Introduction

For the Central Florida Water Initiative (CFWI) Regional Water Supply Plan (RWSP), the CFWI RWSP Team held a series of public meetings and workshops, and presented status updates to a wide variety of user groups (since June 28, 2012 approximately 3,623 people reached via 122 events). The cfwiwater.com webpage assisted to provide public drafts of the CFWI RWSP, advertise all public meetings, and solicit comments from all interested parties including the public. Through this process, the CFWI RWSP Team received substantial comments from a variety of stakeholders, many of which helped shape the final draft of the CFWI RWSP. This document provides comments (unedited for grammar or spelling) from stakeholders and the responses/actions taken by the CFWI RWSP Team. Page numbers referenced in this Comment and Responses document refer to page numbers in the November 26, 2013 CFWI Draft RWSP.

Acronyms

The following is a list of acronyms used in this document by the CFWI RWSP Team.

ASR – Aquifer Storage and Recovery
AWS – Alternative Water Supply(ies)
BEBR – Bureau of Economic and Business Research
BMPs – Best Management Practices
CFCA – Central Florida Coordination Area
CFWI – Central Florida Water Initiative
C/I/I – Commercial / Industrial / Institutional
CUP – Consumptive Use Permit(ting)
C&SF – Central and Southern Florida
Demand Subgroup – Population and Water Demand Subgroup
DEO – Florida Department of Economic Opportunity
Districts – Water Management Districts
DOWN – District Observation Well Network
DPR – Direct Potable Reuse
DSS – Domestic Self-supply
DWSP – District Water Supply Plan
ECFT – East Central Florida Transient
EDM – Electrodialysis Metathesis
EMT – Environmental Measures Team
F.A.C – Florida Administrative Code
FARMS – Facilitating Agricultural Resource Management Systems
FAS – Floridan Aquifer System
FDACS – Florida Department of Agriculture and Consumer Services
FDEP – Florida Department of Environmental Protection
FFL – Florida Friendly Landscaping
F.S. – Florida Statute
FY – Fiscal Year
GIS – Geographic Information System
HOA – Homeowners Association
KBMOS – Kissimmee Basin Modeling and Operations Study
KCOL – Kissimmee Chain of Lakes
KRRP – Kissimmee River Restoration Project
LFA – Lower Floridan Aquifer
L/R/A – Landscape / Recreation / Aesthetic

MCU II – Middle Confining Unit II
MFL(s) – Minimum Flow(s) and Level(s)
Mgd – Million Gallons per Day
Mgy – Million Gallons per Year
mg/L – Milligrams per Liter
NFSEG – North Florida South East Georgia
NRC – National Research Council
OVAS – Oklawaha Valley Audubon Society
PCEC – Putnam County Environmental Council
RIB – Rapid Infiltration Basin
RO – Reverse Osmosis
RWSP – Regional Water Supply Plan
SFWMD – South Florida Water Management District
SJRWMD – St. Johns River Water Management District
STOPR+2 – St. Cloud, TOHO Water Authority, Orange County, Polk County, Reedy Creek, Orlando Utilities Commission, Seminole County Environmental Services
SWFWMD – Southwest Florida Water Management District
SWUCA – Southern Water Use Caution Area
TMDL – Total Maximum Daily Load
UFA – Upper Floridan Aquifer
USACE – United States Army Corps of Engineers
USGS – United States Geological Survey
WCCF – Water Cooperative of Central Florida
WPCG – Water Planning Coordination Group
WPSP – Water Protection and Sustainability Program
WSIS – Water Supply Impact Study
WSO – Water Supply Options
WUCA – Water Use Caution Area

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Copies (Pictures) of Letters Received Via Mail / Comment Cards

Comments / Responses

Tom Burnett, Concerned Citizen (11/26/13)

Page iii: The area's population is projected to reach approximately 4.1 million by 2035, which is a 49 percent increase from the 2010 estimate. Agriculture represents the second largest water use in the region, with a projected acreage of 165,000 in 2035. Agricultural acreage is projected to decline within the central urban areas.

Page iv: In addition, almost 100 percent of the treated wastewater in the region is reused (178 million gallons per day [mgd]) for landscape irrigation, industrial uses, groundwater recharge, and environmental enhancement. **Total average water use** in the CFWI Planning Area is projected to increase from approximately 800 mgd in 2010 to about 1,100 mgd in 2035. This projected increase of approximately 300 mgd represents a total increase in water use of approximately 40 percent. Potable water for public supply is and is projected to continue to be the largest use category in the CFWI Planning Area, and accounts for more than 70 percent of this total projected increase.

Comment 1 - In my cursory review I did not find any mention of reusing any water to meet the potable-use demand.

CFWI RWSP Team Response *- The use of reclaimed water as a component of water resource management is discussed in brief in the Executive Summary (page iv) and Chapter 7 (page 131) and in detail in Chapter 6 (pages 118-121).*

Comment 2 - I did not find any discussion of modifying building codes to address conservation, cisterns, grey-water systems, ultra-low or waterless urinals and water closets.

CFWI RWSP Team Response *- The following subheading and text has been added to the CFWI RWSP (Chapter 5): Building Codes and Land Development Regulations - Local governments can adopt or amend ordinances to improve water use efficiency in new construction and major renovations. These ordinances can require the use of plumbing fixtures that meet WaterStar℠ or other standards that are more stringent than the Florida state building code and land development regulations that require more efficient outdoor water use. Those regulations can require water efficient landscape designs and, if irrigation is used, require irrigation systems to be designed to high efficiency standards and properly installed.*

Cisterns are not included in this plan, however they could be considered as a local option for a supply source.

"Graywater systems" refers to the use of water from baths, showers, clothes washers, laundry trays, and sinks, but does not include wastewater from kitchen sinks (381.0065 Florida Statute (F.S.)).This is not to be confused with use of reclaimed water, which is discussed in Chapter 6. Graywater systems are not included in this plan, however they could be considered as a local option for businesses. Of note, after March 1, 2009, the Florida Building Code was updated and

specifies that graywater may only be used for flushing of toilets and urinals and any discharge from the building must be connected to a public sewer or an onsite sewage treatment and disposal system in accordance with Chapter 64E-6, Florida Administrative Code (F.A.C.) Landscape irrigation is no longer included as a permitted use of gray water in the Florida Building Code.

Ultra-low or waterless urinals and water closets are discussed in Chapter 5 (page 93, table 20).

Comment 3 - I found no discussion of using financial incentives (e. g., reduction in building permit fees and/or taxes.) to support these goals.

CFWI RWSP Team Response *- The following subheading and text has been added to the CFWI RWSP (Chapter 5): Local Incentives - Water providers and local governments also can provide financial incentives for water conservation through reductions in connection fees, permitting fees, and taxes or by sharing the cost of plumbing or irrigation system retrofits.*

Comment 4 - I found no discussion of building reverse osmosis (RO) plants.

CFWI RWSP Team Response *- Water treatment via reverse osmosis (RO) is discussed as a brackish water source option in Chapter 6 (page 108) and as a seawater water supply development option in Chapter 7 (page 130).*

Comment 5 - I found no discussion of establishing, increasing, or modifying any existing monetary rate structures for those currently using the state's waters.

CFWI RWSP Team Response *-Water conservation rate structures are discussed in Chapter 5 (page 91). Water conservation rate structures are also included as recommendations in Chapter 11 (pages 170-171).*

Overall, the results of the modeling estimate that the sustainable groundwater withdrawal limit is 850 mgd. **This results in a deficit of 250 mgd by the end of the planning horizon.** The sustainable limits of groundwater withdrawals reported in this CFWI RWSP are used by the Districts for planning purposes only and should not be viewed as regulatory constraints for specific water use permits.

Comment 6 - I did not find any discussion concerning how to not only reverse this projection, but to take additional steps to have a positive effect on the water tables. Since many, many springs are already suffering from low flows, it doesn't make sense to omit this consideration.

Additionally, wetlands are dependent on having water tables close to the surface during the growing seasons. I find no discussion on rectifying this current problem.

Look at Table 16, page 70, printed below.

CFWI RWSP Team Response *- The information presented in Table 16 shows the estimated effects of using groundwater to meet the projected increases in water demands expected to*

occur by 2035 on three small springs in the area. Based on the analyses and information used to prepare the table, it was concluded that meeting the additional 2035 demands with groundwater would not be sustainable due to the adverse impacts that are projected to occur across the region.

The goal of the RWSP is to provide a plan to meet all existing and future reasonable-beneficial uses of water while making sure there is sufficient water to sustain the water resources and related natural systems over the planning period. For the current phase of the CFWI, the plan addresses projected demands for water out to 2035. As presented in the RWSP, water demands are projected to increase by about 300 million gallons per day (mgd). Using information obtained from the East Central Florida Transient (ECFT) groundwater flow model and environmental monitoring in the area, it was determined that it is possible to meet an additional 50 mgd of water demand using groundwater without causing adverse impacts. Development of groundwater beyond the additional 50 mgd will likely require management efforts to avoid adverse impacts. It is anticipated that much of the remaining 250 mgd demand will be met through development of mitigation projects and AWS including conservation, reclaimed water, surface water, stormwater, brackish and seawater sources.

The plan acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the Southern Water Use Caution Area (SWUCA), have been or will be implemented to ensure recovery to adopted Minimum Flows and Levels (MFLs) can be achieved.

The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, South Florida Water Management District (SFWMD), Southwest Florida Water Management District (SWFWMD), Florida Department of Environmental Protection (FDEP), FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Page v: The recent status assessment of MFLs as part of this RWSP identified 10 water bodies within the CFWI Planning Area that are currently below their established MFLs and an additional 15 water bodies that are projected to fall below their established MFLs within the planning horizon if projected demands were to come from traditional sources.

To meet current and future water demands while protecting the environment and water resources, this CFWI RWSP identified water conservation efforts, groundwater withdrawal optimization, prevention and recovery strategies for targeted MFL water bodies, water supply development project options, and water resource development project options.

It is estimated that up to an additional 42 mgd could be saved with increased conservation efforts, reducing the projected water deficit noted above. Of this, 64 percent (27 mgd) could be conserved by public supply utilities and 26 percent (11 mgd) by agricultural operations.

There are 16 first, second, and third magnitude springs in the region (FDEP 2004).

Comment 7 - This data is almost a decade old and probably have significant lower flows. What is the status of the "dead springs?"

CFWI RWSP Team Response *- Available flow records through 2012 were evaluated for area springs to support the RWSP process. Kissingen Springs in Polk County ceased flowing in 1960 and has not flowed since as a result of water use and landscape alteration impacts that predated establishment of state CUP programs.*

Page 6: The 35 brackish groundwater projects and 15 surface water projects have an estimated capital cost of up to 2.5 billion dollars, and could generate an estimated potential of up to 264 mgd of water. The reclaimed water projects, with an estimated capital cost of 452 million dollars, could deliver 121 mgd (potentially 165mgd with supplemental sources) of projected increase in reuse flows, further offsetting the groundwater deficit.

Table 16, Page 70: Summary status of non-MFL springs within the CFWI Planning Area for the Reference Condition (2005) and the 2035 withdrawal scenario.

Spring Name	County	Period of Record (POR)	Number of Observations	Annual Median POR Flow (cfs)	Reference Condition Flow (cfs)	2035 Withdrawal Condition Flow (cfs)	Reference Condition to 2035 Change[a] (percent)
Apopka	Lake	1971-2012	2,923	28	25	17.8	–29
Clifton	Seminole	1972-2003	18	1.4	1.4	0.6*	–56
Island	Seminole	1982-2011	41	8.3	7.9	7.2*	–8

[a] Small predicted changes in spring flow generally fall below the predictive accuracy of the ECFT model.
Cfs – cubic feet per second.

Comment 8 - Is this report implying that these negative projections can't be corrected?

CFWI RWSP Team Response *- The RWSP provides a plan that will enable the region to meet projected demands for water over the planning period while also ensuring adverse impacts to natural systems are avoided. If groundwater withdrawals are limited to the sustainable limits identified in the plan, these projected negative impacts will not be realized.*

Page 75: For the purposes of the CFWI RWSP, the amount of additional groundwater that may be available within the CFWI Planning Area was estimated to be 50 mgd (or long-term annual average total of 850 mgd) greater than the current long-term average (1995 through 2010) groundwater use of approximately 800 mgd.

Page 144: Florida law (Chapter 373.042, F.S.) requires the Districts or FDEP to establish MFLs for aquifers, rivers, streams, springs, and lakes to identify the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area.

Comment 9 - The state and its water districts have five essential missions:
1. Provide all the water its citizens want and need - and willing to purchase;
2. Restore the wetlands' acreage to that of an historic time, e. g., 1960;
3. Restore the flows in the springs to that of an historic time, e. g., 1930;
4. Cease issuing all Consumptive Use Permits (CUPs) until the above 3 items have been deemed successful; and,
5. Provide the necessary funding from numerous sources to prosecute these enormous tasks.

CFWI RWSP Team Response *- The core responsibilities to be carried out by the FDEP and the State's five water management districts (Districts), as they relate to managing and protecting the State's water resources, have been established in detail in Chapter 373, F.S. The core missions are Water Supply, Flood Protection, Water Quality and Natural Systems.*

Joe Bourassa, Concerned Citizen (11/29/13, 12/02/13, 12/27/13, 01/16/14, 01/20/14, 01/22/14, 01/24/14, 02/16/14 & 02/19/14)

Comment 1 (11/29/13) - I have printed out both sections of your CFWI WSP and have to wonder what all those experts that composed those 556 pages are doing now ?? Hopefully putting together the necessary "revised edition" that brings the base line statistics up to a more reasonable 2012 time frame and discarding the 2005 data basis and even the 2010 Water use "projections" rather than using the 2010 actual estimate---that surely was available well before this publication.

CFWI RWSP Team Response *- The projections made for the RWSP are a "snap shot" in time and were developed using the best available information at the time developed. Projections had to be developed at least a year in advance (from a historic baseline) in order to perform the analyses by the technical teams. At the time the projections were developed for the RWSP, 2010 information was not available for all of the areas within the CFWI. Planning projections are updated at least once every five years.*

Comment 2 (11/29/13) - On top of that you extend the limit 25 years, rather the the typically prescribed 20 years---WHY ??

CFWI RWSP Team Response *- Section 373.709 (2) F.S. states that a RWSP must be based on at least a 20-year planning period.*

Comment 3 (11/29/13) - Of course I am only 1/3 through the basic 225 page report but can't help notice the tiring repetition, but that is Government. I sure hope I find your CFWI

presentation graph to the Steering Comm. that showed **no increase** in Total Water Use in 15 years in the Appendix's, and it's contrast to the new projections.

CFWI RWSP Team Response *- The 15-year graph will not be included in the Appendix to Chapter 2.*

Comment 4 (11/29/13) - This report sure runs contrary to the USGS's most recent [Marella 2013] report that shows that we in Fl. use 6.4 % **less** "Total Water" today then we did in 1975---35 years ago !! Especially interesting is the big play on MFL's when it's original Legislative direction and present Statute clearly indicates it only applies to **increased** "Withdrawals" when your historical 1995-2010 [15 Yrs.] water use graph indicates **no** Increase !! How can we have a "failure to meet a MFL" when there has been no increased "Withdrawals ??

CFWI RWSP Team Response *- Projected demand was simulated to be withdrawn from traditional sources. The groundwater availability results indicate that not all of the 2035 projected demand can be met by traditional sources without exceeding MFLs.*

Comment 5 (11/29/13) - I expect to provide extensive"Public Comment" to the report directly to you and the primary stakeholders by other than by the CFWI website manner, which is too restrictive. Sure hope to see it on the website in the future.

CFWI RWSP Team Response *- Thank you for your comment.*

Appendix Table A-21, pages 57-137 prompts a number of COMMENTS.

Comment 6 (12/02/13) - The use of such a LIGHT color at the bottom of the page's make them virtually unreadable. Why not a Std. Black font ?

CFWI RWSP Team Response *- Black font is used throughout the document, with the exception of page headers and footers.*

Comment 7 (12/02/13) - The Format used on those 80 pages contains so much WASTED white space [>50%]and the use of such a VERY SMALL font makes it extremely difficult to read by citizens, especially older ones.

CFWI RWSP Team Response *- Formatting of the document and appendices will remain as approved by the CFWI RWSP Team and technical editor.*

Comment 8 (12/02/13) - The bulk of the Comments are from Utilities and Consultants that are concerned about the "Projections" and their effect on their CUP's / WUP's. Ms. Bader"s constant indication that they were not connected sure raises many questions in even Citizens mind's. Please clarify why the are different, yet why the new CFWI method is superior for "Planning Purposes" ??

CFWI RWSP Team Response *- See response to your Comment 1.*

Comment 9 (12/02/13) - I will address to you my COMMENTS on both the Population & Water Use issues in follow up emails but agree in general that the latest BEBR and actual estimated Water Use should be used in this ever so important CFWI report.

CFWI RWSP Team Response *- No response required.*

Comment 10 (12/02/13) - Note; why can't I print out this comment form ??

CFWI RWSP Team Response *- The comment form was designed as an online tool.*

Comment 11 (12/27/13) - It should be obvious to anyone that still thinks intelligently that one can not possibly critique 500+ pages of this CFWI DWSP in this simplistic format.

Confounding that, there is no simple way to get a copy of what one presents here.

With both of those points in mind, I plan on sending a copy of my relevant material by USPS to DWSP Chair Tom Bartol before the Jan. 10th deadline for inclusion in the forthcoming "Comments" section---slated for March--- and expect to see it included there in it's complete form.

Please respond if that is not agreeable with the stated policy ??

CFWI RWSP Team Response *- As noted on the CFWI RWSP website, comments may be submitted online, by email or mail. All comments submitted and associated responses will be made available on the CFWI RWSP website.*

Comment 12 (01/16/14) - In reviewing the PS Water Use data numbers by Utilities in your CFWI report, I first come across a number of major deviation.

1; Polk Co.---Winter Haven and Lakeland.---where your CFWI report lists the 2010 Lakeland Utility's use as 24.43 MGD while the SWFWMD lists it as 20.27, a major discrepancy,
Winter Haven you list the 2010 use as 10.75, while SWFWMD says 9.179 MGD

2; Seminole Co.---Seminole City use on the District's website says it was for 2010, 18.3 while your CFWI indicates 20.25 MGD.
For Sanlando, CFWI indicates 10.49 while the District says 7.44 MGD.
For Sanford CFWI indicates 7.10, the District says 6.87 MGD

3; Lake Co---Lake Util, CFWI indicates 7.47, District shows 5.21 MGD
For Leesburg, CFWI says 9.121, District says 4.82 MGD

There are more, and they all point to higher CFWI uses than even the SJRWMD's reported ones. WHY ?? Of course you might have evidence that SWFWMD sent you incorrect data, or there is other possible error sources, [even mine?]]BUT as the Director of that Water Use Group, you are ultimately responsible for what the CFWI published data shows.

Please look into why these major differences exist before I submit them to the CFWI's "Steering Group" and Media. Await hearing from you shortly !

CFWI RWSP Team Response *- The first paragraph on the second page in Chapter 2 addresses this. See response to your Comment 1.*

Comment 13 (01/20/14) - I sure understand what the report say's but want to know why the "2010 Planning Numbers" are so much higher than the 2009 or 2010 ACTUALS ??

Since the CFWI RWSP report was not issued till 2013, It would seem to make sense that the real 2010 numbers, available by Oct. 2010 could/should not have been substituted and used by 2013 ??

I have put together a report of the difference between the assumed CFWI 2010 numbers and the Actual 2010 numbers and will publish that soon. You and Tammy have so badly managed the situation, that a redo is definitely required, and ASAP.

Of course the difference in trend, exhibited between the 2010 "Actuals" and my recently collected 2013 numbers for PS {Utilities} sure destroys the whole direction exhibited in the CFWI report. Of course you can just redo the report again ??

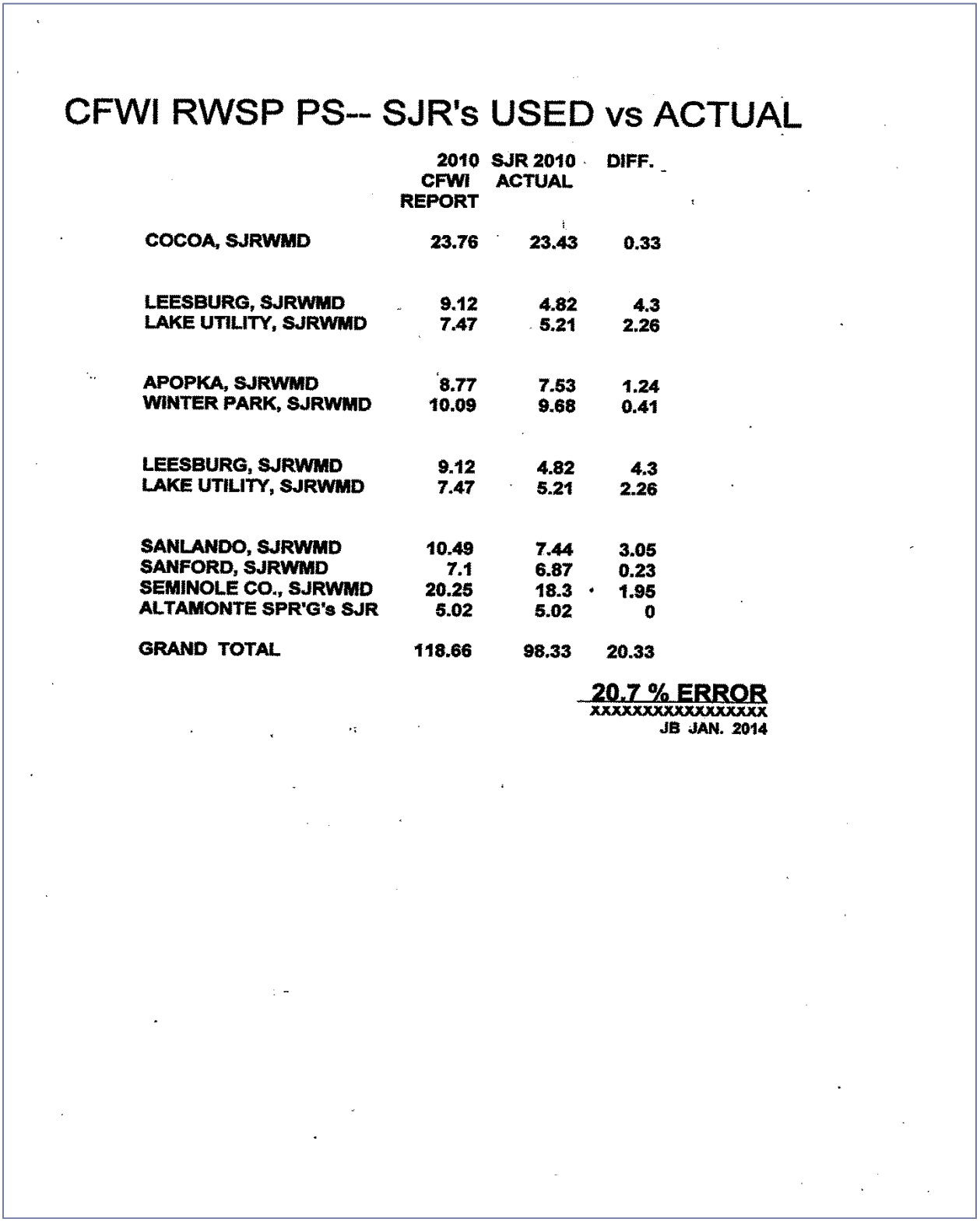
CFWI RWSP Team Response *- See response to your Comment 1.*

Comment 14 (01/22/14) - I thought I would put together a list of just thr SJRWMD"s "ERRORS' that appear to be in the CFWI's data base, and give you and Tammy an opportunity to correct any inaccuracies.

I have some of the comparable larger Utility data for SWF & SF but they are so much smaller percentage wise than yours. As previouslyy indicated by email, I understand that you thought you covered yourself by indicating that the numbers used for PS in that report were "tentative", but to miss by 20+ %, always on the plus side sure might lead one to feel it was a very positive decision to create the need for more District attention and taxpayer money ??

A full report will be forthcoming on what the 2012 & 2013 PS data from the major CFWI Utilities actual use has been for inclusion in the Citizen Comments that have been solicited.

This attachment will be sent to the CFWI Steering Comm. & others. tomorrow if you do not reply today !



CFWI RWSP PS-- SJR's USED vs ACTUAL

	2010 CFWI REPORT	SJR 2010 ACTUAL	DIFF.
COCOA, SJRWMD	23.76	23.43	0.33
LEESBURG, SJRWMD	9.12	4.82	4.3
LAKE UTILITY, SJRWMD	7.47	5.21	2.26
APOPKA, SJRWMD	8.77	7.53	1.24
WINTER PARK, SJRWMD	10.09	9.68	0.41
LEESBURG, SJRWMD	9.12	4.82	4.3
LAKE UTILITY, SJRWMD	7.47	5.21	2.26
SANLANDO, SJRWMD	10.49	7.44	3.05
SANFORD, SJRWMD	7.1	6.87	0.23
SEMINOLE CO., SJRWMD	20.25	18.3	1.95
ALTAMONTE SPR'G's SJR	5.02	5.02	0
GRAND TOTAL	118.66	98.33	20.33

20.7 % ERROR
XXXXXXXXXXXXXXXX
JB JAN. 2014

CFWI RWSP Team Response *- See response to your Comment 1.*

Comment 15 (01/24/14) - I see that the closing date for "Public Comment" has been delayed 20 days--- hopefully so that the SJRWMD can publish the real 2010 PS Water Use numbers in place of those previously presented in the CFWI's DWSP.

I attach a sample of the error [20 %] that was in the previous numbers, even though the CFWI DRWSP was published in Nov. 2013, at least 1 1/2 years later than the 2010 numbers were available.. A more complete analysis is coming.

