water Supply Authority
Irrigation Audit and Education Pilot Project (N-278)**

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**Withlacoochee Regional Water Supply Authority
Irrigation Audit and Education Pilot Project (N-278)
A Cooperative Funding Initiative**

1. Introduction

The Withlacoochee Regional Water Supply Authority (Authority) and its member counties partnered with the Southwest Florida Water Management District (District) to provide a water conservation program for residential customers of the water utilities. Under the Cooperative Funding Initiative (Initiative), the Authority applied for matching funds to conduct the water conservation program. Single-family residential customers of the water utilities were eligible to apply for and receive a free irrigation system evaluation. Citrus, Hernando, and Marion County utilities and two Community Development districts within The Villages, The Village Center Community Development District and the North Sumter County Utility Dependent District, participated in the program. The evaluations were designed to assess the residential irrigation system and to provide recommendations for conserving water. Recommendations included the use of Florida-friendly™ landscaping techniques, appropriate rainy season or dry season scheduling, efficient irrigation application systems, and improvements to the irrigation system. A professionally certified irrigation contractor provided these recommendations.

2. Program Description

This project targeted existing inefficient, fully operational single-family residential irrigation systems. Participation in this program was anticipated to result in increased water savings and water quality protection. The Initiative included an in-depth inspection of the resident's irrigation system by zone followed by a written report to the resident that included efficiency measures per zone. The timing and run cycles for each zone were analyzed and changes recommended. A new rain sensor was installed or repaired if the existing sensor was non-functional. Each participant also received information and brochures on measures to conserve outdoor water use as part of the educational component designed to maintain the savings over time. Approximately one year after the initial evaluation, participants were offered a follow-up evaluation to determine how many changes were made; the evaluator provided an estimate of changes made based on the original recommendations. Each residential account was tracked by the utility to show the actual amount of water used one year prior to the evaluation and for one year following the evaluation. The utility water use data is the primary method used to measure the water savings. While the program was designed to measure water use for one year before and after the evaluation, the utilities have the ability to further track the water use over time. In addition to the inspection, education and reporting components, the pilot program included a contract administrator for the Authority to coordinate the program and to prepare this final report.

2.1 Objectives

The District's *Regional Water Supply Plan* identifies outdoor water uses as consuming 50 percent or more of the residential water used in the Public Supply sector. The regional irrigation evaluation program was initiated to assist the local utilities to reach and maintain a compliance water use rate of 150 gallons of water per capita per day and to reduce current and future water demands.

The project objectives to reduce outdoor water use are identified in the Agreement between the District and the Authority:

- a. Evaluate single-family residential irrigation systems for efficiency improvements;
- b. Install rain sensors where an operable sensor is not present; and
- c. Provide water conservation information to encourage other conservation practices.¹

2.2 Methodology

The Pilot program consisted of four major components:

- a. Irrigation evaluations conducted on-site.
- b. Follow-up evaluations for up to 50 percent of the original participants.
- c. Recommendations and educational materials provided to each participant to achieve more efficient irrigation.
- d. Analysis of water use from the utilities' data for each customer for one year prior to the on-site evaluation and one year after the evaluation.

The program agreement was signed on January 25, 2011. The Authority and the cooperating utilities then organized the pilot program described in the following paragraphs.

Initiation. The Authority's Board selected two contractors in June 2011 to conduct the evaluations and to administer the program. Eco Land Design, Jack Overdorff, was selected to carry out the on-site evaluations and provide homeowners with recommended changes. Nancy H. Smith Inc. was selected to administer the pilot project. Following a meeting with all the water utility coordinators, the District, the Authority and the selected contractors, the project began in mid-June 2011 with the first on-site evaluation on August 26, 2011.

Process. The local coordinators are the water resource coordinators or water conservation administrators for each utility. The coordinators directed their efforts toward the highest water users in each utility, or those customers using 30,000 gallons or more of water each month. Directing the program toward the highest users was determined to be the most effective way to reduce overall water use and to achieve the highest return for the money spent. Each

¹ Cooperative Funding Agreement between the Southwest Florida Water Management District and Withlacoochee Regional Water Supply Authority Regional Irrigation Evaluation Program (N278). Agreement No. 11C00000066. January 25, 2011, Exhibit A.

coordinator provided the Authority administrator with a list of names and addresses for direct contact. A brochure, prepared by the District, was mailed to each prospective customer along with an application and a self-addressed stamped envelope (see Appendix A for sample materials). From July 2011 through November 2012, 1,320 applications were mailed to individual customers.

As the project continued, the process was refined for each utility. The Hernando County and Citrus County coordinators made the initial contact with their customers, sending the Authority names and addresses only for those wishing to participate. Citrus and Marion County Coordinators used a variety of methods to contact customers including post cards, phone calls, and a local property owners' association. After making an attempt to reach customers by telephone, the Villages relied on mail-outs to reach customers desiring to participate. As the program progressed, some account holders requested evaluations based on word of mouth from neighbors who had participated in the program and were satisfied with the results.

Because of the decision to focus on the highest users, the pilot project was not generally advertised and no press releases were issued. In addition, because the Coastal and Withlacoochee Rivers Basin Boards provided the program funding, the District's funds had to be divided equally between the basins. Funds from the Withlacoochee River Basin were expended for customers from Marion County within the District boundaries, and within The Villages of Sumter County. Funds from the Coastal Rivers Basin were spent in Citrus and Hernando counties where customers were limited to the west side of each county. Citrus County used its evaluations within one development to assist the utility in reaching its compliance per capita water use.

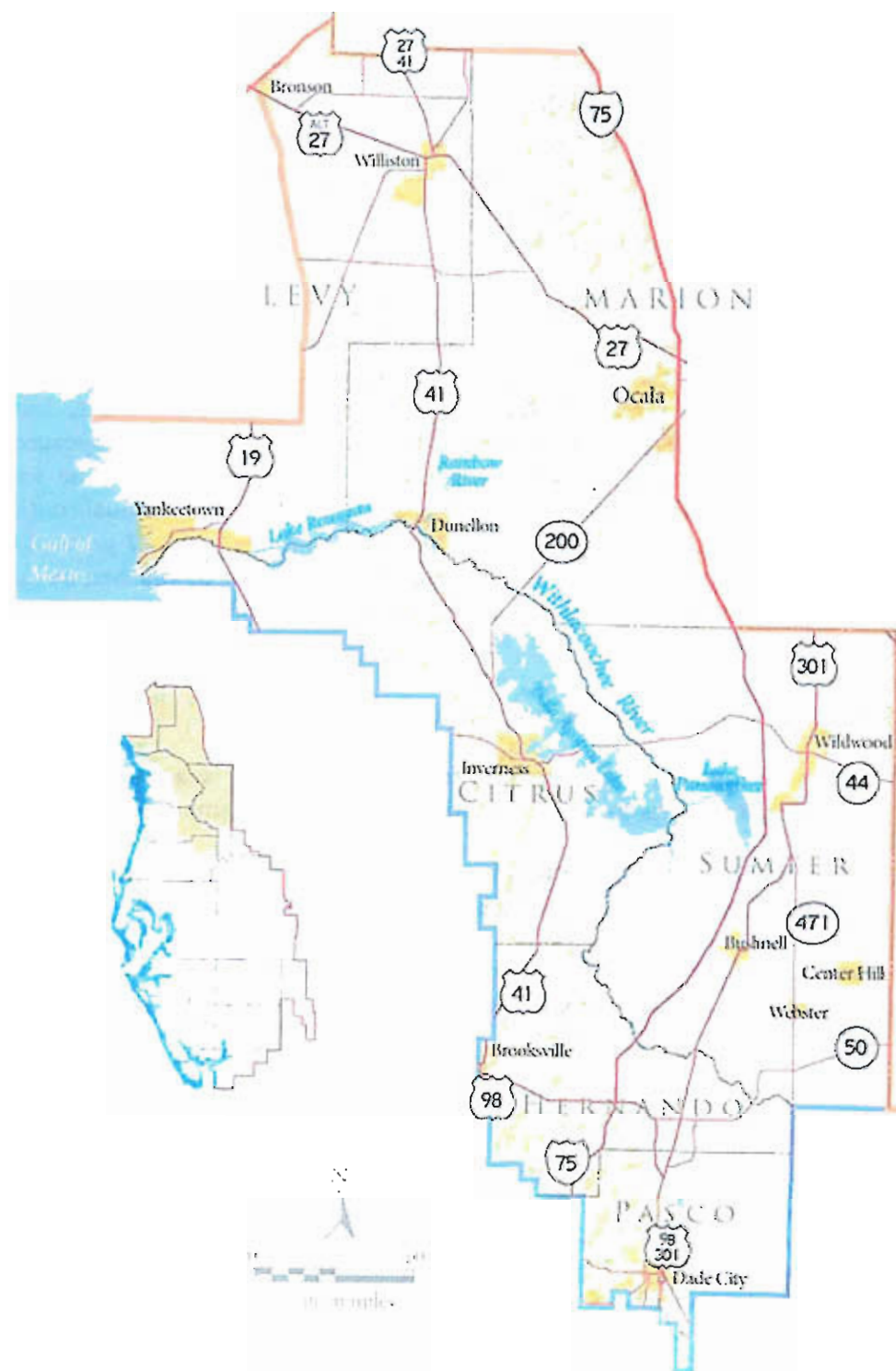
Maps of the two basin areas are shown in Figures 1 and 2.

Figure 1. Coastal Rivers Basin



Source: SWFWMD.

Figure 2. Withlacoochee River Basin



Source: SWFWMD.

3. Program Summary

3.1 Overall Summary of Irrigation System Evaluations

The first on-site evaluation was conducted on August 26, 2011. The on-site portion of the program was extended through December 1, 2012, lasting a total of 15 months. A total of 230 irrigation system evaluations were completed within the four-county region out of a program goal of 250, or 92 percent of the target. Within the Coastal Rivers Basin, 124 evaluations were completed; the Withlacoochee River Basin had a total of 106 completed. Table 3.1 summarizes the irrigation system evaluations completed.

The program reached less than 100 percent of its target due to a number of constraints on the program. The Basin funding had to be spent within specific geographic boundaries, limiting coordinators to only portions of the utilities' service areas. It was further constrained by the decision of coordinators to target the highest water users within the utilities. This was a reasonable decision in order to achieve the most water savings. However, because of the geographic constraints and targeting high water users, the program could not be advertised within the general service area population. The program was limited to individual contacts with customers to obtain participation. There were 248 total applicants with a 7 percent dropout rate. Some customers choose not to follow through, some could not be reached by numerous telephone or email contacts, and one account was closed shortly after submitting an application.

Some of the lessons learned during the program include:

- Because a number of the homes are second homes or seasonal residences, the majority of residents are available during the months November through April;
- Either telephone calls or letters from the utility helped to introduce the program. The utility offices provided invaluable service in reaching customers;
- Having a knowledgeable irrigation audit contractor who is able to effectively communicate with homeowners is essential to the program success.

Table 3.1: Irrigation System Evaluation Summary

BASINS	UTILITY	COMPLETED EVALUATIONS	PERCENTAGE OF TOTAL COMPLETED	PERCENTAGE OF TARGET
Coastal Rivers	Citrus	62	27.0	24.8
	Hernando	62	27.0	24.8
	Basin	124	54.0	49.6
Withlacoochee River	Marion	50	21.7	20.0
	Villages	56	24.3	22.4
	Basin	106	46.0	42.4
Total	All	230¹	100.00	92.0

Table prepared by Nancy H. Smith, Inc. Dec. 3, 2013.

¹ Program target for irrigation system evaluations were 250.

3.1.1 Coastal Rivers and Withlacoochee River Basins

There were 124 on-site system evaluations completed within the Coastal Rivers Basin and 106 evaluations within the Withlacoochee River Basin. Only Citrus and Hernando Counties have land area within the Coastal Rivers Basin. Therefore, Citrus and Hernando Counties directed their efforts to customers living on the west side of each county and within the Coastal Rivers Basin. Marion County and The Villages evaluated systems within the Withlacoochee River Basin.

3.1.2 Citrus, Hernando, Marion and The Villages Utilities

Citrus and Hernando County Utilities completed 62 evaluations in each jurisdiction. Marion County completed 50 evaluations and The Villages completed 56. Every utility had additional applicants that decided not to participate after completing the applications. A total of 248 applications were submitted, 18 declined to participate or could not be contacted, and 230 evaluations were conducted. Overall, there was a dropout rate of approximately 7.3 percent.

3.2 Total Number of Rain Sensors Installed

Rain sensors were installed or replaced at 136 residences, or 59 percent of all on-site evaluations. Table 3.2 shows the breakout of rain sensor installation by basin. Installation of a new rain sensor was counted if the sensor had to be replaced entirely or in part. If the sensor was re-set or moved to a new location, it was counted as an operational sensor. Initially, some homeowners refused the installation of a rain sensor. Accepting a rain sensor is a requirement of the program. If the rain sensor is declined, no evaluation will be conducted for future programs.

Table 3.2: Total Rain Sensors

RAIN SENSOR INSTALLATION			
<i>Basin</i>	<i>Installed</i>	<i>Operational</i>	<i>Declined</i>
Coastal Rivers	69	47	8
Withlacoochee River	67	37	2
Totals	136	84	10
Percentage	59%	37%	4%

Table prepared by Nancy H. Smith, Inc. December 28, 2012.

3.2.1 Coastal Rivers and Withlacoochee River Basins

There were 69 rain sensors installed in the Coastal Rivers Basin and 67 rain sensors installed in the Withlacoochee River Basin, a roughly equal distribution between funding basins.

3.2.2 Citrus, Hernando, Marion and The Villages Utilities

Table 3.2.2 shows the number of rain sensors installed per utility and the percentage of rain sensors installed based on the total evaluations performed. Citrus County had the fewest sensors or repair kits installed, with six customers declining installation. If these six were included in the calculations, Citrus County's percentage of rain sensors installed would have increased to 56 percent. The other three utilities had sensors installed or repaired at more than 60 percent of the residences.

Table 3.2.2: Rain Sensor Installation per Utility

RAIN SENSOR INSTALLATION					
<i>Utility</i>	<i>Total Evaluations</i>	<i>Installed or Repaired</i>		<i>Functional Sensors</i>	
		<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Citrus	62	29	47	27	43.5
Hernando	62	40	65	20	32.3
Marion	50	33	66	15	30.0
Villages	56	34	61	22	39.3
Totals	230	136	59	84	36.5

Table prepared by Nancy H. Smith, December 6, 2013.

3.3 Total Number of Follow-up Evaluations

The Initiative Agreement between the Authority and the District, as amended, specified that follow-up evaluations be conducted on approximately 50 percent of the total original irrigation

evaluation sites.² The Authority was able to achieve a 38.7 percent follow-up evaluation rate, or 89 re-inspections out of the desired goal of 115. The follow-up inspections were designed to occur approximately 12 months following the initial evaluation. Over the course of a year, customers had the opportunity to implement some or all of the recommendations provided to them and to establish more efficient irrigation practices. During the follow-up inspection, the contractor reviewed each of the sites based on the initial evaluation. He determined how many changes were actually made and provided a percentage of recommendations followed. These items were noted on the original inspection form and provided to the homeowner, to the Authority, and to each utility. The follow-up evaluations ended in October 2013 and the final water use data was collected through December 2013.

The target goal for 115 follow-up evaluations could not be reached due to various factors, including participants' lack of willingness to schedule a re-inspection, changes in account ownership, and inability to contact customers to schedule appointments.

Table 3.3 summarizes the total number of completed follow-up evaluations. Table 3.3.1 and 3.3.2 provide further subdivision by basin and by utility.

Table 3.3: Total Follow-up Evaluations

FOLLOW-UP EVALUATIONS COMPLETED		
<i>Evaluations</i>	<i>Number</i>	<i>Percentage</i>
Completed	89	38.7
Target Evaluations	115 ¹	50.0

Table prepared by Nancy H. Smith, November 11, 2013.

¹ Fifty percent (230/2) of original evaluations.

3.3.1 Coastal Rivers and Withlacoochee River Basins

There were 124 irrigation system evaluations completed in the Coastal Rivers Basin. Follow-up inspections were completed for 50 customers, or 80.6 percent of the target number of 62. The Withlacoochee River Basin had 106 irrigation system evaluations completed, with 39 total follow-up inspections, or 73.6 percent. The original inspections were reviewed at each residence, the number and percentage of recommendations followed was assessed and a re-inspection report was provided to the customer, the Authority, and the utility.

² Agreement No. 11C00000066 was amended on December 28, 2012. Exhibits A and B were amended to extend timelines and reduced the follow-up evaluations from 100% to approximately 50% of the total evaluations.

Table 3.3.1: Follow-up Evaluations by Basin

<i>BASINS</i>	<i>FOLLOW-UP EVALUATIONS</i>	<i>TARGET</i>	<i>PERCENTAGE OF TARGET</i>
Coastal Rivers	50	62	80.6
Withlacoochee River	39	53	73.6
Total	89	115	77.4

Table prepared by Nancy H. Smith, November 11, 2013

3.3.2 Citrus, Hernando, Marion and The Villages Utilities

The breakdown of re-inspections by utility is provided in Table 3.3.2 below. Citrus County had the largest number of follow-up inspections with 26. The Villages had 20 follow-up inspections, but the lowest percentage. Again, some applicants scheduled appointments, but cancelled prior to the actual visit. In order to close out the project in a timely manner, the follow-up evaluations were completed by the end of October 2013.

Table 3.3.2: Follow-up Evaluations by Utility

FOLLOW-UP EVALUATIONS COMPLETED			
<i>Utility</i>	<i>Follow-up Evaluations</i>	<i>Target</i>	<i>Percent of Target</i>
Citrus	26	31	83.9
Hernando	24	31	77.4
Marion	19	25	76.0
Villages	20	28	71.4
Totals	89	115	77.4

Table prepared by Nancy H. Smith, November 11, 2013.

3.4. Total Water Savings

Water savings for a one-year period for the 250 customers were projected to be 21.9 million gallons, or 60,000 gallons of water per day. For this pilot program, 230 single-family residential irrigation systems were evaluated. Water savings for these 230 accounts were 29 million gallons, or 79,352 gallons of water per day. The total amount of water used in the pre-evaluation and post-evaluation period by these accounts is shown in the following tables, broken out by basin (Table 3.4.1) and by utility (Table 3.4.2).

Water Use Variables. The total amount of water used for irrigation may vary over time for a variety of reasons. While this program did not include a correlation of data, it is important to note some of the possible variations in water use that may occur. Homeowners may make seasonal time adjustments or periodically turn the system off. Actual rainfall amounts vary

over time and place. Other variables in the amount of water used may include changes in account status per residence, filling swimming pools, or establishing new lawns. In addition, changes in watering restrictions within the local government may affect the amount and frequency of lawn irrigation.

3.4.1 Coastal Rivers and Withlacoochee River Basins

The 124 accounts in the Coastal Rivers Basin saved 18.0 million gallons of water in one year (MGY), or 49,329 gallons of water per day. The 106 accounts in the Withlacoochee River Basin saved 11 MGY, or 30,023 gallons of water per day.

Table 3.4.1: Annual Water Savings by Basin

ANNUAL WATER SAVINGS BY BASIN				
Accounts	Annual Water Use			
<i>Utility</i>	<i>Total Evaluations</i>	<i>Pre-Evaluation Annual Use (MGY)</i>	<i>Post-Evaluation Annual Use (MGY)</i>	<i>Water Saved (MGY)</i>
Coastal Rivers Basin	124*	48.3	30.3	18.0
Withlacoochee River Basin	106	31.4	20.5	11.0
Total	230	79.7	50.8	29.0

Table Prepared by Nancy H. Smith, Inc. January 3, 2014.

MGY – million gallons per year

* 119 accounts with complete water use data. 5 residences in Hernando County became vacant after the initial evaluation.

3.4.2 Citrus, Hernando, Marion and The Villages Utilities

Hernando County saved the most water in total gallons saved, with 30,482 gallons of water saved per day. Data was omitted for five residences that became vacant during the year following the on-site system evaluation. Using gallons per account per day (gpad), it is possible to compare the water savings per utility. For instance, Hernando County accounts saved an average of 535 gpad, Marion County saved 352 gpad, Citrus County saved 304 gpad, and The Villages VCCDD utility saved 270 gpad.

The North Sumter County Utility Dependent District provided water use data for irrigation water use only, and was not included in the gallons per account per day. All other utilities measured total household water used for both pre- and post-evaluation data. Hernando County omitted data for five residences because the residence became vacant in the year following the initial evaluation. Citrus County included data for all 62 accounts, but noted changes in occupancy for eight residences with one vacancy over the year following the initial evaluation.

Table 3.4.2: Annual Water Savings by Utility

ANNUAL WATER SAVINGS BY UTILITY					
Households		Annual Water Use (Million Gallons)			Daily Savings
<i>Utility</i>	<i>Total Evaluations</i>	<i>One-Year Pre- Evaluation Use</i>	<i>One-Year Post- Evaluation Use</i>	<i>Water Saved</i>	<i>Gallons Per Day</i>
Citrus	62	23.9	17.0	6.9	18,847
Hernando	62	24.4	13.3	11.1	30,482
Marion	50	15.9	9.5	6.4	17,595
Villages	56	15.5	11.0	4.5	12,428
Totals	230	79.7	50.8	29.0	79,352

Table Prepared by Nancy H. Smith, Inc. January 3, 2014.

3.4.3 Water Saved Per Capita

This water conservation program was initiated between the District and the Authority to assist the county utilities to meet or maintain the per capita compliance rate of 150 gallons per capita per day. The average persons per household were obtained from the 2010 U.S. Census for use in Table 3.4.3 to calculate the amount of water saved per capita per day. The average participant saved at least 141 gallons per capita per day, with Hernando County customers saving 225 per capita per day.