I sure hope you Steering Committee members have enough personal integrity such that you would never sign off on a report that had that kind of error in the most basic variable that drives all the reports conclusions and direction. *(Same attachment submitted as shown in Comment 14.)*

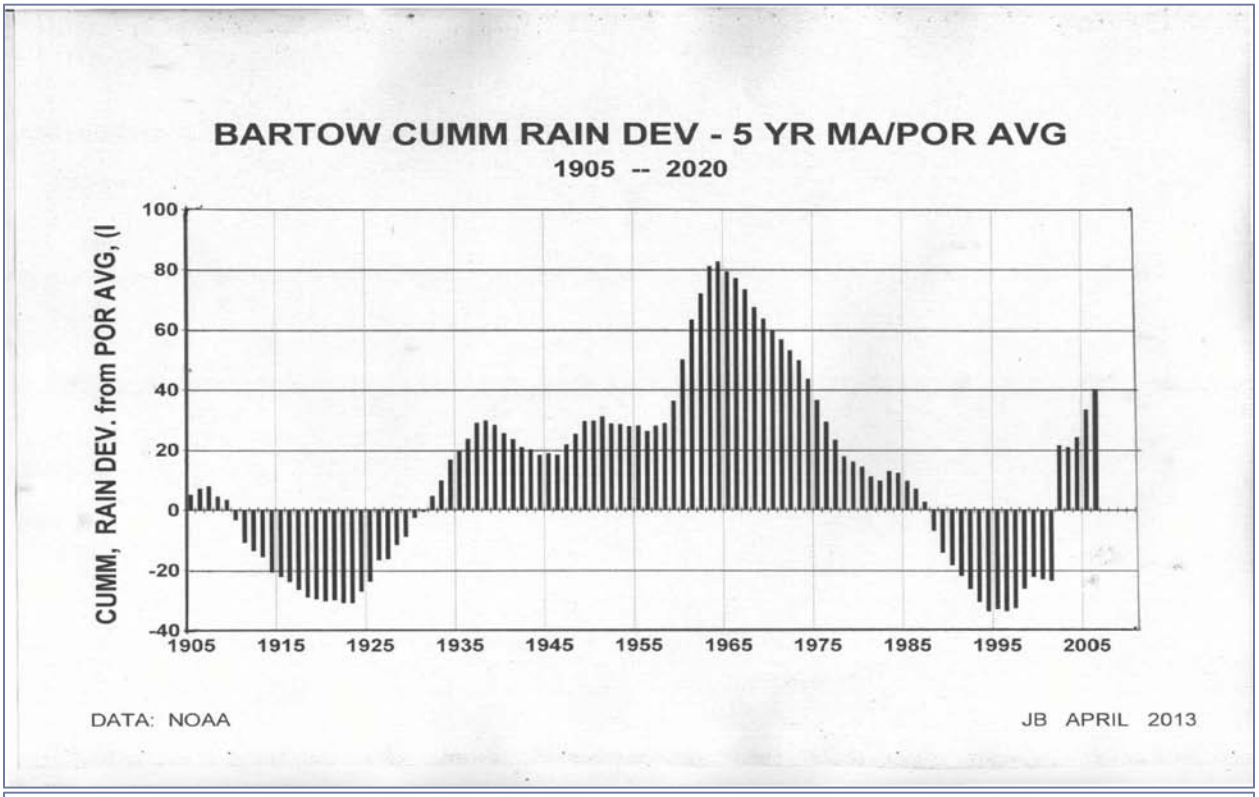
CFWI RWSP Team Response *- See response to your Comment 1.*

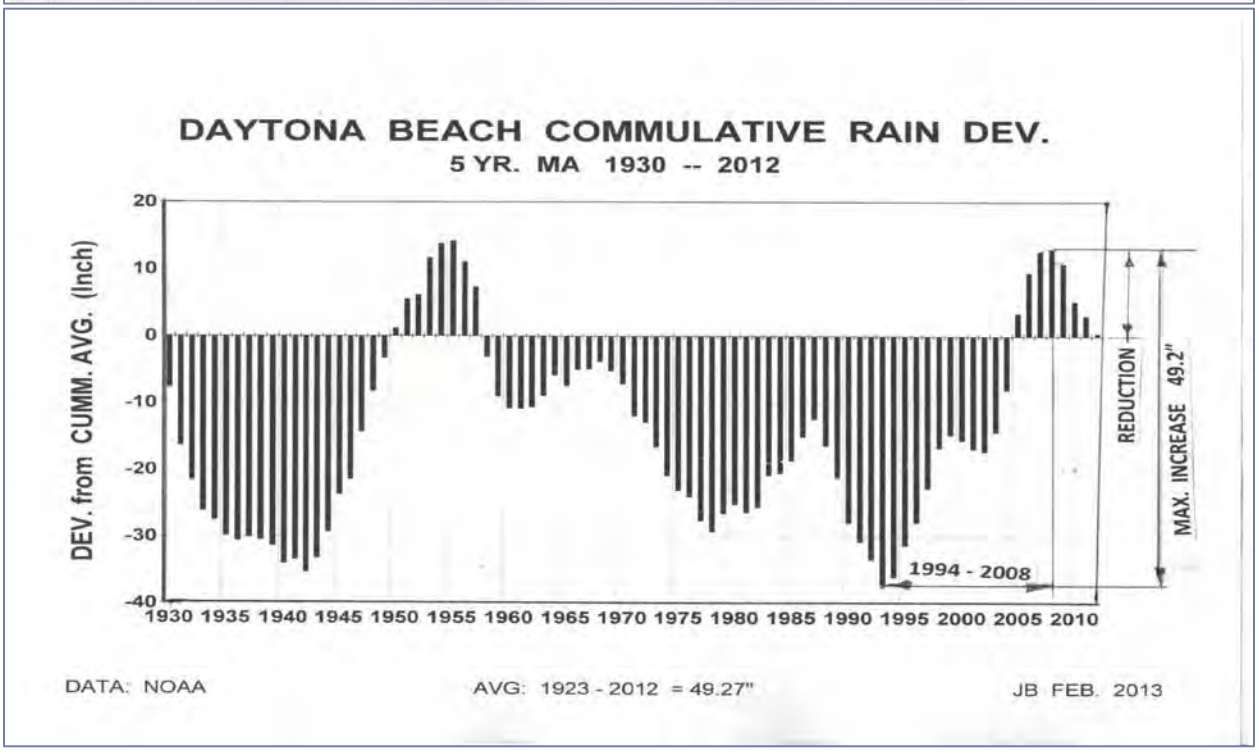
Comment 16 (02/16/14) - As part of the whole CFWI project there are a number of planned projects [e.g. MFL] that are based on studies of the past rainfall pattern in setting the "withdrawal" limits and MFL violations.

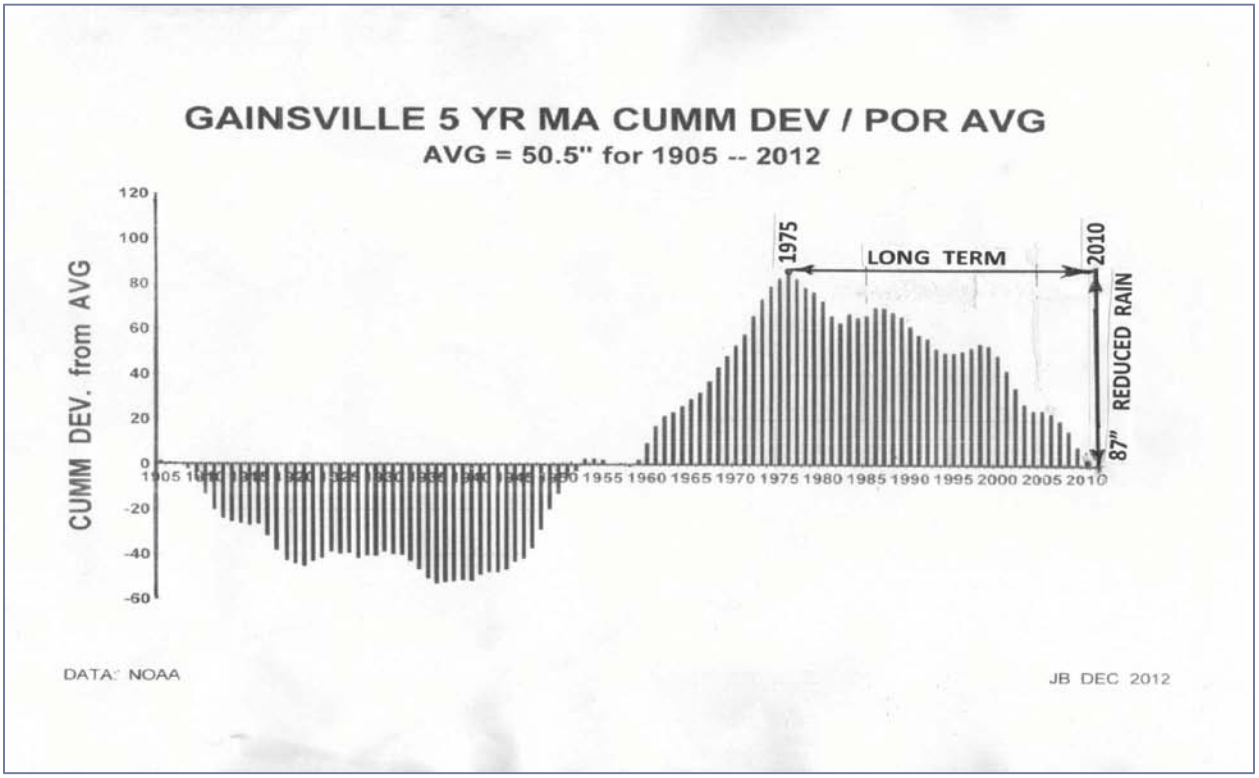
Unfortunately those studies were based on a long term "No Change" rainfall pattern that is not a realistic evaluation of what has happened rainfall wise. I want to believe that all individuals in the CFWI Study and Future Planning groups understand the overriding importance of rainfall in any hydrological condition,

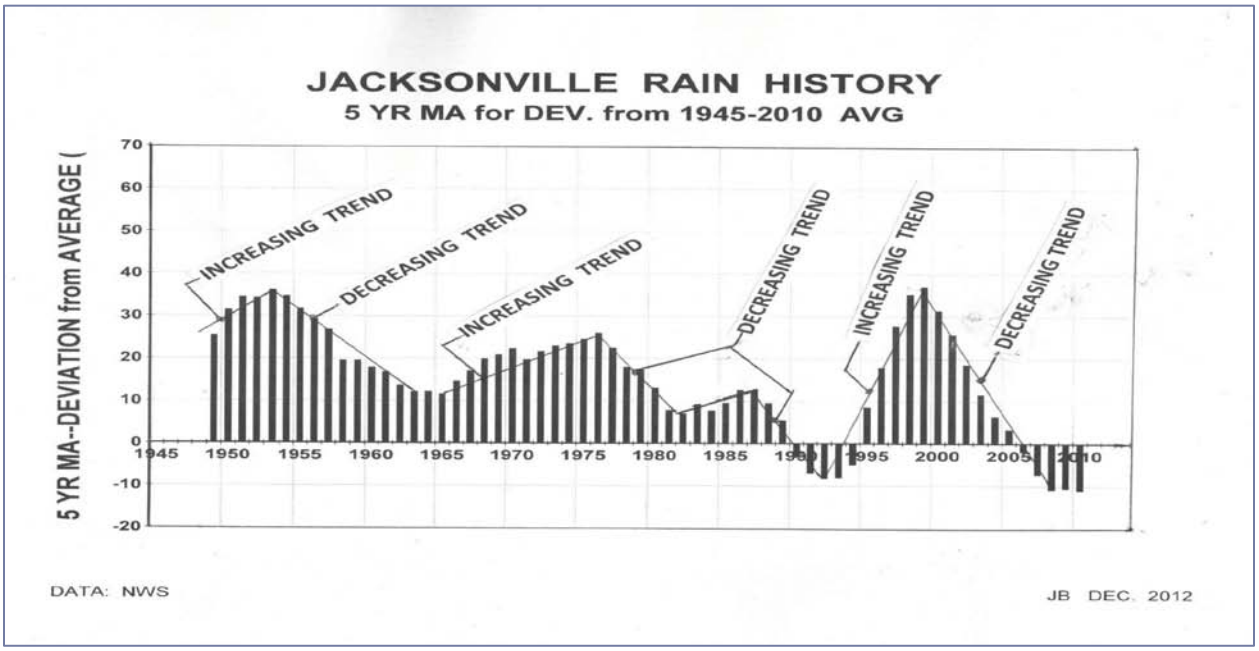
With that in mind and knowing that the whole MFL program was established by the Legislature to be directed at "Withdrawals" and not the multidecadal cyclical rain variations.as indicated by my attached graphs, it is imperative that all previous MFL studies be re-evaluated taking into account what the many "Cumulative" rain patterns indicate for hydrological conditions, That is especially important for those MFL's established before the latest 2000, 2006-7 and 2000 droughts.

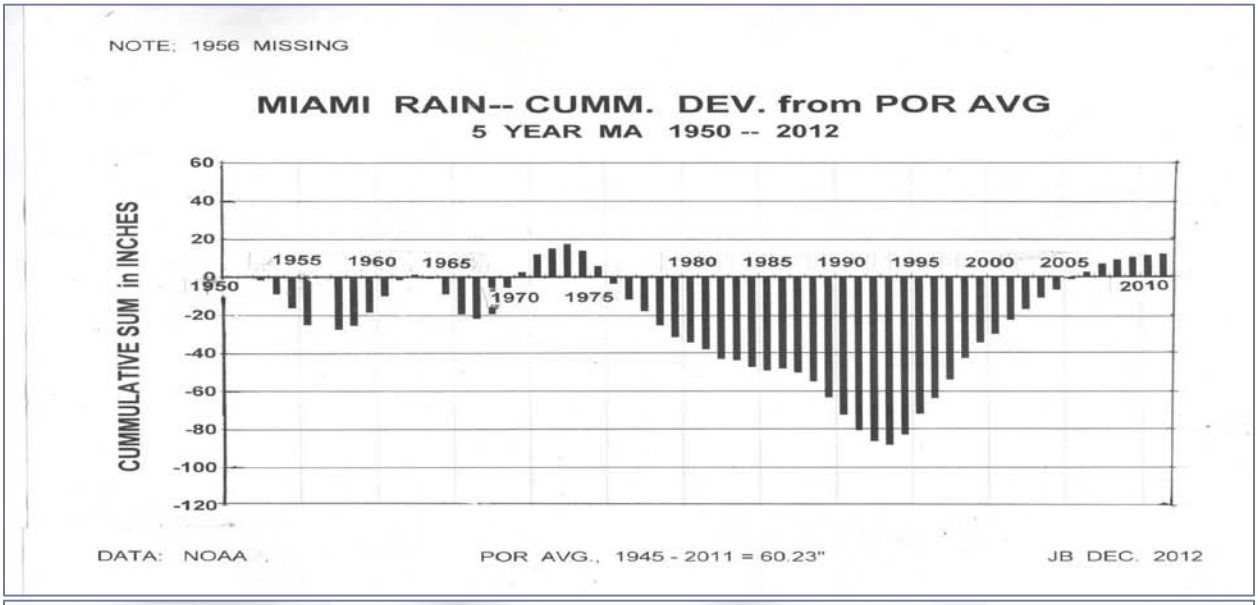
I believe that the attached graphs are of such overall public significance that a full size copy of each should be part of the planned publication of the Public Comments", If a hard copy is required just let me know tomorrow "Monday" and I will provide it.

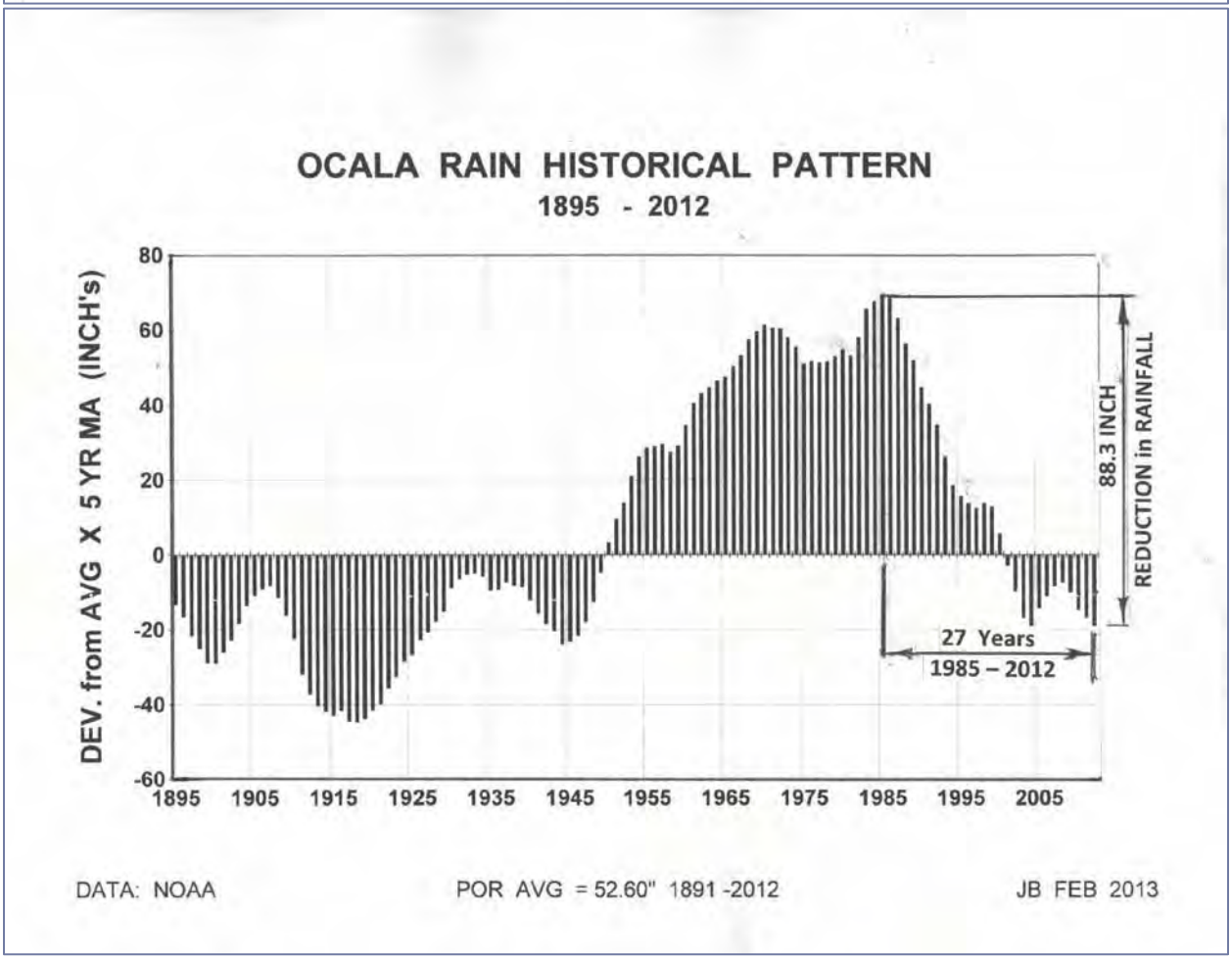

BARTOW CUMM RAIN DEV - 5 YR MA/POR AVG
1905 -- 2020
CUMM, RAIN DEV. from POR AVG, (I
100
80
60
40
20
0
-20
-40
1905
1915
1925
1935
1945
1955
1965
1975
1985
1995
2005
DATA: NOAA
JB APRIL 2013

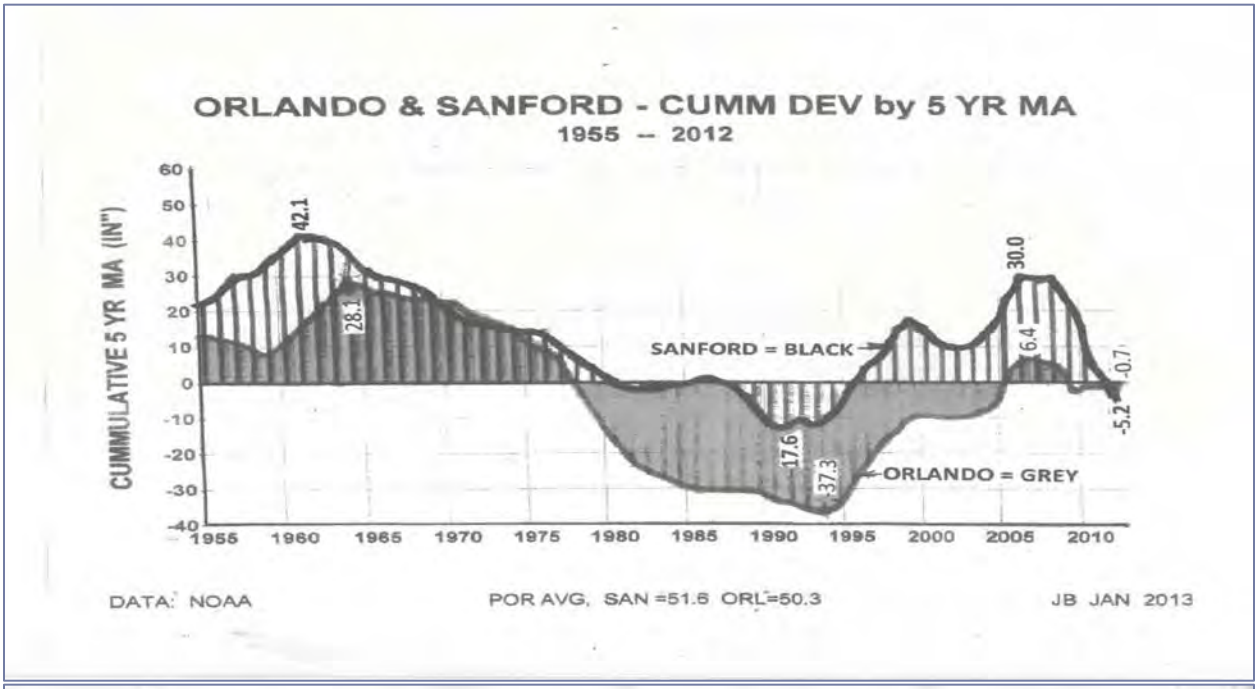

DAYTONA BEACH COMMULATIVE RAIN DEV.
5 YR. MA 1930 -- 2012
DEV. from CUMM. AVG. (Inch)
20
10
0
-10
-20
-30
-40
1930 1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010
REDUCTION
MAX. INCREASE 49.2"
1994 - 2008
DATA: NOAA
AVG: 1923 - 2012 = 49.27"
JB FEB. 2013

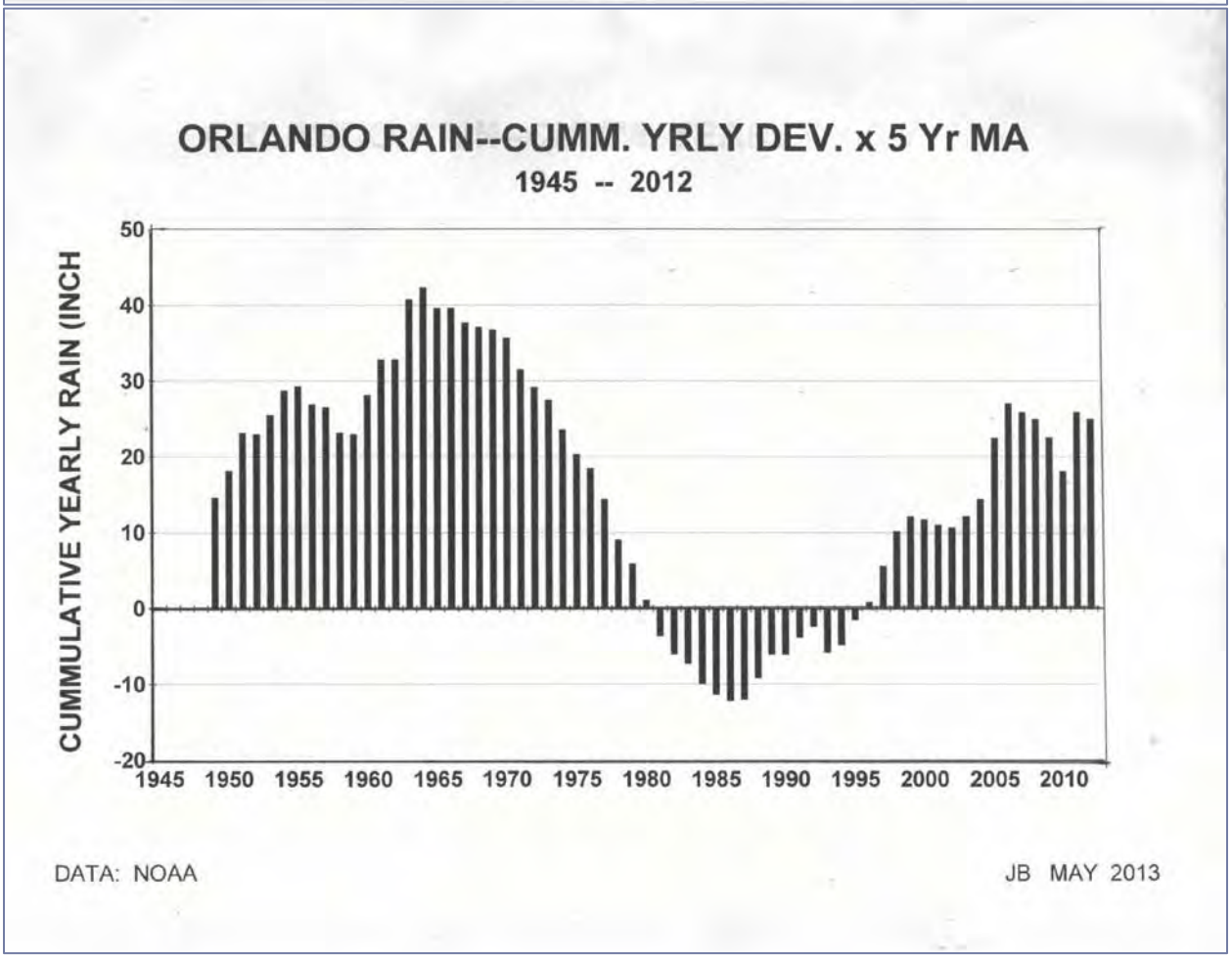

GAINSVILLE 5 YR MA CUMM DEV / POR AVG
AVG = 50.5" for 1905 -- 2012
CUMM DEV. from AVG
120
100
80
60
40
20
0
-20
-40
-60
1905
1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010
1975
LONG TERM
2010
87" REDUCED RAIN
DATA: NOAA
JB DEC 2012

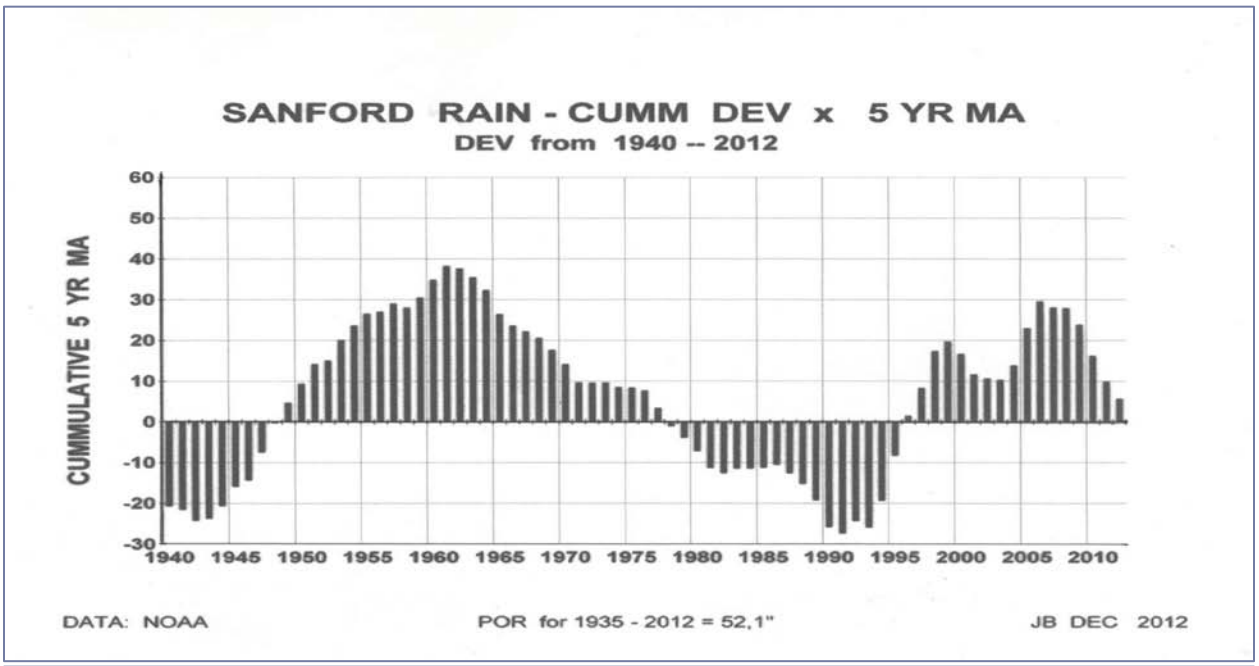

JACKSONVILLE RAIN HISTORY
5 YR MA for DEV. from 1945-2010 AVG
5 YR MA--DEVIATION from AVERAGE (
70
60
50
40
30
20
10
0
-10
-20
INCREASING TREND
DECREASING TREND
INCREASING TREND
DECREASING TREND
INCREASING TREND
DECREASING TREND
1945 1950 1955 1960 1965 1970 1975 1980 1985 1995 2000 2005
DATA: NWS
JB DEC. 2012

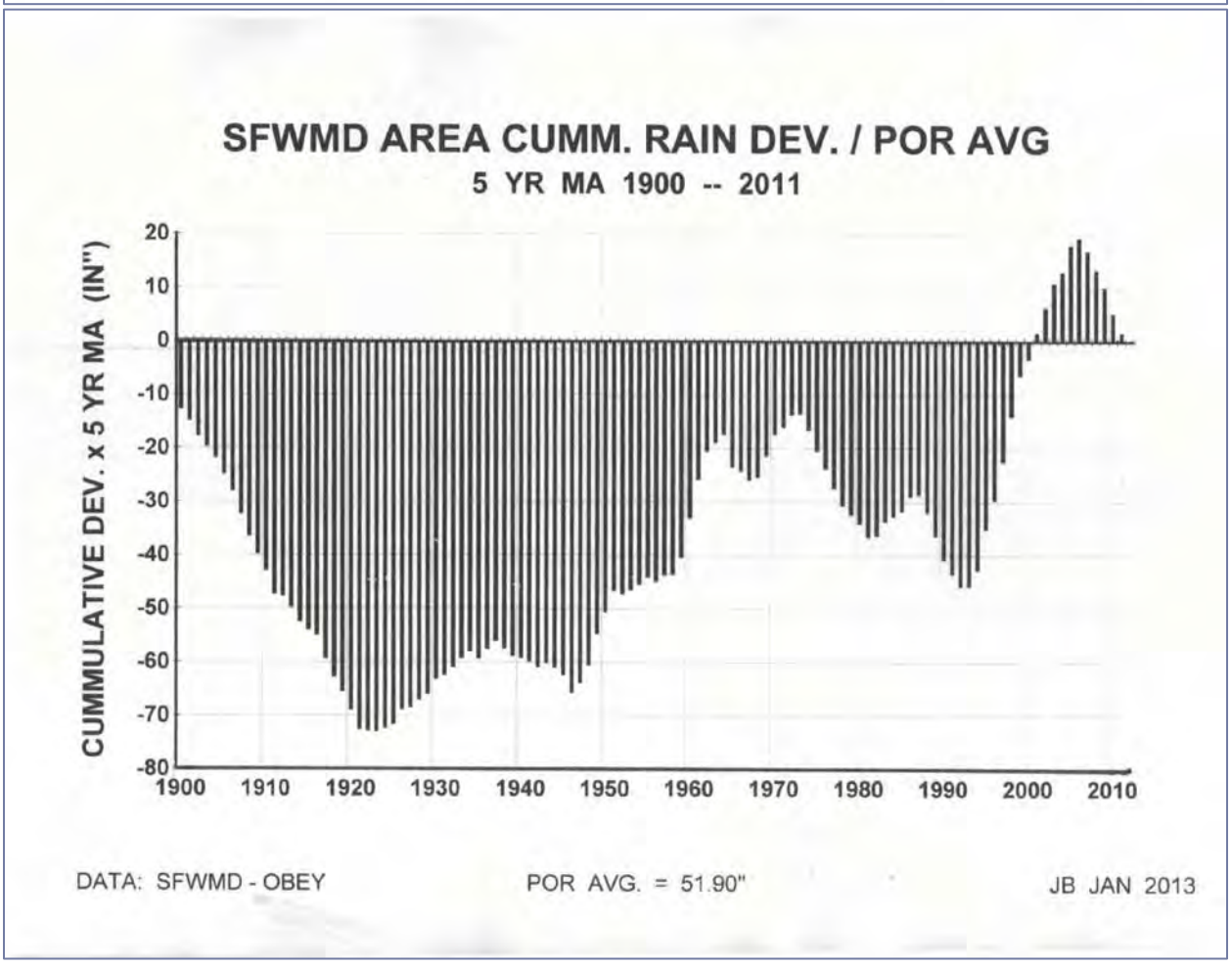

NOTE: 1956 MISSING
MIAMI RAIN-- CUMM. DEV. from POR AVG
5 YEAR MA 1950 -- 2012
CUMMULATIVE SUM in INCHES
60
40
20
0
-20
-40
-60
-80
-100
-120
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
DATA: NOAA
POR AVG., 1945 - 2011 = 60.23"
JB DEC. 2012


OCALA RAIN HISTORICAL PATTERN
1895 - 2012
DEV. from AVG X 5 YR MA (INCH's)
80
60
40
20
0
-20
-40
-60
1895
1905
1915
1925
1935
1945
1955
1965
1975
1985
1995
2005
88.3 INCH
REDUCTION in RAINFALL
27 Years
1985 – 2012
DATA: NOAA
POR AVG = 52.60" 1891 -2012
JB FEB 2013


ORLANDO & SANFORD - CUMM DEV by 5 YR MA
1955 -- 2012
CUMMULATIVE 5 YR MA (IN")
60
50
40
30
20
10
0
-10
-20
-30
-40
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
42.1
28.1
SANFORD = BLACK
30.0
6.4
-0.7
-5.2
17.6
37.3
ORLANDO = GREY
DATA: NOAA
POR AVG, SAN =51.6 ORL=50.3
JB JAN 2013


ORLANDO RAIN--CUMM. YRLY DEV. x 5 Yr MA
1945 -- 2012
CUMMULATIVE YEARLY RAIN (INCH
50
40
30
20
10
0
-10
-20
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
DATA: NOAA
JB MAY 2013


SANFORD RAIN - CUMM DEV x 5 YR MA
DEV from 1940 -- 2012
CUMMULATIVE 5 YR MA
60
50
40
30
20
10
0
-10
-20
-30
1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010
DATA: NOAA
POR for 1935 - 2012 = 52,1"
JB DEC 2012


SFWMD AREA CUMM. RAIN DEV. / POR AVG
5 YR MA 1900 -- 2011
CUMMULATIVE DEV. x 5 YR MA (IN")
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010
DATA: SFWMD - OBEY
POR AVG. = 51.90"
JB JAN 2013

CFWI RWSP Team Response *- Appendix B describes the methods associated with MFLs, including the use of varying hydrologic/climatic conditions.*

Comment 17 (02/19/14) - Since the District has not published it's Historic Total FW Use by County, I thought I would send my copy on for inclusion in the CFWI "Public Comment File" to put into perspective the CFWI's "Projections". A simple 3 pages that let's every interested County Stakeholder or Citizen know where the latest USGS's 2013 report of FL. Total Fresh Water Use is derived from, and why it shows that we now in 2010 use 6.6% **LESS** FW than we did in 1975, 35 years ago !

I await seeing the publication of these "Public comments" soon..

SJRWMD TOTAL GW & SW USE -- By County 1980-2012 Page 1

	ALACHUA				BAKER				BRADFORD				BREVARD				CLAY				DUVAL				
YEAR	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	YEAR
1980	27.9	1	28.9		4.8	0.6	5.4		0.1	0	0.1		171	20.3	191		19.1	1.3	20.4		141	1.4	143		1980
1981	31.3	4.1	35.4		4.6	0.6	5.2		0.2	0	0.2		39.3	67.4	107		20.3	1.3	21.6		145	2.3	148		1981
1982	31.3	1.5	32.8		4.1	0.6	4.7		0.2	0	0.2		88.5	26.6	115		17.8	1.3	19.1		130	2.3	132		1982
1983	30.4	1.5	31.9		5	0.6	5.5		0.3	0	0.3		89.1	27.6	117		16.4	1.3	17.7		134	2.3	136		1983
1984	32.1	1.4	33.5	32.5	4.5	1.1	5.5	5.3	0.4	0	0.4	0.24	99.4	29.7	129	132	18.5	1.4	19.9	19.7	144	1.4	146	141	1984
1985	28.5	0	28.6	32.4	5.4	2.2	7.6	5.7	0.3	0	0.3	0.28	116	39.8	156	125	21.3	5.3	26.6	21	151	1.4	153	143	1985
1986	28.9	0.1	29.9	31.3	5.6	2.2	7.8	6.2	0.3	0	0.3	0.3	124	26.3	150	132	22.6	4.9	27.5	22.2	141	1.2	142	142	1986
1987	30.3	0.2	30.5	30.9	5.8	2.2	8	6.9	0.4	0	0.4	0.34	110	27.2	137	125	23.4	0.4	23.8	23.1	162	1	163	148	1987
1988	31.1	0.2	31.3	30.8	5.9	2.2	6.1	7	0.5	0	0.5	0.38	119	30.8	149	133	24	0.3	24.3	24.4	162	1	163	153	1988
1989	32.5	0.2	32.6	30.6	7.1	2.2	9.3	7.8	0.3	0	0.3	0.36	110	26.4	137	138	23.9	0.3	24.2	25.3	161	1	162	156	1989
1990	35.6	0.2	35.7	32	7.1	2.2	9.3	8.1	0.3	0	0.3	0.36	118	26.6	149	144	25.2	0.4	25.6	25.1	143	1.4	154	157	1990
1991	31.2	0.2	31.3	32.3	6.2	0.9	7.1	8	0.4	0	0.4	0.38	129	26.8	145	146	25.4	0.4	25.8	24.7	147	0.9	149	158	1991
1992	30.1	0.1	30.1	32.2	5.1	0.4	5.5	7.5	0.3	0	0.3	0.36	97.7	24.7	156	143	22.8	0.1	23	24.6	143	0.3	143	154	1992
1993	32.2	0.1	32.3	32.4	4.4	0.4	4.8	7.2	0.4	0	0.4	0.34	154	29	122	145	21.4	0.4	21.8	24.1	142	1	143	150	1993
1994	32.4	0.1	32.5	32.4	4.2	0.4	4.6	6.3	0.4	0	0.4	0.36	151	30.1	183	142	23.1	0.4	23.5	23.9	142	1	143	146	1994
1995	31.8	0.1	32.8	31.8	4.4	0.6	5	5.4	0.4	0	0.4	0.38	113	22.5	181	148	21.3	0.2	21.5	23.1	145	0.5	145	145	1995
1996	31.8	0.2	32	31.9	5.5	0.9	6.5	5.3	0.4	0	0.4	0.38	125	23.2	136	157	21.5	0.3	21.8	22.3	151	0.7	152	145	1996
1997	30.3	0.2	30.5	32	5.4	0.8	6.2	5.4	0.4	0	0.4	0.4	74.4	19.1	148	155	20.1	0.3	20.5	21.8	151	0.7	152	147	1997
1998	36.6	0.2	36.8	32.9	4.9	0.5	5.4	5.5	0.4	0	0.4	0.4	193	28.2	93.5	154	21.9	0.4	22.3	21.9	151	0.8	152	149	1998
1999	33.8	0.1	33.9	33.2	4.8	0.4	5.2	5.7	0.4	0	0.4	0.4	75.6	19.3	221	148	23.2	0.5	23.6	21.9	152	0.7	153	151	1999
2000	36.9	0.3	37.2	34.1	5.6	1.7	7.4	6.1	0.4	0	0.4	0.4	144	39.2	94.9	156	33.6	0.5	34.1	24.5	154	1.7	156	153	2000
2001	33.4	0	33.4	34.4	5.6	1.1	6.7	6.2	0.2	0	0.2	0.36	93.5	23.7	183	139	27.5	0.7	28.2	25.7	143	3	146	152	2001
2002	31.9	0.1	32	34.7	5.3	0.9	6.2	6.2	0.3	0	0.3	0.34	123	33.3	117	148	27.5	0.5	28	27.2	144	3.5	148	151	2002
2003	35	0.2	35.6	34.3	8.7	2.7	11.4	7.4	3	0	3	0.86	113	40.5	156	142	28.1	0.3	28.4	28.5	147	8.1	153	151	2003
2004	37.8	0.3	38	35.2	5.9	1	6.9	7.7	3.2	0	3.2	1.42	118	38.6	153	154	31.4	2	33.4	30.4	158	7.3	166	154	2004
2005	31.5	0.2	31.7	34.1	6.1	0.9	7	7.6	2.6	0	2.6	1.9	95.5	22.6	157	141	22.7	0.4	23.1	28.2	165	6.4	172	157	2005
2006	36.2	2.6	38.8	35.7	7.2	1.2	8.4	8.1	2.5	0.1	2.6	2.4	113	45.5	118	149	26.4	2.5	28.9	28.5	174	5.8	180	165	2006
2007	34	2.4	36.4	36	5.5	0.3	5.9	7.9	1.5	0.1	1.6	2.6	75.2	66.4	159	146	26.4	1.8	28.2	28.4	175	4.2	179	170	2007
2008	31.7	2.2	33.9	35.8	4.9	0.1	5	6.6	1	0.1	1.1	2.2	78.2	36.2	142	138	24.4	1.3	25.8	27.9	159	4.8	164	172	2008
2009	29.2	1.6	30.8	34.3	5.1	0.1	5.2	6.3	0.9	0	0.9	1.8	85	40	114	132	17.9	1.1	19	25	147	4.9	152	169	2009
2010+			29.2	33.8			4.7	5.8			0.9	1.4			125	135			23.7	24.1			160	157	2010+
2011*			29.2	31.8			7.9	5.7			1.5	1.2			137	135			24.9	24.3			163	154	2011*
2012+			26.3	29.9			9.4	6.4			1.4	1.2			131	130			19.8	22.6			148	157	2012+

NOTES: 1; All Data is in MGD-- Shown to 3 Significant Figures When Above the 0.1 MGD Lower Reporting Criteria
2; Years 2010*-2012* are ONLY REPORTED as TOTAL

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SJRWMD TOTAL GW & SW USE -- By County 1980-2012 Page 2

	FLAGLER				INDIAN RIV.				LAKE				MARION				NASSAU				OKEECHOBEE			
YEAR	Grnd.	Surf	Total	5yrMa	Grnd.	Surf	Total	5yrMa	Grnd.	Surf	Total	5yrMa	Grnd.	Surf	Total	5yrMa	Grnd.	Surf	Total	5yrMa	Grnd.	Surf	Total	5yrMa
1980	11	0.2	11.2		79.8	215	294		93.5	7.6	101		37	2	39		53.7	0.9	54.6		4.3	1.1	5.4	
1981	9.2	0.2	9.4		122	203	325		138	21.7	160		39.7	2.1	41.8		51.1	0.9	52		11.2	1.9	13.1	
1982	7.8	0.2	8		108	162	271		121	22.1	143		31.7	2.7	34.4		52.5	0.9	53.4		11.7	2	13.8	
1983	8.3	0.2	8.4		107	176	282		129	21.6	141		31.1	2.5	33.6		40.1	0.9	40.9		14.6	1.5	16.1	
1984	8.8	0.5	9.2	9.24	105	174	279	290	127	18.7	145	138	34	2.5	36.4	37	43.9	0.9	44.8	49.1	14.3	1.8	16.1	12.9
1985	9	0.9	10	9	45	107	152	262	64.9	8.3	73.2	133	31.6	3.1	34.7	36.2	46.1	0.9	47.1	47.6	7.8	0.6	8.4	13.5
1986	9.4	1.3	10.7	9.26	62.5	114	177	232	69.7	12.4	82.1	117	34.7	2.7	37.4	35.3	47.7	1	48.6	47	8	0.5	8.5	12.6
1987	8.7	1.1	9.8	9.62	64.2	106	170	212	89.8	12.7	103	109	32.4	1.4	33.8	35.2	43.6	1	44.6	45.2	7.3	0.3	7.5	11.3
1988	10.4	0.9	11.4	10.2	78.2	136	214	199	88	11.3	99.3	100	33.3	1.3	34.6	35.4	42.9	1	43.8	45.8	9.8	0.3	9.1	9.9
1989	11	1	12	10.8	71	107	178	178	96	13.5	110	93.3	36.7	1.3	38	35.7	41	0.5	41.5	45.1	9.9	0.3	10.2	8.7
1990	13.5	1.2	14.7	11.7	72.9	166	239	196	84.4	12.7	97	98.1	37.6	1.4	39	36.6	42.8	0.6	43.4	44.4	9.9	0.3	10.2	9.1
1991	11.4	1.1	12.5	12.1	62.1	98.5	161	192	97.3	17.2	115	105	32	1.1	33.1	35.7	43.1	0.2	43.3	43.3	10	0	10	9.4
1992	14.6	0.6	15.2	13.2	95.8	179	275	213	70.5	11.5	82	100	37.5	1	38.5	36.6	45.7	0.1	45.8	43.6	15.8	0	15.8	11.1
1993	13.2	1	14.2	13.7	79.7	134	214	213	74	12	86	97.8	33.4	1.1	34.5	36.6	48.6	0.2	48.8	44.6	12.1	0	12.1	11.7
1994	13.7	1	14.8	14.3	82.8	144	227	223	77	12.6	89.6	93.8	36.6	1.1	37.7	36.6	45.2	0.2	45.4	45.3	13	0	13	12.2
1995	13.6	0.9	14.5	14.2	76.6	136	213	218	75.4	7.7	83.1	91	39.9	0.8	40.6	36.9	44.5	0.1	44.7	45.6	12	0	12	12.6
1996	13.3	1.4	14.7	14.7	71.1	130	201	226	79.7	8.4	88.1	85.8	42.5	1	43.5	39	46.8	0.2	47	46.3	10.3	0	10.3	12.6
1997	13.2	1.5	14.7	14.6	53.2	87	140	199	78.7	7.8	86.6	86.7	39	1.1	43.1	39.9	46.8	0.2	47	46.6	6.8	0	6.8	10.8
1998	15.8	1.6	17.4	15.2	76.3	122	198	196	103	11.6	115	92.4	41.3	1.4	42.7	41.5	48	0.2	48.2	46.5	11.6	0	11.8	10.8
1999	18.3	1.2	19.5	16.2	59.9	96.7	157	182	79.7	6.1	85.8	91.7	40.9	0.9	41.8	42.3	45.2	0.2	45.4	46.5	7.9	0	7.9	9.8
2000	24.6	3.6	28.2	18.9	87.4	161	284	196	90.8	9.8	101	95.2	43.9	1.9	45.9	43.4	46.5	0.5	47	46.9	15.3	0	15.3	10.4
2001	16.4	0.4	16.7	19.3	67.8	124	192	194	84.4	7.2	91.6	95.9	36.5	2.9	39.4	42.6	47.7	1.2	48.9	47.3	11.8	0	11.8	10.7
2002	16.2	0.3	16.6	19.7	57.3	97	154	197	80.9	6.9	87.8	96.1	34.1	1.8	35.9	41.1	46.8	0.9	47.7	47.4	7.8	0	7.8	10.9
2003	15.8	0.1	15.9	19.4	79.3	120	199	197	77.9	38.7	117	96.5	39.5	1.9	41.4	40.9	47.9	2.4	50.3	47.9	4.8	0	4.8	9.5
2004	17.7	0.9	18.7	19.2	96.8	163	260	218	82.5	41.3	124	104	38	4.7	52.6	41	47.1	0.7	47.8	48.3	6.6	0	6.6	9.3
2005	15.5	3.8	19.3	17.4	71.6	112	184	198	74.8	10.3	85.2	101	35.4	1.2	36.6	39.2	52	1.8	53.9	49.7	17	0	17	9.6
2006	22.1	7	29.1	19.9	195	101	295	218	93.6	22.7	116	106	45.3	5.7	51	41.5	53.2	1.5	54.7	50.9	18.3	9.2	27.5	12.7
2007	26.8	9.2	36	23.8	79.9	38.4	118	211	97.2	18.6	116	112	44	5.5	49.5	44.2	50.3	1.5	51.7	51.7	14.2	7.1	21.3	15.4
2008	22.6	6.6	29.2	26.5	73.7	36.3	110	193	95.8	19.4	105	109	42.1	6.5	48.6	45.7	48.9	2	48.6	51.3	12.6	6.3	18.9	18.3
2009	18.2	4.9	23.1	27.3	92.8	45.6	138	169	79.2	19	98.2	104	40	5.3	45.2	46.2	47.1	1.4	48.4	51.5	15	7.5	22.5	21.4
2010+			23.4	28.2			143	161			104	108			45	47.9			50.5	50.8			17.2	21.5
2011*			26.3	27.6			168	135			114	107			44.8	46.6			53.3	50.5			19.6	19.9
2012+			21.1	24.6			158	143			114	107			36.3	44			52.9	50.7			10.5	17.7

NOTES: 1; All Data is in MGD-- Shown to 3 Significant Figures When Above the 0.1 MGD Lower Reporting Criteria
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SJRWMD TOTAL GW & SW USE -- By County 1980-2012 Page 3

	ORANGE				OSCEOLA				PUTNAM				ST. JOHNS				SEMINOLE				VOLUSIA				
YEAR	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	Grnd.	Surf	Total	5 Yr MA	YEAR
1980	128	106	233		2.8	0.2	3		60.2	25.6	85.8		30.8	0.5	31.2		60.2	0.4	60.6		65.9	5.9	71.9		1980
1981	151	34.7	186		9.2	0.8	10		64.9	9.6	74.4		37.5	0.5	38		55.7	0.4	56.1		69.6	6.2	75.8		1981
1982	144	4.6	149		7.6	0.9	8.5		50.8	38.7	89.5		41.1	0.5	41.6		61.6	0.4	61.5		69.3	6.2	75.5	75.1	1982
1983	142	30.2	172		7.6	0.9	8.5		47.2	42.6	89.9		44.1	0.7	44.8		68.7	0.4	69.1		73.3	2	75.2	102	1983
1984	153	30.2	183	185	7.6	0.9	8.5	7.7	57	15.7	72.6	82.4	44.1	1.4	45.5	46.8	73.3	0.8	74	64.3	71.2	5.7	76.9	127	1984
1985	144	50.9	195	177	6.5	1.2	7.7	8.6	70.3	20.1	90.3	83.3	50.2	1.1	51.3	46.1	66.8	2.1	68.8	65	86.6	118	204	154	1985
1986			200	180			15.1	9.7	66.2	23.8	90	86.5	49.5	1.3	50.8	46.3	70.8	2.3	72.4	69.2	78	124	202	181	1986
1987	148	47.8	196	189	5.6	7.2	12.8	10.5	68.9	16.7	85.8	85.7	37.2	1.1	38.3	46.9	66.4	2.2	68.6	70.6	86	124	210	209	1987
1988	144	41.4	186	192	6.8	7.2	14	11.6	73.5	17.2	90.6	85.8	44.5	0.9	45.4	47.2	67.4	2	69.4	70.6	88.5	124	213	224	1988
1989	166	52.8	219	199	6.8	7.1	14	12.7	73.2	17.7	90.9	89.5	47.7	1.1	48.8	45.4	72.4	2.1	74.6	70.8	90.8	125	216	222	1989
1990	160	60	220	204	5.6	8.1	14.7	14.1	63.5	19.3	83	88	51.3	1.4	52.7	47.3	71.4	1.8	73.2	71.6	77.2	203	281	218	1990
1991	133	49.9	183	200	7.4	9.7	17.1	14.5	47.7	41.9	89.6	87.9	40.9	1.1	42	46.6	61.2	1.2	62.3	69.6	67.3	122	190	215	1991
1992	136	67.7	204	202	8.3	11.4	19.7	15.9	49.4	52.7	102	91.2	47.4	0.4	47.7	45.1	65.9	0.5	66.4	69.2	71.3	119	191	213	1992
1993	130	45.4	175	200	5.4	9.5	14.9	80.4	42.1	46.3	88.4	90.8	40.9	1	41.9	43.8	67.2	1.1	68.3	69	79.2	122	201	189	1993
1994	127	32.4	160	188	5.6	9.6	15.2	16.3	30.3	47.2	77.5	88.1	40.2	1	41.2	44.5	81.4	1.2	82.6	70.6	82.7	121	204	173	1994
1995	132	24.2	156	175	5.9	9.2	15.1	16.4	38.1	50.3	88.4	89.2	45.7	0.6	46.4	43.6	84.8	0.9	84.6	72.8	82.8	75.4	156	152	1995
1996	141	29.7	171	173	5.7	8.3	14	15.8	49.9	34.3	84.2	88.1	44.2	0.9	45.1	45.7	81.1	1.1	82.2	76.8	103	7.8	111	132	1996
1997	136	20.4	157	164	4.8	7.5	12.3	14.3	41.6	36.2	77.8	83.3	42.9	0.8	43.3	47.9	72.4	1.4	73.8	78.3	80.2	7.6	87.8	110	1997
1998	155	33.5	189	166	8.4	14.8	23.2	16	47.6	51.1	98.7	85.3	51.3	1	52.4	49.8	79.9	1.3	81.2	80.9	90.4	8.2	98.6	100	1998
1999	148	2.1	150	165	2.8	2.9	5.7	14.1	49.1	48.9	98	89.4	51.8	0.8	52.5	49.1	71.7	0.9	72.6	78.9	85	8.2	93.2	96.3	1999
2000	157	5.3	163	165	29.5	19.1	48.5	20.7	40.4	48.9	89.3	89.6	52.6	3.2	55.7	48.7	88.5	1.8	90.3	80.2	97	12.1	109	98	2000
2001	134	3.7	138	166	20.9	15.1	35.9	25.1	26.5	47.7	74.2	87.6	38.3	3.1	41.4	43.9	68.4	1.3	69.7	77.5	81.9	10.9	92.8	98.6	2001
2002	135	2.5	138	159	12.5	9.3	21.8	27	24.7	45.8	70.5	86.1	39.6	2	41.6	40	65.3	0.8	66.1	76	80.1	16.1	96.1	101	2002
2003	141	5.5	147	155	29.6	29.9	50.5	32.5	24.5	44.8	69.3	80.3	25.1	3.2	28.3	35.9	77.6	1.1	78.7	75.5	86.7	14.6	101	95.4	2003
2004	141	5.5	147	147	22.8	32.1	54.9	42.3	23.4	43.3	66.8	74	28.5	4.4	32.8	39.6	85.8	1	86.8	78.3	84.3	40.4	105	101	2004
2005	145	4.6	149	146	51.1	0.7	51.8	43	23.4	28.3	51.7	66.5	32.3	3.2	35.6	43.5	68.3	0.9	69.2	74.1	76.6	5.6	82.2	98	2005
2006	158	7.7	181	144	84.6	32.5	97.1	55.2	34.3	29.5	63.8	64.4	43	16.8	59.8	39.6	73.9	4.8	78.8	75.9	91	15.6	107	98.3	2006
2007	160	9.3	169	152	17.7	8.9	26.5	56.2	24	26.9	50.9	60.5	45.4	15.5	60.8	43.5	73.7	5.5	79.2	78.5	83.1	11.4	94.5	98	2007
2008	142	6.7	149	158	15.7	7.9	23.6	50.8	20.9	27	47.9	56.2	37	10.5	47.4	47.3	65.8	3.9	69.7	76.7	76.6	10.9	87.4	95.2	2008
2009	136	7.7	144	158	15.5	7.8	23.3	44.5	22.2	26.4	48.6	55	36.7	11	47.7	50.3	66.5	4.5	71	73.6	75	11.2	86.2	91.5	2009
2010+			144	157			23.4	38.8			56.9	53.6			56.9	54.5			69.1	73.6			110	94.6	2010+
2011*			152	152			53.1	30			55.2	51.9			60.5	54.7			69.6	71.7			85.9	92.8	2011*
2012+			147	147			14.8	27.6			45.6	50.8			49.1	52.4			61.9	68.3			82.6	90.4	2012+

NOTES: 1; All Data is in MGD-- Shown to 3 Significant Figures When Above the 0.1 MGD Lower Reporting Criteria
2; Years 2010*-2012* are ONLY REPORTED as TOTAL

JB DEC 2013

CFWI RWSP Team Response - *Thank you for your comment.*

Comment 18 (02/19/14) - Of course even more interesting is the Districts PS-Utility Water Use History by Utility & County. Of course this takes a few more attachments [4] but feel assured that the District really wants all Stakeholders and Citizens to know the Historical PS Water use Facts to properly assess the present CSWI's "Projections". Again await seeing these facts in the CFWI's upcoming review of it's Public Comments, expected next month.