Table 3.4.3: Water Saved Per Capita

WATER USE PER CAPITA PER DAY				
<i>Utilities</i>	<i>persons per household¹</i>	<i>Pre- evaluation use</i>	<i>Post- evaluation use</i>	<i>Water Saved Per Capita Per day</i>
Citrus County	2.16	489	348	141
Hernando County	2.38	492	268	225
Marion County	2.35	371	222	150
Villages – NSCUDD²	1.81	400	291	109
Villages - VCCDD	1.81	442	293	149

Table prepared by Nancy H. Smith. January 24, 2014

¹ 2010 Census. American Fact Finder, "Community Facts." Table DP-1. Profile of General Population and Housing Characteristics: 2010: Average household size. Retrieved from www.factfinder2.census.gov on 1/22/2014. The average household size for Hernando and Marion counties is calculated for the entire county.

The average household size for Citrus County and for the Villages VCCDD is for the zip code area, retrieved from the zip code tabulation provided by the US Census Bureau. All of Citrus County evaluations were completed in the zip code 34446; all of the evaluations in the Villages were completed in the zip code 32162.

² Water use data in the NSCUDD utility is irrigation only. It does not include normal household water use.

3.5 Program Costs

The total program costs were budgeted for \$200,000, and later amended to \$156,250, per the Agreement amendment dated November 28, 2012. Total program expenditures were \$138,258.29 or 69 percent of the original budget. The on-site evaluation expense, which included repair or replacement of the rain sensor, was \$435 per evaluation, or \$100,050 for 230 evaluations. Program administration was \$120 per on-site evaluation, for a total of \$27,600. Marketing and outreach costs were \$1,708.29. Per District calculations, the overall cost-benefit ratio is \$1.16 per 1,000 gallons of water saved. Because the program was targeted to high water users and further limited geographically within each county, the program was not broadly advertised to all single-family utility accounts.

Through the Initiative Agreement, the District provided 50 percent of the total cost, not to exceed \$100,000. The Authority and the participating utilities, or counties, shared the other half. The Authority paid 25 percent with each utility contributing 12.5 percent of the total cost, in addition to completing other activities to research high water users, contact customers, coordinate with the Authority, and provide water use data for participating customers.

3.5.1 Coastal Rivers and Withlacoochee River Basins

The Authority had two basins within the District: the Coastal Rivers Basin and the Withlacoochee River Basin. Under the Initiative funding agreement, the two basin boards contributed the District's portion of the funding for the program. The total cost for the Coastal Rivers Basin was \$37,226.55 and \$31,902.59 for the Withlacoochee River Basin for a total District cost of \$69,129.15.

Table 3.5.1: Basin Expenditures

IRRIGATION EVALUATION PROGRAM (N278) COSTS				
Item	WRWSA	SWFWMD		TOTAL
		Coastal Rivers Basin	Withlacoochee River Basin	
Irrigation Evaluations	\$ 50,025.00	\$ 26,970.00	\$ 23,055.00	\$ 100,050.00
Follow-up Evaluations	\$ 4,450.00	\$ 2,500.00	\$ 1,950.00	\$ 8,900.00
Program Administration	\$ 13,800.00	\$ 7,440.00	\$ 6,360.00	\$ 27,600.00
Education/Outreach	\$ 854.15	\$ 316.55	\$ 537.59	\$ 1,708.29
Total Program Costs	\$ 69,129.15	\$ 37,226.55	\$ 31,902.59	\$ 138,258.29

Table prepared by Nancy H. Smith, Inc., December 23, 2013.

3.5.2 Citrus, Hernando, Marion and The Villages Utilities

Table 3.5.2 shows the cost of the program in each utility as a whole, including the portion paid by the Authority. The final utility cost is shown on the last line of the table. This is the program cost to each utility after subtracting the funds provided by the Authority. The Authority's final cost is \$34,564.57. Using the District's methodology, the cost-benefit ratio for the Pilot program is \$1.16 per 1,000 gallons of water saved.

Table 3.5.2 Expenditures Per Utility

IRRIGATION EVALUATION PROGRAM (N278) COSTS						
Item	SWFWMD	WRWSA				TOTAL
		Citrus	Hernando	Marion	The Villages	
Irrigation Evaluations	\$ 50,025.00	\$13,485.00	\$13,485.00	\$10,875.00	\$12,180.00	\$100,050.00
Follow-up Evaluations	\$ 4,450.00	\$ 1,300.00	\$ 1,200.00	\$ 950.00	\$ 1,000.00	\$ 8,900.00
Program Administration	\$ 13,800.00	\$ 3,720.00	\$ 3,720.00	\$ 3,000.00	\$ 3,360.00	\$ 27,600.00
Education/Outreach	\$854.15	\$ 171.85	\$ 144.71	\$ 113.18	\$ 424.42	\$ 1,708.29
Total Program Costs	\$ 69,129.15	\$18,676.85	\$18,549.71	\$14,938.18	\$16,964.42	138,258.29
Final Utility Cost		\$ 9,338.42	\$ 9,274.86	\$ 7,469.09	\$ 8,482.21	\$34,564.57

Table prepared by Nancy H. Smith, Inc., December 23, 2013.

4. Customer Implementation

Each follow-up evaluation included an estimate of the changes made by the customer based on the original evaluation and recommendations provided. A sample of a complete evaluation is located in Appendix B. The evaluation form was used to provide a written set of recommendations to each customer. On the follow-up inspection, the contractor used the last column of the form to note whether changes were implemented. The results of the follow-up inspections are included in this section.

4.1 Implementation Rates for Efficiency Recommendations

About a year after the first on-site evaluation, the irrigation contractor began scheduling appointments with customers. He reviewed the irrigation system on each site using the original written evaluation. Based on the changes made to the system relative to the written evaluation, an implementation rate was determined for installation of water conservation measures. (Section 3.3 covers the number of follow-up evaluations.) The implementation rate is not indicative of potential or actual water savings. Some changes to system components may have a greater impact on one system than another depending on the severity of the particular issue and the corresponding changes to the systems.

Table 4.1 Implementation Rates for Efficiency Recommendations

IMPLEMENTATION RATES BY BASIN		
<i>Basins</i>	<i>Follow-up Evaluations</i>	<i>Percent of Changes Implemented</i>
Coastal Rivers	50	48.3
Withlacoochee River	39	55.9
Total	89	51.6

Table prepared by Nancy H. Smith, November 12, 2013

The changes included relocation of heads, changes in types of heads, eliminating or removing items that block the spray pattern or coverage, repairing or replacing leaking or broken heads, reducing turf areas, reducing areas of overspray, and capping heads in areas where irrigation is not needed. All of the customers who participated in the follow-up evaluations made some changes to their irrigation systems, ranging from 10 to 90 percent, for an overall implementation rate of 51.6 percent. The 89 customers that participated in the follow-up evaluations represent 39 percent of the 230 total evaluations.

The installation or repair of the rain sensor by the irrigation contractor and alterations to system run times were not included in the percent of changes implemented.

4.2 Customers Satisfaction Surveys

A customer satisfaction survey was prepared using Survey Monkey, an online questionnaire and survey resource (www.surveymonkey.com). The complete survey and results are included in Appendix D. The survey was sent from Survey Monkey to those customers providing an email address. All other customers received a paper copy of the survey by regular mail. These surveys were provided to customers approximately 9 – 12 months following the on-site evaluation. The results of all surveys received by mail were entered into the online survey database for a composite accounting of the results. The response rate for Survey Monkey was 29 percent while the response rate for mailed surveys was 51 percent.

A total of 73 surveys were completed, or an overall response rate of 32 percent. Ninety-five percent of respondents reported making changes to their irrigation systems and 74 percent reported using less water. Respondents were asked to rate the overall evaluation process by selecting "Pleased," "Very Pleased," "Dissatisfied," or no response. Of the respondents, 97 percent selected "Pleased" or "Very Pleased" with the irrigation system evaluation. Twenty customers included additional comments, which are reported in Appendix D at the end of the composite survey.

Appendices

Appendix A. Marketing Materials



Would you like a **FREE** irrigation system evaluation? Want to **lower your water bill** by optimizing your outdoor water use? Water-efficient landscaping equipment and practices can reduce water bills and help protect Florida's precious water resources.

Some irrigation systems have damaged sprinkler heads, heads that are incorrectly angled and sized for the area, or heads programmed to overwater zones. You may not even know if a problem exists, but participating in this evaluation is a good way to find out.

Evaluations:

The Withlacoochee Regional Water Supply Authority and the Southwest Florida Water Management District are offering a limited number of free evaluations to qualified residents. Eco-Land Design, a certified irrigation auditor, will visit your home to:

- Perform an irrigation system evaluation
- Install a free rain sensor if you do not have an operable sensor
- Evaluate your time clock and sprinkler zones for water efficiency
- Provide a detailed report with suggestions that could improve the operation and effectiveness of your irrigation system
- Supply information on Florida-Friendly Landscaping™ principles and other landscape-related information

Qualifications:

You must be a single-family residence using 30,000 gallons of water or more per month; have a fully functional irrigation system with no leaks, breaks or repair needs; and you must be a customer of one of the following utilities:

- Citrus County Utilities
- Hernando County Utilities
- Marion County Utilities
- Village Center Community Development District
- North Sumter County Utility Dependent District

To participate, complete and return the attached application by

The number of free evaluations is limited.

For further information, call the program administrator at **(352) 527-5795**.

This irrigation system evaluation pilot program is funded by



North Sumter County
UTILITY
Dependent District



UTILITIES



WITHLACOOCHEE
REGIONAL
WATER
SUPPLY
AUTHORITY

Sponsored by a grant from the
Central River and Withlacoochee River
Watersheds of the
**Southwest Florida
Water Management District**

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Irrigation Evaluation Pilot Program (N278) Application Form

Residential Water Customer Information:

Complete Name	Water Utility Name	Day-Time Telephone Number:
	Account Number #:	Best Time to Call:
Street Address with Zip Code:	Post Office Address, if applicable:	Email Address:
Does your water account serve more than one home? ____No ____Yes If Yes, how many? ____		

Landscape and Irrigation System Information

Is your irrigation system fully operational and without any breaks, leaks or other damage? ____Yes ____No If No, the irrigation system must be repaired before an evaluation can be scheduled.	
Please indicate when your sprinkler system was installed: ____ Before 2008 ____ 2008 or more recent ____ Unknown	How is your lawn watered? (Check all that apply) ____ Permanent in-ground sprinkler system ____ Drip or micro-irrigation, soaker hose or other low volume system ____ Garden hose with sprinkler or hand-held nozzle
How are your landscape beds watered? (Check all that apply) ____ Rainfall only ____ Permanent in-ground sprinkler system ____ Drip or micro-irrigation, soaker hose or other low volume system ____ Garden hose with sprinkler or hand-held nozzle	Do you have an automatic sprinkler system timer? ____ Yes ____ No How many time cycles? Do you have a rain sensor installed on your automatic in-ground sprinkler system? ____ Yes ____ No ____ Don't Know
Please indicate the number of zones your sprinkler system contains: ____ 1 zone ____ 2-4 zones More than 6 (Specify) ____ ____ 5 or 6 zones Don't know ____	Please indicate total acreage of maintained property: ____ 1/8 acre or less (7,500 sq. ft. or less) ____ 1/4 acre (7,501 to 12,500 sq. ft.) ____ 1/2 acre (12,501 to 30,000 sq. ft.) ____ 1 acre (30,001 to 50,000 sq. ft.) ____ Greater than 1 acre, up to 2 acres ____ 2 acres or more (Specify acres) ____
Please indicate percent of landscape which is lawn: ____ 0% - No lawn ____ Less than 25% ____ 26-50% ____ 51-75% ____ 76-100%	

(Please Turn Page Over)



Southwest Florida
Water Management District
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This program is cooperatively funded by the Withlacoochee Regional Water Supply Authority, participating local governments, and the Withlacoochee River and the Coastal Rivers Basin Boards of the Southwest Florida Water Management District.

This program applies only to single-family residential users using public-supply, metered water for their operable in-ground irrigation or sprinkler system.

Simple Steps to Participating

1. Complete all items on this application form (both sides) and return in the stamped, self-addressed envelope that is included with this application.
2. The Program's contractor will contact you to arrange an appointment to perform an evaluation of your irrigation system. You will need to provide access to your property and your sprinkler system's time clock.

What You can Expect from Participating in the Irrigation Evaluation Pilot Program:

An irrigation system evaluation, including suggested changes to improve the operation and efficiency of your irrigation system, **at no cost to you.**

Installation of a rain sensor where a rain sensor is not present or is inoperable, **at no cost to you.**

Educational materials on water conservation, **at no cost to you.**

Reduction in water use and lower water bills.

Program Terms and Conditions – What is expected of Participants:

The irrigation system must be fully functional without any breaks, leaks or other damage.

The application form must be completed fully.

The Irrigation System Evaluator will need access to the property, including the area where the time clock is installed. The participant or an adult representative will need to be available.

Irrigation System Evaluators are on-site to evaluate the system and to recommend modifications. They are ~~not~~ authorized to make recommended modifications or repairs.

Any licensed irrigation professional can make the recommended modifications, if the participant chooses to hire someone.

Any costs incurred in making recommended modifications will be at the participant's expense.

The participant or adult representative shall be required to participate in a follow-up evaluation regarding the suggested sprinkler system modifications. This visit will be scheduled 9 to 12 months after the initial visit.

A customer satisfaction survey will be completed and returned at the end of the program.

By signing below, I certify that I have read and will abide by the program guidelines as outlined. IN ADDITION, I certify that my entire irrigation system is in good operating condition. In the event my irrigation system or major parts of my irrigation system are inoperable when the System Evaluator arrives to conduct the irrigation system evaluation, I understand that I will be ineligible to receive the requested evaluation.

Signature

Name (Please Print)

Date

If you have further questions related to this program, please call 352-527-5795 and Nancy Smith will return your call.

Appendix B. Sample Evaluation Report



7615 Terrace River Drive
Tampa, FL 33637
Ph: (813) 466-8705
E-Mail: ecolandfl@gmail.com

Residential Landscape/Irrigation Evaluation Report

Evaluator: Jack Overdorff, RLA

Re-inspection Date: 5/8/13

Date: 4/16/12

Resident Name: [REDACTED]

Address: [REDACTED] SW 75th Cir., Ocala, FL 34476

E-mail: [REDACTED]

Report Overview:

On Wednesday, April 11th, 2012, a site inspection was conducted for the irrigation system at the above referenced residence in Ocala, Florida. The irrigation system is connected to the potable (drinking) water supply.

A visual inspection as well as a more in-depth review of the irrigation system was conducted. The findings are outlined below as well as recommendations for addressing the system issues and setting of watering durations.


Turf Area
17,700 Sf

Residential Irrigation Evaluation Report

Checklist:

Item	Location	Functioning?
Time clock	Garage wall of the residence	Program A, Zones 1-6 Program Running Days: Sunday, Monday, Wednesday & Fri. @ 2am Zones #1, #2, #4 & #5, running 30 minutes Zone #3, running 40 minutes Zone #6, running 15 minutes
Rain sensor	West Side of the residence	No, replacement cartridge installed and working properly
Backflow Preventer	Side yard	Yes

Evaluation:

Area	Observation	Action	Addressed by Homeowner
General	Spray Heads have irregular head spacing	Recommend moving heads and adding heads as noted below to achieve head to head coverage and improve the spray pattern coverage	Some heads moved. Several nozzles replaced
	The overall turf maintenance can be reduced as large turf areas are difficult to maintain	Recommend reducing the turf areas by installing Florida Friendly Landscape materials that are suited for the site conditions. Also, recommend installing low volume irrigation for the planting beds to reduce the overall water demand of the landscape	Not completed

Residential Irrigation Evaluation Report

Zone #1 Spray Zone Front Yard Turf Area (See attached site plan)	Water can be conserved as Spray Head #4 is overspraying onto the street	Recommend adjusting the spray pattern to reduce overspray and to conserve water	Completed
	Spray pattern coverage can be improved as Spray Head #5 is partially blocked by plant material	Recommend trimming the plant material and or moving the head to improve the spray pattern coverage for the turf areas	Completed
	Zone is operating at approximately 11 Gallons Per Minute (GPM)	No action	Zone is operating at approximately 3 Gallons Per Minute (GPM)
Zone #2 Spray Zone Rear Yard Turf Area (See attached site plan)	Spray pattern coverage can be improved as Spray Head #12 is leaning	Recommend straightening the head to improve the spray pattern coverage for the turf areas	Completed
	The spray pattern coverage can be improved as Spray Head #11 is spaced too far apart from Spray Heads #15 & #16 for head to head spray coverage	Recommend respacing heads or adding a head in this location to improve the spray pattern coverage for the turf areas	Completed

Residential Irrigation Evaluation Report

	The spray pattern coverage can be improved as Spray Head #9 is spaced too far apart from Spray Head #33 for head to head spray coverage	Recommend respacing heads or adding a head in this location to improve the spray pattern coverage for the turf areas	Completed
	The spray pattern coverage can be improved as Spray Head #13 is spaced too far apart from Spray Head #35 for head to head spray coverage	Recommend respacing heads or adding a head in this location to improve the spray pattern coverage for the turf areas	Not completed
	Zone is operating at 17.5 Gallons Per Minute (GPM)	No Action	Zone is operating at 9 Gallons Per Minute (GPM)
Zone #3 Spray Zone Rear Yard Turf Area (See attached site plan)	Zone is operating at 16 Gallons Per Minute (GPM)	No Action	Zone is operating at 8.5 Gallons Per Minute (GPM)
Zone #4 Spray Zone Side Yard Turf Area (See attached site plan)	The spray pattern coverage can be improved as Spray Head #20 is spaced too far apart from Spray Head #19 for head to head spray coverage	Recommend respacing heads installing a larger radius spray nozzle to improve the spray pattern coverage for the turf areas	Completed
	Spray pattern coverage can be improved as Spray Head #21 is partially blocked by plant material	Recommend trimming the plant material and or moving the head to improve the spray pattern coverage for the turf areas	Completed

Residential Irrigation Evaluation Report

	Zone is operating at 9 Gallons Per Minute (GPM)	No action	Zone is operating at 9 Gallons Per Minute (GPM)
Zone #5 Spray Zone Front/Side/Rear Yard Turf Area (See attached site plan)	Spray pattern coverage can be improved as Spray Head #28 is set to low and blocked by the surrounding turf areas	Recommend raising the head or installing a taller head to improve the spray pattern coverage for the turf areas	Not completed
	Water can be conserved as Spray Heads #25 & #26 are overspraying onto mature plantings	Recommend adjusting the spray patterns to only irrigate the turf areas to conserve water	Spray Head #25 adjusted. Spray Heads #26, #30 & #31 overspraying planting beds
	Water can be conserved as Spray Head #24 is overspraying onto the driveway	Recommend adjusting the spray pattern to reduce overspray and to conserve water	Completed
	Zone is operating at 13.5 Gallons Per Minute (GPM)	No action	Zone is operating at 7 Gallons Per Minute (GPM)
Zone #6 Low Volume Zone Landscape Beds (See attached site plan)	Water can be conserved as Several micro-sprays are overspraying onto the residence (See attached irrigation layout plan)	Recommend adjusting the heads to reduce overspray, conserve water and prevent water damage to the residence	Completed
	Water can be conserved as 1 micro-spray nozzle is broken at the northwest corner of the residence	Recommend repairing or replacing the nozzle to conserve water	Completed

Residential Irrigation Evaluation Report

	Zone is operating at 16.5 Gallons Per Minute (GPM)	No action	Zone is operating at 8.5 Gallons Per Minute (GPM)
--	--	-----------	---

A catch can test was performed on Zones #1 & #5 to determine the system spray uniformity and also determine appropriate run times for the scheduled waterings in order to achieve a 1/2" to 3/4" application rate. .

Zone #1 is running at 11 gallons per minute and according to the catch can test, is operating at 83% spray uniformity for the Zone (above 70% is considered to be good). This zone is applying .51" of water per hour. The lawn has areas in good condition. It is recommended that the zone runtime be set at 71 minutes once per week to achieve a 1/2" application rate. Also, based on the existing soil profile (high sand content) and root depth it is recommended that the runtime be completed in one application.

Zones #5 is running at 13.5 gallons per minute and according to the catch can test, are operating at 63% spray uniformity for the Zone (above 70% is considered to be good). This zone is applying .48" of water per hour. The lawn has areas of distress. If the recommendations above are made to the system with the application rate increased to .70" per hour and the spray uniformity improved to 70%, it is recommended that the zone runtime be set at 60 minutes once per week to achieve a 1/2" application rate. Also, based on the existing soil profile (high sand content) and root depth it is recommended that the runtime be completed in one application.

Irrigation Schedules:

The Watering schedule below (Left Side) reflects the information recorded from the irrigation controller at the time of the inspection by the irrigation evaluator called (Pre-inspection zone runtimes and water usage). The water schedule below (Right Side) reflects recommended changes to the watering times and frequency based on the evaluation inspection called (Post-inspection zone runtimes and water usage). These modifications can create significant water savings in many cases.

The suggested runtimes reflect the fact that Spray Heads deliver more water than rotor sprinklers during a given time period and that turf grasses typically require more frequent irrigation than most plants and shrubs. Following the Post Inspection suggested runtimes will allow for deeper development of turf grass roots, greater soil moisture retention and help promote a more drought resistant turf. Over-watering allows water to travel beyond the root zone, while under-watering may cause shallow roots that will dry out quickly.