SJRWMD 2000-2010 UTILITY WATER USE DETAILS

COUNTY	Permit #	NAME	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ALACHUA	1674	Hawthorne						0.18	0.17	0.18	0.17	0.17	0.165
	11339	GRU-Murphree	25.41	26.1	25.7	25.77	26.42	24.59	25.81	27.2	25.81	24.58	23.6
	11364	Arredondo Farms						0.11	0.13	0.13	0.13	0.1	0
	Alachua	TOTAL > 0.24 now > 0.1	**25.41**	**25.1**	**25.7**	**25.77**	**26.42**	**24.88**	**26.11**	**27.51**	**26.11**	**24.85**	**23.77**
BAKER	15	MacClenny	0.81	0.82	0.77	0.73	0.82	0.86	0.89	0.92	0.89	0.95	0.814
	15	MacClenny											0.091
	Baker	TOTAL > 0.24, now > 0.1	**0.81**	**0.82**	**0.77**	**0.73**	**0.82**	**0.86**	**0.89**	**0.92**	**0.89**	**0.95**	**0.91**
BRADFORD	431	Keystone Heights	0	0	0	0.35	0.45	0.45	0.48	0.55	0.51	0.46	0.46
	Bradford	TOTAL > 0.24 now > 0.1	**0**	**0**	**0**	**0.35**	**0.45**	**0.45**	**0.48**	**0.55**	**0.51**	**0.46**	**0.46**
BREVARD Groundwater	202	Palm Bay, City	5.74	6.13	5.93	6.72	6.97	6.95	6.23	6.35	6.32	6.04	6.19
	233	Mims North Brevard	0.69	0.75			0.87	0.86	0.87	0.89	0.87	0.8	0.82
	236	Barefoot Bay	0.48	0.44	0.41	0.52	0.34	0.32	0.48	0.47	0.48	0.48	0.48
	10647	Titusville, City	3.15	3.46	3.64	3.74	3.85	3.87	4.36	4.46	4.35	4.29	3.97
	50245	Cocoa, City	25.61	24.77	24.17	22.97	29.2	25.58	21.58	26.35	21.58	22.18	23.43
	50301	Melbourne, City	3.28	4.17	4.87	4.98	4.46	4.73	4.36		4.36	4.32	4.28
	Brevard	TOTAL Groundwater	**38.95**	**39.72**	**37.74**	**40.3**	**51.08**	**42.31**	**37.88**	**38.52**	**37.96**	**38.11**	**39.17**
BREVARD, Surface	50245	Cocoa, City						2.39	3.04		3.04	3.9	1.26
	50301	Melbourne, City						13.46	12.32	16.1	12.32	11.92	13.1
	Brecard	TOTAL Surface Water	**14.08**	**14.08**	**15.57**	**19.36**	**16.13**	**15.85**	**15.36**	**16.1**	**15.36**	**15.82**	**14.36**
	Brevard	TOTAL,Grand > 0.24 now > 0.1	**53.03**	**53.8**	**53.31**	**59.66**	**67.21**	**58.16**	**53..24**	**54.62**	**54.32**	**53.93**	**53.5**
CLAY	416	Orange Park Grid	11.29	11	11.16	12.36	13.96	11.76	7.9	13.58	12.86	9	8.93
	453	Orange Park Water Plant	1.49	1.4	1.25	1.4	1.25	1.07	1.17	1.18	1.22	1	1.01
	499	Green Cove Springs	1.26	1.24	1.27	1.21	1.2	1.14	1.41	1.33	1.19	1.06	1.07
	527	St. Johns Landing							0.13	.13	0.11	0.11	0.12
	756	Neighborhood Utilities								0.11			
	Clay	TOTAL > 0.24 now > 0.1	**14.48**	**14**	**14.02**	**15.59**	**17.04**	**13.96**	**17.03**	**16.2**	**15.38**	**11.17**	**11.13**
DUVAL	784	Baldwin	0.28	0.31	0.24	0.29	0.29	0.31	0.24	0.26	0.24	0.29	0.23
	793	Jacksonville Beach	3.53	3.15	3.13	2.91	2.92	2.78	2.48	2.64	2.46	2.38	2.42
	810	Atlantic Beach	2.17	3.12	3.22	3.11	2.79	2.61	2.39	2.62	2.39	2.28	2.48
	842	Neptune Beach	1.22	1.18	1.12			0.94	0.94	0.98	0.94	0.89	0.89
	50293	Normandy Village	0.4	0.37	0.37	0.37	0.34	0.4	0.32	0.36	0.32	0.32	0.33
	677-88271	JEA	94.36	100.78	102.47	103.57	120.13	127.62	118	131.16	118	112.24	114.7
	Duval	TOTAL > 0.24, now > 0.1	**118.7**	**111.3**	**112**	**111.2**	**126.5**	**134.7**	**121.9**	**138**	**124.4**	**118.4**	**122**
FLAGLER	59	Flagler Beach	0.62	0.57	0.6	?	0.62	0.64	0.59	0.6	0.59	0.56	0.57

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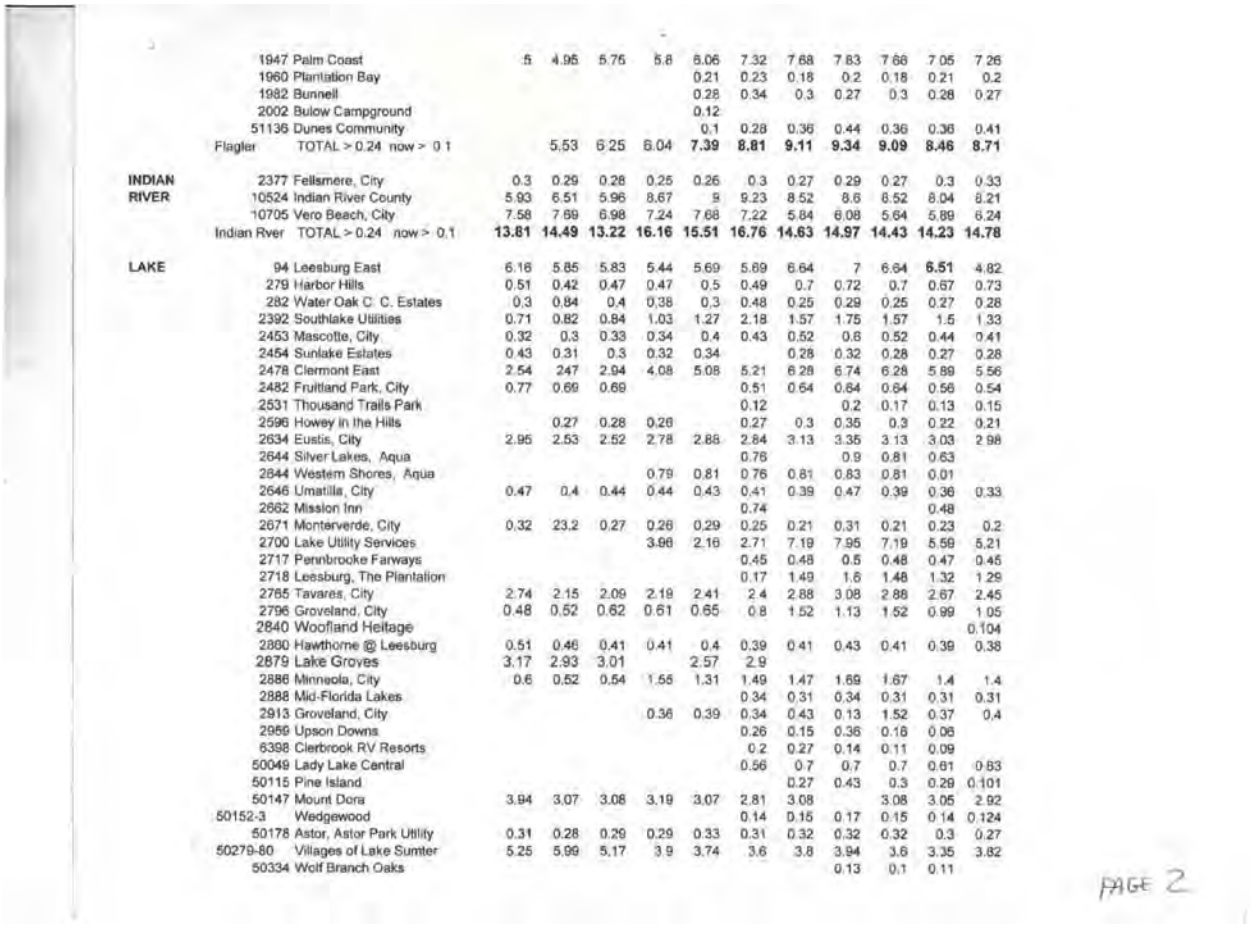

	1947	Palm Coast	5	4.95	5.75	5.8	6.06	7.32	7.68	7.83	7.68	7.05	7.26
	1960	Plantation Bay					0.21	0.23	0.18	0.2	0.18	0.21	0.2
	1982	Bunnell					0.28	0.34	0.3	0.27	0.3	0.28	0.27
	2002	Bulow Campground					0.12						
	51136	Dunes Community					0.1	0.28	0.36	0.44	0.36	0.36	0.41
	Flagler	TOTAL > 0.24 now > 0.1		5.53	6.25	6.04	**7.39**	**8.81**	**9.11**	**9.34**	**9.09**	**8.46**	**8.71**
INDIAN	2377	Fellsmere, City	0.3	0.29	0.28	0.25	0.26	0.3	0.27	0.29	0.27	0.3	0.33
RIVER	10524	Indian River County	5.93	6.51	5.96	6.67	9	9.23	8.52	8.6	8.52	8.04	8.21
	10705	Vero Beach, City	7.58	7.69	6.98	7.24	7.68	7.22	5.84	6.08	5.64	5.89	6.24
	Indian River	TOTAL > 0.24 now > 0.1	**13.81**	**14.49**	**13.22**	**16.16**	**15.51**	**16.76**	**14.63**	**14.97**	**14.43**	**14.23**	**14.78**
LAKE	94	Leesburg East	6.16	5.85	5.83	5.44	5.69	5.69	6.64	7	6.64	**6.51**	4.82
	279	Harbor Hills	0.51	0.42	0.47	0.47	0.5	0.49	0.7	0.72	0.7	0.67	0.73
	282	Water Oak C. C. Estates	0.3	0.84	0.4	0.38	0.3	0.48	0.25	0.29	0.25	0.27	0.28
	2392	Southlake Utilities	0.71	0.82	0.84	1.03	1.27	2.18	1.57	1.75	1.57	1.5	1.33
	2453	Mascotte, City	0.32	0.3	0.33	0.34	0.4	0.43	0.52	0.6	0.52	0.44	0.41
	2454	Sunlake Estates	0.43	0.31	0.3	0.32	0.34		0.28	0.32	0.28	0.27	0.28
	2478	Clermont East	2.54	247	2.94	4.08	5.08	5.21	6.28	6.74	6.28	5.89	5.56
	2482	Fruitland Park, City	0.77	0.69	0.69			0.51	0.64	0.84	0.64	0.56	0.54
	2531	Thousand Trails Park						0.12		0.2	0.17	0.13	0.15
	2596	Howey in the Hills		0.27	0.28	0.26		0.27	0.3	0.35	0.3	0.22	0.21
	2634	Eustis, City	2.95	2.53	2.52	2.78	2.88	2.84	3.13	3.35	3.13	3.03	2.98
	2644	Silver Lakes, Aqua						0.76		0.9	0.81	0.63	
	2844	Western Shores, Aqua				0.79	0.81	0.76	0.81	0.83	0.81	0.01	
	2646	Umatilla, City	0.47	0.4	0.44	0.44	0.43	0.41	0.39	0.47	0.39	0.36	0.33
	2662	Mission Inn						0.74				0.48	
	2671	Monterverde, City	0.32	23.2	0.27	0.26	0.29	0.25	0.21	0.31	0.21	0.23	0.2
	2700	Lake Utility Services				3.98	2.16	2.71	7.19	7.95	7.19	5.59	5.21
	2717	Pennbrooke Farways						0.45	0.48	0.5	0.48	0.47	0.45
	2718	Leesburg, The Plantation						0.17	1.49	1.6	1.48	1.32	1.29
	2765	Tavares, City	2.74	2.15	2.09	2.19	2.41	2.4	2.88	3.08	2.88	2.67	2.45
	2796	Groveland, City	0.48	0.52	0.62	0.61	0.65	0.8	1.52	1.13	1.52	0.99	1.05
	2840	Woofland Heitage											0.104
	2860	Hawthorne @ Leesburg	0.51	0.46	0.41	0.41	0.4	0.39	0.41	0.43	0.41	0.39	0.38
	2879	Lake Groves	3.17	2.93	3.01		2.57	2.9					
	2886	Minneola, City	0.6	0.52	0.54	1.55	1.31	1.49	1.47	1.69	1.67	1.4	1.4
	2888	Mid-Florida Lakes						0.34	0.31	0.34	0.31	0.31	0.31
	2913	Groveland, City				0.36	0.39	0.34	0.43	0.13	1.52	0.37	0.4
	2959	Upson Downs						0.26	0.15	0.36	0.18	0.06	
	6398	Clerbrook RV Resorts						0.2	0.27	0.14	0.11	0.09	
	50049	Lady Lake Central						0.56	0.7	0.7	0.7	0.61	0.63
	50115	Pine Island							0.27	0.43	0.3	0.29	0.101
	50147	Mount Dora	3.94	3.07	3.08	3.19	3.07	2.81	3.08		3.08	3.05	2.92
	50152-3	Wedgewood						0.14	0.15	0.17	0.15	0.14	0.124
	50178	Astor, Astor Park Utility	0.31	0.28	0.29	0.29	0.33	0.31	0.32	0.32	0.32	0.3	0.27
	50279-80	Villages of Lake Sumter	5.25	5.99	5.17	3.9	3.74	3.6	3.8	3.94	3.6	3.35	3.82
	50334	Wolf Branch Oaks								0.13	0.1	0.11	

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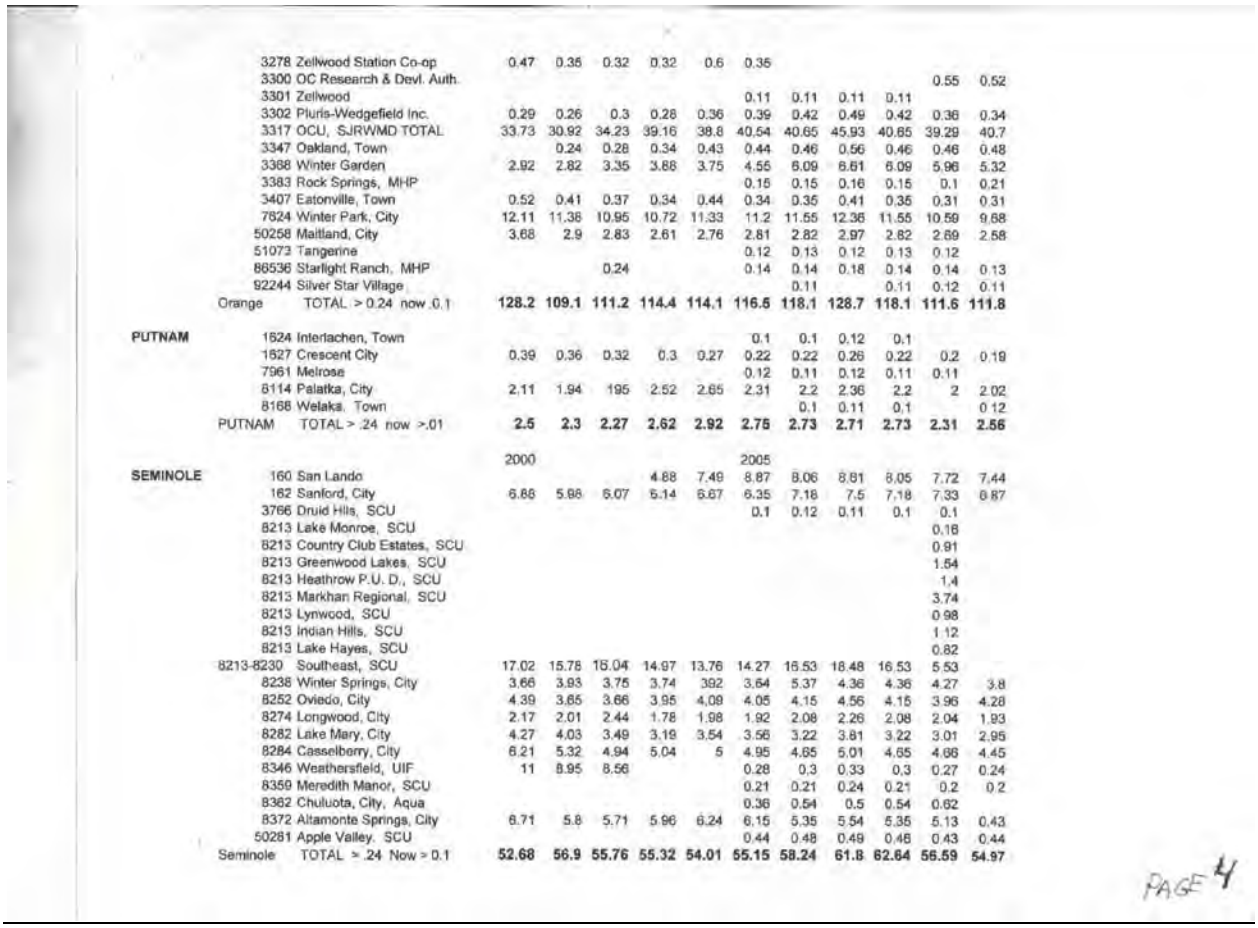
	62724	Fairways @ Mt. Pleasant,						0.12	0.14	0.15	0.14	0.14	
	84879	Eustis Eastern						0.17	0.17	0.22	0.17	0.16	
	85195	Heathrow							0.12	0.11	0.17	0.17	
	103822	Colina Bay							0.17	0.19	0.17	0.14	0.152
	107839	Holiday Travel Resort							0.1	0.1	0.1	0.1	0.1
Lake		TOTAL > 24 now > 0.1	**34.26**	**33.57**	**33.54**	**32.28**	**38.87**	**39.62**	**50.29**	**50.22**	**49.43**	**43.42**	**40.55**
MARION	2993	Hilltop @ Lake Weir, Sunshine U						0.17	0.24	0.26	0.24	0.04	
	2995	Trailwinds Village						0.11	0.12	0.13	0.12	0.12	0.11
	3002	Residential - High Pointe			0.29	0.26	0.27	0.25	0.35	0.35	0.33	0.28	0.27
	3021	Rolling Greens		0.47	0.45			0.34	0.45	0.44	0.45	0.37	0.36
	3043	Ocala Oaks, Aqua						0.17	0.18	0.18	0.18	0.15	0.14
	3054	Silver Springs Shores, MCU	1.32	1.22	1.28	1.24	1.31	1.29	1.47	1.67	1.47	1.44	
	3094	Fore Acres, Sunshine Util.						0.13	0.12	0.19	0.12	0.11	0.11
	3101	Greenfields, Indian Pines.						0.14	0.18	0.19	0.15		0.152
	3130	Sun Ray, Sunshine Util.						0.17	0.24	0.15	0.14	0.15	0.15
	3137	Belleview, City	0.86	0.71	0.71	0.73	0.8	0.79	0.84	0.93	0.84		0.81
	4575	Silver Springs Regional, MCU						0.28	0.23	0.27	0.23	0.22	
	9999	Cedar Hills									0.11		
	82064	Spuce Creek, MCU					1.86	1.93					
	3420162	Marion Utilities	0.57	0.46	0.43								
	3421214	Sunshine Utilities	0.66	0.61	0.58								
	3424088	AP Utilities	0.59	0.53	0.46								
	3425020	Florida Water Services	2.23	1.53	1.93								
	6424621	Ocala Jockey Club					0.24						
	6424619	On Top of the World				1.17	1.21						
	6424749	Spruce Creek Pres.				0.28							
	50324	Ocala, City	10.84	10.13	10.33	9.95	9.9	10.5	11.18	11.77	11.16	10.56	10.83
	50381	Deer Path, MCU						0.12	0.15	0.17	0.15	0.16	
	51173	South Oak, MCU						0.13	0.13	0.16	0.13	0.13	
	71676	Stonecrest, MCU	0.6	0.57	0.6	0.71		1.01	1.04	1.27	1.04	1.01	
	82064	Spruce Creek Cntry. Club, MCU						1.93	1.44	2.08	1.44	1.38	
	82827	Spruce Creek South, MCU						0.71	0.71	0.85	0.71	0.66	
Marion		TOTAL > 24 now > 0.1	**17.67**	**16.23**	**17.06**	**16.07**	**16.42**	**18.33**	**19.07**	**20.91**	**19.01**	**18.25**	**18.62**
NASSAU	122	Fernandina Beach, City	4.33	3.99	3.43	3.93	3.66	3.51	4.37	3.92	3.44	3.46	3.39
	922	Callahan						0.17	0.17	0.18	0.17	0.17	0.17
	942	Lofton Oaks, Nassau Regional,	JEA			0.77	1.07	1.05	2.26	2.34	2.26	2.11	2.23
	948	Hilliard, Town			0.24	0.25	0.28	0.29	0.28	0.29	0.28	0.26	0.28
	50087	Nassau, Amelia Utilities				0.99	1.48	1.5	1.4	1.59	1.4	1.38	1.35
	2450022	Amelia Island	1.57	1.47	1.54								
Nassau		TOTAL 0.24 now > 0.1	**5.9**	**5.96**	**5.96**	**6.05**	**6.73**	**7.16**	**8.48**	**8.32**	**7.55**	**7.38**	**7.42**
ORANGE	3159	OUC, SJRWMD TOTAL	60.14	47.51	46.62	46.06	45.77	44.4	42.98	45.9	42.96	40.26	39.6
	3202	UCF											0.34
	3203	Clarcona Resorts						0.14	0.13	0.14	0.13	0.11	0.11
	3216	Ocoee, City	6.3	5.4	5.11	4.61	3.15	4	3.84	4.25	3.84	3.65	3.43
	3217	Apopka, City--North	7.31	6.2	5.98	6.05	6.73	6.86	8.18	8.53	8.18	6.89	7.53

18.6

PAGE 3



	3278 Zellwood Station Co-op	0.47	0.36	0.32	0.32	0.6	0.36					
	3300 OC Research & Devl. Auth.										0.55	0.52
	3301 Zellwood						0.11	0.11	0.11	0.11		
	3302 Pluris-Wedgefield Inc.	0.29	0.26	0.3	0.28	0.36	0.39	0.42	0.49	0.42	0.36	0.34
	3317 OCU, SJRWMD TOTAL	33.73	30.92	34.23	39.16	38.8	40.54	40.65	45.93	40.85	39.29	40.7
	3347 Oakland, Town		0.24	0.28	0.34	0.43	0.44	0.46	0.56	0.46	0.46	0.48
	3388 Winter Garden	2.92	2.82	3.35	3.88	3.75	4.55	6.09	6.61	6.09	5.96	5.32
	3383 Rock Springs, MHP						0.15	0.15	0.16	0.15	0.1	0.21
	3407 Eatonville, Town	0.52	0.41	0.37	0.34	0.44	0.34	0.35	0.41	0.35	0.31	0.31
	7624 Winter Park, City	12.11	11.38	10.95	10.72	11.33	11.2	11.55	12.36	11.55	10.59	9.68
	50258 Maitland, City	3.68	2.9	2.83	2.61	2.76	2.81	2.82	2.97	2.82	2.69	2.58
	51073 Tangerine						0.12	0.13	0.12	0.13	0.12	
	86536 Starlight Ranch, MHP			0.24			0.14	0.14	0.18	0.14	0.14	0.13
	92244 Silver Star Village							0.11		0.11	0.12	0.11
	Orange TOTAL > 0.24 now .0.1	**128.2**	**109.1**	**111.2**	**114.4**	**114.1**	**116.5**	**118.1**	**128.7**	**118.1**	**111.6**	**111.8**
PUTNAM	1524 Interlachen, Town						0.1	0.1	0.12	0.1		
	1527 Crescent City	0.39	0.36	0.32	0.3	0.27	0.22	0.22	0.26	0.22	0.2	0.19
	7961 Melrose						0.12	0.11	0.12	0.11	0.11	
	8114 Palatka, City	2.11	1.94	195	2.52	2.85	2.31	2.2	2.36	2.2	2	2.02
	8168 Welaka, Town							0.1	0.11	0.1		0.12
	PUTNAM TOTAL > .24 now >.01	**2.5**	**2.3**	**2.27**	**2.62**	**2.92**	**2.75**	**2.73**	**2.71**	**2.73**	**2.31**	**2.56**
		2000					2005					
SEMINOLE	160 San Lando				4.88	7.49	8.87	8.06	8.81	8.05	7.72	7.44
	162 Sanford, City	6.86	5.86	6.07	5.14	6.67	6.35	7.18	7.5	7.18	7.33	6.87
	3766 Druid Hills, SCU						0.1	0.12	0.11	0.1	0.1	
	8213 Lake Monroe, SCU										0.18	
	8213 Country Club Estates, SCU										0.91	
	8213 Greenwood Lakes, SCU										1.54	
	8213 Heathrow P.U. D., SCU										1.4	
	8213 Markhan Regional, SCU										3.74	
	8213 Lynwood, SCU										0.98	
	8213 Indian Hills, SCU										1.12	
	8213 Lake Hayes, SCU										0.82	
	8213-8230 Southeast, SCU	17.02	15.78	16.04	14.97	13.76	14.27	16.53	18.48	16.53	5.53	
	8238 Winter Springs, City	3.66	3.93	3.75	3.74	392	3.64	5.37	4.36	4.36	4.27	3.8
	8252 Oviedo, City	4.39	3.85	3.66	3.95	4.09	4.05	4.15	4.56	4.15	3.96	4.28
	8274 Longwood, City	2.17	2.01	2.44	1.78	1.98	1.92	2.08	2.26	2.08	2.04	1.93
	8282 Lake Mary, City	4.27	4.03	3.49	3.19	3.54	3.56	3.22	3.81	3.22	3.01	2.95
	8284 Casselberry, City	6.21	5.32	4.94	5.04	5	4.95	4.65	5.01	4.65	4.66	4.45
	8346 Weathersfield, UIF	11	8.95	8.56			0.28	0.3	0.33	0.3	0.27	0.24
	8359 Meredith Manor, SCU						0.21	0.21	0.24	0.21	0.2	0.2
	8362 Chuluota, City, Aqua						0.36	0.54	0.5	0.54	0.62	
	8372 Altamonte Springs, City	6.71	5.8	5.71	5.96	6.24	6.15	5.35	5.54	5.35	5.13	0.43
	50281 Apple Valley, SCU						0.44	0.48	0.49	0.48	0.43	0.44
	Seminole TOTAL > .24 Now > 0.1	**52.68**	**56.9**	**55.76**	**55.32**	**54.01**	**55.15**	**58.24**	**61.8**	**62.64**	**56.59**	**54.97**

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CFWI RWSP Team Response *- Thank you for your comment.*

Billy Kempfer, Concerned Citizen (12/02/13)

Comment 1 - As I look at the map I am concerned that the line doesn't go at least to St.johns or I-95. There are a lot of acres east of the Osceola co. line that depend on free flowing artesian water for irrigation. Any allocation up stream or up gradient from this area that is pumped will greatly reduce the flow in Brevard co.
I serve on one of the task force committes but I wanted to get this in during the drafting process.

The map I am referring to is the one in the email I got last Tues from Margret Hull with CFWI referring to the meeting in Clermont to discus the draft . I assumed the area in pink was the designated area to be considered for additional consideration by CFWI . The boundary I am referring to is the Brevard ,Osceola co.line.The water I am referring to is the Floridan aquifer. If water is allowed in great amounts to be pumped the wells down stream will be affected and may not continue to flow

CFWI RWSP Team Response *- The area in question in the map provided by SWFWMD staff only represents the CFWI Planning Area boundaries. Please refer to the CFWI Draft RWSP (Chapter 4) for the map boundaries of the ECFT groundwater flow model boundaries; which*

extend well beyond the CFWI boundaries. Additional information can also be found in Appendix C.

Anonymous / Unknown Name (12/03/13)

Comment 1 - Very good net site! I genuinely adore how it is simple on my eyes and the information are effectively prepared.

CFWI RWSP Team Response *- Thank you for your comment.*

Anonymous / Unknown Name (12/04/13)

Comment 1 - A person necessarily assist to make seriously articles I'd state. This is the first time I frequented your website page and up to now? I amazed with the analysis you made to create this actual post incredible. Magnificent process!

CFWI RWSP Team Response *- Thank you for your comment.*

Anonymous / Unknown Name (12/09/13)

Comment 1 - I am bookmarking your feeds also It was a very wonderful topic! Just wanna say thank you for the information you have apportioned. Just carry on writing this variety of put up. I will be your correct reader. Thanks once more.

CFWI RWSP Team Response *- Thank you for your comment.*

Anonymous / Unknown Name (12/11/13)

Comment 1 - The site You have publish is very nicely created and very informative thanks for great posta?

CFWI RWSP Team Response *- Thank you for your comment.*

Andy Neff, Utility, Seminole County (12/11/13)

Comment 1 - We (Seminole County) noticed the Yankee Lake project (#135) was list for 30 mgd of water generated in the WSO list. This is incorrect. Yankee Lake should be listed as 50 mgd generated. Can you please make the change?

CFWI RWSP Team Response *- The CFWI RWSP was updated to reflect the change noted.*

Joe Hill, Former SJRWMD Governing Board Chair / Concerned Citizen (12/12/13)

Comment 1 - Need to get rid of St Augustine grass for landscaping and replace with less water and fertilizer dependent species. Mr. Hill has ornamental peanuts on his lawn and he does not irrigate. Mr. Hill relayed that outdoor irrigation is a large element of the water budget and we could conserve many millions of gallons if we got rid of St Augustine grass.

CFWI RWSP Team Response *- The Districts support Florida Friendly Landscaping (FFL) principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping.*

Ray Scott, FDACS, Conservation and Water Policy Federal Programs Coordinator (12/12/13)

Comment 1 - PDF page 24, second paragraph: It is difficult to project acreage and water use demands for crops that are relatively new or expanding rapidly because there are limited data available to base projections. This should be changed to the following: It is difficult to project acreage and water use demands for crops that are relatively new or expanding rapidly because there are limited data available upon which to base projections.

CFWI RWSP Team Response *- The CFWI RWSP was updated to reflect the change noted.*

Al Aikens, CH2M Hill, Project Manager / Hydrogeologist (12/16/13)

Comment 1 - The citation "CH2M/PB Water, 2009" on page 115 for the SJR/TCR project is incorrect and the reference is missing from the Reference List. The citation should be "CH2M/PB Water Joint Venture, 2009" and the reference is :

CH2M/PB Water Joint Venture, 2009, *St. Johns River/Taylor Creek Reservoir Water Supply Project Environmental Information Document and Preliminary Design Report*, Orlando, FL.

CFWI RWSP Team Response *- The CFWI RWSP was updated to reflect the change noted.*

Terry L. Dykehouse, City of Clermont, City Engineer (12/18/13)

Please consider the following revisions to the DRAFT CFWI RWSP:

Comment 1 - The City of Clermont completed a water demand assessment in October 2013.

The estimated population projections using BEBR medium and high growth rates are as follows:

	MED	HIGH
2015 –	37,058	37,058
2020 –	41,189	42,381
2025 –	45,039	47,688
2030 –	48,544	52,886
2035 –	51,607	57,854

These numbers should replace the numbers in Tables A-1 and A-9 for the City of Clermont in the draft CFWI RWSP. Accordingly the demand projections in Table A-1 and A-9 for the City of Clermont should be adjusted using the gross per capita rate consistent with report methodology.

CFWI RWSP Team Response *- As part of the efforts to prepare a single RWSP and to achieve consistency for the CFWI Planning Area, a Population and Water Demand Subgroup (Demand Subgroup) was formed to review and update population and water demand projections for the*

CFWI Planning Area. The Demand Subgroup review began in late 2011 and was completed in early 2013. The Demand Subgroup consisted of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area. Pursuant to Chapter 373 F.S., population projections for each county were controlled to the University of Florida's Bureau of Economic and Business Research (BEBR) Medium population projections. The countywide population projections were spatially distributed, based on the best available data, via a Geographic Information System (GIS) model that projected where in the county growth was likely to occur and applied growth rates similar to historic patterns (controlling overall to county BEBR Medium). Utility service areas were overlaid to determine utility specific projections. As such, any increase in a utilities' projections will result in an associated decrease from another utility or the Domestic Self-supply (DSS) category. Utilities will need to work together to determine which areas should be reduced/increased; if justifiable, documented & supported methodology indicates changes should be made. It should be noted that these projections were made using a snapshot in time and the projections are intended solely for regional planning purposes to determine if water supply options (WSO) are needed in the future. The Demand Subgroup will continue to work with utilities and engage stakeholders during the next CFWI RWSP update, to ensure that the best available information is being used to estimate regional demands.

Comment 2 - Figure E-1 Wastewater Treatment Plants

The City of Clermont currently operates only one WWTP on Hancock Road. The second plant shown on 12th Street is not in operation, and will not be in operation at any time in the future.

CFWI RWSP Team Response *- It will be noted in the GIS layer that this facility is not in operation.*

Tom Moran, City of Lake Wales, Public Works Director (12/26/13)

The following format observations are forwarded:

Comment 1 - CFWI RWSP, Page vi, Paragraph 2, 3rd line, "Districtsmay" needs formatting

CFWI RWSP Team Response *- The CFWI RWSP has been updated as a result of a prior comment.*

Comment 2 - CFWI RWSP, Page 36, Table 12, Spelling Lake Wailes. It is currently Lake Wales.

CFWI RWSP Team Response *- The SWFWMD identifies the lake as "Lake Wales" rather than "Lake Wailes." This naming convention is based on the water body being identified as "Lake Wales" on United States Geological Survey (USGS) maps and reports (e.g., Hydrology of Polk County, Florida by R. Spechler and S. Kroening, 2007) and in District rules pertaining to established MFLs.*

Comment 3 - CFWI Appendices, Page B-29, Table B-8, Spelling Lake Wailes. It is currently Lake Wales.

CFWI RWSP Team Response *- See response to your Comment 2.*

Comment 4 - CFWI RWSP, Page 54, under Non-MFL Lakes and Wetlands, the last (second) paragraph is duplication.

CFWI RWSP Team Response *- The second paragraph is a duplication and the CFWI RWSP has been updated to reflect the change noted.*

Comment 5 - CFWI RWSP, Page 55, Format on the first paragraph.

CFWI RWSP Team Response *- The formatting of the CFWI RWSP is set to justified paragraphs. As a result of the citation, the formatting may look inconsistent, but is correct.*

Comment 6 - The concept of storm water retention needs to be evaluated with a little more scrutiny; rain barrels etal. Will alleviate the gpcpd for the water audit, the lakes in the vicinity of Lake Wales are refreshed by storm water runoff. If some portion of the runoff is diverted to irrigation, this has to have some impact on the lake levels.

CFWI RWSP Team Response *- The WSO Subgroup worked with utility representatives to prepare a draft list of potential water source options available to water users within the CFWI Planning Area. Completion of the RWSP does not mark the end of the CFWI effort. Currently, the CFWI Solutions Planning Team (including a subteam that will address stormwater projects) is developing alternatives to meet the water.*

Comment 7 - I think the need for a comparison of potable drinking water for public consumption versus the use of irrigation for orange groves etc. I have had some inquiries by private individuals as to whom or what determines the authorization to drill additional wells.

CFWI RWSP Team Response *- Details about well construction programs can be found on the web sites for each of the respective Districts.*

Comment 8 - The requirement that some HOAs and Community Developments place on residents to have "green lawns" needs to addressed by the state or some government entity that approves the covenant and restrictions for these communities.

CFWI RWSP Team Response *- Section 373.185(3)(b) F.S., addresses this issue and provides as follows: "A deed restriction or covenant may not prohibit or be enforced so as to prohibit any property owner from implementing Florida-friendly landscaping on his or her land or create any requirement or limitation in conflict with any provision of part II of this chapter or a water shortage order, other order, consumptive use permit, or rule adopted or issued pursuant to part II of this chapter."*

The next comment is not addressed in the plan:

Comment 9 - I do not think that the nation utilizes flood waters effectively. I think the federal government should undertake a nation-wide underground conveyance and storage system to capture and reuse the flood waters generated by the upper Mississippi basin and other flood-prone areas.

It seems to me that the "FED" has all the resources available to undertake a model of this nature. Areas of drought could have gravity fed underground reservoirs that could be used for irrigation water and to some extent, with proper treatment, potable water. Those areas that are "uphill" could have a series of pumps installed in the conveyance system to provide water to places like South Dakota.
This would require some co-operation between various agencies; FEMA, USGS, EPA, etc. It would include; Geo-Tech Engineers, Hydrologists, Climatologists, Surveyors and Water Resource Engineers to name a few.
Such a concept would generate hundreds, if not thousands, of jobs; this is nothing new; President Roosevelt did similar "back to work" programs in the 1920s and 1930s.
The "FED" could do a cost comparison between engineering – construction versus pay-outs for flood damage to homes, crops and compensation paid.

CFWI RWSP Team Response *- Surface water, and especially flood water, is an important water supply option that should be considered as part of this RWSP. Currently there are a number of surface water projects identified in Appendix F of this RWSP that propose to utilize surface water that contains runoff from streams or flood control systems. Capture and storage of this water is critical to ensure its availability during high demands periods, typically during the winter and spring. Aquifer storage and recovery (ASR) is being looked at as one option for storage of water during peak flow periods.*

Edward McDonald, Concerned Citizen (01/03/14, 01/20/14 & 1/23/14)

Executive Summary

Comment 1 (01/03/14) - There is a basic flaw in the approach described in this section. It discusses the concept of "developing feasible water supply and water resource development options that will meet future water supply needs in a manner that sustains the water resources and related natural systems". This statement implies that the current status of the water resources and related natural systems are satisfactory in their present condition and only need to be "sustained". Clearly this is a false assumption. Only looking within the boundaries of Southern Water Use Caution Area we know that the three main objectives of the recovery strategy are not currently being met. We also know that it was determined that it was not "practical" to meet the objective of meeting the minimum flow requirements of the Upper Peace River by restoring natural drainage and groundwater levels. In fact, the SWFWMD has developed a project to "artificially" restore these minimum flows via the manipulation of the water level of Lake Hancock. The other two "symptoms" addressed in the SWUCA Recovery Strategy are salt water intrusion and low lake levels along the Lake Wales Ridge. The most important point that should not be lost is that the three areas that have been identified are the most obvious "symptoms" of the real problem, but they are not the only areas experiencing harm. They are the "Poster Children" of the symptoms that are the result of the real problem. The real problem is that there is currently not sufficient groundwater to meet the needs of the natural systems. In order for a regional water supply plan to be effective, its primary goal needs to be one of restoring the natural systems and not maintaining the current level of harm. A plan that does not address areas currently under stress and those natural systems already "lost" cannot be approved.

The second major problem with the regional water supply plan is the planning horizon. It's obvious that the further into the future one tries to predict the future the accuracy of those

projections become less reliable. There are some things that are reasonably certain over the next century or so. The geology of Central Florida will not change significantly. The amount of rainfall will continue to have its variations, but a projection of a substantial increase in rainfall would not be warranted. For the moment, ignoring sea water desalination, the only two sources of water for the Central Florida area is surface water and groundwater. The "ultimate source" of both of these is rain which we have no reason to believe is going to reliably increase. The real question then becomes how much rain water will we divert to human use? We know that every time man changes anything in the hydrologic cycle that natural systems must also change and adapt to this new "equilibrium". If we accept the assumptions that I have identified above, it becomes obvious that a water supply plan cannot be viewed in twenty year chunks, but it be must be viewed on a much longer time frame that ensures the protection of our natural systems for generations far into the future. Based on the above requirement of protection of our natural systems, a regional water supply plan should be able to predict the maximum amount of rainwater that is available for human use. A regional water supply plan that cannot do this is unacceptable and cannot be approved.

CFWI RWSP Team Response *- The RWSP acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.*

The goal of the RWSP is to provide a plan to meet all existing and future reasonable-beneficial uses of water while making sure there is sufficient water to sustain the water resources and related natural systems over the planning period. For the current phase of the CFWI, the plan addresses projected demands for water out to 2035. As presented in the RWSP, water demands are projected to increase by about 300 mgd. Using information obtained from the ECFT groundwater flow model and environmental monitoring in the area, it was determined that it is possible to meet an additional 50 mgd of water demand using groundwater without causing adverse impacts. Development of groundwater beyond the additional 50 mgd will likely require management efforts to avoid adverse impacts. It is anticipated that much of the remaining 250 mgd demand will be met through development of mitigation projects and AWS including conservation, reclaimed water, surface water, stormwater, brackish and seawater sources.

The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD,FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. A Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery.

Regarding the duration of the RWSP planning horizon, Section 373.709 (2) F.S. states that a RWSP must be based on at least a 20-year planning period.

"The CFWI Planning Area also encompasses extensive natural systems such as Green Swamp, Reedy Creek Swamp, Boggy Creek Swamp, Shingle Creek Swamp, the Kissimmee Chain of Lakes

(the headwaters to the Kissimmee River), 16 springs, and numerous wetland and surface water bodies."

Comment 2 (01/03/14) - How many wetlands are there, how many are under stress, what is the current total acreage of wetlands, what is the historic total acreage of wetlands and how many and what acreage of wetlands will be restored by following the CFWI RWSP??

CFWI RWSP Team Response *- Estimated acreages are provided in the Environmental Measures Team (EMT) supporting documents and can be found at cfwiwater.com. Historic total acreage was not assessed as only current wetland maps were used. Historic totals are known to be substantially higher in many areas as wetlands have been lost over the past 200 plus years due to major and minor drainage, mining and filling. Plans for wetland restoration will be determined during the Solutions Planning Team and/or Regulatory Team work.*

"All 46 of these water bodies are located in the SJRWMD and SWFWMD portions of the CFWI Planning Area."

Comment 3 (01/03/14) - Why have none of the lakes in the SFWMD portion been assigned minimum levels and will there be any assigned in the future?

CFWI RWSP Team Response *- SFWMD has established MFLs for water bodies that provide diverse and important water resource functions that are regionally significant on a District, state and national scale that are experiencing or have the potential to experience significant harm pursuant to Chapter 373.042(2), F.S. The SFWMD identifies regionally significant water bodies for which MFLs and water reservations should be developed or updated through development of an annual priority list pursuant to Section 373.042(2), F.S. By virtue of the recreational uses, habitat values, and utilization by threatened and endangered species, the water resources of the Upper Chain of Lakes and Kissimmee River qualify as regionally significant water bodies.*

Consideration is also given to whether the water body is or reasonably can be expected to experience significant harm in the future. In previous Kissimmee Basin Water Supply planning efforts current and future condition of these water bodies were evaluated in order to determine the potential for hydrologic alterations to occur which could result in significant harm to the water resource functions. While the potential for some future uses of surface water were identified, it was determined that the current and projected surface water demands from these water bodies would not result in significant harm. As a result of the ongoing river restoration efforts of the SFWMD, state, and federal government, the future hydrology for the Upper Chain of Lakes and Kissimmee River will be enhanced significantly from historic conditions.

In order to protect the public's interest and investment in the restoration of the Kissimmee River, the SFWMD will act to protect the enhanced hydrology associated from the restoration efforts. Accordingly, the SFWMD will be using a water reservation rule to protect the waters needed for the protection of fish and wildlife associated with the restoration efforts. A reservation will result in a high level of protection. As discussed on Page 38 of the RWSP, the SFWMD included the Kissimmee Basin water reservation, which includes 19 lakes in the Upper Kissimmee Chain of Lakes (KCOL), the Kissimmee River and its floodplain, in its 2014 Priority Water Body List for future adoption by December of 2015. The effect of this type of rule is to

withhold water needed for the protection of fish and wildlife from allocation water from the Upper Chain of Lakes and Kissimmee River.

"*water levels in regulatory monitoring wells in the Lake Wales Ridge area associated with the SWUCA Recovery Strategy are also not currently being met and are projected to not be met by 2035 under this future demand scenario*."

Comment 4 (01/03/14) - How does the CFWI RWSP address this problem? Will following the plan insure that future water levels will comply with minimum levels?

CFWI RWSP Team Response *- See response to your Comment 1.*

"*Adverse impacts to wetlands from withdrawals are currently occurring in several areas*"

Comment 5 (01/03/14) - Where are these wetlands located and will following the CFWI RWSP reverse these adverse impacts?

CFWI RWSP Team Response *- The wetlands that were used are mapped in the EMT supporting documents and can be found at cfwiwater.com. The wetlands with water level data were used to develop statistical relationships between water level regime and various indicators of stress. The causes of reduced depths and durations of inundation varied as wetland biologic response is similar irrespective of cause. See response to your Comment 2; which discusses future strategies, including the work products of the Solutions Planning and Regulatory teams.*

"*The RWSP identifies 139 potential water supply development project options, consisting of 35 brackish groundwater*"

Comment 6 (01/03/14) - Where in the CFWI Planning Area have you been able to locate a brackish water source? If you are referring to the Lower Floridan Aquifer, all of the well test data that I have seen, indicate water quality with TDS levels well below any definition of brackish. Even if the water was brackish how would this fact alone delineate it as being an alternative water source? It would clearly be non-traditional for this part of Florida, but being non-traditional isn't a viable criterion for whether it is an acceptable, new water source.

CFWI RWSP Team Response *- Potential brackish groundwater sources may exist in western and central portions of Polk County below Middle Confining Unit II (MCU II)of the Floridan Aquifer System, as defined in: Miller, J.A., 1986, Hydrogeologic Framework of the Floridan Aquifer System in Florida and in Parts of Georgia, Alabama, and South Carolina: USGS Professional Paper 1403-B. The MCU II does not extend into eastern portions of the CFWI Planning Area. The MCU II is characterized, in part, by evaporative minerals, and groundwater contacting the unit is often found to be brackish. As discussed in the RWSP Executive Summary, Pages v and vi, brackish groundwater, surface water, seawater, reclaimed water, reservoirs and ASR are considered non-traditional or alternative water sources.*

"*Other factors also include the location and distribution of water users, site characteristics, as well as proximity of groundwater withdrawals to natural systems. Thus, it will be necessary to optimize groundwater withdrawals, and identify and implement a combination of water*

conservation and alternative water supply project options to adequately address the projected 2035 water demands."

Comment 7 (01/03/14) - Of the 139 potential water projects that have been identified how many can be developed independently of the others? In other words, which projects can be developed in conjunction with the others? I am assuming that the implementation of some of the projects would automatically eliminate the possibility of developing one or more of the remaining identified projects. Is this a true statement? I am interpreting the statement from the CFWI RWSP that I have quoted above to mean that the 139 potential projects listed is a "first pass" at identifying projects and that many, if not most, of them will be eliminated upon detailed scrutiny. Is this a correct assumption?

CFWI RWSP Team Response *- The primary solutions needed to meet the future water demands, while protecting the environment, include water conservation, AWS and water resource development projects. A combination of solutions from the 139 potential water supply projects (or other projects identified by stakeholders) will need to be implemented to satisfy future water demands. As noted in Comment 1, the CFWI Solutions Planning Team has convened and is tasked with determining the most viable, practical cost-effective regional water supply projects and conservation measures. This work will continue through 2014, with the results included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.*

"Funding for the development of alternative water supplies, based on the provisions of Section 373.705 (1), F.S., is the primary responsibility of water suppliers and users." "Funding for the development of water resource development projects is primarily the responsibility of the Districts, with funding assistance from water supply entities."

Comment 8 (01/03/14) - The two statements that I have listed above address funding. Please clearly indicate the difference between the development of alternative water supplies and the development of water resource development projects. The listing of examples would help with this understanding. Why have water management districts elected to fund the development of alternative water supplies when research and projects to restore natural systems go unfunded?

CFWI RWSP Team Response *- Examples of water supply and water resource development projects can be found in Chapters 7 and 8. The Districts have in the past and continue to support research projects and projects to restore natural systems, funding permitted. Examples of restoration projects include Lake Apopka North Shore Restoration, Upper Basin Project, Comprehensive Everglades Restoration, Sawgrass Lake Restoration, Clam Bayou Habitat Restoration, etc.*

"Current permits and laws limit the scope of regulatory actions that can be taken to impose specific solutions on users."

Comment 9 (01/03/14) - What changes to current laws will be proposed based on the findings of the CFWI RWSP? Also, what is the plan to reduce current Upper Floridan Aquifer water use permit holder's withdrawals to match the identified 850 MGD maximum allowable limits?

CFWI RWSP Team Response *- See response to your Comment 1.*

"*Successful implementation of this RWSP requires close coordination and collaboration with other regional and local governments, utilities, and other water users. Public and private partnering can ensure that water resources in the CFWI Planning Area are prudently managed and available to meet future demands*."

Comment 10 (01/03/14) - Though the above statement may be true, isn't it also true that the water management districts have the ultimate responsibility to insure the protection of our water resources and the related natural systems? In other words, when harm occurs to our water resources and the related natural systems, water management districts must accept full blame.

CFWI RWSP Team Response *- Chapter 373, F.S. establishes the core responsibilities to be carried out by FDEP and the Districts as it relates to managing and protecting the State's water resources. This does include encouragement of collaboration and public-private partnerships (373.085 (1)(a)).*

CHAPTER 1 INTRODUCTION

"*The water supply planning region identified in this plan shall be considered a Water Resource Caution Area for the purposes of Section 403.064, F.S., and affected parties may challenge the designation pursuant to Section 120.569, F.S."*

Comment 11 (01/03/14) - What is the significance of the declaration of a WUCA? Does the CFWI RWSP represent a WUCA recovery strategy? Which of the Florida statutes and administrative codes will need to be changed to reflect this new status of the CFWI Planning Area? How will this be coordinated among the three Water Management Districts? What is the formal process (public input wise) for implementing these changes? How will this be coordinated with SWUCA?

CFWI RWSP Team Response *- The RWSP does not declare the CFWI Planning Area a water use caution area (WUCA). The only WUCA is the SWUCA, which is established by rule and information can be found on SWFWMD's website.*

"Identify the sustainable quantities of traditional groundwater sources available for water supplies that can be used without causing harm to the water resources and associated natural systems"

Comment 12 (01/03/14) - Why is the goal of identifying sustainable water sources limited to "traditional groundwater"? Don't we want to learn from past mistakes? Doesn't it only make good sense to identify the sustainable quantities of water available from any potential new non-traditional source prior to recommending its use? Is it smart policy to allow the over permitting of a water source?

CFWI RWSP Team Response *- See response to your Comment 1.*

"Protect and enhance the environment, including the natural resource areas and systems identified by the Districts as well as any federal, state, and locally identified natural resource areas"

Comment 13 (01/03/14) - Where are the areas of the environment that will be enhanced by the implementation of the CFWI RWSP? Does this enhancement include the compliance of all designated MFL water bodies and the removal of stress from all identified wetlands? With regards to the MFL Lake Wales Ridge Lakes will the enhancements that result from the implementation of the CFWI RWSP allow for the development of the low and high guidance water levels?

CFWI RWSP Team Response *- See response to your Comment 1.*

"There are approximately 1,200 square miles (782,000 acres) of wetlands"

Comment 14 (01/03/14) - How many acres of wetlands were there prior to development?

CFWI RWSP Team Response *- Natural features are described in Chapter 1. As noted, there are currently 1,200 square mile (782,000 acres) or wetlands. Historical acreages are not included in this RWSP.*

"Within 6 months following approval of the water supply plan, Districts are required to notify each public supply utility of the projects identified in this plan update for that utility to consider and incorporate into its corresponding local government required water supply facilities work plan in meeting future water demands."

Comment 15 (01/03/14) - What is the formal approval process for this plan and who or what entity actually votes to approve this plan?

CFWI RWSP Team Response *- Each District will recommend that it's Governing Board: (1) endorse the CFWI RWSP and approve the information and conclusions of the CFWI RWSP that apply within the jurisdictional boundaries of that District. SJRWMD will also simultaneously approve its District Water Supply Plan 2013, which for Region 3 includes the incorporation of the information and conclusions of the CFWI RWSP that apply within the jurisdictional boundaries of the SJRWMD. The DWSP will then serve to meet the District's water supply planning obligations pursuant to section 373.709, F.S.*

"AWS sources include reclaimed water, brackish groundwater, surface water, seawater and stormwater."

Comment 16 (01/03/14) - Where physically is the referenced brackish groundwater located?

CFWI RWSP Team Response *– See response to your Comment 6.*

"The Lower Floridan aquifer (LFA) has the potential to be a source of additional water in the CFWI Planning Area, and a number of studies are in progress to evaluate this potential source."

Comment 17 (01/03/14) - What is the scientific basis for this statement? I have read the USGS report on the ECFT modeling effort and I didn't see anything in that report that would support this conclusion.

CFWI RWSP Team Response *- The Lower Floridian aquifer (LFA) is generally considered to be more productive and have fewer impacts to lakes and wetlands resulting from withdrawals in comparison to the upper sections of this aquifer. Potential future projects may consider moving withdrawals from the Upper Floridan aquifer (UFA) to the LFA in an effort to minimize future impacts or as a measure to address existing concerns. In addition, portions of the LFA may be brackish and might be developed as an alternative water source; studies are in progress.*

"Despite the abundance of surface water features in the region, a relatively small amount is currently withdrawn for public supply or other uses."