Residential Irrigation Evaluation Report

Plant type	Pre-Inspection zone runtimes And water usage	Plant type	Post-Inspection suggested runtimes And water usage
	Program A (4 application times per week)		Program A (1 application time per week)
Turf	Zone 1 (Spray) - 30 mins = 330 Gal	Turf	Zone 1 (Spray) - 71 mins = 781 Gal
Turf	Zone 2 (Spray) - 30 mins = 525 Gal	Turf	Zone 2 (Spray) - 70 mins = 1,225 Gal
Turf	Zone 3 (Spray) - 40 mins = 640 Gal	Turf	Zone 3 (Spray) - 70 mins = 1,120 Gal
Turf	Zone 4 (Spray) - 30 mins = 270 Gal	Turf	Zone 4 (Spray) - 60 mins = 540 Gal
Turf	Zone 5 (Spray) - 30 mins = 405 Gal	Turf	Zone 5 (Spray) - 60 mins = 810 Gal
Plants	Zone 6 (Low Vol.) - 15 mins = 248 Gal	Plants	Zone 6 (Low Vol.) - 15 mins = 248 Gal
	Total Current Water Usage (per application) = 2,418 Gallons X 4 applications per week = 9,672 Gallons per week		Total Water Usage (per application) after run time modifications 4,724 Gallons per week

*Plant type has three terms: Turf Only, Plants/Shrubs only and Mixed (combination of Both)

a. Consider placing these charts next to your controller.

b. Consider skipping your watering day when there is significant rainfall 1/2 half inch or more).

When watering your lawn and landscape please observe the local water use restrictions.

Please check for any changes to the current watering restrictions at: <http://swfwmd.state.fl.us/conservation/restrictions/swfwmd.php>

Additionally, seasonal adjustments may also be used to further reduce water use during the winter months (December, January and February) when root growth is minimal thus requiring much less water. By watering every other week during the winter months an additional 28,344 gallons could be saved. The controller also has a seasonal adjustment capability that can also be used to adjust runtimes of all zones by increasing or reducing the percentage of application time; during the rainy season or in winter months when plant materials are not in a growth cycle, the controller's seasonal adjustment can be set at 60% to 80% of the current application rate to conserve water.

Also note: additional water savings can occur by repairing leaks, removing heads, capping heads and changing nozzles on heads as noted above.

The chart below reflects how much water is currently used compared to the Post-evaluation water use with adhering to the recommendations noted above.

Estimate of existing water usage ¹	Post-evaluation water use ²	Projected annual gallons saved ²	Projected Annual Gallons Saved w/ Skip a Week ²
<i>9,672 GAL/CYCLE/WEEK</i>	<i>4,724 GAL/CYCLE</i>	<i>4,948 GAL/CYCLE</i>	<i>4,724 GAL/CYCLE</i>
<i>502,944 GAL/YEAR</i>	<i>245,648 GAL/YEAR</i>	<i>257,296 GAL/YEAR</i>	<i>285,640 GAL/YEAR (57% Annual Savings)</i>

¹ Based on 4 days a week watering with 1 application per day as noted above

² Based on 1 day a week watering with 1 application per day year round

Not only is it important to follow these recommendations because it will help conserve the water supply in the Coastal Rivers and Withlacoochee river Basins, it may also help to lower your current utility bill.

For system repairs: Contact a licensed irrigation contractor for a professional installation, particularly if the system involved additional equipment or major modifications. For a listing of qualified contractors in your area, call the Florida Irrigation Society at 1-800-441-5341 or visit their website: <http://www.fisstate.org/>. or refer to the yellow pages of the phone directory. For do-it-yourselfers, irrigation supplies can be obtained from home improvement centers or irrigation supply facilities.

Approximately once per month inspect the irrigation system. Turn on each irrigation zone and visually examine all sprinkler heads. (Are they broken, spraying in the wrong direction or not rotating?) Take notes for later reference. Ten minutes of operation time is allowed for this inspection.

Thanks again for participating in the Withlacoochee Regional Water Supply Authority's Irrigation Evaluation program. We hope this information will benefit you. There are various recommendations and suggested changes made in this report.

Please contact (WRWSA Contracted Admin, Nancy Smith - [352-586-0661](tel:352-586-0661)), if you have any questions or Comments.

Urban runoff has been identified as the primary source of pollutant loading to surface waters in Florida and is regulated by local, state and federal regulations. Runoff in residential areas is contaminated with fertilizers, bacteria from pet waste, sediment, as well as oil and other automotive fluids from vehicles in driveways and streets. Your efforts in eliminating runoff from excessive irrigation helps reduce the amount of these pollutants which will be transported to local waters. By following the recommendations in this audit report not only will you be conserving water by irrigating more efficiently you will also be reducing your impact on the environment!

See attached Irrigation Layout Plan for irrigation equipment locations on the property.

Actual Water Usage Following Modifications:

Pre-Inspection zone run times And water usage per application	Post-Inspection run times
Program A (4 application times per week)	Program A (2 application times per week)
Zone 1 (Spray) - 30 mins = 330 Gal	Zone 1 (Spray) - 50 mins = 165 Gal
Zone 2 (Spray) - 30 mins = 525 Gal	Zone 2 (Spray) - 55 mins = 495 Gal
Zone 3 (Spray) - 40 mins = 640 Gal	Zone 3 (Spray) - 60 mins = 510 Gal
Zone 4 (Spray) - 30 mins = 270 Gal	Zone 4 (Spray) - 55 mins = 495 Gal
Zone 5 (Spray) - 30 mins = 405 Gal	Zone 5 (Spray) - 55 mins = 385 Gal
Zone 6 (Low Vol.) - 15 mins = 248 Gal	Zone 6 (Low Vol.) - 15 mins = 128 Gal
Total Current Water Usage (per application) = 2,418 Gallons X 4 applications per week = 9,672 Gallons per week	Total Water Usage (per application) after run time modifications = 2,178 Gallons per application = 4,359 Gallons per week

Water Usage Summary Following Re-Inspection

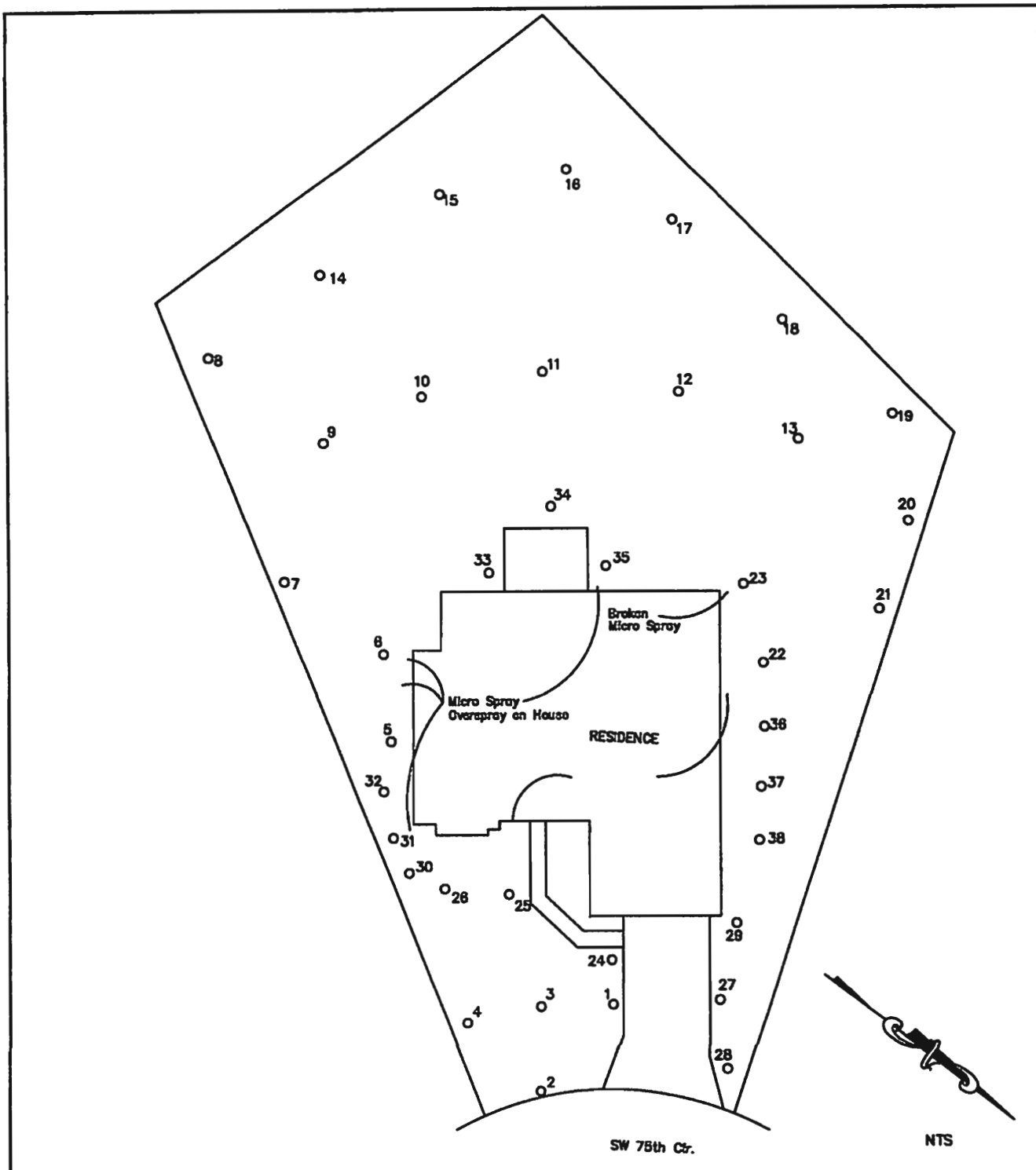
Estimate of existing water usage ¹	Post-evaluation water use ²	Projected annual gallons saved ²	Projected Annual Gallons Saved w/ Skip a Week ²
<i>9,672 GAL/CYCLE/WEEK</i>	4,359 GAL/CYCLE	5,313 GAL/CYCLE	4,359 GAL/CYCLE
<i>502,944 GAL/YEAR</i>	<i>226,668 GAL/YEAR</i>	<i>276,276 GAL/YEAR</i>	<i>332,507 GAL/YEAR (66% Annual Savings)</i>

¹ Based on 4 days a week watering with 1 applications per day

² Based on 2 days a week watering using the skip a week program in the winter months (Dec., Jan., Feb.) and assuming a 15% savings with the installed rain sensor.

Estimated percentage of recommended modifications completed: 70%





Plan provided courtesy of the SWFWMD, Withlacoochee
Regional Water Supply Authority & Marion County

LEGEND

- Location of Spray Heads
- Location of Rotor Head

ELD

ECO-Land Design
7615 Terrace River Drive
Tampa, FL 33637
Ph: (813) 468-8705
eco-landdesign.com

IRRIGATION LAYOUT PLAN

DATE:

APRIL 2012

APPLICANT:

[REDACTED]
[REDACTED] SW 75th Cir.
Ocala, FL 34476

Appendix C. Educational Materials

10/1/2020

List of Educational Materials

1. *A Guide to the Basics of Micro-Irrigation* (SWFWMD)
2. *Rain Barrels: A Homeowner's Guide* (SWFWMD)
3. *Watch the weather, wait to water!* (SWFWMD)
4. *A Do-It-Yourself Guide to Florida Friendly Fertilizing* (SWFWMD)
5. *Saving Water Outdoors* (SWFWMD)
6. *The Florida-Friendly Landscaping Guide to Plant Selection & Landscape Design* (SWFWMD)
7. *Saving Water Indoors* (SWFWMD)
8. *Florida Yards & Neighborhoods Landscape Water Conservation Calendar* (SWFWMD, Hernando County Utilities & FY&N)
9. *Water Wisdom Magnet* (Villages Utilities)
10. *Water Wisdom Home Closing Booklet* (Villages Utilities)

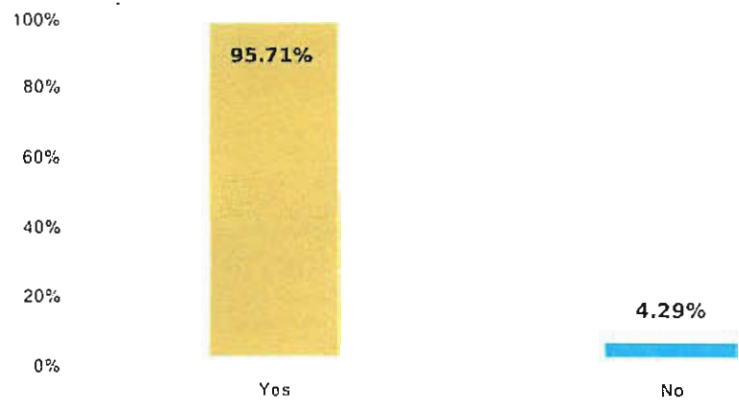
The educational materials were ordered by Jack Overdorff, the irrigation evaluation contractor, and distributed during the onsite irrigation system evaluation.

Appendix D. Customer Satisfaction Survey

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q1 Did you make any changes to your irrigation system as a result of the system evaluation?

Answered: 70 Skipped: 4

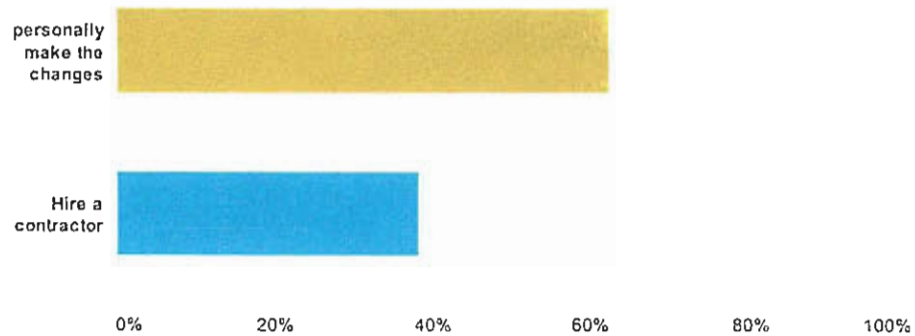


Answer Choices	Responses	
Yes	95.71%	67
No	4.29%	3
Total		70

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q2 If you made changes to your system, did you

Answered: 66 Skipped: 0



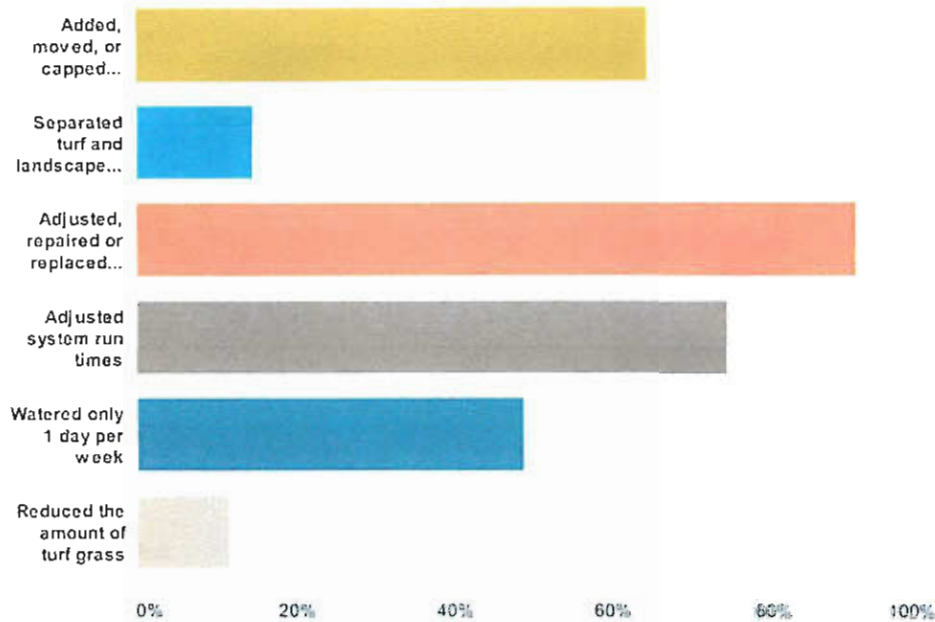
Answer Choices	Responses	
personally make the changes	62.12%	41
Hire a contractor	37.88%	25
Total		66

#	Other (please specify)	Date
1	will personally make the changes	10/29/2013 2:13 PM
2	sprinkler Tech	10/29/2013 2:11 PM
3	a relative	10/29/2013 2:08 PM
4	Both - some areas turned off completely.	9/10/2013 2:55 PM

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q3 What changes did you make to your irrigation system?

Answered: 70 Skipped: 4



Answer Choices

Added, moved, or capped sprinkler heads
 Separated turf and landscape zones
 Adjusted, repaired or replaced sprinkler heads
 Adjusted system run times
 Watered only 1 day per week
 Reduced the amount of turf grass

Responses

64.29% 45
 14.29% 10
 90% 63
 74.29% 52
 48.57% 34
 11.43% 8

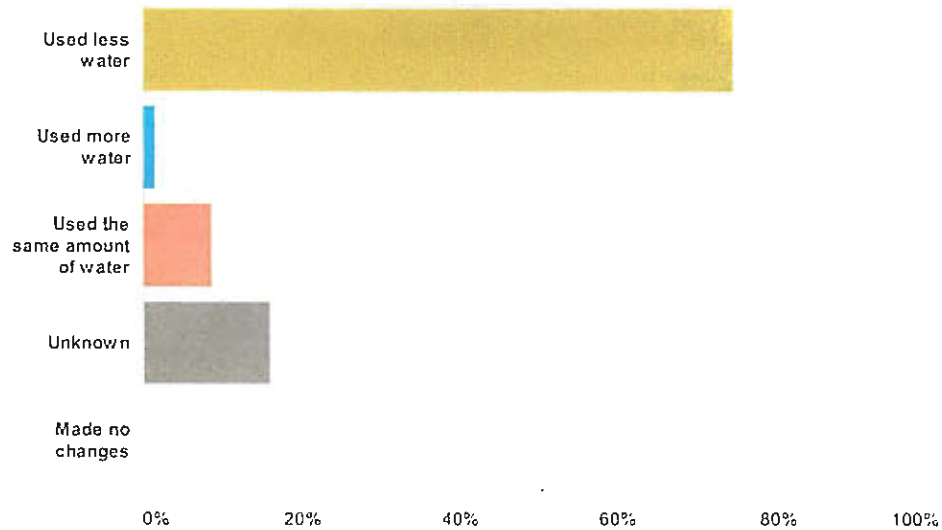
Total Respondents: 70

#	Other (please specify)	Date
1	will add, move or cap sprinkler heads; will adjust, repair or replace sprinkler heads.	10/29/2013 2:13 PM
2	Adjusted spray zone	10/29/2013 1:49 PM
3	Added one head in turf & capped 4 heads in landscaping	10/29/2013 1:21 PM
4	more than one day of water in summer.	9/10/2013 2:55 PM
5	replaced controller unit	9/9/2013 6:27 AM
6	watering as needed	9/7/2013 6:28 PM
7	capped landscape zones	1/6/2013 1:30 PM
8	put in more much beds with eco friendly plantings	10/22/2012 10:56 AM

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q4 Did you notice a change in your irrigation system performance as a result of any changes made?

Answered: 70 Skipped: 0

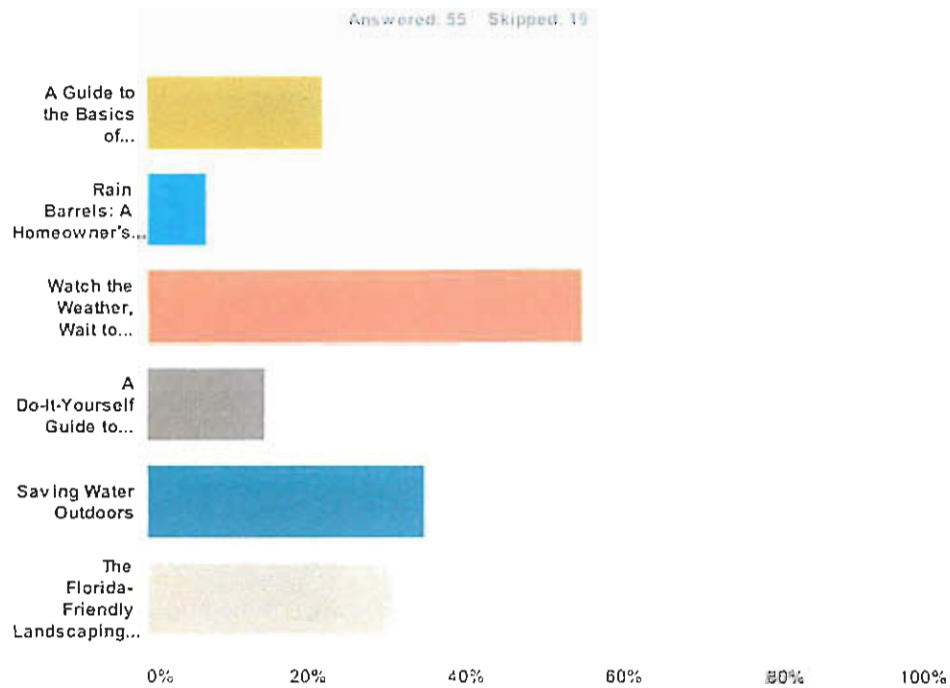


Answer Choices	Responses	
Used less water	74.29%	52
Used more water	1.43%	1
Used the same amount of water	8.57%	6
Unknown	15.71%	11
Made no changes	0%	0
Total		70

#	Other (please specify)	Date
1	Did not notice a difference.	10/29/2013 2:11 PM
2	Hard to tell, but capped numerous heads	10/29/2013 2:06 PM
3	too soon to tell	10/29/2013 1:57 PM
4	better coverage of all areas	10/29/2013 1:42 PM
5	Depends on amount of rain we get, then we shut off system.	10/29/2013 1:38 PM
6	Adjusted system to eliminate spray on road & driveway	10/29/2013 1:28 PM
7	costs less \$\$\$	9/10/2013 2:55 PM

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q5 Which educational information provided was most helpful?

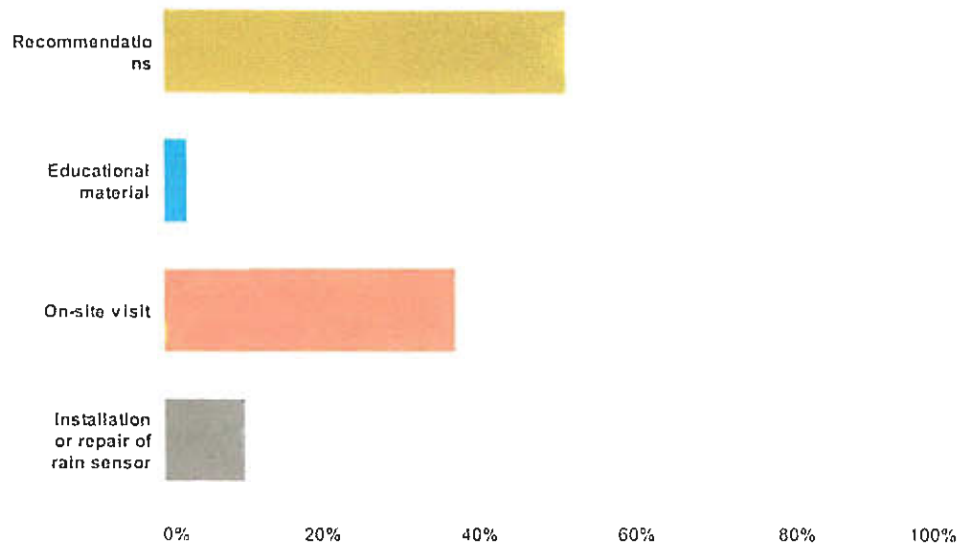


Answer Choices	Responses	
A Guide to the Basics of Micro-Irrigation	21.82%	12
Rain Barrels: A Homeowner's Guide	7.27%	4
Watch the Weather, Wait to Water!	54.55%	30
A Do-It-Yourself Guide to Florida Friendly Fertilizing	14.55%	8
Saving Water Outdoors	34.55%	19
The Florida-Friendly Landscaping Guide to Plant Selection & Landscape Design	30.91%	17
Total Respondents: 55		

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q6 What was the most helpful part of the evaluation?

Answered: 71 Skipped: 1



Answer Choices	Responses	
Recommendations	50.70%	36
Educational material	2.82%	2
On-site visit	36.62%	26
Installation or repair of rain sensor	9.86%	7
Total		71

#	Other (please specify)	Date
1	on-site visit	10/29/2013 2:13 PM
2	on-site visit and installation or repair of rain sensor	10/29/2013 2:08 PM
3	on-site visit and installation or repair of rain sensor	10/29/2013 2:07 PM
4	on-site visit	10/29/2013 2:04 PM
5	on-site visit	10/29/2013 2:01 PM
6	on-site visit	10/29/2013 1:57 PM
7	on-site visit	10/29/2013 1:54 PM
8	on-site visit and installation or repair of rain sensor	10/29/2013 1:51 PM
9	on-site visit and installation or repair of rain sensor	10/29/2013 1:49 PM
10	on-site visit and installation or repair of rain sensor	10/29/2013 1:48 PM
11	on-site visit and installation or repair of rain sensor	10/29/2013 1:45 PM
12	installation or repair of rain sensor	10/29/2013 1:44 PM
13	on-site visit	10/29/2013 1:38 PM

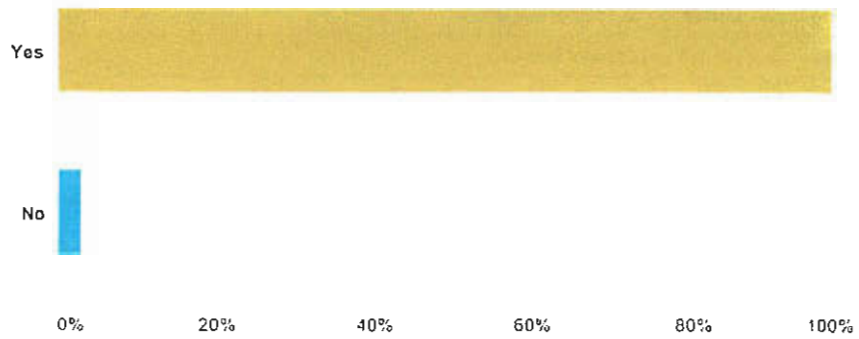
Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

14	selected all options	10/29/2013 1:37 PM
15	on-site visit and installation or repair of rain sensor	10/29/2013 1:35 PM
16	also installation or repair of rain sensor	10/29/2013 1:33 PM
17	on-site visit	10/29/2013 1:33 PM
18	also installation or repair of rain sensor	10/29/2013 1:31 PM
19	also on-site visit; installation or repair of rain sensor	10/29/2013 1:30 PM
20	also recommendations & educational material	10/29/2013 1:27 PM
21	Did not get a rain sensor.	9/8/2013 5:06 PM
22	Introduction to the Water Star Program in Marion County	9/7/2013 9:21 PM
23	and on site visit	10/22/2012 10:56 AM

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q7 Would you recommend this program to a neighbor?

Answered: 69 Skipped: 1



Answer Choices

Yes

No

Total

Responses

97.10%

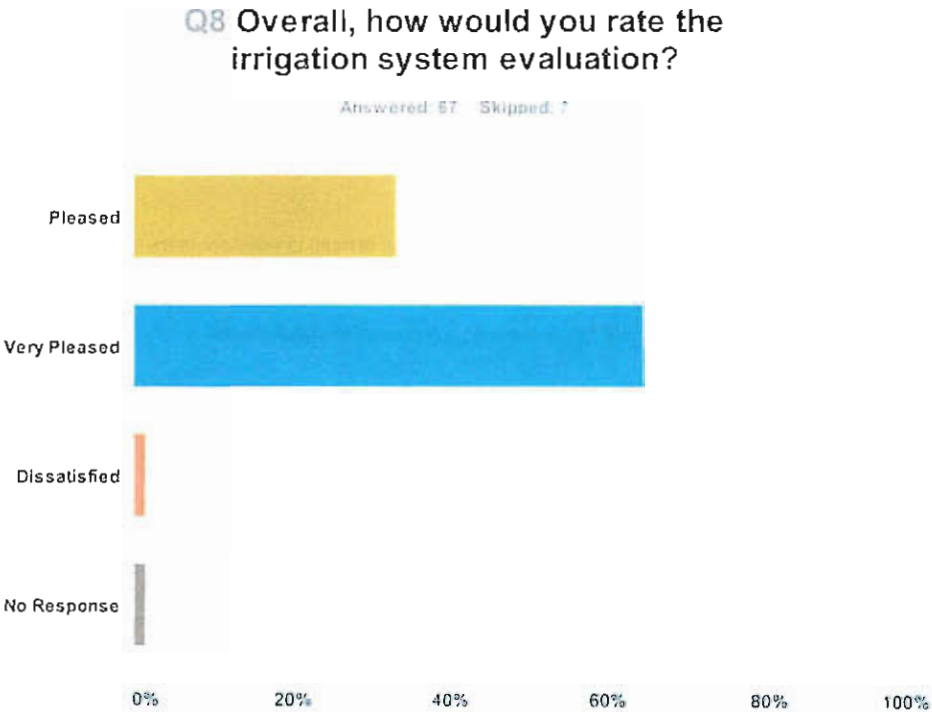
2.90%

67

2

69

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey



Answer Choices	Responses	
Pleased	32.84%	22
Very Pleased	64.18%	43
Dissatisfied	1.49%	1
No Response	1.49%	1
Total		67

Irrigation System Evaluation 2011-2012: Customer Satisfaction Survey

Q9 Other Comments

Answered: 20 Skipped: 54

#	Responses	Date
1	A very professional evaluation. [REDACTED]	10/29/2013 2:13 PM
2	I have moved to a gated community. I no longer do my own watering or need to worry about the turf.	10/29/2013 2:11 PM
3	Thank you!	10/29/2013 2:01 PM
4	Survey completed 7-15-2013. I waited until I re-landscaped & re-sodded to complete the questionnaire.	10/29/2013 1:57 PM
5	Mr. Overdorff did a wonderful job. He is professional & very helpful. I would recommend him to everyone. Many of my neighbors would also benefit from this service. Thank you & we are continuing to make further improvements per his recommendations. Thank you, [REDACTED].	10/29/2013 1:54 PM
6	A big "Thank you." [REDACTED]	10/29/2013 1:51 PM
7	We found Jack Overdorff to be professional and very informative. He took the time to answer all of our questions. Faithful in his follow-up.	10/29/2013 1:49 PM
8	Thank you. I appreciate the help.	10/29/2013 1:47 PM
9	Jack did a great job, easy to talk to, took the time to answer all questions and explain the reasoning. Thank you, [REDACTED], 3/18/13	10/29/2013 1:42 PM
10	Mr. Jack Overdorff was very pleasant, knowledgeable, and efficient. He was good explaining my system and ways to conserve water and keep water bills lower. He was quite professional.	10/29/2013 1:37 PM
11	Very helpful. Thanks.	10/29/2013 1:30 PM
12	We were amazed at the work that went into the total evaluation. Thank you.	10/29/2013 1:24 PM
13	Jack was terrific, explained everything and helped us save water AND money. Thanks!	9/10/2013 2:55 PM
14	Excellent program	9/9/2013 6:27 AM
15	I am saving money	9/8/2013 2:49 PM
16	He did an outstanding job and well worth the visit to my home. THANK YOU	9/7/2013 4:20 PM
17	Very detailed report. Appreciate the time and effort expended on saving water.	9/7/2013 2:49 PM
18	I am sorry that I did not do this sooner. The onsite evaluation was very good.	3/4/2013 6:58 PM
19	spent \$315.00 with new contractor, very pleased with results and have a yearly maintenance contract	1/5/2013 4:09 PM
20	great service.	10/22/2012 7:36 PM

Appendix E. Water Use Data by Utility

Citrus County Utilities Irrigation Audits (N278) Participants						
#	City	ACCOUNT#	DATE EVALUATION COMPLETED AND DELIVERED	Annual Water Use (Gallons)		
				Water Use Pre	Water Use Post	Water Saved
3	Homosassa	15-89-4940-1-0	9/6/11	387,000	310,000	77,000
7	Homosassa	15-89-7-1-8	9/6/11	473,000	326,000	147,000
5	Homosassa	15-89-1918-1-4	9/18/11	436,000	308,000	128,000
4	Homosassa	15-89-0201-2-0	9/19/11	551,000	398,000	153,000
2	Homosassa	15-89-1242-1-1	9/28/11	593,000	363,000	230,000
10	Homosassa	15-89-5496-1-5	9/28/11	595,000	337,000	258,000
9	Homosassa	15-89-3400-1-5	10/13/11	347,000	177,000	170,000
12	Homosassa	15-89-7132-2-9	10/13/11	520,000	319,000	201,000
16	Homosassa	15-89-8031-1-1	10/13/11	446,000	321,000	125,000
17	Homosassa	15-89-0378-1-9	10/18/11	494,000	268,000	226,000
11	Homosassa	15-89-2448-1-1	10/20/11	573,000	398,000	175,000
13	Homosassa	15-89-1864-1-8	11/14/11	579,000	238,000	341,000
15	Homosassa	15-89-1392-1-9	11/14/11	641,000	115,000	526,000
8	Homosassa	15-89-8892-1-9	12/6/11	426,000	301,000	125,000
14	Homosassa	15-89-9608-1-2	12/7/11	318,000	100,000	218,000
1	Homosassa	15-89-9468-1-1	12/28/11	585,000	339,000	246,000
18	Homosassa	15-89-9508-3-9	12/28/11	818,000	324,000	494,000
20	Homosassa	15-89-9968-1-6	1/9/12	325,000	235,000	90,000
22	Homosassa	15-89-9091-5-7	1/9/12	476,000	252,000	224,000
6	Homosassa	15-89-5468-2-7	1/13/12	564,000	408,000	156,000
25	Homosassa	15-89-6076-1-1	1/16/12	308,000	371,000	-63,000
26	Homosassa	15-89-9332-3-1	1/16/12	638,000	254,000	384,000
19	Homosassa	15-89-6604-1-2	1/17/12	457,000	279,000	178,000
23	Homosassa	15-89-8961-2-3	1/17/12	355,000	243,000	112,000
21	Homosassa	15-89-6192-5-1	1/26/12	494,000	289,000	205,000
24	Homosassa	15-89-5096-1-9	1/30/12	628,000	414,000	214,000
28	Homosassa	15-89-327-1-1	3/8/12	341,000	292,000	49,000
27	Homosassa	15-89-4406-2-5	3/9/12	300,000	185,000	115,000
29	Homosassa	15-89-9012-1-2	3/26/12	360,000	207,000	153,000
30	Homosassa	15-89-7136-2-5	3/29/12	463,000	265,000	198,000
31	Homosassa	15-89-4592-1-1	4/19/12	339,000	227,000	112,000
32	Homosassa	15-89-9360-3-6	5/13/12	230,000	229,000	1,000
34	Homosassa	15-89-198-3-3	5/13/12	461,000	115,000	346,000
33	Homosassa	15-89-6572-1-0	5/14/12	252,000	232,000	20,000
35	Homosassa	15-89-2170-1-5	5/14/12	269,000	236,000	33,000
39	Homosassa	15-89-3672-2-4	5/21/12	271,000	286,000	-15,000
40	Homosassa	15-89-9065-1-8	5/21/12	330,000	214,000	116,000
41	Homosassa	15-89-0792-2-5	5/29/12	302,000	232,000	70,000
36	Homosassa	15-89-5462-2-3	5/31/12	397,000	266,000	131,000
42	Homosassa	15-89-1712-1-2	6/18/12	345,000	329,000	16,000
44	Homosassa	15-89-0546-1-6	6/18/12	440,000	378,000	62,000
43	Homosassa	15-89-6796-1-0	6/21/12	448,000	371,000	77,000
45	Homosassa	15-89-0800-1-7	6/29/12	285,000	248,000	37,000
37	Homosassa	15-89-9220-3-6	7/8/12	323,000	344,000	-21,000
46	Homosassa	15-89-1932-1-6	7/25/12	324,000	277,000	47,000
47	Homosassa	15-89-0592-2-7	7/25/12	171,000	136,000	35,000
48	Homosassa	15-89-0996-1-1	7/26/12	113,000	77,000	36,000

Citrus County Utilities Irrigation Audits (N278) Participants						
Annual Water Use (Gallons)						
#	City	ACCOUNT#	DATE EVALUATION COMPLETED AND DELIVERED	Water Use Pre	Water Use Post	Water Saved
49	Homosassa	15-89-0178-1-1	7/30/12	278,000	320,000	-42,000
54	Homosassa	15-89-780-1-1	7/30/12	182,000	172,000	10,000
55	Homosassa	15-89-0768-17	7/30/12	279,000	294,000	-15,000
52	Homosassa	15-89-1744-22	8/6/12	339,000	488,000	-149,000
38	Homosassa	15-89-9414-1-6	8/10/12	258,000	214,000	44,000
51	Homosassa	15-89-506-1-4	8/11/12	214,000	151,000	63,000
53	Homosassa	15-89-306-1-6	8/13/12	264,000	183,000	81,000
50	Homosassa	15-89-3398-1-9	9/5/12	253,000	288,000	-35,000
56	Homosassa	15-89-5922-1-9	9/12/12	345,000	310,000	35,000
59	Homosassa	15-89-5398-1-4	9/12/12	322,000	389,000	-67,000
57	Homosassa	15-89-0056-1-8	9/15/12	185,000	222,000	-37,000
58	Homosassa	15-89-0282-1-4	9/15/12	332,000	289,000	43,000
60	Homosassa	15-89-4264-1-8	10/5/12	461,000	446,000	15,000
61	Homosassa	15-89-3870-1-6	10/5/12	207,000	217,000	-10,000
62	Homosassa	15-89-2902-2-8	10/25/12	200,000	215,000	-15,000
Totals				23,910,000	17,031,000	6,879,000

Account owner changed

Gallons Saved Per Day

18,847

Gallons Saved per Account per Day

304

Hernando County Utilities Irrigation Audits (N278) Participants						
#	City	ACCOUNT#	DATE EVALUATION COMPLETED AND DELIVERED	Annual Water Use (Gallons)		
				Water Use Data Pre	Water Use Data Post	Water Saved
1	Spring Hill	TB00199-01	09/06/11	433,150	256,950	176,200
2	Spring Hill	S5909924-0	09/06/11	446,600	388,700	57,900
3	Spring Hill	S901034-0	09/12/11	486,850	216,300	270,550
4	Spring Hill	TB00678-01	09/12/11	588,500	434,525	153,975
5	Spring Hill	S906937-00	09/26/11	280,600	258,000	22,600
6	Spring Hill	S900999-00	9/26/11	305,600	144,100	161,500
7	Spring Hill	S910035-00	9/28/11	426,700	148,100	278,600
8	Spring Hill	S808089-00	9/28/11	424,550	309,400	115,150
9	Spring Hill	S801313-00	10/17/11	496,800	322,700	174,100
10	Spring Hill	S801469-0	10/17/11	429,700	398,000	31,700
11	Brooksville	SE00070-01	10/26/11	469,500	290,250	179,250
12	Spring Hill	S906786-00	10/26/11	346,700	168,600	178,100
13	Spring Hill	S603293-00	11/3/11	431,600	350,100	81,500
14	Spring Hill	S907315-01	11/4/11	354,700	224,475	130,225
15	Spring Hill	S800801-1	11/7/11	382,150	198,700	183,450
16	Spring Hill	S804981-0	11/7/11	442,800	368,350	74,450
17	Spring Hill		11/21/11	515,600	209,500	306,100
18	Spring Hill	TP01379-02	12/12/11	373,200	282,300	90,900
19	Spring Hill	TB00119-01	12/13/11	378,900	318,600	60,300
20	Spring Hill	S909785-00	12/15/11	534,625	398,325	136,300
21	Spring Hill	S80134-00	1/19/12	-	-	-
22	Weeki Wachee	RH00609-02	1/19/12	350,600	345,600	5,000
23	Spring Hill	TB00059-02	1/25/12	0	0	0
24	Spring Hill	S103786	2/15/12	332,600	133,700	198,900
25	Spring Hill	S601881-01	2/15/12	528,500	201,300	327,200
26	Spring Hill	SL00461-03	2/24/12	822,300	103,200	719,100
27	Weeki Wachee	GL01299-01	2/26/12	478,000	356,200	121,800
28	Spring Hill	S100879-01	3/8/12	373,800	183,700	190,100
29	Spring Hill	S813441-01	3/8/12	0	0	0
30	Spring Hill	S911383-02	3/8/12	415,100	108,000	307,100
31	Spring Hill	S813270-02	3/8/12	413,800	211,700	202,100
32	Spring Hill	TP00232-02	3/26/12			-
33	Spring Hill	S804767-0	3/31/12	713,300	224,200	489,100
34	Spring Hill	PP00630-1	3/31/12	527,500	263,200	264,300
35	Spring Hill	TP00134-2	4/9/12	226,800	87,800	139,000
36	Spring Hill	S102878-2	4/9/12	441,800	238,600	203,200
37	Spring Hill	TB00029-03	4/18/12	395,000	97,700	297,300
38	Spring Hill	SL00318-01	4/23/12	625,600	237,500	388,100
39	Spring Hill	S805241-1	5/21/12	0	0	-
40	Spring Hill	SL00747-2	5/21/12	357,600	314,500	43,100
41	Spring Hill	SB01950-0	5/21/12	340,000	214,700	125,300
42	Weeki Wachee	GL00987-2	5/23/12	607,500	198,400	409,100
43	Spring Hill	S803556-01	5/29/12	195,100	133,700	61,400
44	Spring Hill	S804264-00	5/31/12	381,400	267,200	114,200

Hernando County Utilities Irrigation Audits (N278) Participants						
#	City	ACCOUNT#	DATE EVALUATION COMPLETED AND DELIVERED	Annual Water Use (Gallons)		
				Water Use Data Pre	Water Use Data Post	Water Saved
45	Spring Hill	T800435-1	6/5/12	460,200	186,300	273,900
46	Spring Hill	S605939-1	6/6/12	475,100	255,700	219,400
47	Spring Hill	S907774-00	6/11/12	393,800	213,100	180,700
48	Spring Hill	S103270-00	6/11/12	561,800	240,600	321,200
49	Spring Hill	S807916-01	6/15/12	273,300	265,900	7,400
50	Spring Hill	S6000061-3	6/15/12	289,000	179,600	109,400
51	Spring Hill		7/11/12	-	-	-
52	Spring Hill	S601264	7/12/12	359,200	171,400	187,800
53	Spring Hill	TP01855-01	7/13/12	385,200	253,400	131,800
54	Spring Hill	OK00301-02	8/17/12	472,400	91,600	380,800
55	Spring Hill	SI01051-01	8/17/12	507,600	338,100	169,500
56	Spring Hill	S901270-00	8/25/12	530,000	182,900	347,100
57	Spring Hill	TPO1238-03	8/25/12	402,300	192,200	210,100
58	Spring Hill	S812677-01	11/14/11	413,800	211,700	202,100
59	Spring Hill	SI00558-01	11/10/11	507,900	403,600	104,300
60	Spring Hill	S911044-01	11/10/11	503,275	334,475	502,941
61	Weeki Wachee	GL00958-2	3/29/12	447,300	389,600	57,700
62	Spring Hill	S901118-3	10/25/12	321,200	69,500	251,700

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Totals	24,378,500	13,252,409	11,126,091
Gallons Saved per Day			30,482.44
Gallons Saved per Account per Day			534.78