Comment 18 (01/03/14) - Surface water (storm water run off) is a major component of the water budget for a given area. The use of surface water has been under study for decades. When will water management districts be able to clearly define the potential of surface waters to meet future water demands? The fact that the availability of surface water is still treated as a totally unknown quantity is inconsistent with the concept that the CFWI RWSP represents a comprehensive approach to water management.

CFWI RWSP Team Response *- Where available potential withdrawal amounts have been included for proposed projects in Appendix F. A sub-team of the Solutions Planning Team will further evaluate the proposed projects in Appendix F. Actual specific quantities will be determined in the permitting process if the projects are implemented.*

"Utilities within the CFWI Planning Area are leaders in developing reclaimed water systems, reusing nearly 90 percent of all domestic wastewater flows within the region."

Comment 19 (01/03/14) - Only looking at the projected increase in demand for public supply, what is the amount of wastewater that will be generated from this increase?

CFWI RWSP Team Response *- Projected wastewater flows were estimated based on population growth within public supply utility service area boundaries. Methodology regarding projected wastewater flows can be found in Appendix E.*

CHAPTER 2 POPULATION AND WATER DEMANDS

"SJRWMD and SWFWMD methods, assumptions, and water demand projections were developed in the most recent water supply plans and were vetted during a public input process."

Comment 20 (01/03/14) - The fact that the CFWI RWSP is to be a viewed as a comprehensive water supply plan that "levels the playing field" for everyone located within the planning area, isn't it important that all areas utilize the same methods for determining the basic assumptions such as projected populations and the resulting demand? I am assuming that the population projection for the planning area was not allowed to exceed the BEBR medium growth projections. If this is in fact the case, those service areas that were

allowed a higher growth rate than projected using the BEBR guidelines must be balanced by other areas growing at a lower than projected rate. Is this what has been done? How was the concept of "functional" populations addressed in both the population estimates and the resulting demand?

CFWI RWSP Team Response *- The Demand Subgroup controlled population projections for each county to BEBR Medium population projections. The countywide population projections were spatially distributed, based on the best available data, via a GIS model that projected where in the county growth was likely to occur and applied growth rates similar to historic patterns (controlling overall to county BEBR Medium). Utility service areas were overlaid to determine utility specific projections. BEBR Projections only account for permanent population. Gross per capita rates capture all of the uses within a utility and as such, capture any functional factors in the demand projections.*

"Estimated demand projections for each water use category are intended for planning purposes and do not include potential reductions that could be achieved by additional demand management measures."

Comment 21 (01/03/14) - Is it fair to say the estimated demand projections represent a "planning level" or "maximum possible" value and not the actual quantity of "new" water supply that must be developed? In general, are the demand projections shown considered to be "conservative"; in other words, leaning toward the high side or are they considered to be the best possible estimate of what can actually be expected during the planning horizon? If a public utility or other water user disagrees with the projected demands, can the WPCG defend their projections and demonstrate their accuracy?

CFWI RWSP Team Response *- As described in Chapter 2, the projections developed are based on historic averages and do not take into account any reductions that could be achieved by additional conservation or the use of reclaimed water. The Water Planning Coordination Group (WPCG) set the guidelines for demand projection reporting and calculation conventions. The respective Districts used the guidelines and developed independent methodologies for projections (based on historic data and BEBR projections), which can be defended.*

"The original 2010 population projections of each District were updated to reflect 2011 published BEBR Medium permanent resident population projections, current service area boundaries, and 2006 to 2010 five-year average gross per capita rates (Smith 2011)."

Comment 22 (01/03/14) - where does this plan define: "average gross per capita rates"? Is this the same value as "The Uniform Gross Per Capita" rate which is defined as the as the utility service area finished water use divided by the utility service area residential population?

CFWI RWSP Team Response *- In Chapter 2, Page 16, it is noted that population served and water use data was used to calculate the average gross per capita rate for each utility. The gross per capita rate for each individual year is equivalent to the uniform gross per capita rate. An average of five-years (2006-2010) of gross per capita was used to develop projections. As noted, complete methodologies for each District can be found via the respective references documented.*

Comment 23 (01/03/14) - Why doesn't Table 2 include a column for 2010-2035 (1-in 10) Change?

CFWI RWSP Team Response *- The Demand Subgroup agreed to only show the change for average conditions in the CFWI RWSP tables.*

"The projected population and projected demand for the region in 2035 has the potential to be 15 percent and 14 percent higher, respectively (Table A-15)."

Comment 24 (01/03/14) - Describing the complexities of developing a demand projection for population growth is fine, but how you take these considerations into account is what is important. The question then becomes how "conservative" should you make your projections. It's my opinion that for the purpose of a planning document, the CFWI RWSP should show demand numbers that reflect the best possible estimate of actual overall demands and if an error is to be made it should be toward the high side to avoid future surprises. We should avoid situations where individually utilities are put in the situation of needing more water than what was estimated. These discrepancies (where they exist) should be resolved now not later during permit renewals.

CFWI RWSP Team Response *- See response to your Comment 21.*

Table 4 shows the projected DSS and small utility demand for the planning period from 2010 to 2035. Demand in the CFWI Planning Area is expected to increase by 4.06 mgd"

Comment 25 (01/03/14) - For the purposes of the CFWI RWSP as a planning document, would it be fair to say that domestic self-supply will have an insignificant impact with regards for the need to develop alternative water supplies? I believe this is the intent of the conclusions reached under the heading "Considerations".

CFWI RWSP Team Response *- Although DSS and small utility demand may be a small percentage of the overall projected demand, where the demand occurs over the CFWI Planning Area may have an impact. In addition, guidelines established by the WPCG call for the projection of DSS and small utility demand.*

"In addition, only SFWMD and SWFWMD included projected demands associated with other agriculture, such as aquaculture, dairy/cattle, poultry, and swine, which are reported as miscellaneous type uses."

Comment 26 (01/03/14) - The RWSP states that the SJRWMD did not include projected demand for the listed items, but the plan does not state the significance of this fact. Will this different reporting method have an impact on the conclusions (results) of this plan? Has a goal been established that would require all three WMDs to report water usage in the same manner?

CFWI RWSP Team Response *- The Demand Subgroup has completed the demand projections for this Draft CFWI RWSP using the methodologies referenced; conclusion/results are not anticipated to be changed. Chapter 11, Recommendations, does include future efforts for the Districts to employ like methods for water supply planning projections during the next CFWI RWSP update.*

"Acreage projections for Seminole County and the portions of Lake and Orange counties located in SJRWMD were based on the existing 2005 agricultural spatial layer and the acres projected to intersect with population growth developed by the proprietary model is discussed in the public supply section."

Comment 27 (01/03/14) - The RWSP describes multiple methods used by the three WMDs. Is there an on-going effort to identify which method works best and then require all WMDs to follow that single method so that apples to apples comparisons can be done throughout the districts?

CFWI RWSP Team Response *- See response to your Comment 26.*

"Agricultural acreages and water demands are difficult to predict because they depend upon the choices individual agricultural producers make from year to year."

Comment 28 (01/03/14) - Agricultural projected water usage is very important to a comprehensive water supply plan for many reasons such as: Land use transition would allow the old ag-water to be used to meet other needs; most of the ag-water usage comes from the Upper Floridan Aquifer which is the aquifer identified as having limited capacity; there are few economically feasible alternative sources available; past conservation efforts have proven to be very cost effective. How does the listing of all of the uncertainties involved in projecting the impact of agricultural type water uses help with the development of a comprehensive water supply plan? Is it time to establish "water use priorities" which would eliminate some of the uncertainties associated with predicting agricultural water use? How will the concept of "consistent with the public interest" be interpreted in a planning area where very expensive alternative water projects are now considered a viable option?

CFWI RWSP Team Response *- See response to your Comment 26. In addition, the public interest is considered in the CUP process. The Regulatory Team will address consistent permitting amongst the Districts.*

"SWFWMD is currently the only district that projects water demand for miscellaneous irrigation use (additional irrigation demand). The miscellaneous irrigation water use is typically not metered, thus estimates of future demand are based on reasonable assumptions of water use."

Comment 29 (01/03/14) - What is the source of water for the majority of L/R/A users? If it is the UFA then the estimated increase of 32 MGD is significant. This is one area that deserves more research, as the current projections appear to be based more on speculation than solid, concrete data.

CFWI RWSP Team Response *- The source of water for the landscape / recreational / aesthetic (L/R/A) category varies dependent upon location. Methodologies for the L/R/A category are documented and can be found in the references to the RWSP. As noted in the response to Comment 26, Chapter 11, Recommendations, does include future efforts for the Districts to employ like methods for water supply planning projections during the next CFWI RWSP update.*

"Changes suggested by stakeholders were incorporated only if they were based on approved methodologies and supported by complete documentation."

Comment 30 (01/03/14) - Are stakeholders being held to a higher standard than those used by the authors of the CFWI RWSP?

CFWI RWSP Team Response *– No, see response to your Comment 21.*

"While it was understood that the planning demand projection methodology differed among the Districts, changes were made in nearly all Districts population projection methodologies help achieve some consistency. These changes make it inappropriate to compare the planning demand projections in this document with current or in-progress RWSPs or projections produced by individual Districts for use in consumptive use permitting."

Comment 31 (01/03/14) - What does this statement mean? If the methods used to develop this RWSP do not represent real, usable population projections and the resulting water demand what good are they?

CFWI RWSP Team Response *- The projections made for the RWSP are a "snap shot" in time and were developed using the best available information at the time developed. Projections had to be developed at least a year in advance (from a historic baseline) in order to perform the analyses by the technical teams. At the time the projections were developed for the RWSP, 2010 information was not available for all of the areas within the CFWI. Planning projections are updated at least once every five years. In addition, see response to your Comment 21.*

Comment 32 (01/03/14) - As a general comment under this chapter, there is no discussion of the water demand associated with the category of Environmental Restoration. This is included in the SWFWMD 2010 Heartland RWSP. Question: How is this water use category addressed in the CFWI RWSP?

CFWI RWSP Team Response *- Environmental restoration was not included in the demand projections for Chapter 2; guidance from the WPCG. Environmental restoration will be considered as part of the Solutions Planning Phase.*

CHAPTER 3 RESOURCE PROTECTION AND ASSESSMENT CRITERIA

"*Pursuant to the provisions of Section 373.223, F.S., an applicant seeking a consumptive use permit must provide reasonable assurances to the respective District that the proposed use of water: 1) Is a reasonable-beneficial use as defined in Section 373.019, F.S.; 2) Will not interfere with any existing legal use of water; and, 3) Is consistent with the public interest.*"

Comment 33 (01/03/14) - Is the current approach to consumptive use permitting effective for the protection of a water resource with limited capacity? If the answer is "yes", how do we rationalize the fact the Upper Floridan Aquifer is currently permitted for withdrawals that exceed its capacity by nearly 200 million gallons per day? Now that the CFWI Planning Area has been declared a Water Use Caution Area will this allow for the development of consumptive use permitting rules that will reduce the current permitted quantities?

CFWI RWSP Team Response *- To date, the CFWI Planning Area has not been declared a WUCA. As noted in Chapter 373.223, F.S., "to obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water: is a reasonable-beneficial use as defined in s. 373.019; will not interfere with any presently existing legal use of water; and is consistent with the public interest. A Regulatory Team has been established that will: develop options for consistent regulations as well as identify legislative changes, as needed; implement the solution strategies identified through the CFWI process; assist with resource recovery strategies; and provide for equitable and predictable review of CUP applications among the Districts. Additional information regarding the Regulatory Team can be found at cfwiwater.com.*

"MFLs have been adopted for 46 water bodies, including 33 lakes or wetlands, 6 springs and 7 river/stream systems (Table 12) within the SJRWMD and SWFWMD portions of the CFWI Planning Area."

Comment 34 (01/03/14) - Of all of the lakes that compose the Kissimmee River System, why is Lake Istokpoga the only one that has been given the protection of having a Minimum Level established? Please revise table 12 to indicate which of the MFL water bodies are currently not meeting minimums.

CFWI RWSP Team Response *- Lake Istokpoga is not in the CFWI Planning Area. However, Lake Istokpoga is unique and has important binding agreements between the state of Florida, the federal government, and a sovereign nation. The lake is operated pursuant to a United States Army Corps of Engineers (USACE) regulation schedule; it also has tribal (Seminole Tribe of Florida) based federal entitlements that must be balanced with existing legal users in this region. The Water Resources Compact is a binding agreement that has been approved by the SFWMD, Seminole Tribe and FDEP that authorizes water allocations based on federal entitlements. Balancing water supply in accordance with this Compact and other existing legal users in the region coupled with concerns about future development acted as a catalyst for establishment of an MFL for this regionally significant water body (it is the fifth largest lake in Florida).*

"The technical information is being reassessed to determine the quantity of water needed for the water reservation. Contingent upon future Governing Board approval, rulemaking may be initiated to develop a water reservation rule for the Kissimmee Basin in the CFWI Planning Area."

Comment 35 (01/03/14) - Upon completion of the water reservation process what is the probability that the Kissimmee River could be used as an alternative water source for the CFWI Planning Area?

CFWI RWSP Team Response *- The availability of water above the needs required to protect fish and wildlife will be made by the SFWMD Governing Board as part of the water reservation rule development process.*

"This included statistical analyses of long-term trends in hydrologic data for the central Florida region (Intera 2010) and GIS-based analyses of the spatial distribution of the potential susceptibility of surface water features to groundwater withdrawal-induced hydrologic changes and land alteration."

Comment 36 (01/03/14) - For the purposes of making the CFWI RWSP a more "stand-alone" document, please provide examples of what is meant by induced hydrologic changes and land alterations.

CFWI RWSP Team Response *- Groundwater withdrawal-induced hydrologic changes means changes in groundwater and surface water levels resulting from groundwater withdrawals. Land alteration means changes in land use such as urban development, agriculture, commercial development, mining, etc. Additional information can be found in the EMT supporting document at cfwiwater.com.*

"The SWUCA recovery strategy will be reevaluated and updated in coordination with the updates to the SWFWMD RWSP updates."

Comment 37 (01/03/14) - With the understanding that all of Polk County is within the CFWI planning area and the most of Polk County is within SWUCA, how does the CFWI RWSP take into account the fact the seven of the eight Lake Wales Ridge MFL lakes currently do not meet the designated minimum level? What would be the allowable withdrawal capacity of the Upper Floridan Aquifer in order to for these lakes to be brought into compliance with their minimum required levels? We know that the current rate of withdrawal is too high to allow the necessary pressure increase of the UFA in the Lake Wales Ridge Area.

CFWI RWSP Team Response *- In general, the process to determine available groundwater included making sure that any additional quantities of new groundwater would not significantly affect areas that are currently in recovery. Because there are several factors to consider and different options for achieving recovery that can affect the answer, we did not specifically quantify the allowable amount of withdrawal capacity from the UFA that would ensure lakes would recover. The SWUCA Recovery Strategy is currently being evaluated by SWFWMD.*

"Between 2007 and 2012, over 350 wetland sites within and near the CFWI Planning Area were visited and assessed by the EMT. Although most of these sites had no recorded water stage elevation measurements, 44 did have limited hydrologic data records and were used to conduct a statistical analysis of wetland stress."

Comment 38 (01/03/14) - We have known that the planning area has been under hydrologic stress for decades, why are only 12 percent of the wetlands visited monitored? In addition, what is the total acreage of wetlands today versus predevelopment time? What was the criterion used to select the sites to be visited?

CFWI RWSP Team Response *- See response to your Comments 2 and 14.The decision to monitor was made in past permitting activities. As noted in the RWSP, only 44 wetlands had hydrologic data records and were used to conduct the analysis.*

"In addition, the term "stress" should not be equated with "harm" or "significant harm" which are regulatory terms that should not be equated with the methods used to assess impacts during this planning assessment. While many of the hydrologic indicators observed during

field assessments are the same as those gathered during a regulatory review, no determination of harm was made during the assessment."

Comment 39 (01/03/14) - If the term "stress" has no meaning in a regulatory setting then what was the purpose of determining this "status" and how should it be interpreted?

CFWI RWSP Team Response *- The determination of "stressed" status was used to characterize the current status of CFWI Planning Area wetland with respect to hydrologic stress and alteration, and to develop tools for evaluating future wetland conditions based on modeled withdrawal scenarios to support the CFWI RWSP and solutions planning activities. Chapter 3 provides detail on how wetlands were identified as being stressed.*

"The eastern portions of the UFA within the CFWI Planning Area are known to have poorer quality groundwater that has not been flushed from the aquifer by fresh water recharge."

Comment 40 (01/03/14) - What is the past 50 year trend in water quality of this part of the aquifer? Assuming that the water quality is trending towards lower quality, where is the source of recharge, has the rate of recharge changed or is more of the recharge water being withdrawn prior to reaching these easternmost areas?

CFWI RWSP Team Response *- There are only a small number of wells available to address long-term water quality trends in the eastern portion of the planning area. Other wells with shorter periods of record are available in the area and show relatively stable water quality conditions. As indicated in the RWSP, the larger concern with groundwater quality movement is at the local level surrounding a limited number of existing public utility wellfields where the native water quality is poorer than farther west and in some instances requires treatment to provide potable water quality to its customers. The RWSP examined individual utilities and found that local management can address and have addressed challenges presented by poorer native groundwater quality. The primary recharge to the Floridan aquifer is near the center of the peninsula. After water enters the aquifer it generally flows toward either the Gulf of Mexico or the Atlantic Ocean. In some areas, the rate of recharge may have changed, but it does not appear to have impacted regional groundwater quality within the CFWI Planning Area.*

"The comparison in flow changes between these scenarios is intended to provide only a qualitative review of the risk potential for a given wellfield (see Appendix C-I)".

Comment 41 (01/03/14) - Why aren't the results of this modeling effort summarized in this RWSP document?

CFWI RWSP Team Response *- The results of the water quality assessment are presented in Appendix C-I to the RWSP.*

"*Climate change adds to the uncertainty associated with long-term water supply planning, affecting demand projections, infrastructure vulnerability, and potentially the availability of reliable supply options."*

Comment 42 (01/03/14) - Would it be fair to say that the most likely scenario of climate change will be the reduction of available groundwater and that the gradual reduction

(through conservation or life-style change) of water uses that are adversely impacted by drought conditions is a prudent goal?

CFWI RWSP Team Response *- As noted in Chapter 3, a range of scenarios are presented; all are uncertain and studies are ongoing. To stay current and to further strengthen partnerships, local governments, and utilities should continue to share information about projected effects of climate change and adaptive measures and, when warranted, use information gathered through cooperative forecasting to refine water demand projections during the 5-year planning updates.*

CHAPTER 4 EVALUATION OF WATER RESOURCES

"Groundwater withdrawal scenarios for the CFWI Planning Area were therefore evaluated to predict any adverse effect on the recovery efforts. The evaluations were made by calculating the simulated change in groundwater flows to the currently impacted area in response to projected groundwater withdrawals within the CFWI Planning Area."

Comment 43 (01/03/14) - What is the flow rate of groundwater as it passes across the western boundary of the model? How does the flow rate change as the withdrawal rates are increased in the CFWI planning area? With regards to the Lake Wales Ridge MFL lakes what does the model show is the impact of increased groundwater withdrawals on the levels of these lakes? Was there any attempt made to determine how groundwater withdrawals would need to change to bring these lakes into compliance? If so, what were these changes? If not, why not?

CFWI RWSP Team Response *- The evaluation of the change in flows across the western boundary was part of the process used to determine effects of increased withdrawals. For the Reference Condition (2005), flows across the western boundary were estimated to be about 270 mgd and for the 2035 pumping conditions this flow was about 220 mgd. Changes to UFA freeboard associated with modeled results for CFWI Planning Area lakes and wetlands can be found in Appendix B. An estimate of recovery was not made in the RWSP. This will be addressed in the Solutions phase or the reevaluation of the SWUCA Recovery Strategy.*

"Relatively robust hydrologic records were available for 44 of the 357 evaluated sites, and information for this subset of the assessed sites was referred to as the "Class 1" wetland data set (Table 13)."

Comment 44 (01/03/14) - What is the significance of the data classes given to the wetlands in Table 13? Do these classifications have any significance outside of this RWSP? How does the wetland classification system used in this RWSP compare the classification system described in USGS Circular 1342: Hydrology and Ecology of Freshwater Wetlands in Central Florida-A Primer?

CFWI RWSP Team Response *- The circular uses the Cowardin system of classification, which only considers a very general version of cover type. The same cover type, such as "palustrine forested" can be applied to many wetlands, which have very different species composition and very different hydrology. While not differentiating in terms of classification, the document in question does discuss the importance of physiographic setting (see pages 13-15) and provides a general map that is applicable to central Florida. The available water level records showed*

that wetlands in the two major types of physiographic settings differ substantially and should not be lumped together for analysis. The classification into Plains and Ridges is consistent with the map on page 15 other than that it was more detailed.

"Analysis of hydrologic data from the Class 1 Plains and Ridge wetlands were conducted separately to determine the statistic that best discerns stressed and unstressed wetlands. The distribution of stressed and unstressed wetlands was used to infer the general percentage of stressed Class 3 wetlands within the CFWI Planning Area."

Comment 45 (01/03/14) - With the understanding that the model output consists of water pressures and a water balance, that wetlands can be severely impacted with only small changes in amount and duration of saturation and that most wetlands are smaller than a grid size how confident are you in the model's ability to predict stress level of wetlands? Assuming that a "stress pattern" can be identified how can this be equated to the regulatory definitions of harm? In my view, a RWSP that does not identify past harm, existing harm, and potential future harm does not provide the information necessary to develop a comprehensive regional water supply.

CFWI RWSP Team Response *- The decision to use a probabilistic model was based on the issues that you raise: the model cannot predict the status of any specific wetland with accuracy. It predicts probability of wetlands being stressed based on model results and physiographic setting. See response to your Comment 39.*

"Modeled groundwater withdrawals for the Reference Condition (2005) represent the pumping required to meet the demands for water (e.g., population, irrigated agricultural acreage, and commercial/industrial activity) as they occurred in 2005 given the rainfall that occurred over the 12-year model period from 1995 to 2006."

Comment 46 (01/03/14) - When the model was run at the base conditions: What was the status of each of the current and proposed MFL water bodies? What was the status of the wetland's stress levels? Are there any wetlands that existed in 2005 that are today reduced in size solely due to changes in groundwater level? Due to changes to surface drainage?

CFWI RWSP Team Response *- The status of adopted and proposed CFWI Planning Area MFLs evaluated for planning purposes with the ECFT model is reported for all modeled scenarios, including the Reference Condition (2005), in Tables B-11and B-12 in Appendix B of the RWSP.*

Characterization of stressed condition for "current" conditions is discussed and illustrated on page 36 of the EMT report titled "Development of Environmental Measured for Assessing Effects of Water Level Changes on Lakes and Wetlands in the CFWI Planning Area", which is available at cfwiwater.com. Modeled changes in water levels between the Reference Condition (2005) and future withdrawal condition scenarios is discussed and presented on pages 36 through 43 of the EMT report. It is likely that there are some wetlands within the CFWI Planning Area that existed in 2005 that are currently smaller or greater in size. This type of information was not compiled or evaluated for development of the RWSP.

"Reference Condition was 653 mgd, average daily flow. This Reference Condition (2005) demand differs from the 1995-2006 average of 800 mgd, which is described in Appendix C."

Comment 47 (01/03/14) - How long does it take the pressures in the Floridan Aquifer System to reach a new condition of equilibrium after a step change in groundwater withdrawals? In other words, if the groundwater withdrawals would jump from 700 MGD to 800MGD how many weeks or months would it take for all of the pressure levels to reach a new steady state condition?

CFWI RWSP Team Response *- The aquifer system of the CFWI Planning Area responds to continuous changes in positive and negative stresses and as such, the ECFT model was constructed to mimic these changes on a monthly basis. The model was not tested or used to evaluate a 100 mgd step change in withdrawals to identify how long it would take to reach equilibrium. However, the model calibration period included changes in monthly pumping on the order of 100 mgd or more over the modeled area. The calibrated model simulates these changes over the 12-year simulation period (see Figure B-17 in Appendix B). If a constant step change in pumping were to occur, depending on many factors, it could take up to three or more years to reach equilibrium. For the groundwater modeling scenarios, this issue was addressed by allowing a model "start-up period" for each withdrawal scenario. This was accomplished by repeating the first year of the model simulation for three years before running the 12-year simulation period.*

"*"With respect to the projected increase in groundwater withdrawals over time, Figure 5 compares the distribution of withdrawals for the Reference Condition (2005) to the 2035 withdrawal condition scenarios based on total withdrawals summarized over uniform 10-mile by 10-mile sections of the CFWI Planning Area.*"

Comment 48 (01/03/14) - Figure 5 represents some very interesting data, would it be possible to generate a similar map that color coded the differences between the 2005 and 2035 conditions and could it be drawn to look similar to Figures 7 and 8?

CFWI RWSP Team Response *- It was decided to only show the Reference Condition (2005) and 2035 scenario in this format in the RWSP and Appendices. Additional figures may be available in the Hydrologic Analysis Team technical document, which is expected to be available at cfwiwater.com in late 2014.*

"Using the ECFT groundwater model projected changes in water levels in the UFA, the remaining available UFA freeboard and the corresponding status of MFLs and other resource considerations was determined. Table 14 summarizes results of these evaluations for MFLs constraints and other considerations for the Reference Condition (2005) and the 2035 withdrawal scenarios."

Comment 49 (01/03/14) - Looking at Table 14, I see 7 constraints not being met in 2005 when there is a groundwater withdrawal rate of 653 MGD and 28 constraints not being met in 2035 with a groundwater withdrawal rate of 1083 MGD. Based on this data how was the 850 MGD allowable groundwater withdrawal rate determined? It would appear that the 653 MGD is too much as it is clearly resulting in harm.

CFWI RWSP Team Response *- The 850 mgd was based on the 2015 projected withdrawal condition with insight gained from several sensitivity analyses that were conducted to assess the potential for different management activities to enhance the availability of additional water supplies in the CFWI Planning Area. Because the hydrogeology is variable across the*

region, the same amount of pumping in one area can have a very different effect in another area. As such, it is possible that some areas will reach the limit of groundwater withdrawals sooner than other areas.

"*"Local-scale occurrences were considered to be a few sites in proximity with smaller water level differences that could be managed through the individual consumptive use permitting process;*"

Comment 50 (01/03/14) - We know that the SWFWMD considered SWIMAL to a regional problem and was the major impetus behind including Polk County within the boundaries of SWUCA. I am assuming that the CFWI RWSP will compliment and not supersede the SWUCA recovery strategy. How is the fact that the current withdrawal rates in Polk County have not yet reached the rate allowed within the SWUCA guidelines? Does the 850 MGD capacity limit include the increases within Polk County that are permitted under SWUCA?

CFWI RWSP Team Response *- As discussed in Chapters 3 and 4 and Appendices B and C, the limit of 850 mgd was based on projected demands and constraints, not permitted quantities. The SWUCA was considered throughout the RWSP process and is consistent with the SWUCA Recovery Strategy.*

"*"As a result, the CFWI Planning Area-wide water use values represent long-term average values, not single year values. As a result, for this planning effort the sustainable quantity of groundwater for the region was 850 mgd, which is an increase of 50 mgd above the recent long-term average of 800 mgd.*"

Comment 51 (01/03/14) - What regulatory changes are anticipated to insure that water withdrawals will be optimized/limited in accordance with the model scenario that indicates that 850 MGD can be utilized in accordance with Florida law that states that a water resource can only be used in a manner that is sustainable and protects the resource and natural systems?