Closed Accounts

Marion County Utilities Irrigation Audits (N278) Participants						
#	Street Address	Account #	DATE EVALUATION COMPLETED AND DELIVERED	Annual Water Use (Gallons)		
				Water Use Data Pre	Water Use Data Post	Water Saved
1	Ocala	011691-01	9/6/11	306,000	283,000	23,000
2	Ocala	011055-11	9/6/11	477,000	404,000	73,000
3	Ocala	007438	9/14/11	351,000	208,000	143,000
4	Ocala	009949-01	9/14/11	406,000	155,000	251,000
5	Ocala	009938-00	10/7/11	341,000	238,000	103,000
6	Ocala	012152	10/7/11	283,000	215,000	68,000
7	Ocala	10006	11/28/11	370,000	204,000	166,000
8	Ocala	009825-00	11/28/11	515,000	31,000	484,000
9	Ocala	009909-00	11/28/11	318,000	275,000	43,000
10	Ocala	010957-00	11/28/11	396,000	233,000	163,000
11	Ocala	007340-00	12/19/11	344,000	264,000	80,000
12	Ocala	013928	12/19/11	316,000	227,000	89,000
13	Dunnellon	018341-00	1/11/12	414,000	109,000	305,000
14	Ocala	011708-00	2/7/12	333,000	143,000	190,000
15	Ocala	007341-00	2/7/12	198,000	193,000	5,000
16	Ocala	007320-01	2/8/12	456,000	296,000	160,000
17	Ocala	007272-00	2/24/12	164,000	170,000	(6,000)
18	Ocala	010710-00	4/16/12	332,000	138,000	194,000
19	Ocala	005885-00	4/16/12	377,000	227,000	150,000
20	Ocala	007566-01	4/16/12	248,000	168,000	80,000
21	Ocala	011044-01	4/30/12	321,000	223,000	98,000
22	Ocala	005835-00	4/30/12	20,000	6,000	14,000
23	Ocala	012156-00	5/7/12	317,000	157,000	160,000
24	Ocala	009912-00	5/7/12	352,000	300,000	52,000
25	Ocala	030865-00	6/13/12	853,000	82,000	771,000
26	Ocala	005895-03	6/13/12	292,000	216,000	76,000
27	Ocala	010298-01	7/10/12	331,000	220,000	111,000
28	Dunnellon	018409-00	8/6/12	123,000	73,000	50,000
29	Ocala	010956-00	8/29/12	313,000	249,000	64,000
30	Ocala	027961-02	8/29/12	297,000	185,000	112,000
31	Ocala	007556-00	8/30/12	263,000	156,000	107,000
32	Dunnellon	018193-00	8/30/12	278,000	151,000	127,000
33	Ocala	009897-00	8/31/12	324,000	261,000	63,000
34	Ocala	009668-00	8/31/12	305,000	185,000	120,000
35	Ocala	010849-00	9/25/12	318,000	254,000	64,000
36	Ocala	009846-00	9/25/12	218,000	71,000	147,000
37	Ocala	006264-00	9/26/12	346,000	166,000	180,000
38	Ocala	010893-01	9/27/12	220,000	170,000	50,000
39	Ocala	030789-01	9/29/12	376,000	202,000	174,000
40	Ocala	010909-00	9/29/12	315,000	165,000	150,000
41	Ocala	006664-00	10/3/12	231,000	210,000	21,000
42	Ocala	022773-00	10/3/12	421,000	298,000	123,000
43	Ocala	028371-01	10/4/12	406,000	121,000	285,000
44	Ocala	010571-00	10/9/12	105,000	112,000	(7,000)
45	Ocala	005886-00	10/11/12	407,000	298,000	109,000

Marion County Utilities Irrigation Audits (N278) Participants						
#	Street Address	Account #	DATE EVALUATION COMPLETED AND DELIVERED	Annual Water Use (Gallons)		
				Water Use Data Pre	Water Use Data Post	Water Saved
46	Ocala	010727-00	10/13/12	342,000	211,000	131,000
47	Ocala	009682-00	10/29/12	137,000	140,000	(3,000)
48	Ocala	031309-01	10/31/12	261,000	205,000	56,000
49	Ocala	009847-00	11/10/12	77,000	34,000	43,000
50	Ocala	012193-01	11/30/12	409,000	199,000	210,000
50			Totals	15,923,000	9,501,000	6,422,000
			Gallons Saved per Day			17,595
			Gallons Saved per Account per Day			352

Villages NSCUDD Irrigation Audits (N278) Participants							
#	Account	Village ID	Irrig Report	Annual Water Use (Gallons)			
				Water Use Pre	Water Use Post	Water Saved	GPD
				Total	Total	Total	
1	300-1396-00	Village of Hadley	9/20/11	313,060	191,140	121,920	334
2	502-1146-00	Village of Mallory Square	9/20/11	331,900	218,210	113,690	311
3	601-2351-00	Village of Hadley	9/20/11	425,480	184,850	240,630	659
4	40-1581-01	Village of Sunset Pointe	10/7/11	407,660	274,190	133,470	366
5	504-1136-00	Village of Sabal Chase	10/7/11	433,810	273,610	160,200	439
6	530-1651-00	Village of Amelia	10/7/11	342,760	278,740	64,020	175
7	1-1406-01	Village of Belvedere	10/24/11	298,510	164,080	134,430	368
8	1-3196-01	Village of Belvedere	10/24/11	207,230	119,500	87,730	240
9	22-1291-01	Village of Poinciana	10/24/11	308,980	163,210	145,770	399
10	510-2076-00	Village of Caroline	10/31/11	193,870	179,130	14,740	40
11	540-1616-00	Village of Sabal Chase	10/31/11	200,750	146,560	54,190	148
12	330-0626-03	Village of Sunset Pointe	11/8/11	266,030	209,880	56,150	154
13	501-2176-00	Village of Caroline	11/16/11	356,660	211,350	145,310	398
14	540-2426-00	Village of Largo	11/16/11	328,570	75,690	252,880	693
15	40-0556-01	Village of Sunset Pointe	11/29/11	290,960	239,910	51,050	140
16	601-1356-00	Village of Hadley	11/29/11	354,170	304,470	49,700	136
17	33-0781-01	Village of Poinciana	12/5/11	423,890	359,890	64,000	175
18	11-0946-00	Village of Virginia Trace	12/28/11	363,420	219,830	143,590	393
19	22-0146-01	Village of Poinciana	12/28/11	223,010	133,190	89,820	246
20	720-0826-00	Village of Buttonwood	6/29/12	347,230	290,550	56,680	155
21	333-0886-00	Village of Buttonwood	7/17/12	246,300	268,460	-22,160	-61
22	720-0376-00	Village of Pennecamp	7/17/12	253,850	172,320	81,530	223
23	222-0731-00	Village of Pennecamp	7/20/12	233,130	251,930	-18,800	-52
24	503-1806-00	Village of Amelia	7/20/12	195,930	166,860	29,070	80
25	2-2861-01	Village of Ashland	8/20/12	191,330	225,090	-33,760	-92
26	33-0401-02	Village of Poinciana	8/20/12	169,320	116,780	52,540	144
27	502-2286-00	Village of Mallory Square	9/8/12	268,120	132,230	135,890	372
28	620-1486-00	Village of Pennecamp	9/10/12	151,670	100,240	51,430	141
29	10-1356-01	Village of Ashland	9/20/12	231,180	138,380	92,800	254
30	740-0116-00	Village of Tamarind Grove	9/21/12	274,840	213,280	61,560	169
31	510-2011-00	Village of Caroline	9/24/12	216,340	175,530	40,810	112
32	604-0941-00	Village of Hemingway	9/24/12	141,150	171,270	-30,120	-83
33	22-0596-01	Village of Liberty Park	11/10/12	122,400	151,110	-28,710	-79
34	33-2256-00	Village of Poinciana	11/19/12	220,000	128,060	91,940	252
35	703-3371-00	Village of Hemingway	11/19/12	301,960	199,750	102,210	280
36	620-1126-00	Village of Pennecamp	11/23/12	227,430	174,770	52,660	144
37	503-0041-00	Village of Amelia	11/24/12	126,450	170,550	-44,100	-121
38	333-0341-00	Village of Buttonwood	11/29/12	378,170	273,550	104,620	287
39	503-0241-01	Village of Amelia	11/29/12	69,380	128,030	-58,650	-161
40	503-0301-01	Village of Amelia	11/29/12	130,000	92,020	37,980	104
41	333-0796-00	Village of Buttonwood	11/30/12	269,940	189,500	80,440	220
Totals				10,836,840	7,877,690	2,959,150	8,107

Gallons Saved per Day

8,107

Gallons Saved per Account per Day

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Villages LSSA/VCCDD Irrigation Audits (N278) Participants							
				Annual Water Use (Gallons)			
				Water Use Pre	Water Use Post	Water Saved	
#	Account	Village ID	Irrig Report	Total	Total	Total	GPD
1	11-3681-01	Village of Summerhill	10/10/11	266,770	144,050	122,720	336
2	31-0570-01	Village of Belle Aire	10/10/11	407,430	289,340	118,090	324
3	71-3410-01	Village of Springdale	10/10/11	379,620	153,430	226,190	620
4	31-4485-00	Village of Piedmont	10/31/11	398,000	201,900	196,100	537
5	51-0465-02	Village of Polo Ridge	11/8/11	257,240	201,170	56,070	154
6	80-0735-02	Village of Woodbury	11/8/11	399,500	299,820	99,680	273
7	71-0710-01	Village of Springdale	12/5/11	378,910	358,890	20,020	55
8	61-1420-02	Village of Glenbrook	12/27/11	347,400	213,300	134,100	367
9	31-3190-01	Village of Piedmont	6/22/12	204,210	181,980	22,230	61
10	71-0360-02	Village of Woodbury	6/22/12	360,450	154,000	206,450	566
11	31-2140-02	Village of Belle Aire	6/23/12	262,620	213,360	49,260	135
12	31-4265-00	Village of Piedmont	6/26/12	307,340	75,170	232,170	636
13	50-2575-01	Village of Polo Ridge	6/28/12	277,510	251,790	25,720	70
14	80-0290-01	Village of Woodbury	7/17/12	248,290	170,530	77,760	213
15	81-1165-00	Village of Springdale	8/20/12	180,260	189,570	-9,310	-26
	Totals			4,675,550	3,098,300	1,577,250	4,321

Gallons Saved per Day

4,321

Gallons Saved per Account per Day

288

**Item 11.b.
As-Needed Engineering
and Technical Services
Work Order**

2025-2026 • \$1,500,000 • 100% • 100%

11

**11.b. Executive Director's Report – As-Needed Engineering and Technical Services Work Order. . .
Richard Owen, WRWSA**

At the November 2012 meeting, the Board authorized the Executive Director to enter into contracts with eight firms for as-needed General Professional Engineering/Technical Services. The Board also authorized staff to issue the first work order to Water Resource Associates for as-needed engineering and technical support services in an amount of \$25,000. That work order expired at the end of September 2013. This year's budget contains \$75,000 for potential engineering/technical support services. To-date, only one work order has been issued, in the amount of \$10,000 to Jones Edmunds for purposes of supporting the proposed Memorandum of Understanding with the City of Wildwood and Marion County, leaving a balance of \$65,000. Staff has need for additional as-needed engineering/technical support, including support for proposed revisions to the Charles A. Black wellfield agreement with Citrus County. Staff believes that, among the pre-approved consultants for as-needed support services, Water Resource Associates (WRA) is uniquely qualified to provide these required services. The purpose of this Work Order is to engage WRA to provide engineering and technical general support services to the Authority Board and Executive Director on an as-needed basis, including support for revising the Citrus County agreement. A copy of the proposed Work Order is included as an Exhibit to this item.

Staff Recommendation: Staff recommends Board approval of Work Order #14-02, as contained in the exhibit to this item, in an amount of \$35,000 for purposes of providing as-needed engineering/technical support services, with a termination date of September 30, 2015.

GENERAL ENGINEERING/TECHNICAL SERVICES

WORK ORDER No. 14-03

General Support Services

INTRODUCTION AND BACKGROUND

This Work Order No. 14-03 "General Support Services" is approved this ___ day of _____ 2014 and is incorporated by reference into the Agreement for General Professional Engineering/Technical Services entered into on November 28, 2012 between the Withlacoochee Regional Water Supply Authority (Authority or WRWSA) and Water Resource Associates, Inc. (Consultant), for General Professional Engineering/Technical Services.

SCOPE OF WORK

The Consultant will assist the Authority Board and Executive Director with policy, programmatic and technical aspects of the Authority on an as-needed basis. This work requires the expertise of a water supply engineering firm to provide a wide range of disciplines for its successful implementation.

The Consultant responsibilities will include, but not be limited to:

1. Assisting the Authority Executive Director with water-related policy, technical and programmatic issues;
2. Assisting in the development and negotiation of a revised purchase agreement between the Authority and Citrus County regarding the Charles A. Black water supply facilities;
3. Providing technical assistance regarding the regional water supply planning and implementation process;
4. Assisting in responding to inquiries and investigations from member governments, the water management districts, the Florida Department of Environmental Protection and other interested parties;
5. Attendance at various board, water management district, county and city meetings;
6. Participation and coordination with Authority member governments;
7. Coordination with the SWFWMD and SJRWMD;
8. Presentations regarding the Authority's activities to various boards, commissions, councils and other organizations;
9. Development of position papers and providing assistance developing Authority Board meeting material; and
10. Other related activities requested and approved by the Executive Director.

COMPENSATION

The Consultant shall receive compensation and reimbursement for travel and other expenses not to exceed the sum of \$35,000, consistent with the rate schedule attached as Exhibit A to the Agreement.

SCHEDULE

The schedule for Consultant services will commence upon execution of this Work Order by the Authority and will continue through September 30, 2015.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the day and year first written above.

WITHLACOOCHEE REGIONAL WATER SUPPLY
AUTHORITY

Richard S. Owen Date
Executive Director

WATER RESOURCE ASSOCIATES, INC.

Title: Date

APPROVED BY:

Larry Haag
General Counsel for
Withlacoochee Regional Water Supply Authority

Item 11.c.
Correspondence



January 29, 2014

Jay Hoecker, Water Supply Specialist
Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34604

RE: Regional Irrigation System Evaluation Pilot Program (N278)

Dear Jay,

Enclosed with this letter are two paper copies and two electronic copies of the final report for the Regional Irrigation System Evaluation Pilot Program (N278). These are submitted to the District as the Record and Library copies as specified in the Agreement No. 11C00000066, paragraph 9.

The report provides a summary of the program and the water savings obtained during the course of the project by utility, by basin and region-wide. The report includes items as required in Exhibit A, paragraph 4.2 of the Agreement. We appreciate the opportunity to work with the District and with the utilities within our region to promote and improve water conservation in furtherance of the District and Authority priorities and to help the utilities to reach and maintain the 150 gallons of water per capita per day.

Please contact me or Nancy Smith, our Project Manager, if you need any other information pertaining to this final report or of the irrigation system evaluation program.

Sincerely,

Richard S. Owen, AICP
WRWSA Executive Director

Enclosures: (4)

RSO/nhs



January 17, 2014

Marion County Clerk of Circuit Court
Attn: Cindy Bonvissuto, Commission Records
P.O. Box 1030
Ocala, FL 34471-1030

Re: Revised and Restated Interlocal Agreement between the Withlacoochee Regional Water Supply Authority and Citrus, Hernando, Marion and Sumter Counties

Dear Ms. Bonvissuto,

Attached are 5 copies of the Revised and Restated Interlocal Agreement that was approved by the Marion County Commission on Tuesday, January 7, 2014. Please date on page 9 and sign on page 10, then return all 5 copies to me.

As you will see, Hernando County and Sumter County have signed so far. Citrus County adopted the Interlocal Agreement on January 14, 2014. After all parties have signed the Agreement, I will return a completed original to you.

Please call or email me if you have any questions. My telephone number is 352-527-5795 and email is nsmith@wrwsa.org. Thank you for your help.

Sincerely,

Nancy H. Smith
WRWSA Administrative Assistant

Enc.: Revised and Restated Interlocal Agreement (5 copies)

cc: Richard S. Owen, Executive Director

Item 11.d.
News Articles

Subject: finding AWS before its too late...

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Mon, Feb 03, 2014 9:24 am

To: WRWSA <richardowen@wrwsa.org>

Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

Daily Commercial

The Florida Legislature, local water management districts and the South Lake Regional Water Initiative are taking aggressive steps to find alternative water sources to groundwater use as the projected demand for water continues to grow.

There is a demand of 300 million gallons of water a day by 2035 and currently there is only 50 million gallons that can be met by the traditional source, according to water experts.

This leaves the Central Florida region with the task of finding 250 millions gallons of water from someplace else.

"That is a shot across the bow that we have to seriously do something," Rep. Larry Metz, R-Groveland, said Thursday after moderating the Lake County legislative delegation to address water concerns.

"If we continue to go in the direction we are headed lately in the next 10 years or so, we are quickly going to use up the available capacity and not allow any further consumptive use, which means no growth and no jobs."

The South Lake Regional Water Initiative, consisting of the South Lake Chamber of Commerce, the county and the municipalities of Clermont, Groveland, Minneola, Mascotte and Montverde, agreed this week to equally share in the cost of hiring a consultant to help find an alternative water source for south Lake County.

"It is a great day for Lake County in our quest to protect water resources," said Commissioner Sean Parks, who founded the initiative two years ago with Groveland Mayor Tim Loucks.

That agreement must come before the city councils and the County Commission for approval.

At the same time, the St. Johns River Water Management District released its Draft District Water Supply Plan Tuesday, showing water demand projections exceed groundwater availability by 2035. The plan includes measures on promoting water conservation and finding alternative water sources.

And, the delegation held a workshop stressing that the protection of water resources is a top priority for the 2014 legislative session.

Rep. Marlene O'Toole, R-The Villages, Sen. Alan Hays, R-Umatilla, Sen. Dorothy Hukill, R-Port Orange and Metz, are all part of the delegation.

Water experts said the challenge is finding an affordable alternative water source.

Another challenge, experts said, is ensuring regional entities are working together to meet their needs without competing for the same alternative water sources.

The Central Florida Water Initiative includes southern Lake, Orange, Osceola, Seminole and Polk counties, and is working to develop a unified process to address central Florida's current long-term water supply needs.

It proposes tapping into brackish groundwater, surface water such as the St. Johns River and reclaimed water.

Water officials expressed optimism this week about finding a possible alternative water source for south Lake County.

Lake County Legislative Delegation

Metz, who moderated the workshop, said addressing the protection of water resources, including the springs and lakes, is now coming to the forefront because of the alarming projections.

Hays said while there is momentum for springs protection legislation he is cosponsoring with several other senators, it is simply a beginning point in a lengthy process.

Gov. Rick Scott recently recognized the need for funding for springs protection in his 2014-15 budget, Hays said.

"The state legislature is aware of the need for water," he said. "Finally, it looks like we are going to have some discretionary money appropriated toward the solution. It is not going to be solved overnight."

Hays said the legislature needs the flexibility to allocate funds in areas deemed appropriate.

The proposed Florida Water and Land Conservation Amendment stands in the way of exercising that fiscal prudence, Hays said.

The amendment would require 33 percent of the documentary stamp tax on real estate transactions go toward conservation measures.

"If that amendment is passed, it will tie our hands," he said. "It is exceptionally bad public policy to put that kind of fiscal micromanagement into the Constitution."

Betsy Farmer, district supervisor of the Lake Soil and Water Conservation District, said to the delegation, "We have a duty and obligation to make sure our resources are not wasted. Water consumption must be considered the serious reality that it is and can only be accomplished with your help."

Parks stressed south Lake residents were equally concerned.

"Because quite frankly people come out to south Lake because of the beautiful lakes," he said. "For economic prosperity, businesses have to have a reliable, predictable and affordable water supply."

South Lake Regional Water Initiative

Forming a partnership two years ago, the SLRWI addresses "regional solutions in the areas of reclaimed water distribution, minimum flows and levels of the region's lakes and rivers, and alternative water supplies and conservation."

Loucks said it was important to fund the \$300,000 study to look at alternative water sources in south Lake.

"These studies are going to get more expensive as time goes on," he said. "Currently we only have a 6 percent reserve in our upper Floridan aquifer. If we don't get on board, that is going to be long gone."

Possible alternative water supplies for south Lake include using reclaimed water from Water Conserv II, the largest water reuse project in Orange County. Officials say Water Conserv II was a challenge because there is no real impetus from Conserv II officials to provide water resources to south Lake because of their own needs.

Meanwhile, the closest other alternative water sources are nine miles away.

However, Alan Oyler, consultant for St. Johns River Water Management District, expressed some optimism Thursday about exploring the idea of taking water from the lower Floridan Aquifer while seeking cost-effective treatment technology that makes it a viable source. The vast majority of water is pumped from the upper Floridan Aquifer.

Even so, the problem with withdrawing from the lower Floridan Aquifer is that the water quality is typically poorer, Oyler said.

"You have more dissolved solids in that water," he said.

Challenges

Larry Walker, Mascotte public services director, came to the SLRWI meeting this week with some bad news.

The St. Johns River Water Management District, he said, has cut the city's request to withdraw water from the upper Floridan Aquifer almost in half.

"The only way to have any new businesses, is you have to have those (water) capacities," he said.

This is a situation future south Lake cities may face as they renew their permits, because the SJRWMD is reducing potential effects on wetlands caused by groundwater withdrawals, water officials stated.

Oyler said because Mascotte is part of the SLRWI, the neighboring cities are preparing to meet to help address Mascotte's needs.

This is one example of why it is critical that municipalities and entities work together to find a solution, Oyler said.

Subject: Fwd: GOVERNOR SCOTT'S BUDGET RECOMMENDS \$1.4 BILLION TO PROTECT AND PRESERVE FLORIDA'S ENVIRONMENT
From: Diane Salz <disalz@yahoo.com>
Date: Wed, Jan 29, 2014 10:03 am
To: Richard Owen <richardowen@wrwsa.org>
Cc: "nsmith@wrwsa.org" <nsmith@wrwsa.org>

Sent from my iPhone

Begin forwarded message:

From: "Florida Department of Environmental Protection" <FloridaDEP@public.govdelivery.com>
Date: January 29, 2014 at 10:02:22 AM EST
To: disalz@yahoo.com
Subject: GOVERNOR SCOTT'S BUDGET RECOMMENDS \$1.4 BILLION TO PROTECT AND PRESERVE FLORIDA'S ENVIRONMENT
Reply-To: FloridaDEP@public.govdelivery.com



FOR IMMEDIATE RELEASE: Jan. 29, 2014

CONTACT: DEP Press Office, 850.245.2112, DEPNews@dep.state.fl.us

GOVERNOR SCOTT'S BUDGET RECOMMENDS \$1.4 BILLION TO PROTECT AND PRESERVE FLORIDA'S ENVIRONMENT

~Funding for Everglades, spring and land conservation~

TALLAHASSEE – Today, Governor Rick Scott highlighted his commitment to protect, preserve and improve Florida's environment. The Governor's "It's Your Money Tax Cut Budget" will include support for restoration projects in the Everglades, springs protection improvements, and the purchase of conservation lands. The FY2014/2015 budget places a priority on protecting the health of Florida's natural resources.

"By proposing more than a billion dollars, Governor Scott recognizes the Department's commitment to preserving the environment through sound science," said Florida Department of Environmental Protection Secretary Herschel T. Vinyard Jr. "This significant funding will ensure the Department's ability to continue to safeguard and protect the state's natural resources."

Proposed budget items include:

\$180 million investment to restore the Everglades and Florida Keys. Governor Scott has been laser-focused on Everglades restoration. This continues funding for the Governor's landmark \$880 million Everglades water quality plan. The \$180 million also includes \$40 million to speed up completion of the C-44 Stormwater Treatment

Area for Martin and St. Lucie counties, and provide the first \$30 million - in a three year installment - for the Tamiami Trail project, providing needed water to Everglades National Park. In addition, the investment of these funds will allow for the completion of the Kissimmee River restoration project, which will improve the environmental health of the area north and south of Lake Okeechobee, the Lake itself, and Lee, Charlotte, Martin and St. Lucie counties. Lastly, \$50 million will support improvements to the Florida Keys wastewater system, helping to protect the coral reefs and water quality of the Keys.

\$286 million for restoring waterways and water supply. This funding represents a continued commitment to assisting Florida's communities with "getting the water right." More than \$276 million is provided for wastewater/stormwater facility construction, drinking water facility construction and water quality planning. Additionally \$9.4 million is provided to continue setting nutrient limits and developing restoration plans for Florida's waters at a record pace. Under Governor Scott's leadership, the Department has implemented the most comprehensive numeric nutrient criteria in the nation.

\$55 million for springs restoration. The "It's Your Money Tax Cut Budget" commits \$55 million for springs restoration, protection and preservation, with \$50 million invested in springs protection projects and to address significant groundwater issues in and around springs. Since 2011, Governor Scott has specifically directed more funding to springs protection than any Administration in Florida's history to protect and restore these natural treasures.

\$70 million for Florida Forever. The Governor's budget recommends \$30 million in cash and an additional \$40 million in budget authority from the proceeds of the sale of surplus non-conservation lands owned by the state. This investment to purchase conservation lands needed for springs protection, military buffering or water resource protection will allow Floridians to enjoy our natural treasures.

\$125 million for Petroleum Tank Cleanup. This funding will support a more efficient and effective petroleum tanks restoration program. DEP will competitively procure contracts providing a better value for the Florida taxpayer.

\$25 million for beach erosion control. The Governor's budget will manage and nourish Florida's beautiful beaches. The local government partners responsible for the state's most valuable and recognizable natural resource will benefit from state assistance for beach and dune restoration, beach nourishment, inlet sand bypassing and regional sediment management.

\$19 million for state park improvements. The funding for state park repairs, renovations and development will keep Florida State Parks on the map. This includes \$4 million in ADA access improvements. Florida is the only state to be awarded three National Gold Medals for Excellence by the National Recreation and Parks Association.

In addition, Governor Scott's "It's Your Money Tax Cut Budget" provides \$1 million to protect Florida's manatees. The Oceanaria Reimbursement Assistance Program, which is managed by the Florida Fish and Wildlife Conservation Commission, works to rescue, rehabilitate and release manatees to support their adult population, which is key to the survival of the species.

Representative Holly Raschein said, "Governor Scott's investment to fund key priorities to improve the infrastructure here in South Florida - with Everglades

restoration and enhancements to the Keys wastewater system - illustrates his commitment to Florida's environment."

Eric Draper, Executive Director of Audubon Florida said, "Everglades, Florida Forever and springs restoration are critical priorities for Florida. Governor Scott's budget increases funding for these priorities and also renews funding for Florida Keys wastewater to help protect our reefs."

Shelly Lakly, Director of the Florida Chapter of The Nature Conservancy said, "We support the significant investments in water quality that are illustrated in the proposed budget through increased funding for Everglades restoration and springs protection projects to prevent further degradation of our estuaries and springs. With the funding for the Keys wastewater system, the Governor has followed through on his commitment to protect Florida's coral reefs and marine ecosystems, a priority of The Nature Conservancy and important to protecting the economy and quality of life of the Florida Keys."

Eric Eikenberg, CEO of The Everglades Foundation said, "Governor Scott's budget recognizes that we must protect the Caloosahatchee and St. Lucie Rivers and estuaries, and sharpen our focus on rapidly restoring and protecting America's Everglades."

Sally Hess, Secretary of the Friends of Florida State Parks said, "The continued support by Governor Scott in his budget will help protect, sustain and improve accessibility to Florida's award winning state parks."

Greg Chelius with the Trust for Public Land said, "With this funding, Governor Scott's investment will allow for significant opportunities to protect the state's natural resources."

Patrick Rose, Executive Director of the Save the Manatee Club said, "We applaud Governor Scott for championing this critical investment in the protection of our endangered manatees. His strong support will better ensure that manatees will receive the care they urgently need today and in the future."

For further details on the Governor's recommended "It's Your Money Tax Cut Budget", visit www.FLItsYourMoney.com.

About Florida Department of Environmental Protection

The Florida Department of Environmental Protection is the state's principal environmental agency, created to protect, conserve and manage Florida's environment and natural resources. The Department enforces federal and state environmental laws; protects Florida's air and water quality, cleans up pollution, regulates solid waste management, promotes pollution prevention and acquires environmentally-sensitive lands for preservation. The agency also maintains a statewide system of parks, trails and aquatic preserves. To view the Department's website log on to www.dep.state.fl.us.

<http://content.govdelivery.com/accounts/FLDEP/bulletins/a227ff>



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CHECK OUT DEP'S [ONLINE NEWSROOM](#)

Subject: Ocala Star Banner: 'Earth needs new laws...'
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Wed, Jan 29, 2014 9:34 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

'Earth needs new laws,' 300 told at Silver Springs forum

By [Fred Hiers](#)
Staff writer

Published: Tuesday, January 28, 2014 at 10:56 p.m.

Last Modified: Tuesday, January 28, 2014 at 10:56 p.m.

The protection of Silver Springs will require vigilance, money and a willingness to create laws that sometimes call for personal sacrifice in order to leave the water resource in a better state for future generations.

That was the collective sentiment of eight speakers who took part in the Silver Springs Alliance forum Tuesday at the College of Central Florida to discuss the progress and shortcomings of Marion County and Florida lawmakers in protecting the first-magnitude spring east of Ocala. More than 300 people attended the forum.

The keynote speaker was Patricia Siemen, a Dominican sister from Adrian, Mich., and an attorney. She currently serves as the director of the Center for Earth Jurisprudence at the Barry University School of Law in Orlando.

While Silver Springs is a local issue, Siemen said it was also important to have a broad environmental overview and realign how people think about the earth and resources.

People need to ask "What needs to shift in order to have a sustainable future?" Siemen said.

The answer is new laws that no longer are solely based on what people need, but rather also what the earth needs, she said.

"My premise is that the earth has rights too," she said. "The earth needs new laws."

Her advice was to "work with elected leaders to lead on ecological health, or elect new ones."

Silver Springs feeds the 4.5-mile-long Silver River, which empties into the Ocklawaha River.

Silver Springs was the largest first-magnitude spring in Florida. Its flow has recently been surpassed by Rainbow Springs.

During the past few decades, Silver Springs' flow has fallen by more than a third and polluting nitrate levels have risen manyfold.

Another speaker was Florida Sen. Charlie Dean, R-Inverness.

Dean is one of a handful of Florida senators crafting legislation for the 2014 session meant to address water-quality problems among Florida's lakes, springs and aquifers.

Some of the legislation includes tougher regulation of wastewater-treatment plants and farm fertilizer application, replacing thousands of leaking septic tanks and devoting as much as \$400 million a year to water cleanup efforts using real estate taxes.

Part of the motivation for the proposed legislation came about when Dean and other lawmakers met to discuss what they wanted their political legacy to be, Dean said.

"The answer was very simple — water," he told the audience Tuesday evening.

Marion County Commissioner Stan McClain told those attending that Marion County has already done much to protect Silver Springs, citing its springs protection ordinance and \$30 million to improve its wastewater system.

McCain said improving the quality of the spring would draw more tourists and financially invigorate the area.

Sally Lieb, the manager of Silver Springs State Park, updated the audience on the changes made to Silver Springs State Park

since the state took it over from California-based amusement park operator Palace Entertainment late last year.

Many of the improvements already made or planned are structural, such as improvements to the glass-bottom boats or demolishing unneeded building and removing non-native, invasive plants, Lieb said.

"There's been a lot of behind-the-scenes work," she said.

Environmental lobbyist Ryan Smart, with the Florida Conservation Coalition, said that for the past several years he has had to fight legislation that would have harmed Florida's waters.

But now the Springs Protection Act, which would raise \$400 annually from real estate taxes, has made him for the first time optimistic. The proposed legislation is a major policy shift, he said.

Smart encouraged people to contact their elected officials and to encourage their support for the legislation.

"If we don't tell them this is what we want, we're not going to get it," he said.

Smart also encouraged people to support the Florida Water and Land Conservation Amendment that will be on the November ballot.

The amendment sets aside a third of all real estate taxes to fund conservation, such as acquiring conservation and recreation lands; manage existing lands; protect lands critical for water supply; and restore degraded natural systems.

Speaker Robert Knight, director of the nonprofit Howard T. Odum Florida Springs Institute and president of Wetland Solutions Inc. in Gainesville, warned that while some Floridians are trying to protect Silver Springs, the water resource continues to get worse.

While it was originally thought that the spring's flow had diminished by a third during the past several decades, the latest study shows it has fallen 42 percent.

Many state water district officials say the decline is due to reduced rainfall, but Knight said the main culprit is over-pumping.

He said the spring's flow was mostly the same between 1880 and 1960, but declined during recent decades.

"That's not due to rainfall," he said.

Florida pumps about 2.5 billion gallons from the aquifer daily, and that can double during droughts, Knight said. That represents about half the water that would otherwise go to springs.

Knight said the solution is to use less water for irrigation, less for agriculture and to conserve.

"Pumping less is the solution for this," he said. "We all need to take action."

Additional speakers included Scott Mitchell of the Silver Springs Museum and environmentalist Karen Alhers, who spoke about Adena Springs Ranch's application in Marion County to pump 5.3 million gallons daily for its proposed cattle operation.

Contact Fred Hiers at fred.hiers@starbanner.com and 867-4157.

Subject: Fwd: another environmental permitting bill...
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Wed, Jan 29, 2014 9:26 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>
Date: Wed, Jan 29, 2014 at 9:25 AM
Subject: another environmental permitting bill...
To: Diane Salz <disalz@yahoo.com>

LobbyTools

Rep. Jimmy Patronis, R-Panama City, is back for a fourth year in a row with a wide-ranging environmental permitting bill and again is facing environmental opposition.

HB 703 provides for water use permits of up to 30 years for larger developments and up to 50 years for landowners who participate in water storage programs. Also under the bill, water supply projects that are part of development orders would have to be included in regional water supply plans.

The bill also would extend "right to farm" provisions in state law to prohibit enforcement of local springs and wetlands regulations that also have been modified or readopted since 2003. And the bill requires the **Department of Environmental Protection** to consider the cost of implementing any greenhouse gas reductions when developing a plan to meet federal regulations.

While last year's legislation, **HB 999**, was described as a "potpourri of many improvements" by lobbyist **Frank Matthews**, this year he is describing HB 703 as "reform light." Matthews represents an array of industry, development and agricultural interests.

"I can't say anything in there jumps out at me as crossing a line or creating a hot button (issue)," Matthews said. He describes his role as being a "scrivener" to Patronis on the bill.

But there are some hot button issues in the bill, as filed last week, for **Audubon Florida** and the **Sierra Club**.

"This is a bad bill," said **Audubon Florida Executive Director Eric Draper**.

He said the bill allows for the privatization of water by allowing the 50-year permits for landowners engaging in water storage. And he said the bill turns water planning upside down in favor of homebuilders.

"We should have scientists in charge of our planning for water resources, not developers," Draper said.

Matthews said the bill seeks to meet the goal of linking water planning and land planning. And he said longer water use permits are needed to encourage large landowners to participate in water storage projects.

"If you are increasing the water pie (available water), everybody should have some benefit associated with that," he said.

Sierra Club lobbyist **David Cullen** said the bill is designed to gut whatever the **U. S. Environmental Protection Agency** could end up requiring for states in regulating of greenhouse gas emissions.

"It is absurd to put a bill like this in place that denies the entire problem of sea level rise," Cullen said. **The Southern Alliance for Clean Energy** says the bill would discourage the use of energy efficiency to reduce carbon pollution.

Matthews said the bill simply delineates the criteria to be used by the state if regulations are required. A DEP spokesman said the department did not request the bill and has not taken a position on it.

Last year, **HB 999** also included a provision prohibiting local governments from enacting new ordinances restricting fertilizer use. Another section would have exempted water control districts from being subject to state wetlands regulations.

But those sections were taken out of the bill after former **U. S. Sen. Bob Graham** personally lobbied against them at the Capitol. They are not included this year in the initial version of HB 703.

Matthews said he hasn't heard anything about fertilizer language. And he said Patronis is trying to reach agreement on language dealing with wetlands permitting. Patronis could not be reached for comment.

Matthews said Patronis likes getting people involved on various sides of an issue to work out their differences.

"When folks find fault with whatever it is (in the bill)," Matthews said, "I'm sure it will be thoroughly discussed."

Subject: Fwd: NEWS RELEASE: District Plans to Add Three First-Magnitude Spring Systems to SWIM Program priority list
From: Diane Salz <disalz@yahoo.com>
Date: Wed, Jan 29, 2014 8:52 am
To: richardowen@wrwsa.org
Cc: Nancy Smith <nsmith@wrwsa.org>

Sent from my iPad

Begin forwarded message:

From: Chris Zajac <Chris.Zajac@swfwmd.state.fl.us>
Date: January 29, 2014 at 7:54:52 AM EST
Subject: NEWS RELEASE: District Plans to Add Three First-Magnitude Spring Systems to SWIM Program priority list

January 28, 2014

District Plans to Add Three First-Magnitude Spring Systems to SWIM Program priority list

The Southwest Florida Water Management District (District) Governing Board voted today to begin the process of adding three first-magnitude spring systems – Weeki Wachee River, Chassahowitzka River and Homosassa River – to the Surface Water Improvement Management (SWIM) Program priority list. The existing SWIM Program priority list includes two first magnitude spring systems – Rainbow River and Crystal River/Kings Bay – today's action initiates bringing all five of the District's first magnitude springs onto the SWIM Program priority list.

Improving northern coastal spring systems is a District priority and adding these springs on the District's SWIM list will allow the District to better prioritize projects, programs, and funding to improve the water resources. These spring groups are important for their ecological value and their economic impact.

A first-magnitude spring groups discharges 64.6 million gallons of water per day or more. Together, all five of the District's first-magnitude springs discharge more than one billion gallons of water per day.

With Board approval, staff will now coordinate with several state agencies and stakeholders to request any comments they have on the priority list changes. Those comments will be part of what the Board uses to make their final decision on the waterbodies. District staff anticipates requesting the Governing Board's final approval within six months. Following final approval, staff will develop SWIM plans for the newly added waterbodies.

SWIM projects focus on reducing the pollution in stormwater runoff by reducing excess nutrients and other pollutants which affect water quality. The District and its partners have implemented projects which have provided water quality treatment of more than 145,000 acres of watershed. SWIM projects also restore degraded or destroyed natural systems,

enhance existing habitats, and promote the preservation of natural habitats. Since 1987, the SWIM Program has restored over 10,923 acres of freshwater, estuarine, and upland habitat.

In 1987 the Florida Legislature created the Surface Water Improvement and Management (SWIM) Act to protect, restore and maintain Florida's highly threatened surface water bodies. Under this act, the state's five water management districts identify a list of priority water bodies within their authority and implement plans to improve them.

Chris Zajac
Government Affairs Program Manager
Northern Planning Region
Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34604
(352) 796-7211 ext. 4413
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Subject: Fw: Ocala Star Banner: getting water right
From: Diane Salz <disalz@yahoo.com>
Date: Mon, Jan 27, 2014 10:29 am
To: Richard Owen <richardowen@wrwsa.org>
Cc: Nancy Smith <nsmith@wrwsa.org>

On Monday, January 27, 2014 10:28 AM, Diane Salz <salz.govconsultant@gmail.com> wrote:

OTHER VOICES

'Getting water right' requires us all to change

By Patricia Harden
Special to Star-Banner

Published: Sunday, January 26, 2014 at 6:30 a.m.

Last Modified: Friday, January 24, 2014 at 5:37 p.m.

I am a second-generation Floridian and have spent almost 60 years involved in Florida ecological/water issues. What has been/is happening to our water resources causes me great concern and sorrow. In Pogo's words, "We have met the enemy and he is us." We over-allocate, and yet, now grant permits for 30 years. Industries lose large amounts of water each year in undocumented "leaks." We abuse by discharging poorly or untreated storm and agricultural waters into ground and surface waters, we over-irrigate and over-fertilize our landscape and continue to plant water-hungry types of lawns and landscapes. We plant crops on poor soils that require increased fertilization and irrigation. We fight eliminating septic tanks in areas of high springs and surface water impacts. The consumptive use and nutrients from all of this and more end up impacting our aquifer and surface waters, which includes springs, causing many problems, current and future. We allow our lawmakers to dismantle and emasculate the water management districts, likely with the astute guidance of well-paid special interest lobbyists. The government is definitely not "getting water right." In a better world, the Legislature would demand good science and truth and ensure that effective water protection measures were implemented by the districts. It is patently obvious we all need clean water for personal health, food production, industry, etc. How we, individually and collectively, choose to use and conserve the resource will greatly impact the economy and our quality of life. We all need to be more efficient and careful with this incredible and irreplaceable finite resource. The St. Johns River Water Management District stated years ago that in order to meet not-too-distant future needs, alternative water sources would need to be found. Alternative sources means withdrawing from our rivers, lakes and streams. Desalinization is likely the last choice

because it is even more expensive.

To help protect the resource, we need to make better choices on the type of lawns/landscapes we plant, our personal water use, better agricultural practices, more efficiency in industrial use, and so on. Are we willing to do this? Do we care enough? Can we ask the tough questions and take the hard actions? Should those who make large profits using our water resources continue to pay only the cost of consumptive-use permits?

Are we, as individuals, prepared to make even one sacrifice or pay an extra dollar designated for water resource restoration and protection? Are we willing to write or call our legislators and tell him/her to shun the high-paid lobbyists and base their decisions on real, not special interest-driven, science?

There is a misguided and seemingly, at times, cavalier attitude by Tallahassee toward using/abusing our natural resources based on the false mantra of "helping the economy." I would venture to say that clean water is the base of our economy.

Florida citizens and our economy will pay the price for this flagrant disregard of our precious water resources as we continue to over-allocate, overuse and abuse them. We are seeing this now in the sad decline of our fragile springs, so well documented in the Star-Banner's excellent series, "Fragile Springs," and in other places such as the Indian River Lagoon and the St. Johns River.

We need to care, do our part and, let our voices be heard loud and clear. The Legislature is addressing springs protection in this session. Urge your legislator to listen to valid science, not special interests, and to pass strong, meaningful springs and aquifer protection legislation. If we don't take a stand, we will all pay the price.

Patricia Harden is former chair of the St. Johns Water Management District Governing Board. She lives in Sanford.

Subject: Fwd: Tampa Tribune: encouraging signs for FL's environment

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Mon, Jan 27, 2014 10:25 am

To: WRWSA <richardowen@wrwsa.org>

Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Mon, Jan 27, 2014 at 10:25 AM

Subject: Tampa Tribune: encouraging signs for FL's environment

To: Diane Salz <disalz@yahoo.com>

Encouraging signs for Florida's environment

The run-up to this year's legislative session in Tallahassee has been filled with promising signs for Florida's environment, a surprising and encouraging development considering the virtual antipathy of recent Legislatures toward conservation.

In separate announcements last week, Gov. Rick Scott said he'll seek \$55 million to restore and maintain the state's natural springs, and that he wants the state to double its spending on Everglades restoration, bumping it up to \$130 million.

In the Senate, a \$380-million plan to help the state's natural water bodies is being drafted. And in the House, members are also working on a springs restoration package.

Whatever the motivation — be it political or not — the results will benefit the environment, the economy, and the reputation of Florida as a place of abundant natural beauty. The governor and state lawmakers should be applauded and encouraged to do even more.

The contrast could hardly be more stark compared with Scott's first years in office, when he gutted environmental protections and cut funding for a program that purchased pristine lands. State lawmakers were no less a threat to Florida's natural wonders, targeting growth management laws that guarded against haphazard development.

The state's clumsy attempt last year to sell some of its previously purchased conservation lands has been a dismal failure.

The measures being pitched in advance of this legislative session will go a long way toward restoring and protecting some of the state's freshwater sources. Nutrient-rich stormwater runoff, along with leaky septic tanks, pose a hazard to Florida's 700 springs. About half the money Scott is proposing would go toward reducing runoff, and about half would go toward restoring damaged springs.

As proposed, money for the Everglades will help restore the natural flow of water into the southern end of the Everglades. It will also be used for water treatment projects important to the overall health of the Everglades.