CFWI RWSP Team Response *- See response to your Comment 1.*

CHAPTER 5 WATER CONSERVATION

"Water conservation is the prevention and reduction of wasteful or unreasonable uses of water to improve efficiency of use."

Comment 52 (01/03/14) - I like to think of conservation in terms of the reduction of the "need" to use water. I think this makes conservation more about life style changes and less about "restricting" the use of water. Clearly the use of low flow toilets and faucets are life style changes. Telling people that they can't water their grass is the passage of restrictions. Encouraging low maintenance lawn covers and eliminating requirements for perfectly manicured lawns are lifestyle changes. The US Water Resources Council defines water conservation as activities designed to (1) reduce the demand for water, (2) improve efficiency in use and reduce losses and waste of water, and (3) improve land management practices to conserve water. How can the CFWI RWSP emphasize that the best way to manage our water resources is to leave as much water as possible in the natural system?

How can the regulations be written so that existing and new water use permit holders must demonstrate that they meet best available conservation practices?

CFWI RWSP Team Response *- Section 373.042, F.S. requires the Districts to set MFLs at which further withdrawals of water would be significantly harmful to the water resources of the area. The RWSP identifies programs to ensure that an adequate supply of water exists to protect water resources and natural systems to meet existing and future reasonable beneficial uses, which will be further developed by the Solutions Planning Team.*

The CUP consistency process, a statewide cooperative effort between all five Districts and FDEP to achieve CUP consistency, including water conservation, is currently underway.

"However, as efficiency improvements are made, finding ways to achieve even greater efficiency through conservation does become more challenging."

Comment 53 (01/03/14) - Conservation techniques are often eliminated based on the idea of economic feasibility. The option to conservation is some sort of alternative water project, so as a starting point the economic feasibility of a conservation effort should be weighed against the cost of an alternative water project. The conservation project has the added bonus that it has no negative impact on the environment. There is a real, measureable value to this benefit. How will the CFWI RWSP determine the economic feasibility of water conservation efforts?

CFWI RWSP Team Response *- The RWSP only provides an estimate of the probable amount of water conservation that can be achieved under an example set of circumstances. It does not attempt to measure the economic feasibility of specific projects or the implementation of practices by individual entities. The economic feasibility of specific water conservation projects is determined by who will implement them, usually water providers or end users. The Solutions Team will further evaluate potential conservation efforts.*

"*"All of the estimates of water conservation potential provided here, except that for agriculture, are limited by a cost ceiling of $3.00 per 1,000 gallons.*"

Comment 54 (01/03/14) - Isn't this cost ceiling ridiculously low? Why use this number and then add a disclaimer that says it is a poor assumption? It should, at a minimum, equal the cost of the potential alternative water project plus an adder for eliminating environmental impacts. This whole section needs to be redone based on realistic numbers for costs.

CFWI RWSP Team Response *- The $3.00 per 1,000 gallons cost limit for conservation practices is based on the typical retail charge for public water supplies in the CFWI Planning Area. The rationale is that water users generally will be motivated to adopt conservation practices only if the practices are economically advantageous to them. Higher priced conservation practices will become more attractive over time as the price of water increases.*

"The estimated agricultural water conservation potential of 10.9 mgd shown in Table 19 is based on the middle range participation rate of 12.5 percent""

Comment 55 (01/03/14) - What is the meaning of a 12.5 percent participation rate? Does this mean if a 100 percent participation rate was required that the potential savings would be 87 MGD? How was the 12.5% determined?

CFWI RWSP Team Response *- Yes and the 12.5% participation rate is based on participation rate data from mobile irrigation labs; see Chapter 5.*

"It was not feasible for this analysis to evaluate the conservation potential of the many varied commercial and industrial processes and it is assumed that the consumptive use permitting process and business economics already drive commercial and industrial establishments to minimize their use of process water."

Comment 56 (01/03/14) - What is the basis for this statement? Once a C/I/I user has installed their well the water is essentially free. How would the economics of using something that is free limit its use?

CFWI RWSP Team Response *- There are energy and maintenance costs associated with pumping the water.*

"The estimate of conservation potential for Power Generation was derived from the Conserve Florida Water Clearinghouse EZ Guide estimate for publicly supplied C/I/I water use."

Comment 57 (01/03/14) - As someone that has worked in the Power Generation field I can say that there is potential for significant water savings, but at very high costs. Only a detailed economic analysis would determine which projects, if any, could be done at a cost equal to other potential water supply projects. Are water management districts willing or able to do these sorts of comprehensive water supply evaluations?

CFWI RWSP Team Response *- The Districts are to ensure that water is used efficiently and for planning purposes only make regional level estimates of conservation.*

"As a result, per capita water use for the public supply sector has decreased steadily over time, as illustrated in Figure 11."

Comment 58 (01/03/14) - Figure 11 shows a gross water use for public supply of what I estimate to be 145 gallons per day per person for the year 2010. The SWFWMD's 2013 Consolidated Annual Report shows a gross per capita water use of 105 gallons per day for the year 2010. Why is there such a large difference in water use between the SWFWMD report and the CFWI plan data? Limiting my calculations to the 2010 population of 2,618,658, this equates to a water saving potential of over 104 MGD. This would imply that the potential for public supply conservation is many times greater than that estimated in the plan.

CFWI RWSP Team Response *- The CFWI Planning Area extends beyond the SWFMWD area and as such per capita rates for others Districts will differ. SWFWMD has taken extra actions to reduce water use in the SWUCA because of resource constraints and has rule requirements for per capita in place.*

"The FDEP and the state's Districts provide a model FFL ordinance, Florida-Friendly Landscape Guidance Models for Ordinances, Covenants, and Restrictions (FDEP and University of Florida 2009) and technical support for local governments electing to adopt FFL ordinances."

Comment 59 (01/03/14) - When an applicant for a new water use permit for water to be used to irrigate an area that is required to meet Florida Friendly guidelines, how do WMD's take this fact into account when they determine the allowable per acre irrigation requirements? As an example, if an applicant is irrigating 30 acres of turf grass in a new residential development and is indicating that he is meeting FFL guidelines how much less water would he be allowed in his permit when compared to an applicant that was not following FFL guidelines?

CFWI RWSP Team Response *- The Districts do not have specific permitting criteria for FFL. The water needs of specific landscapes vary greatly depending on site characteristics and landscape design as well as plant type. It is not possible to make a blanket statement about how much less water a FFL might use than some other landscape. Water allocations are calculated on the basis of plant water needs for the particular application; see each respective Districts Applicants Handbook for additional information.*

"Most, if not all, of the options available for public supply customers are also applicable for DSS users."

Comment 60 (01/03/14) - Will cost sharing incentives such as toilet rebate programs be made available to domestic self-supply users?

CFWI RWSP Team Response *- DSS users may be eligible for funding if they were able to apply collectively as a group (like through an HOA or property owners association) or if they were covered by an application made by a county that would cover a larger area than the service area boundary of the utility.*

"If all recommended improvements at the facilities are implemented, the SFWMD could save as much as 3.5 million gallons of water and $8,700 annually for a total investment of $63,000."

Comment 61 (01/03/14) - How typical are these numbers for construction costs? If these numbers are representative of actual implementation costs, then at a capital cost of less than $7.00 per gallon this would be a very cost effective investment when compared to the expected 10 to 15 dollar per gallon capital cost for implementation of alternative source water projects.

CFWI RWSP Team Response *- The $63,000 was for fixture replacements at the SFWMD facilities (buildings), not construction of new facilities. The study that these numbers came from was done in 2009. Current costs may be different. Most of those improvements have already been made. Implementation of AWS sources for these facilities was never a consideration. It is agreed that conservation is normally very cost effective when compared to the cost of implementing AWS projects.*

"*"Demand reduction can be based only on factors that can be changed, such as irrigation and growing methods and adoption of BMPs."*

Comment 62 (01/03/14) - With regards to agricultural conservation there is a topic that must be discussed and that is matching the crop to the location. It makes sense that some soil/crop combinations will require more irrigation than others. What regulations are in place that WMD's can use to insure that a given location is a "reasonable" location for a given crop type that will insure that a water use will be consistent with the public interest.

CFWI RWSP Team Response *- The Districts are required to determine if a water use is "reasonable and beneficial" before issuing a CUP. Crop growing condition needs and economics generally will preclude farming in suboptimal sites.*

"*This chapter also described the tools, resources, and initiatives available to and used by individuals, commercial, and agricultural water users, local governments, utilities, and Districts to foster conservation and water use efficiency.*"

Comment 63 (01/03/14) - This section has addressed some aspects of conservation, but there other areas that need to be addressed. One is the allowable distribution losses that public supply utilities are permitted to have before they need to address them. Current allowable loss is 10 percent. Putting that number into perspective, if you look at the projected 2035 public supply of 626 MGD, ten percent or over 62 MGD can be lost and no one needs to take any corrective action. Why is this acceptable? The SWFWMD permit regulations for public water allow a 150 gallon per day per person water use and the SFWMD permit regulations allow a 200 gallon per day per person water use before requiring the applicant to take any action to improve efficiency. Why are these numbers so high? What do these numbers say about the perceived importance of water conservation? How is water conservation going to be viewed when it comes time to evaluate alternative water projects? As an actual example, the SFWMD recently issued a water use permit for an alternative water project called the Cypress Lakes Wellfield Project. This permit allows for the withdrawal of 37.5 MGD of raw groundwater from the Lower Floridan Aquifer. Finished water quantity is estimated at 30 MGD. What happened to 7.5 MGD (25 percent of total output) of groundwater? Why is losing so much ground water acceptable?

CFWI RWSP Team Response *- A 10% non-revenue or unaccounted for water is allowable because that is usually what is feasible to achieve, according to the American Water Works Association. Water distribution systems deteriorate over time. Older distribution systems may have higher loss rates. Newer systems may have lower loss rates.*

The per capita rates among utilities will vary depending on the demographics within the utility, location and other factors. A higher value may not mean that they are operating inefficiently. Where conservation is a cheaper alternative, it is likely to be implemented prior to AWS projects.

The 25% is an estimate for RO treatment losses for brackish water at the future plant.

CHAPTER 6 WATER SOURCE OPTIONS

"*"The sources of water potentially available to meet projected water demand in the planning region include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water.*"

Comment 64 (01/03/14) - Is reclaimed water accurately described as a water source? Isn't the use of reclaimed water better defined as a conservation measure? Reclaimed water is simply water that has been recovered after it has been used for some other purpose. How this recovered water is used in a beneficial rather than wasteful way is a measure of efficiency which is the goal of conservation. In my view, a true new or alternative source of water is one that is isolated from the "traditional" water source in that its use has no impact on the traditional water source or the natural systems that depend on the traditional water source.

CFWI RWSP Team Response *- As discussed in the RWSP Executive Summary, Pages v and vi, brackish groundwater, surface water, seawater, reclaimed water, reservoirs and ASR are considered non-traditional or alternative water sources.*

"*Examples of management tools include ASR, storage tanks and ponds/reservoirs, land-use transitions, avoidance of adverse impacts from withdrawals through wellfield optimization, and water resource augmentation and aquifer recharge.*"

Comment 65 (01/03/14) - With the understanding that storm water is a form of surface water, storm water management is an underutilized tool for water supply management. Also, I don't see any mention of the concept known as "water farming".

CFWI RWSP Team Response *- The WSO Subgroup worked with utility representatives to prepare a draft list of potential water source options available to water users within the CFWI Planning Area. Completion of the RWSP does not mark the end of the CFWI effort. Currently, the CFWI Solutions Planning Team (including subteams that will address stormwater and other projects such as dispersed water management) is developing alternatives to meet the projected water demands.*

"Avoidance of impacts, system optimization, and source management techniques are not discussed in detail in this document."

Comment 66 (01/03/14) - These topics apply when impacts are deemed local versus regional. How will water management districts use its regulatory powers to determine where and how to implement these techniques?

CFWI RWSP Team Response *- See response to your Comment 1.*

"An additional 178 mgd of reclaimed water was reused for residential, landscape, and green space irrigation."

Comment 67 (01/03/14) - Of this 178 MGD of reclaimed water how does the total breakdown with regards to the quantity from residential, I/C/C, agricultural, self-supply, etc. Of the 2010 total of 800 MGD how much of this water was used for non-irrigation use?

CFWI RWSP Team Response *- See Chapter 2, Appendix A and Appendix E for use type details for 2010 water demand and reclaimed water flow and beneficial reuse.*

"*"Central Polk County marks the location where the four major groundwater basins meet and represents an area of high recharge with groundwater flow radiating out in all directions from that location.*"

Comment 68 (01/03/14) - What is a groundwater basin and how are its extents defined? How does the ECFT model utilize groundwater basins?

CFWI RWSP Team Response *- Figure 13 in Chapter 6 shows the locations of the groundwater basins within the CFWI Planning Area. These basins are generally defined by the average potentiometric surface within the Floridan aquifer system. The potentiometric surface represents the aquifer levels (as potential head) within the system and can be utilized much like a contour map to identify the direction of flow from a given point. As shown in the figure, Polk County represents the regional potentiometric high from which water flows out radially into the four groundwater basins in the region. Groundwater basins lines can shift however based upon rainfall conditions. The concept of the groundwater basin is inherently built into the ECFT model as part of the calibration process to match observed groundwater levels.*

"Due to the highly transmissive nature of the FAS, the potential for impacts resulting from use of the Floridan aquifer may project outward for extended distances over several months or years."

Comment 69 (01/03/14) - Assuming this statement to be true, if impacts need to be evaluated in terms of months or even years, how do water management districts evaluate impacts based on well tests that last days or weeks at the most?

CFWI RWSP Team Response *- While the effects of a groundwater withdrawal or injection may propagate outward for extended distances and for an extended period of time, in theory, the physical expression beyond the first few days or weeks become very small. Pump tests measuring aquifer hydraulics depend upon that period of time during the test where the bulk of the aquifer level change would occur for their calculations. This occurrence is typically within the first 36 hours of the given test. Tests involving water quality issues or large projected withdrawals may conduct tests for extended periods of time of weeks or months and on rare occasions a year.*

However, throughout most of the CFWI Planning Area, all of these aquifers are sufficiently connected that pumping in one aquifer affects adjacent aquifers."

Comment 70 (01/03/14) - Does the ECFT model accurately model this connectivity? If so, can the model be used to determine the maximum capacity of the entire aquifer system that is sustainable and does not harm the resource and the related natural systems? If so, what is this number?

CFWI RWSP Team Response *- A great deal of effort during the model calibration process was made to correctly adjust the model to account for the interaction of all the aquifers simulated in the ECFT. The estimation of the maximum capacity of the entire aquifer system is a function of many variables including natural and economic variables.*

"*The amount of additional potential fresh groundwater development (availability), as described in Chapter 4, is highly dependent on the location and rates of the withdrawals.*"

Comment 71 (01/03/14) - Physically where are these areas located? Obviously, for planning purposes it is critical to know these areas upfront.

CFWI RWSP Team Response *- The excerpted text is a general statement that refers to or indicates that the response of groundwater levels to withdrawals varies depending on the hydrogeology of the area where the withdrawal occurs and location(s) of the environmental feature(s) of concern. For example, in areas where there is good confinement between the surficial aquifer and the UFA, withdrawals from the UFA will have minimal effect on water levels in the surficial aquifer. In areas where there is a good connection between the surficial aquifer and UFA, the same amount of withdrawal from the UFA will have a more quantifiable effect on water levels in the surficial aquifer that in some cases can be close to a one-to-one effect. The result is that the available amount of groundwater depends on the distribution of groundwater withdrawals. In general, the "ridge" areas, such as along US Highway 27, are more susceptible to the lowering of water levels in the UFA than non ridge areas, referred to as "the plains" in the draft plan (see first paragraph on page 69 for a brief discussion on the differences between ridge and plains settings). It is also important to note that the effects of withdrawals distant from the ridge can extend to the ridge areas.*

"Brackish water, for alternative water supply planning purposes in the CFWI Planning Area for SJRWMD and SWFWMD, is generally defined as water with a total dissolved solids (TDS) concentration of greater than 500 mg/L. SFWMD defines saline water, which includes brackish water, as water with chloride concentrations greater than 250 mg/L."

Comment 72 (01/03/14) -Why is there no uniformly recognized definition of brackish groundwater? The old CFCA Action Plan defined brackish water as water with a chloride concentration of > 1000 mg/L and/or a TDS concentration of >1500 mg/L. The SJRWMD defines brackish groundwater as water with a total dissolved salt concentration between 1000 mg/L and 10,000 mg/L. As a general question what makes the salt concentration of groundwater a measure as to whether it is a water source that has the capacity to supply water in a sustainable manner, which does not result in harm to the resource or related natural systems?

CFWI RWSP Team Response *-The Regulatory Team, in conjunction with the CUP Consistency effort, will evaluate the potential for consistent regulatory definitions. The RWSP resource analysis assumed that future demands will be met with traditional sources. Brackish is a categorization of water to determine AWS, it does not have any bearing on capacity to supply.*

"*"Currently, the Water Cooperative of Central Florida (WCCF) (which includes Orange County Utilities) and Reedy Creek Improvement District (RCID) are implementing the development of a brackish wellfield to withdraw water from sections of the LFA. The WCCF and RCID (as co-permittees) were recently granted a water use permit to withdraw 37.5 mgd (30 mgd finished and 7.5 mgd treatment process reject) in central Osceola County from the brackish LFA."*

Comment 73 (01/03/14) - Who are WCCF. What study did they use that confirmed that a 37.5 MGD LFA withdrawal would not result in harm? Was this project modeled in the ECFT model? The name of the project is not mentioned in this plan, but I am assuming that this project is the Cypress Lakes Wellfield Project I have major concerns regarding this project. Number one this is not a brackish groundwater supply project. The only reason that this

project was declared a brackish groundwater project is for funding purposes. The old CFCA Action Plan created a special 15 mile by 15 mile square area that was exempt from meeting any brackish water requirements solely for the purpose of allowing this project to be developed. This is the very type of project that needs to be avoided in the future. In my opinion, it is a project where politics superseded science. On the one hand we cannot indicate how little data is available to aid in the understanding of the LFA and then do an about face and approve a project that withdraws 37.5 MGD from that very aquifer. Where is the logic to that?

CFWI RWSP Team Response *- The Water Cooperative of Central Florida (WCCF) is a cooperative that includes Orange County Utilities, TOHO, City of St. Cloud and Polk County Utilities. The WCCF completed work as part of a CUP application to the SFWMD (49-02051-W) issued in 2012. Water samples collected during the course of pump test confirmed the saline nature of the water at over 500 mg/l chlorides. The projected demands associated with the area were modeled in the ECFT. The old Central Florida Coordination Area (CFCA) rules in place that identified the special designated area expired at the end of 2012 and no longer apply to the region.*

"*The SWFWMD has ongoing efforts to capture and store excess river flows to meet the upper Peace River minimum flow during low-flow periods, which will also improve reliability in flow for public supply capture.*"

Comment 74 (01/03/14) - Is any of the water mentioned for public supply be available for use within the CFWI Planning Area? If yes, how much? If no, why not?

CFWI RWSP Team Response *- The storage and treatment projects proposed for the Peace River are designed to address the minimum flow and recovery concerns and do not directly provide new public supply quantities. However, indirect benefits may occur as water resources recover and improved groundwater recharge occurs through the natural sinks in the upper river. The sentence has been restructured as follows: "The SWFWMD has ongoing ~~efforts~~ projects to capture and store ~~excess~~ river flows during high flow periods in an effort to reestablish the upper Peace River minimum flow during low-flow periods.~~,~~ The projects may have residual benefits which ~~will also~~ could improve reliability in flow for public supply capture."*

"The SWFWMD is scheduled to establish MFLs for the upper and middle portions of the Withlacoochee River in 2016."

Comment 75 (01/03/14) - What if any is the potential water supply from the Withlacoochee River?

CFWI RWSP Team Response *- The Withlacoochee River was not considered a viable water supply source for the CFWI Planning Area. A few supply options were identified in the SWFWMD 2010 RWSP from the river for utilities in the SWFWMD's northern counties, but the closest project option would only provide seasonal supply with poor annual reliability, and is sited over 30 miles away from utilities and would likely yield little water for the CFWI Planning Area.*

"The headwaters for these creeks are located in urbanized portions of metro-Orlando. Water control structures in the KCOL direct flows according to regulation schedules established by the United States Army Corps of Engineers and managed by the SFWMD."

Comment 76 (01/03/14) - What are the objectives that established the regulations that control these structures? Are these objectives negotiable in a manner that would meet all of needs of the natural systems and allow water to be used as an alternative water supply for the CFWI Planning Area?

CFWI RWSP Team Response *- There are a number of objectives that are addressed by the regulation schedules for the KCOL and Kissimmee River system. This was a federally constructed project for the express purpose of flood control as part of the central and southern flood control system. The SFWMD has been studying this complex surface water system for a number of years in an effort to better manage public safety along with environmental benefit and will be proposing a number of changes in the near future as part of the Kissimmee River restoration effort. Water supply may be identified, pending study results.*

"*"In order to provide additional incentives for reclaimed water use, the Florida Legislature amended Section 373.250, F.S., in 2012. The amendments required the FDEP to initiate rulemaking to incorporate criteria for the use of "substitution credits" and "impact offsets" when a District is reviewing a consumptive use permit application."*

Comment 77 (01/03/14) - Why are special incentives to use reclaimed water needed? Isn't the real incentive to use reuse water is that it is or soon will be the "only" water available to many water suppliers? In other words why is it necessary to incentivize something that will occur naturally because there will not be any other choice? As I indicated under the chapter on discussing conservation, the use of reclaimed water is best described as a form of conservation and as such will almost always be the most cost effective method for meeting demand. The other benefit of using reclaimed water is that its use does not result in any additional environmental harm as it is not a withdrawal from a natural resource. The ultimate goal of reclaimed water use is direct potable reuse. DPR will make the use of reclaimed water more financially attractive (no more discounts for helping get rid of a waste product) and the need for dual water distribution systems will be eliminated. Also, the problem of matching supply and demand will disappear.

CFWI RWSP Team Response *- Incentives for reclaimed water are needed in many cases because the infrastructure can be costly for utilities to install, and in some cases reuse is more expensive than the current groundwater source. Direct potable reuse (DPR) is being investigated in parts of the United States and other countries, but it requires higher and more costly treatment, which impacts feasibility. It is likely that DPR is forthcoming, but public acceptance of DPR is a slower process.*

"These providers generated 193 mgd of treated wastewater (FDEP Reuse Inventory 2010) collectively."

Comment 78 (01/03/14) - What is the total projected 2035 demand for all non-irrigational uses of water? Of that quantity, how many MGD could be returned to a wastewater treatment plant? What regulatory changes could be made that could significant

increase these numbers? What percentage of new residential development will be required to have connections to wastewater treatment plants?

CFWI RWSP Team Response *- See Chapter 2 and Appendix A for use type details for 2035 demand and see Appendix E for methodology regarding reclaimed water projections and breakout of projected uses. Districts do not set regulations for local governments and municipalities; however, the Districts do recommend that future reclaimed water is used beneficially.*

"*The Cocoa ASR system operation began in 1987, and now consists of ten ASR wells, completed in the FAS between depths of 280 to 300 feet below land surface, with a combined recovery capacity of 10 mgd.*"

Comment 79 (01/03/14) - With regards to the Cocoa ASR system, please respond to the following: Is the injected water considered to be potable? What is the name of the aquifer where the water is injected? What is the native quality of the groundwater at the injection locations? How is the water used that is withdrawn? Has there been any degradation of injection capacity over time? What is the average recovery efficiency?

CFWI RWSP Team Response *- The injected water is potable water and the aquifer used is the UFA. The native water quality ranges from 32 to 840 milligrams per liter (mg/L) chlorides. The water withdrawn from the ASR wells is done so during high demand periods of the year (March-May) and is used for public supply. There has been no degradation of the injection capacity of the wells. The plant has never needed to recover 100% of the injected water. For over a decade, the average injected water volume has been approximately 1 billion gallons.*

"Recently, the SFWMD completed a hydrogeologic investigation of the middle and lower FAS in the vicinity of Lake Kissimmee, and determined there were several discreet, semiconfined intervals within the FAS, between the depths of 500 to 2,500 feet below land surface that could be available for ASR development in the central region of the CFWI Planning Area."

Comment 80 (01/03/14) - *What would be the source of the water to be injected into the FAS? What is the water quality at the proposed aquifer injection sites? Where does the water go that is displaced by the water that is injected? Once injection stops, how long does it take for pressures within the FAS to return to pre-injection levels*?

CFWI RWSP Team Response *- The intent of hydrogeologic investigation was to characterize the stratigraphic and hydraulic intervals with in a portion of the Floridan Aquifer System (FAS) that has not been thoroughly investigated to date. There were several distinct transmissive intervals observed in the exploratory wells, separated by semi-confining strata, which could be evaluated in the future for regional ASR and/or water supply planning purposes. There were no specific proposed injection sites recommended or implied within the report. The report findings could be used for any variety of source waters, depending on the intended purpose of a project.*

When recharged into the aquifer, the "stored" water displaces the poorer quality formation water. The displaced formation water expands away from the well in a cylindrical manner, albeit with some irregularities associated with porosity, fractures, and preferential flow paths.

Cycle tests at the ASR pilot projects associated with the Comprehensive Everglades Restoration Plan has indicated that pressures within the FAS return to "pre-test" conditions within one to three days.

CHAPTER 7 WATER SUPPLY DEVELOPMENT PROJECT OPTIONS

"In developing the list of water supply development projects, there was a consideration of how the public interest is served by the project or how the project will save costs overall by presenting the loss of natural resources or avoiding greater future expenditures for water resource development or water supply development."

Comment 81 (01/03/14) - Florida law prevents any action that causes harm to the water resources and related natural systems. How was the problem of mitigating past harm addressed in the development of projects? I am assuming that meeting MFL's and restoring lost wetland and currently stressed natural systems are the highest priority. Which of the listed projects fixes these past mistakes? With regards to cost savings, what time frame was assumed in this evaluation? A twenty year planning horizon is much too short address the long term implications of which projects are just short term Band-Aids and which ones are long term, permanent solutions.

CFWI RWSP Team Response *- See response to your Comment 1.*

"The projects will contribute to meeting the Florida Legislature's declared policy to promote the availability of sufficient water for all existing and future reasonable, beneficial uses and natural systems, as described in Paragraph 373.701(1), F.S."

Comment 82 (01/03/14) - What exactly does "promote" mean? Webster's has many definitions. Maybe the most appropriate is "to further the growth of or establishment of". What is the planning horizon of this law? Is it forever? What water are they referring to? Waters of the state? All water everywhere including sea water? Are they assuming that water availability has no limits? And what is meant by future reasonable, beneficial uses? Who gets to decide at what point a use becomes unreasonable or without benefit? We know water management districts can declare certain water usages as being unreasonable during "water emergencies". Isn't it conceivable that at some point in the near future in areas such as the CFWI Planning area that the entire concept of meeting all "reasonable, beneficial uses" is economically unreasonable? How do you plan to address the very real possibility of having current water customer's utility bill's doubling or tripling to pay for FS 373.701? As an example, the City of Oldsmar, who used to get their water wholesale from Pinellas County, was seeing constantly rising rates. They didn't like this lack of control over rates increases and investigated and installed a brackish water wellfield and RO water treatment plant. This was financially feasible due to a $9M grant from the SWFWMD. Does this mean that WMD's will be subsidizing customer's water bills? Isn't restoring water quality, increasing spring flows, and protecting other currently damaged natural systems a better use of the public's money?