In addition to the spending, we hope lawmakers will reconsider a measure passed in 2010 but later repealed that required septic

systems be inspected every five years, with the goal of reducing the number of faulty systems. Septic tank owners complained about the costs, but now that the economy has improved lawmakers should do what they can to mitigate that hazard to freshwater sources.

The state's economic future depends on protecting its fragile freshwater systems, which nourish our plants and animals and provide drinking water for our growing population. Millions of people visit the Sunshine State each year to enjoy its beaches, its open water, and its state and federal parks. Thousands of people decide to move here each year, drawn by its climate and its natural beauty.

The tough budget years during the great recession made for some tough choices. But cutting programs that protect our freshwater sources was shortsighted.

The talk in Tallahassee these days is reminiscent of the enlightened environmental leadership under a string of previous governors, both Democrat and Republican, who understood the relationship between a healthy environment and a healthy economy.

Let's hope that the promise of this legislative session signals a return to those days.

Subject: Fwd: SJRWMD outline's water plan
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Mon, Jan 27, 2014 9:24 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>
Date: Mon, Jan 27, 2014 at 9:23 AM
Subject: SJRWMD outline's water plan
To: Diane Salz <disalz@yahoo.com>

PALATKA — By 2035, Northeast Florida's 18-county St. Johns Water Management District will need 200 million gallons per day more water than it does now because its population is expected to grow from 5.5 million to 6.5 million.

But groundwater supplies are already reaching capacity and pressure is on the district to find more water.

District engineers this week said their plan to fill that gap is to withdraw 155 million gallons per day from the St. Johns River.

Jim Gross, of the district's Regulatory Engineering and Environmental Services, said district staff will accept public comments and suggestions about the plan until Feb. 20.

District engineers have studied the river for four years and evaluated what withdrawal levels can be sustainable, he said.

"We wanted to know: Can we meet the demand without harming the water resources? If we can't, we have to do something else."

Harmful effects would include lake, springs and well levels dropping as well as lowered water quality.

He said conservation and better management techniques could save 60 to 80 million gallons per day. And increasing the use of reclaimed water and alternative supplies could also reduce demand on clean water sources.

Some more expensive options are storing water, using stormwater and desalinating sea water.

As for desalination, Gross said, "That's a distant source in the future. Half its cost is in energy at the moment. It's quite reliable, but the cost is not as favorable as other options."

Environmentalists oppose nearly every plan to take St. Johns River water for public consumption, fearing that setting that precedent could cause saltwater intrusion, encourage more frequent algae blooms, change wildlife habitat and cause other destructive effects.

Gross said the river has been the source of drinking water for the city of Melbourne since the 1960s and has been used in Seminole County for power generation for decades. Since 2009, Seminole County had permission to take 5.5 million gallons per day from the river to "augment its reclaimed water and potable groundwater supply systems," a district official said.

Gross said the district's 155 million gallons per day "can be withdrawn with no more than negligible or minor effect," because the river discharges 5 billion gallons per day to the ocean.

"The National Academy of Sciences has given this a lot of high-level scrutiny," he said. "There is a margin of safety here that says the withdrawals can be done and can be done in a safe manner. This is a resource highly valued by the public."

Few members of the public spoke at the district hearing Thursday.

One who did, Karl Hankin, said the district was using old population forecasts, giving a 30 million gallon-per-day difference in the calculations.

"The forecast is foundational to the district's water supply plan. It's important to get it correct," he said.

Another speaker warned that a 155 million gallon-per-day withdrawal on a continual basis would be detrimental to the river in a draught, "when both the river and groundwater will be low."

District technicians said the district's water supply plan is very different from the Central Florida Water Supply Plan presented last week.

"The 155 million gallon per day taken in the district's plan will include the Central Florida water," one said.

Subject: Niagara Bottling request for more water...
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Mon, Jan 27, 2014 9:28 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

Orlando Sentinel

Niagara Bottling will be waiting another three weeks for a decision on whether it will be allowed to pump nearly double the amount of water it now pumps from the Floridan Aquifer.

The California-based company is asking the St. Johns Water Management District for the OK to increase its draw from 484,000 gallons a day to 910,000 over the coming years. The permit request — which district staffers are recommending for approval — was set to go before the district's board of trustees last week.

Niagara and the district instead agreed to give extra time on the matter so residents could review details of the deal. The extra time also will give staffers a chance to evaluate feedback on Niagara's permit application which — if approved — would be good for the next 20 years. District spokesman Hank Largin said staffers have received 600 to 800 emails about the application in addition to phone calls and letters. Largin said those who've written in are "overwhelmingly opposed" to the permit. The request now is set to be heard on Feb. 11.

Opponents question why residents face water restrictions while the water district is poised to approve Niagara's request for more pumping. Niagara hopes to pump the bulk of its water from the lower aquifer by 2016 while reducing pumping from the more favored upper aquifer. The district maintains that the plan would have less of an environmental impact because Niagara would pull from the lower aquifer, where water is more plentiful but requires more treatment.

Niagara spokesman Joe Kilsheimer said the company is "confident" the application "meets all standards for approval." Kilsheimer stressed that the company's request represents just a "sliver" of Central Florida water use and noted that 70 percent of water use in the area is for agriculture and public operations.

"Our hope is that they understand Niagara's request in context," Kilsheimer said.

ericarodriguez@tribune.com

Subject: Fw: Governor's Budget...

Date: Friday, January 24, 2014 8:56:43 PM Eastern Standard Time

From: Diane Salz

To: Richard Owen

CC: Nancy Smith

On Friday, January 24, 2014 8:54 PM, Diane Salz <salz.govconsultant@gmail.com> wrote:

Governor Scott Announces Environmental Protection Funding Recommendations

Jan 24, 2014

This week, Governor Rick Scott announced that his 2014-2015 budget recommendation will include \$55 million in funding for restoration and protection of Florida's springs. This total contemplates \$25 million for water quantity and water quality protection and restoration projects, \$25 million for alternative water supply development within springsheds, and \$5 million to the Florida Department of Agriculture and Consumer Services to assist the agricultural industry with conservation measures and more efficient use of fertilizers.

In a statement, the Governor said that "[t]his investment will enable state and local partners to protect the quality and quantity of water that flows from our springs. These springs are important not only to animal and plant life, but also add to Florida's ever-expanding tourism industry."

The very next day, Governor Scott announced plans to include an additional \$130 million for Everglades and South Florida waterway projects in the budget proposal. Although this amount includes funding some projects which have already been announced, the total is \$60 million more than the state's current Everglades funding amount.

The Governor's proposal includes \$40 million for construction of a C-44 reservoir, \$30 million for construction of a 2.6-mile bridge over the Tamiami Trail, and \$32 million as part of the \$880 million long-term Everglades restoration plan agreement from last year.

Governor Scott is expected to release his entire 2014-15 budget proposal on Jan. 29, 2014.

Subject: Fwd: Water and Land Conservation is Amendment #1
Date: Thursday, January 23, 2014 3:29:54 PM Eastern Standard Time
From: Diane Salz
To: WRWSA
CC:

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>
Date: Thu, Jan 23, 2014 at 3:29 PM
Subject: Water and Land Conservation is Amendment #1
To: Diane Salz <disalz@yahoo.com>

Water and Land Conservation is Amendment 1

Scott Powers Central Florida Political Pulse

2:41 p.m. EST, January 23, 2014

Right there at the top: the proposed constitutional amendment setting aside some of the document stamp tax for land and water conservation has been designated Amendment #1 for the November statewide ballot.

The proposed "Water and Land Conservation" amendment made it onto the ballot last week when its backers topped the necessary 683,000 petition signatures, with enough in 15 of the state's 27 U.S. Congressional districts.

"We are pleased to be stated as Amendment 1 on the ballot because water and land conservation deserves to be a top priority for our state," Will Abberger, the campaign's chair, stated in a news release.

The amendment would set aside 33 percent of the revenue from the stamp tax for conservation. If approved, it would raise \$648 million in 2015, nearly \$8 billion in its first decade and, by 2034, \$1.27 billion a year, according to state economists.



'Clean Water Declaration' seeks to fight water pollution

Email Facebook 16 Twitter 11 0

By Andy Reid, Sun Sentinel

Life, liberty and the pursuit of ... clean water.

A new "Clean Water Declaration" targeting Florida residents and lawmakers calls for making anti-pollution efforts a greater priority in the state's pursuit of happiness.

A coalition of elected officials, environmentalists and other anti-pollution advocates on Wednesday gathered in [Boynton Beach](#) and 15 other Florida cities — from Tallahassee to Key West — to kick off a campaign aimed at building support for water pollution prevention and cleanups.

Whether flowing out of a faucet, bubbling up in a spring or washing over a coral reef, clean water is vital to Florida's residents, tourism-based economy and environmental health, according to backers of the declaration.

"We the residents of Florida are fed up with pollution in our waters," Sarah de Flesco, of the environmental group Clean Water Action, said Wednesday in [Boynton Beach](#). "We need help from our elected officials."

The Clean Water Declaration contends that Florida residents have an "inalienable right" to clean drinking water, safe waters for fishing and swimming, and protection from pollution.

Declaration backers want those who sign on to support stopping the sources of pollution, guarding against overconsumption and privatization of Florida's water, protecting the environment and providing clean water for future generations.

They are hoping to get at least 100,000 signers. The declaration can be found online at wewantcleanwater.com.

State Rep. Lori Berman, D-[Delray Beach](#), signed the Clean Water Declaration at the campaign kickoff in [Boynton Beach](#).

"It's good for business and it's good for the environment," Berman said.

The idea behind the declaration is to build support for anti-pollution measures such as potentially outlawing the use of fertilizers on lawns during the summer, when rains are more likely to wash pollutants into waterways. [Palm Beach County](#) in 2012 balked at approving that type of restriction.

Another idea could be more pollution control requirements for South Florida farms, where stormwater runoff can carry pollutants into the Everglades. Sugar cane growers have opposed adding more of those requirements, arguing that they are already meeting pollution reduction standards.

Declaration supporters also want more public funding for Everglades restoration as well as cleanup efforts for other Florida waterways.

Pollution problems worsening last summer with the flood-control-prompted dumping of Lake Okeechobee's rising waters into coastal waterways was an example of water quality threats that hurt the environment and the economy.

Dumping hundreds of billions of gallons of Lake Okeechobee water out to sea eased the strain on the lake's troubled dike, but it also wasted water that could have helped boost South Florida's drinking water supply. In addition, the polluting discharges harmed coastal fishing grounds and led to toxic algae blooms in some areas that made water unsafe for swimming.

"When do we say, 'Enough is enough?'" asked Martha Musgrove, of the Florida Wildlife Federation, which supports the declaration. "We want clean water in Florida."

Gov. Rick Scott on Wednesday emphasized his support for water quality improvements by highlighting his effort to include \$130 million in the state's next budget to support ongoing Everglades restoration and other projects to help South Florida's ecosystem.

That proposed spending, which requires the Legislature's approval, would include \$40 million to hasten construction of a delayed reservoir in Martin County, intended to help lessen stormwater discharges polluting coastal waters.

The spending would also include \$30 million as part of an ongoing effort to raise the Tamiami Trail to get more water flowing south to the Everglades. Another \$32 million would go toward completing the Kissimmee River restoration, which helps clean up water flowing into Lake Okeechobee.

This comes as Florida continues to implement the governor's \$880 million plan to build more water storage and treatment areas to clean up water flowing into the Everglades.

Last week, state officials gathered in southwestern [Palm Beach County](#) to celebrate the \$60 million restart of a project to finish an Everglades restoration reservoir that had been shelved for five years as restoration plans changed. The 16,000-acre project has already cost taxpayers nearly \$280 million.

"The end result [will be] billions and billions of cleaner water flowing into the Everglades," Florida Department of Environmental Protection Secretary Herschel Vinyard Jr. said last week.

While praising ongoing water quality spending and commitments, more is needed to protect Florida's waters, declaration backers said.

"We need to act now," said Drew Martin of the [Palm Beach County](#) branch of the Sierra Club. "We need strong standards for water quality."

abreid@tribune.com, 561-228-5504 or [Twitter@abreidnews](https://twitter.com/abreidnews)

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Palm Beach Politics



Subject: Fwd: Land conservation amendment headed toward ballot

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Thu, Jan 23, 2014 6:38 am

To: WRWSA <richardowen@wrwsa.org>

Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Thu, Jan 23, 2014 at 8:37 AM

Subject: Land conservation amendment headed toward ballot

To: Diane Salz <disalz@yahoo.com>

LAND CONSERVATION AMENDMENT HEADED TOWARD BALLOT

By JIM TURNER
THE NEWS SERVICE OF FLORIDA

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THE CAPITAL, TALLAHASSEE, January 16, 2014 A group seeking to pass a constitutional amendment that would set aside funding for land conservation has surpassed the number of valid petition signatures needed to get on the November ballot.

However, the totals remain unofficial until the initiative receives certification and a ballot number from the state Division of Elections.

Certification isn't expected until after Feb. 1, the deadline for groups to submit petition signatures to get amendments on the ballot.

Will Abberger, the campaign chairman for Florida's Water and Land Legacy Inc., which has spearheaded the amendment drive, said on Thursday his group is already moving into the next phases as he expects to be advised shortly after Feb. 1 that the proposal will be declared Amendment 1 for the Nov. 4 ballot.

"We're going to be reaching out to Florida voters in every way we can, to inform them of the importance of the amendment to protecting the state's water quality," said Abberger, who is also director of conservation finance for The Trust for Public Land. "We're just starting that process."

The Florida Water and Land Conservation Amendment seeks to set aside 33 percent of the state's documentary stamp tax revenues — fees already paid when real estate is sold — for 20 years to acquire conservation and recreation lands, manage existing lands, protect lands that are critical for water supply and restore degraded natural systems.

The proposal could generate \$10 billion over its life, the group said.

Senate Appropriations Chairman Joe Negron, R-Stuart, has called the proposed amendment "the wrong way for government to work."

Florida's Water and Land Legacy Inc. had submitted 685,971 valid signatures as of Thursday morning, 2,822 more than required to get an initiative on the ballot, according to the state Division of Elections website.

The group has also surpassed signature thresholds in 15 of the state's 27 Congressional districts, meeting another requirement to get on the ballot.

The group, which submitted more than 1 million signatures to local supervisors of elections for verification, spent more than \$2.6 million since July 2012 as it collected the signatures, according to the elections website.

Abberger expressed encouragement that state lawmakers have started to make overtures about water quality issues, but he added that the amendment will ensure the funding is available.

"To correct the problems that have caused the massive die-off of dolphins and pelicans and manatees in the Indian River Lagoon, to restore the Everglades, to ensure we have adequate fresh water coming into Apalachicola Bay, to protect our springs, is something that is going to cost money," Abberger said.

Florida has filed a federal lawsuit against Georgia about a shortage of fresh water flowing into Apalachicola Bay. Florida argues

Florida has filed a federal lawsuit against Georgia about a shortage of freshwater flowing into Apalachicola Bay. Florida argues that heavy water consumption in the metro Atlanta area has reduced downstream flows into the bay, endangering Apalachicola's oyster industry.

Also, the House is working a comprehensive water package, while the Senate has started to advance a \$220 million package aimed at improving water quality out of Lake Okeechobee and the Everglades. Also, some senators have been drafting an estimated \$380 million package to protect Florida's natural springs.

The idea for the amendment was spawned as funding diminished for the Florida Forever program. Florida Forever, which uses bonds backed with revenue from the documentary stamps, authorizes lawmakers to spend up to \$300 million a year for preservation.

In the 2012 session, state lawmakers set aside \$20 million for land conservation and established a surplus land-sale program within the state Department of Environmental Protection. The controversial and much-criticized program was promoted as potentially generating up to \$50 million.

The final list of properties that could be offered for sale may not be set for a couple of weeks, but the revenue is not expected to reach the \$50 million mark.

Subject: Fwd: Lakeland Ledger: Agriculture Commissioner Adam Putnam says FL needs statewide water policy
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Wed, Jan 22, 2014 7:33 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>
Date: Wed, Jan 22, 2014 at 9:32 AM
Subject: Lakeland Ledger: Agriculture Commissioner Adam Putnam says FL needs statewide water policy
To: Diane Salz <disalz@yahoo.com>

Putnam Says Florida Needs Statewide Water Policy

Safe water supply necessary for state to survive, he says

By [Bill Rufty](#)

LEDGER POLITICAL EDITOR

Published: Tuesday, January 21, 2014 at 12:00 p.m.

LAKELAND | Florida's economy is improving faster than other states on several fronts, according to Florida Commissioner of Agriculture Adam Putnam.

Putnam spoke Tuesday morning at a Community Leader Forum sponsored by GrayRobinson law firm.

But lack of a statewide water policy and the threat of the greening disease to citrus could hamper that.

"The state bird, the construction crane, is back on the Miami skyline," he said.

Real estate sales are up, he said, and all this comes following "The End of Florida" predictions of five years ago during the economic crises and the construction downturn.

"Today, people are back, the state of Florida has balanced its budget every year and is now projected to have a billion surpluses for this budget cycle," Putnam said.

"That's leadership," Putnam said, noting the state is back because of a team effort of its government and business leaders.

"New York can't say what I just said about the progress on their state. Ohio can't say what I just said about the progress of their state. Illinois can't say what I just said about the progress of their state. And Lord knows California can't. So there is a difference in leadership," Putnam said.

Among the issues Putnam's office will ask of Gov. Rick Scott and the Legislature during this session, which begins March 4, is for a statewide, but flexible, water policy, he said.

"From day one (when he first ran for the Legislature in 1996), I have talked about water policy. If you don't know you are going to have a safe and sustainable water source to support all your environmental and business needs, you won't survive," he said.

"Water is the biggest long-term issue facing Florida. It is inseparable from the three pillars of the state's economy. It is inseparable from agriculture, inseparable from tourism and it is inseparable from construction," he said.

"If you don't know that you are going to have a sustainable high quality source of water to support all environmental and economic initiatives, then Florida ceases to exist as we know it," Putnam said. "Water is the thread. Why do people want to be on the lake? Why do they want to be on the river? Water binds us together and so we have put forward what I believe is a strong proposal for a state water policy."

First, he said, Florida's water policy has to be flexible.

"The idea of average annual rainfall in Florida is purely a mathematical notion. It can't be a public policy planning tool because you might get eight inches of water in four months and then it stop for four months. So it needs to be flexible enough to recognize you have drought conditions and you have abundance conditions," he said.

"And I'd much rather have the problems that come with abundance than scarcity because that is what the American West is dealing with now," he said.

Putnam said the emphasis on water in the past 25 years has mainly been focused on South Florida and the Everglades.

"But if you didn't have the Everglades in Florida, people would be talking about our first magnitude springs," he said.

Central Florida, he said, has to find 2 million gallons of water a day to support growth and the little town of Apalachicola in the North, with its important oyster industry, has to worry not about septic tanks nor pollution, but about water being cut off at its border.

Putnam said such a water policy for the various needs and various geographic areas of the state must be long term. It won't be solved in a single session of the Legislature, he said.

In addition to his proposed water policy this year, Putnam said two major issues will be nutrition, particularly in schools' meals programs, and a strong, more dependable energy policy.

During a question and answer period, Putnam said greening is the most serious disease ever to affect Florida citrus and that the state has about two years to find a way to fight it before small and medium groves could be out of business.

[Ledger Political Editor Bill Rufty can be reached at bill.rufty@theledger.com or 963-802-7523.]

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Subject: Fwd: GOVERNOR RICK SCOTT ANNOUNCES \$55 MILLION FOR FLORIDA'S SPRINGS IN "IT'S YOUR MONEY TAX CUT BUDGET"

Date: Tuesday, January 21, 2014 1:04:26 PM Eastern Standard Time

From: Diane Salz

To: Richard Owen

CC: Nancy Smith

Sent from my iPhone

Begin forwarded message:

From: "Florida Department of Environmental Protection" <FloridaDEP@public.govdelivery.com>

Date: January 21, 2014 at 12:37:25 PM EST

To: disalz@yahoo.com

Subject: GOVERNOR RICK SCOTT ANNOUNCES \$55 MILLION FOR FLORIDA'S SPRINGS IN "IT'S YOUR MONEY TAX CUT BUDGET"

Reply-To: FloridaDEP@public.govdelivery.com



FOR IMMEDIATE RELEASE: Jan. 21, 2014

CONTACT: 850.717.9282, MEDIA@EOG.MYFLORIDA.COM

GOVERNOR RICK SCOTT ANNOUNCES \$55 MILLION FOR FLORIDA'S SPRINGS IN "IT'S YOUR MONEY TAX CUT BUDGET"

TALLAHASSEE – Florida Governor Rick Scott today announced \$55 million in funding for restoration and protection of Florida's springs in the 2014-2015 "It's Your Money Tax Cut Budget." This announcement was made during an award ceremony in Tallahassee celebrating 125 employees from around the state that were selected as the Department of Environmental Protection's most stellar environmental stewards.

Governor Scott said, "Today, I'm pleased to announce that in order to continue our dedication to protect and restore springs throughout the Sunshine State, the "It's Your Money Tax Cut Budget" includes \$55 million specifically dedicated to springs protection efforts. This investment will enable state and local partners to protect the quality and quantity of water that flows from our springs. These springs are important not only to animal and plant life, but also add to Florida's ever-expanding tourism industry."

of 3

The \$55 million recommendation dedicates \$25 million in funding for water quantity and quality protection and restoration projects. These projects will have tangible benefits to reduce and eliminate nutrient impacts and ensure the proper flow to our springs.

Effective and efficient water management is essential to the public and to the environmental and economic health and welfare of the state. To that end, alternative water supply development in critical springs areas will receive \$25 million in funding to help protect spring flow. Also, the Florida Department of Agriculture and Consumer Services will be able to help agricultural operations increase water conservation in their irrigation practices and deploy more efficient fertilization practices through a \$5 million allocation in the budget.

"If you care about Florida's springs, Governor Scott's funding announcement should have you very happy," said DEP Secretary Herschel T. Vinyard Jr. "Governor Scott has already surpassed all previous administrations when it comes to funding to improve our springs, and this year's budget do even more. The \$55 million in proposed funding for springs protection and restoration will allow Florida to keep the momentum going on this administration's unprecedented efforts to return one of our state's most precious resources to health."

With the support of Governor Scott and the Florida Legislature, twice as much funding has been dedicated exclusively to springs protection than in any other three-year period since 2001. Since 2011, \$18.7 million has been specifically directed to springs protection.

Under Governor Scott's oversight, Florida's water management districts are also making progress in water quantity by establishing minimum flows and levels for Florida's springs. These are designed to protect and restore spring flows and the natural systems they support. The districts have set minimum flows and levels for 29 springs to date and expect to establish them for 50 more springs over the next two years, which will more than double the cumulative efforts of the last decade.

About the Florida Department of Environmental Protection

The Florida Department of Environmental Protection is the state's principal environmental agency, created to protect, conserve and manage Florida's environment and natural resources. The Department enforces federal and state environmental laws, protects Florida's air and water quality, cleans up pollution, regulates solid waste management, promotes pollution prevention and acquires environmentally-sensitive lands for preservation. The agency also maintains a statewide system of parks, trails and aquatic preserves. To view the Department's website log on to www.dep.state.fl.us.

<http://content.govdelivery.com/accounts/FLDEP/bulletins/a0c193>



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Subject: Dailycommercial: Lawmakers: protection of water vital...

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Tue, Jan 21, 2014 8:00 am

To: WRWSA <richardowen@wrwsa.org>

Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

Lawmakers: Protection of water vital to preservation of quality of life

Livi Stanford | Staff Writer livi.stanford@dailycommercial.com | Posted: Friday, January 17, 2014 4:51 pm

As the agenda for the 2014 Florida Legislative Session begins to take shape, the protection of water resources, including springs and lakes, is a major issue taking center stage, according to state senators and representatives.

There already are discussions about filing legislation to protect the springs, like Alexander Springs near Altoona, and several state senators have united to make the issue a priority this year, according to legislators.

State Sen. Alan Hays, R-Umatilla, said protection of water resources is "perhaps one of the most complex, if not the most complex, issue facing the Legislature in the next four to five years."

Hays said it is critical that nutrients currently found in the springs and lakes be removed before they get into the water bodies.

Hays said the health of some of the lakes and rivers is another concern.

"One of the things we have to consider is the current state of degradation of the Indian River Lagoon has not occurred overnight and it is not going to be restored overnight," he said. "These systems take a significant amount of time to regain their ecological balance. We are going to be called upon to fund part of the restoration of that lagoon. I think it is our obligation to make sure we don't spend money for the exercise of spending."

Finding alternative supplies to groundwater is another issue affecting the community, particularly in south Lake.

Water experts and county officials recently sounded the alarm that the community must find an alternative to diminishing groundwater supplies in the next five years to avoid a direct impact to lake levels and the quality of life in south Lake.

"There is a demand of 300 million gallons of water by 2035 and we only have 50 million gallons that can be met by our traditional source," said Alan Oyler, consultant for St. Johns River Water Management District, which is assisting the South Lake Regional Water Initiative. "All of the utilities are going to have to find 250 million gallons of water. For us to meet project demands, we are going to have to import water from someplace else."

At the first annual South Lake Water Summit in November, a panel of experts from the Lake County Water Authority and the St. Johns River Water Management District weighed in on the problem of dwindling reserves in the Floridan aquifer.

While the lack of rainfall is a major factor affecting low lake levels, groundwater withdrawals and human impacts, such as surface water diversions and irrigation, are also contributors, the panelists said.

The South Lake Regional Water Initiative — consisting of the South Lake Chamber of Commerce, the county and the municipalities of Clermont, Groveland, Minneola, Mascotte and Montverde — is trying to find regional.

They are working parallel to the Central Florida Water Initiative to find a cost-effective, alternative water source.

"For us to take millions of gallons of water out of the aquifer that is potable water, and use that to water plants or agricultural projects, is not always the most wise use of drinking water," Hays pointed out. "If we can find ways to purify the wastewater and stormwater runoff, and use that recycled water for those purposes that are acceptable, it is going to be a much better utilization of our resources."

While desalination of water is an alternative water source option, Hays said it is his last resort.

"It is too expensive," he said. "I think the biggest concern is finding the proper balance of utilizing water and making sure it fits our budget."

Rep. Steve Crisafulli, R-Merritt Island, said the protection of water resources is one of the top priorities this year.

"It goes without saying that water is the most critical and precious resource we have," Crisafulli said. "It's what we depend on to live, it sustains our rich agricultural history, and it is what makes Florida such an attractive tourist destination."

In developing a statewide approach to protecting Florida's ecosystems, Crisafulli said the plan is achieved by "working with stakeholders from across the state, identifying issues and finding solutions to address them."

In 2013, the Florida Legislature "earmarked \$10 million from general revenue for protection and restoration of springs," according to Clean Water Action's 2013 State Legislative Report.

The long-term commitment begins, Crisafulli said, with using existing "revenues to fund projects that will clean up our waterways or address critical water quantity issues."

"In the short term, we need to identify trouble areas and work to fund projects that will address those issues," he added. "As we do that, we can't focus on only one area — whether it's the springs or other specific bodies of water — but rather, we need to take actions across the state."

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Subject: Gainesville Sun: Editorial: Water Planning
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Mon, Jan 20, 2014 7:49 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

Editorial: Water planning

Published: Friday, January 17, 2014 at 6:01 a.m.

Every five years, the St. Johns River Water Management District crafts a long-range "water supply plan" to help gauge what the 17-county district's population and, in turn, water needs will be in the long term. Its latest plan is in the works, looking toward 2035.

A draft plan projects the district, which includes part of Alachua County, will have an additional 1.8 million people and need an extra 314 million gallons a day by 2035. It also says, "Water demand projections exceed fresh water availability by 256 mgd."

In short, the traditional source of our water, the Floridan aquifer, will be tapped out by 2035 and will require two things that have been talked about in the past but never were actually carried out.

One, begin substantive and effective conservation efforts. District officials say they are going to become more aggressive in advocating and financing widespread conservation programs among all segments of water consumers — residential, business and agriculture — as well as water reuse wherever possible.

Two, the water supply plan calls for developing more alternative sources of water — namely surface waters like lakes, rivers and the ocean.

Much of the current plan sounds not unlike past water supply plans, but St. Johns officials say it is much different. We hope so. And there are major changes, for sure.

The district, for example, has designated the entire 17 counties as a "water resource caution area," a designation reserved for areas facing the threat of insufficient supply. In past plans, only small slivers of the district earned the designation.

As for the conservation measures, St. Johns is collaborating with neighboring water management districts — including the Suwannee River district, which covers the rest of Alachua County — to determine the best conservation practices of each. Such cooperation has been noticeably missing in the past. District officials concede there is no longer any choice but to stress conservation because, frankly, it is the cheapest method of extending the existing water supply.

Finally, the district no longer is considering a costly pipeline from the Ocklawaha River to Orlando or Jacksonville to meet those metro areas' huge water needs. The Ocklawaha might instead serve as a source for Marion County and its closest neighbors.

The water supply plan for 2035 is in its infancy, and the public will have a chance to weigh in, but after years of giving lip service to meaningful conservation and local sources first, it seems the latest plan finally embraces those important concepts.

Words are important, and the St. Johns officials are saying the right things. Now we urge them to put action behind those words.

Subject: Fwd: Highlands Today: Legal battle over water quality continues

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Mon, Jan 20, 2014 7:46 am

To: WRWSA <richardowen@wrwsa.org>

Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

----- Forwarded message -----

From: Diane Salz <salz.govconsultant@gmail.com>

Date: Mon, Jan 20, 2014 at 9:45 AM

Subject: Highlands Today: Legal battle over water quality continues

To: Diane Salz <disalz@yahoo.com>

Legal battle over numeric nutrient criteria continues

By John Buchanan
Central Florida's Agri-Leader

Published: January 16, 2014

The coalition of environmental groups that brought legal action five years ago that led to intervention by the U.S. Environmental Protection Agency (EPA) in a dispute over the development of numeric nutrient criteria for Florida's water bodies plans to appeal a Jan. 7 ruling by a federal court judge that allows EPA to withdraw from the terms of a consent decree that terminated the original lawsuit.

Under the terms of the agreement reached in 2009, EPA would have imposed hard limits on nutrients such as nitrogen and phosphorus in Florida's flowing water bodies. Until then - and since - Florida Department of Environmental Protection (DEP) proposed limit targets that would be further evaluated based on the overall biological health of a particular water body.

Because DEP, supported by Florida Department of Agriculture and Consumer Services (FDACS), has steadfastly stuck to its position as scientifically superior, a long battle has raged for almost five years.

The environmental coalition that has waged the fight includes Sierra Club, Florida Wildlife Federation, Conservancy of Southwest Florida, Environmental Confederation of Southwest Florida, St. John's Riverkeeper. Earthjustice has provided legal support.

Last year, after long, detailed discussions with DEP, EPA agreed to allow Florida to set its own standards and evaluation process if a federal judge ruled favorably in a pending hearing in Florida federal court. That ruling came Jan. 7 from U.S. District Judge Robert L. Hinkle.

A number of agricultural organizations hailed the ruling.

It "strongly rebuts environmental litigants' arguments - which stated that it is primarily the job of the federal government to set water quality criteria - and instead shows support for Florida's ability to manage its own water resources," The Fertilizer Institute said in a statement. "[Judge] Hinkle, in support of the cooperative federalism approach taken in the Clean Water Act, takes great strides in the ruling to explain that the EPA takes over only if the state fails to adopt appropriate standards."

Cris Costello, regional organizing representative for the Florida regional staff office of Sierra Club, had a sharply different interpretation of the ruling.

"It allows EPA to get off the hook," Costello said. "Per the consent decree, EPA was required to step in and set hard limits. But instead, EPA met in secret with the Scott administration and representatives of polluting industries and EPA then made the decision to surrender to the Scott administration and the polluters. And that surrender was in the form of a determination by EPA last year that they would not comply with the consent decree. And they asked the court to let them off the hook." Judge Hinkle did that, she said.

Costello said she expects an appeal to be filed in the 11th Circuit Court of Appeals based on a fairly simple legal premise.

"The consent decree is a contract," she said. "It's a contract between EPA and the litigants. So EPA should not be able to simply decide on its own that it doesn't want to comply with that contract. It has to prove that it can't comply. And in no way has EPA done that. Therefore, we think Judge Hinkle got the law wrong."

Rich Budell, director of agricultural water policy at FDACS, said he was not surprised the environmental groups plan to appeal. "I think many people were anticipating that," he said. "This is a legal battle that could go on for another decade."

- See more at: [http://highlandstoday.com/list/highlands-agri-leader-news/legal-battle-over-numeric-nutrient-criteria-continues-](http://highlandstoday.com/list/highlands-agri-leader-news/legal-battle-over-numeric-nutrient-criteria-continues-20140116/#sthash=07e2hcl.i.dnuf)

20140116/#sthash=07e2hcl.i.dnuf

Subject: St. Augustine Record: Central FL wants St. Johns River water
From: Diane Salz <salz.govconsultant@gmail.com>
Date: Mon, Jan 20, 2014 7:42 am
To: WRWSA <richardowen@wrwsa.org>
Cc: "<nsmith@wrwsa.org>" <nsmith@wrwsa.org>

Central Florida wants St. Johns River water

Posted: January 18, 2014 - 11:09pm

By [PETER GUINTA](#)
peter.guinta@staugustine.com

PALATKA — A coalition of five growing Central Florida counties — Seminole, Lake, Osceola, Polk and Orange — made public a draft plan that proposes to solve their future water needs by pumping 150 million gallons per day from the St. Johns River.

The plan, called the Central Florida Water Initiative, comes after years of St. Johns River Water Management District studies to determine potential impacts to the waterway.

The Water Initiative is distinct from the district, though district scientists have worked on the proposal.

Hans G. Tanzler III, the district's executive director, introduced the proposals, saying he welcomed "the opportunity to work on solutions to common problems" and that "the facts and law need to be unbiased."

"In 1960, Florida had 6 million people. Today, it has 20 million. We have a growing population and [growing] water supply needs," he said, adding, "We have no ability to stop people from coming to Florida. There will be a need for alternatives to groundwater. That's what this is all about."

However, the idea of withdrawing that much water from a river already suffering algae blooms and low flow didn't sit well. Most of the people commenting were from St. Johns County.

Bill Hamilton of Crescent Beach said the "first priority" is to protect the resource.

"You can promise and model and project all you want, but (eventually) you reach a certain limit," he said of population growth.

Thomas Bartol, the district's assistant division director of regional engineering and environmental services, heard the questions and comments and said he would take them to the "management structure" and the steering committee of the Water Initiative.

A response document would be published, but won't be done until March, he said.

Ann Taylor of the South Anastasia Community Association, Crescent Beach, said current strategies for supplying water needs are not working.

"The infrastructure cost for this will be \$1.5 billion," she said. "In addition, [the district] recently released a water supply plan for the [18] counties within its jurisdiction calling for the withdrawals of a combined 210 million gallons per day from the St. Johns and the Ocklawaha rivers at a cost of \$3.9 billion. Clearly, our rivers are under attack."

She said meeting the water demands of south and central counties by taking St. Johns River water is "unacceptable."

In 2007, a hard-fought court case against taking 85 million gallons per day from Yankee Lake in Seminole County involved the St. Johns Riverkeeper and Duval and St. Johns counties. The opposition lost in court and the district approved the withdrawal.

"The St. Johns has already been harmed," Taylor said.

The current St. Johns Riverkeeper, Lisa Rowe Rinaman, said taking that water is "a short-term, unsustainable approach to regional water supply."

She pointed to the toxic green algae that blanketed the river from April until Christmas.

"It bloomed earlier this year," she said.

She was joined by Karen Ahlers of Putnam County's Environmental Council and Florida Defenders of the Environment.

"To us, the district's plan then and now represents a series of horrendous decisions. It failed to give conservation priority and the river has a declined flow, nutrients, nuisance plants and lower production," she said.

She said that the Yankee Lake court case is unresolved in appellate court after 6½ years.

"That has deprived us of our day in court," she said. "No one knows whether or not our appeal will be granted."

If it is, she suggested, the withdrawal plan would be moot.

Neil Armingeon, newly appointed Matanzas Riverkeeper and a member of The Friends of Matanzas, said in 2005, the City of Sanford proposed taking 150 million gallons per day from the river and 85 million gallons per day from the Ocklawaha River, a tributary to the St. Johns River.

"Four hundred people came into this room and said, 'No!' There's still not enough political will to try water conservation. They're going to keep doing this until we tell them to stop," he said.

Subject: Fw: House Majority Leader Crisafulli questions Senate water proposals...

From: Diane Salz <disalz@yahoo.com>

Date: Fri, Jan 17, 2014 5:58 pm

To: Richard Owen <richardowen@wrwsa.org>

Cc: Nancy Smith <nsmith@wrwsa.org>

On Friday, January 17, 2014 7:39 PM, Diane Salz <salz.govconsultant@gmail.com> wrote:
The Florida Current

Crisafulli questions Senate water proposals, says House working on own bills
Bruce Ritchie, 01/17/2014 - 05:19 PM

The Republican House majority leaders says the Legislature won't rewrite Florida water law this year but that he does want a statewide approach dealing with water issues.

During an interview about water issues Thursday, **Rep. Steve Crisafulli**, R-Merritt Island and the House Speaker-designate for 2015, said he expects the House to deal with springs, farming practices that affect water quality, agricultural water storage, Indian River Lagoon and other water projects. He also questioned Senate proposals to spend \$220 million on Indian River Lagoon and nearly \$380 million a year on springs.

Crisafulli said he doesn't expect a rewrite of Florida water laws or changes in how water is managed and regulated.

"That is not going to happen," Crisafulli said. "There is not a silver bullet to fix all these problems. It's just a matter of working with the current situation."

In the Indian River Lagoon along the Atlantic Coast, pelicans, manatees and dolphins were dying before heavy rains led to discharges of dark water from Lake Okeechobee into the St. Lucie and Caloosahatchee Rivers. The **Senate Select Committee on Indian River Lagoon and the Lake Okeechobee Basin** in November recommended \$220 million in projects including \$160 million in fiscal year 2014-15.

Crisafulli said he spoke to **Sen. Joe Negron**, R-Stuart and select committee chairman, about including in the recommendation \$20 a year for removing muck from Indian River Lagoon. But Crisafulli also said he's not sure if the state has \$220 million to put into one region.

"The lagoon is certainly something we have the opportunity to work on," he said. "But there's more to it than just the lagoon ... To me, the lagoon is just a piece of the puzzle."

Springs across the state have become choked with algae as nitrogen in groundwater from septic tanks and other sources has increased. A draft Senate bill would provide \$378 million for neighborhoods on septic tanks to hook up to sewers.

Crisafulli said he doesn't expect the House to put that amount -- nearly \$400 million -- towards springs, along with the Senate recommendation for Indian River Lagoon.

"You're over \$600 million" in Senate recommendations, he said.

"We don't have that type of money to put into those types of projects," Crisafulli said. "What we have to do is step back and look and prioritize the necessity of where we can start first, and look at the long-term."

On Oct. 1, **Gov. Rick Scott** asked the **U. S. Supreme Court** to step into the dispute over water flowing from Georgia in the Apalachicola River. Crisafulli said he's heard only conversations about proposals to help restore Apalachicola Bay's oysters, whose population crashed in 2012 because of lack of fresh water.

"Whether it's something this year or next year I certainly believe there are conversations to be had on all regions of the state," he said.

Crisafulli said he expects water bills to be filed beginning in February.

"A lot of these will start in the (**House Agriculture and Natural Resources Subcommittee**) and then work their way through the process," he said. "Some will have appropriations. Some will just be policy-driven."

A full version of this interview [can be found here](#).

Reporter Bruce Ritchie can be reached at britchie@thefloridacurrent.com.

Item 12.
Legislative Update

Withlacoochee Regional Water Supply Authority
Legislative Issues Update
February 3, 2014

Administrative Procedures Act – Several bills have been filed to revise requirements for agency rulemaking, including: reporting deadlines; annual reviews; preparation of regulatory plans; among other things. Proposed Committee Bill (PCB) House Subcommittee on Rulemaking Oversight & Repeal 14-02 will be introduced on 2/5/14. HB 7001 (R-Santiago) and SB 600 (R-Dean) are related bills. It is anticipated that the Authority will complete repealing its outdated agency rules before these changes would become effective on July 1, 2014.

Budget -- Governor Rick Scott has included more than \$276 million for wastewater/stormwater facility construction, drinking water facility construction and water quality planning in his recommended budget; \$9.4 million is provided to continue setting nutrient limits and developing restoration plans for Florida's waters. Also, the Florida House of Representatives has published a water project funding application (go to www.myflorida.gov & click onto House Agriculture & Natural Resources Appropriations Subcommittee website, click on General Publications link). Water project funding applications are due by 5 pm on February 21, 2014.

Confirmations -- The Senate Environmental Preservation Committee & the Senate Ethics & Election Committee will consider confirmation of the following water management district governing board members and executive director--**SWFWMD**: Carlos Beruff (Manatee); David Dunbar (Pinellas); Michael Moran (Sarasota); Robert Beltran (ED). **SJRWMD**: Fred Roberts (Ocala); Maryam Ghyabi (Ormond Beach); Doug Burnett (St. Augustine). A vacancy remains (representing Citrus, Sumter, Levy, Lake counties) on the SWFWMD governing board, leaving only one governing board member in the northern planning region responsible for recommending cooperative funding proposals for the region (Tommy Bronson--Hernando, Marion counties). In the past, a Board member from the central region participated in reviewing northern region applications (Randy Maggard--Pasco County).

Environmental Permitting – HB 703 (R-Patronis) has been filed to revise numerous environmental permitting requirements including: authorizing water use permits for up to 30 years for larger developments and up to 50 years for landowners who participate in water storage programs; extending "right to farm" provisions in current state law to prohibit enforcement of local springs and wetlands regulations that also have been modified or readopted since 2003. No Senate companion bill has yet been filed.

Public Meetings -- SB 718 (R-Legg) has been filed to revise requirements for public meetings to include a description of each matter to be considered at such meeting and to prohibit a board from acting upon a matter not included in the notice. No House companion bill has yet been filed.

Reclaimed Water -- HB 601 (R-Lake Ray) and SB 536 (R-Simpson) have been filed to require the Florida Department of Agriculture and Consumer Services (DACS), Department of Environmental Protection (DEP), and the water management districts to conduct a study on the expansion of the beneficial use of reclaimed water. SB 536 will be considered by the Senate Committee on Agriculture on 2/10/14.

Springs Protection -- SB 382 (R-Dean), HB 49 (D-Stewart), and SB 76 (DeSoto) would recognize the importance of Florida's springs as unique environmental resources. A yet to be filed bill sponsored by Senators Simmons, Montford, Hays, and Simpson would strengthen requirements for protecting and restoring the state's first magnitude springs, and would authorize the use of a portion of documentary stamp tax revenue, approximately \$378 million for such purposes. Governor Rick Scott has included \$55 million in his recommended budget for springs protection and restoration, with \$50 million invested in springs protection projects.

Water & Wastewater Public Utilities -- Legislation has been filed to revise requirements for private water and wastewater utilities regulated by the Public Service Commission (PSC). SB 272 (R-Simpson) would authorize the PSC to consider water quality when fixing rates and to suspend or revoke a certificate of authorization upon receipt of a petition, among other things. SB 272 was passed by the Senate Communications, Energy & Public Utilities Committee and will be considered by the Senate Community Affairs Committee on 2/4. HB 357 (R-Santiago) is a related bill.