CFWI RWSP Team Response *- Options have been identified in the RWSP that might serve as a source of future supply. Funding concerns are a part of any project feasibility and the Districts and FDEP are to provide funding and technical assistance where feasible.*

"A project identified for inclusion in this RWSP may not necessarily be selected for development by the water supplier."

Comment 83 (01/03/14) - Have each of the projects been modeled in the ECFT modeling program?

CFWI RWSP Team Response *- Demand projection scenarios were modeled, not AWS projects. The Solutions Planning Team will investigate and make recommendations for the implementation of AWS projects.*

"*"However, the water supply development projects included in this RWSP have been screened for feasibility and have a likelihood of being permittable. However, the ability to permit a project will depend on its location and results of an impact evaluation.*"

Comment 84 (01/03/14) - Can you describe the screening process? Wouldn't the statement about an impact evaluation apply to any project, even ones not current on any list? What makes the projects on the list any more likely to be approved than just a generalized "wish list"?

CFWI RWSP Team Response *- The projects listed in the RWSP were identified primarily by the water users as supply options they are considering to meet future needs. The screening process completed was done at a high level to eliminate projects that would have a likelihood of conflicting with regulatory constraints. The Solutions Planning Team will investigate and make recommendations for the implementation of AWS projects.*

"These cost estimates should not be viewed as a detailed evaluation of potential project costs that can vary significantly from the preliminary cost estimates shown in Table F-1."

Comment 85 (01/03/14) - Have any of these costs been subjected to an independent third party peer review?

CFWI RWSP Team Response *- No, more detailed cost estimates will be developed during design and permitting.*

"*Because environmental concerns are expected to limit the availability of future development of the FAS, consumptive use permits for additional water from the FAS will be determined on an application-by-application basis.*"

Comment 86 (01/03/14) - Because current permitting practices have allowed the over permitting of the FAS and thereby failed to protect the resource and related natural systems, what regulatory changes are being proposed that would insure that future groundwater permits will comply with F.S. 373.709 and similar state laws? Clearly the concept of having the permit applicant "provide assurances" that everything is okeydokey is antiquated and naive.

CFWI RWSP Team Response *- See response to your Comment 33.*

"This could occur, provided the withdrawal creates no net adverse impact on the limited water resource or creates a net positive impact if required by water management district rule as part of a strategy to protect or recover a water resource."

Comment 87 (01/03/14) - How is the strategy to protect or recover a water resource being developed? Who is working on this strategy and how will it be incorporated in the CFWI RWSP?

CFWI RWSP Team Response *- See response to your Comments 1 and 33.*

"Therefore, while not applicable on a regional basis, extensive portions of the CFWI Planning Area are considered to be resource-limited for both groundwater and surface water withdrawals due to environmental or MFL constraints."

Comment 88 (01/03/14) - This statement is very confusing. Isn't the purpose of the CFWI RWSP to replace the old CFCA Action Plan? Isn't the goal to develop new, better, science based rules that will be universally applied throughout the CFWI Planning Area? A major, first step was taken when this plan identified this area as a water use caution area.

CFWI RWSP Team Response *- The CFWI was created, in part, to incorporate the CFCA Phase II process and develop a single RWSP for the area. The CFWI builds on the previous work of the CFCA and has been designated a water resource caution area.*

As noted in Comment 1, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery.

"Thirty-five potential brackish water supply projects, mostly in Polk County, have been identified to generate water within portions of the CFWI Planning Area."

Comment 89 (01/03/14) - Where did all of these potential groundwater projects pop-up from? Chapter 1 of this plan describes the SWFWMD's Heartland RWSP that includes Polk County and not a mention of a single so-called brackish water supply project. Chapter 6 of this plan discusses brackish groundwater and does not include Polk County as one of the counties with brackish groundwater. Now, all of sudden in chapter 7, there are many potential brackish groundwater projects. Where is the consistency? First, I have looked at what little data there is within Polk County concerning the LFA and I see water quality significantly better than even the new, less stringent definition of brackish. In addition, my communications with SWFWMD staff indicates that the LFA is not considered a source of "new" water. The LFA may have potential to offset water withdrawals from the UFA to mitigate localized harm, but I see little, unbiased data to support the use of the LFA as an alternative water source. Neither of two projects mentioned meet the definition of a brackish water project.

CFWI RWSP Team Response *- Most of the brackish groundwater project options within Polk County are for blending projects that were initially identified in the 2009 Polk County Comprehensive Water Supply Plan. These options are sited near existing utilities, and the quantities are based on the blending ratio with fresh groundwater so the end product remains a potable water product. Additional site-specific geologic and water quality data will be needed to determine the productivity of each project. In addition, project option numbers 23*

and 35 are related to quantities potentially available from the Lower Floridan below MCU II, as defined in: Miller, J.A., 1986, Hydrogeologic Framework of the FAS in Florida and in Parts of Georgia, Alabama, and South Carolina: USGS Professional Paper 1403-B. This aquifer unit is not currently utilized for public supply.

"It is estimated these projects, if implemented, could generate between 164 mgd and 189 mgd of additional water. Not all projects are exclusive of one another, and the total yield would depend upon which projects are developed first."

Comment 90(01/03/14) - Just using a simple, common sense approach, what is a reasonable, potential capacity estimation for the surface water projects? In addition, would this number be considered the maximum, reasonable available capacity for surface water development or did the effort stop based on the twenty year planning horizon? In other words, if we dug harder more capacity could be found.

CFWI RWSP Team Response *- As described in Chapter 7 and Appendix F, fifteen potential surface water projects have been identified which could generate between 164 mgd and 189 mgd of additional water. Not all projects are exclusive of one another, and the total yield would depend upon which projects are developed first. For example, the SJRWMD's Water Supply Impact Study (WSIS) evaluated several withdrawal scenarios from the St. Johns River and concluded that 155 mgd could be withdrawn with no more than negligible or minor effects. Further analyses will be conducted by the Solutions Planning Team.*

"Latt Maxey modified its existing consumptive use permit to an allocation for the production of 21,000 acres of a biofuel crop."

Comment 91 (01/03/14) - Assuming that the storage reservoir had not been included in the project, how much additional groundwater would have been needed to be withdrawn from the aquifer? How was the decision made that using potable, fresh groundwater from a water use caution area for the growing of a bio-fuel crop was reasonable, beneficial and consistent with the public interest? Looking back in history at predevelopment times, what percentage of the 21,000 acres referenced would have been considered to be wetlands and/or flood plains?

CFWI RWSP Team Response *- Upon issuance, the Latt Maxcy Biofuel Crop Project (49-00102-W) was allocated 19,101 million gallon per year (mgy)(52.3 mgd) to serve a total of 23,505.3 acres, of which 21,362 acres are for sweet sorghum. The applicant provided extensive crop analysis and surface water basin models to reduce the allocation from the UFA by 8,669 mgy (23.8 mgd). The permits restricted the UFA withdrawals to 10,432 mgy (28.6 mgd) with the demand deficit made up from the on-site drainage system that collects stormwater runoff as well as recovers tailwater via closed loop irrigation systems.*

As with all approved projects, this applicant met the criteria within the Applicants Handbook for CUP applications including the public interest test. Explanation of the permit review and how it met the reasonable assurances required under the CUP process and can be found on SFWMD's website.

"While SJRWMD has completed preliminary work to identify options for co-siting a seawater desalination plant with an electric power plant or a sizeable reclaimed water discharge

facility, there are no new seawater desalination projects proposed by water users in this RWSP."

Comment 92 (01/03/14) - Isn't it fair to say that seawater desalination is the only true "alternative" water source in that it is the only one that does not impact the hydrological cycle or regional water budget (balance)? I think it's important not to confuse alternative water sources with non-traditional water sources.

CFWI RWSP Team Response *- See response to your Comment 64.*

"Of the potential 165 mgd of new reuse, it is estimated that an offset of 105 mgd of potable quality water could be achieved. The exact application and location of the reuse will determine how much offset might be achieved."

Comment 93 (01/03/14) - How exactly is this 105 MGD accounted for in this report? Has it already been reflected in the projected 2035 demand numbers or is this "new" water that could be used to help reduce the "gap" between projected supply and demand? What is the proposed source or the 29 MGD of supplemental supply water?

CFWI RWSP Team Response *- As noted in Chapter 7, the additional reclaimed water represents new reuse that could offset future estimated demand. As noted in Appendix E, supplemental flow is groundwater and surface water supplies anticipated to augment reuse systems.*

"The intent of these projects is to provide service reliability and maximize potential supply using permitted but unused capacity."

Comment 94 (01/03/14) - Where are these permits located that have permitted withdrawal quantities that exceed their projected 2035 demands? Would a better approach be to reduce those permitted quantities to match their demand thereby releasing that water so that it could be used by other users that have a more immediate need? This would eliminate the need for expensive interconnecting distribution piping and/or metering facilities.

CFWI RWSP Team Response *- See response to your Comment 33.*

"By increasing coordination during the water supply planning process, future consumptive use permit applicants who wish to construct identified water supply project options will be assured that District staff are familiar with the projects, have supporting data, and will be able to facilitate the permitting process."

Comment 95 (01/03/14) - Throughout the CFWI RWSP document there is a consistent theme that the report represents a broad overview of the water supply "condition" in the planning area. The implication that simply because a project is mentioned among the 130 plus potential projects that somehow an individual project has been vetted by a water management district and is now granted a special status that would "facilitate" the permitting process is just ridiculous. In my view, the inclusion of over 130 projects is a clear indication of a lack of a real plan. Clearly, the work to develop a real "plan" has yet to begin. This report does do something that is very important. This report, for the first time, admits

that there is a problem with the capacity of our water supply. The declaration of the CFWI Planning Area as a water use caution area is the first step towards real regulatory reform. I am looking forward to that phase of the work.

CFWI RWSP Team Response *- The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.*

CHAPTER 8 WATER RESOURCE DEVELOPMENT

"This Chapter provides a summary of the water resource development activities and projects recently conducted and also planned over the next five years by the Districts within the CFWI Planning Area to enhance the amount of water available for both water users and natural systems."

Comment 96 (01/03/14) - why is this section limited to a five year horizon? It's my understanding that the CFWI RWSP is to look twenty years into the future.

CFWI RWSP Team Response *- The Districts annually develop financial reports of water resource activities and projects on a five-year horizon, in accordance with Chapter 373.536, F.S.*

"Collaborative modeling efforts for the CFWI Planning Area are being conducted by the District's in cooperation with USGS, FDEP, FDACS, and regional utilities. These efforts include conducting predictive simulations to estimate water demands and the effects of withdrawals on wetlands, springs, lakes, saltwater intrusion, and water users in the CFWI Planning Area as described in Chapter 4, the East Central Florida Transient (ECFT) groundwater model was used to conduct simulations to provide planning level estimates on groundwater availability and possibly for regulatory purposes in the future."

Comment 97 (01/03/14) - In general, I fully support efforts to model and learn more about the hydrology of Central Florida, but at some time in the future there will be a point of diminishing returns. We know the ECFT model provided the necessary output to predict the overall capacity of the FAS, but that it cannot be used to predict localized impacts due to its resolution. At what point would the potential knowledge gained by increasing the resolution and/or improving the quality and/or quantity of input data become more of an academic pursuit with little additional output data that could actually be used to better manage the water resource?

CFWI RWSP Team Response *- Numerical models are designed in scope and scale to answer specific questions. The ECFT Model's primary purpose at this time was to estimate the amount of groundwater available based on a number of environmental constraints for the RWSP. The*

ECFT model domain was chosen based on a number of factors including the extent of potential effects from groundwater withdrawals, and hydrogeologic conditions, among other things. The grid size of slightly less than 40 acres in a modeled area of greater than 10,000 square miles is appropriate given the available data and to provide the appropriate resolution of results for the assessments used to develop the RWSP.

"Table 22 shows the participants and magnitude of funding for water resource development projects and activities within the CFWI Planning Area historically and over the next five-year period."

Comment 98 (01/03/14) - "What is the significance of Table 22? Now that the CFWI Planning area has been designated as a water use caution area, why are the FY12-FY16 five year projected expenditures more than 50 percent less than what was actually spent in FY05-FY11 seven year period? I would have expected to see a major increase not decrease in spending. For each WMD what percentage of discretionary spending is used for water resource development?

CFWI RWSP Team Response *- This information was provided as supplemental detail for the magnitude of funding provided for water resource development. The level of funding is expected to fluctuate over time. The Fiscal Year (FY) 12-FY16 expenditure reduction reflects, in part, the recessionary economic conditions that impacted the Districts and many of its financial cooperators, as well as the completion of multiple large-scale projects prior to FY12. See responses to your Comments 33 and 96.*

"In Polk County, 20 FARMS program projects have been implemented at a total cost of $3.3 million and offsetting an estimated 1.2 million gallons per day (mgd) of groundwater withdrawals."

Comment 99 (01/03/14) - Is the SWFWMD the only WMD that has a formal FARMS program? From the data that I have seen, the FARMS program has been very cost effective. What would be the potential groundwater withdrawal reductions if the FARMS program would be implemented throughout the CFWI planning area?

CFWI RWSP Team Response *- Yes, SWFWMD is the only district that has the Facilitating Agricultural Resource Management Systems (FARMS) program. Estimates of agricultural conservation and methodologies employed can be found in Chapter 5.*

"The Kissimmee Basin Modeling and Operations Study (KBMOS) is the first comprehensive review of water management operations for the Kissimmee Basin in more than 30 years."

Comment 100 (01/03/14) - What are the goals of the current operation of the Central and Southern Florida Project water control structures? With the understanding that protecting natural systems is the highest priority for managing this system, is there any potential for developing surface water supply projects? What is the completion date for this study?

CFWI RWSP Team Response *- The Kissimmee River – Lake Istokpoga Basin portion of the Central and Southern Florida (C&SF) Project was constructed and is operated to protect lands adjacent to the lakes and along the Kissimmee River from frequent and prolonged flooding, to provide water supply for agricultural uses in the area and around the lakes and Kissimmee*

River, to provide navigation from Lake Tohopekaliga to Lake Okeechobee, and to maintain lake stages at desirable levels for fish and wildlife and recreation. The project is operated in accordance with regulations prescribed by the USACE. The Kissimmee Basin Modeling and Operations Study's (KBMOS) goal of evaluating alternative operations for C&SF Project water control structures is to ensure project purposes described above continue are met and align with Kissimmee River Restoration Project (KRRP) headwater discharges authorized as part of the KRRP. A study completion date cannot be provided because the study is currently on hold due to greater KRRP cost-crediting issues.

Availability of water from the KCOL portion of the system has not been determined and is dependent upon establishment of a water reservation. The SFWMD included the Kissimmee Basin water reservation, which includes the Upper Chain of Lakes and the Kissimmee River and its flood plain, in its 2014 Priority Water Body List for future adoption. Surface water availability, if any, from the Kissimmee System will be determined after the needs of the natural system have been determined and formalized through establishment of the water reservation.

"Contingent upon future Governing Board approval, rulemaking will be initiated to develop a water reservation rule for 19 lakes and the Kissimmee River system and its associated floodplain in the CFWI Planning Area."

Comment 101 (01/03/14) - What are the advantages/disadvantages of establishing water reservations versus setting minimum flows and levels?

CFWI RWSP Team Response *- The protection of water resources can be achieved through the reservation of water for the protection fish and wildlife or public health and safety (Section 373.223(4), F.S.). MFLs are implemented to prevent significant harm to the water resources or the ecology of the area due to further withdrawals (Sections 373.042 and 373.0421, F.S.).*

"The project includes a wetland treatment system to improve lake water quality prior to discharge. Increasing the operating level also restores the wetland function for several hundred acres of lands contiguous to Lake Hancock, and provides recharge to the Upper Floridan aquifer through exposed sinkholes along the upper river."

Comment 102 (01/03/14) - What are the plans to improve the water quality of Lake Hancock itself?

CFWI RWSP Team Response *- The wetland treatment system is designed to improve the quality of water discharged to the river, rather than return treated water to the lake. Feasibility studies conducted prior to the project concluded that an outfall treatment system was a more reliable and vastly more cost effective alternative. However, the increased wetland acreage surrounding the lake is expected to help the natural filtration process of water entering the lake. Additional information can be found on SWFWMD's website.*

"The City of Winter Haven recently completed a desktop feasibility study to evaluate the benefits of applying approximately 4 mgd of reclaimed water into conceptual RIBs near one of the city's wastewater treatment facilities (PB 2013)."

Comment 103 (01/03/14) - Are there any on-going studies to determine the absolute, most beneficial way to use the effluent from waste water treatment plants? One concern about RIB's is water quality and the impact on groundwater. Most domestic self-supply users don't utilize any form of water treatment and even low levels of contaminates could cause problems with color, odor, taste, and long term health issues. The use of reclaimed water for irrigation brings up concerns about water use efficiency. The 2010 SWFWMD Heartland RWSP gives the following example of the inefficient use of reclaimed water for irrigation. *"Customers tend to use more reclaimed water than potable water because reclaimed water is generally less expensive and not as restricted as potable water. For example, a single-family residence with an in-ground irrigation system connected to potable water uses about 300 gpd for irrigation. However, if the same single family residence converts to an un-metered flat-rate reclaimed water irrigation supply without day-of-week restrictions, it will use approximately two and one half times (804 gpd) this amount."* If reclaimed water is allowed to be considered a waste product, then disposal may be the main goal and not maximizing its beneficial use. There can be no debate that reclaimed water is "water-of-the-state" and it needs to be controlled and regulated as the valuable resource that it is. The raw water that enters a wastewater treatment plant is simply "source" water that was not consumed on its initial use. The fact that it is used as a transport medium to convey waste products to the wastewater treatment plant doesn't alter its original characterization. The use of reclaimed water is one area of conservation that has the potential for significant improvement in its ability to offset water withdrawals from original sources.

CFWI RWSP Team Response *- The referenced rapid infiltration basin (RIB) feasibility study was primarily a hydrologic analysis, and did not address treated water quality. Reclaimed water used in a RIB project would require advanced treatment to meet water quality regulations of the DEP, and would exceed the quality of water typically recharged through domestic septic systems.*

"As discussed in Chapter 6, ASR systems use injection wells to store seasonally available water supplies underground and recover water from these same wells when needed. ASR systems can function like an above-ground storage reservoir, but at less cost and much smaller geographic footprint."

Comment 104 (01/03/14) - Clearly the above statement is an overly simplified summary of ASR systems. As we all know the only aquifer that can actually store water is an unconfined aquifer. In a confined aquifer you can displace the existing water with a different water, but no increase in total water quantity actually occurs. ASR is most appropriate when there is a seasonally abundant, high quality water source available such a high river flows that occurs in an area where the destination aquifer contains water of a quality that is not suitable for consumptive use. There are many major problems with ASR systems that are documented in the scientific literature. In general, the past record of times when man has tried to artificially manipulate natural systems to his benefit has been very poor. There may be more effective, less risky options available for accomplishing these same goals.

CFWI RWSP Team Response *- ASR has proven to a cost effective tool for water management; particularly when the land footprint for a large storage feature (such as a reservoir or impoundment) is otherwise not available or feasible. ASR systems are currently used for storage and subsequent recovery of a variety of waters, including highly treated potable*

water, reclaimed water, groundwater and partially treated surface water. Implementation of any ASR project requires detailed evaluation of site-specific hydrogeologic conditions, to determine if a transmissive storage zone is overlain by a competent confining interval.

"The Districts, Orlando Utilities Commission, and Tampa Bay Water contributed to a Water Research Foundation (2011) study on zero-liquid discharge technology."

Comment 105 (01/03/14) - Did this study identify a reliable landfill site that would accept high tonnages of these highly soluble salt crystals?

CFWI RWSP Team Response *- The Electrodialysis Metathesis (EDM) process evaluated in the study generates segregated concentrations of gypsum, calcium carbonate, and dolomite. In other applications, the EDM process is used specifically to produce these minerals, with water being a byproduct. The study assumed that the minerals produced would have some commercial value and therefore would be cost neutral.*

CHAPTER 9 FUNDING FOR WATER SUPPLY AND WATER RESOURCE DEVELOPMENT PROJECTS

"Currently, the Districts fund both water resource and water supply development projects."

Comment 106 (01/03/14) - Why do water management districts fund water supply development projects? I am assuming that the funds that are available to WMD's are one very limited and two are the direct result of taxes. I am assuming that WMD's don't actually generate much revenue of their own. If we make the assumption that most of the projected increase in water demand is a direct result of population growth, isn't the use of WMD's funds to help pay for water supply development projects simply the use of public money to subsidize residential developers? Why do residential developers need government subsidies? Is this the best use of public money? I know that I would prefer that WMD's use their funds (my money) to improve water quality, restore spring flows, mitigate harm to wetlands and similar activities that directly protect our environment. If a residential developer choses to develop a property that is located in an area that has limited water availability, the cost to construct a water supply project to meet his development's demand should be included in his cost evaluation for the project. Why should the citizens of the area be expected to pay for these costs through their taxes?

CFWI RWSP Team Response *- Pursuant to Section 373.705, F.S., the proper role of the Districts in water supply is primarily planning and water resource development, but this does not preclude them from providing assistance with water supply development. Water supply development projects that are consistent with the relevant RWSPs and that meet one or more statutory criteria shall receive priority consideration for state or District funding assistance.*

Section 373.707, F.S. states AWS development must receive priority funding attention to increase the available supplies of water to meet all existing and future reasonable-beneficial uses and to benefit the natural systems. It is further stated in the public interest that county, municipal, industrial, agricultural, and other public and private water users; the FDEP; and the Districts cooperate and work together in the development of AWS to avoid the adverse effects of competition for limited supplies of water. Public dollars or services provided to private entities for AWS development may constitute public purposes that also are in the

public interest. District funding allocations for AWS development are set annually with the approval of their respective budgets.

"*The State of Florida and the Districts have, in the past, provided funding assistance to local water suppliers developing alternative water supplies (AWS) and measurable water conservation programs through the Water Protection and Sustainability Program (WPSP). Identification of an AWS project in this CFWI RWSP makes that project eligible for future funding, although funding is not guaranteed per Subsection 373.707 (8)(h), F.S.*"

Comment 107 (01/03/14) - Ignoring the "official" definition of an alternative water supply, what is the purpose or benefit of developing an alternative water supply? Isn't the purpose of developing an alternative water supply the prevention of harm to a water resource and its related natural systems? A definition that does not include this stipulation is really missing the whole point. The current definition includes so-called examples of what would be considered alternative water supplies but there is no guarantee that the development of any one of these listed "supplies" will prevent harm or even lessen existing harm. As an example, brackish water is listed as a supply. What is the correlation between the saltiness of a water source and its availability to be used without causing harm? Obviously there is none. Also, reclaimed water is not a new source or new water supply. It's simply the extension of the efficient use of water that was not "consumed" during its initial distribution. The use of reclaimed water is all about water conservation. In summary, the adding of "examples" of alternative water supplies to the definition is both confusing and misleading. What's important is can they be developed without causing harm or not and that's not even mentioned in the current definition. Simply because a source is non-traditional doesn't make it any good.

CFWI RWSP Team Response *- It is likely that all sources of water, alternative as well as traditional can be harmed by overconsumption. Therefore, the review of CUPs includes the mandate to protect the water resource from harm (Section 373.219, F.S.). As addressed in Chapter 4, the traditional sources of fresh water were found to be limited in a number of areas within the CFWI Planning Area. Section 373.707 F.S. encourages the funding of alterative water supply projects to increase the available supplies of water to meet all existing and future reasonable-beneficial uses and to benefit the natural systems and list the types of projects that may qualify for assistance. See response to your Comment 64.*

"*"(1)(a) The proper role of the water management districts in water supply is primarily planning and water resource development, but this does not preclude them from providing assistance with water supply development.*"

Comment 108 (01/03/14) - Would it make sense to assume that this statement would imply that the WMD's priority should be to fund water resource development and that the funding of water supply projects should only be done if and when WMD's have exhausted all required water resource development projects? Isn't this approach supported by the fact that all of the actual water supply development projects included in the CFWI RWSP were submitted by the water suppliers and not the WMD's? Simply put, WMD's figure out where water is available and water suppliers figure out how to utilize the water supplies that have been identified.

CFWI RWSP Team Response *- The water supply development projects included in the RWSP were proposed by both water suppliers and the Districts. Utilities will have to select a project or projects to meet their needs and they can select from this list in the plan or develop different projects. Generally, utilities fund their projects but it is important to note that Section 373.707 F.S. encourages the funding of alterative water supply projects to increase the available supplies of water to meet all existing and future reasonable-beneficial uses and to benefit the natural systems.*

"*If funding is continued by the Legislature, the state's WPSP could serve as a significant source of matching funds to assist in the development of AWS.*"

Comment 109 (01/03/14) - Looking at the SWFWMD's FY13-14 budget, I only see $439,000 revenues listed for Florida's Water Protection and Sustainability Trust Fund. Assuming a $10 per gallon capital cost expenditure to develop an alternative water supply project; this fund would only produce 0.044 MGD. This is better than nothing, but not much better.

CFWI RWSP Team Response *- The Water Protection and Sustainability Program (WPSP) remains a mechanism available to the State Legislature to appropriate funding for water supply and resource development projects within the annual State budget. While large appropriations haven't occurred in recent recessionary years, the WPSP could be utilized in the future as funds are identified by the Legislature.*

"*The most difficult challenge will be identifying cost-effective and economically efficient methods of meeting the needs of new self-supplied users (whose ability to pay ranges widely) when the traditional, lower cost sources of water are no longer readily available.*"

Comment 110 (01/03/14) - If the determination is made by WMD's that easily obtained groundwater can no longer be withdrawn at locations convenient to randomly located self-supplied users then clearly this will be an obstacle to the expansion of these types of agricultural/industrial endeavors. Local governments will need to determine the value of these agricultural/industrial endeavors and determine the economics of supplying their water needs either through direct or indirect means. It is not the WMD's function to make these determinations as WMD's are not in the business of growth management or economic development. The number one priority of WMD's in the context of this plan is resource protection.

CFWI RWSP Team Response *- Responses to these comments have been addressed previously.*

CHAPTER 10 CONCLUSIONS

"*The RWSP concludes that the current and future water demands of the CFWI Planning Area can be met through the 2035 planning horizon, while sustaining the water resources and related natural systems, through conservation, implementation of management measures, and implementation of water resource development and water supply projects identified in this RWSP.*"

Comment 111 (01/03/14) - As indicated with comments from preceding chapters I have many concerns regarding the CFWI RWSP. One concern is the short time frame of the

planning horizon. Only looking at a twenty year planning horizon may result in the implementation of many Band-Aid, short term, "fixes while ignoring longer term, more permanent "real" solutions. A second concern is that the list of projects that "demonstrate" that future demands can be met without causing harm is based more on wishful thinking and speculation rather than hard science. A third concern is the fact that the so called 850 MGD of allowable withdrawals from the FAS doesn't address the fact that this rate of withdrawal is causing environmental harm. I don't see anything in the plan that "fixes" MFL's that are not currently in compliance or wetlands that have been lost or are currently under stress. A forth concern is the lack of consistency of approach among the three WMD's that have developed this plan. It appears that they do everything differently from how they calculate demands, how conservation is addressed, how much and which projects receive funding assistance, how MFL's and water reservations are determined and the list just goes on and on. A fifth concern is the fact that the plan does not address the regulatory changes that will be required to implement the findings of the plan. Once the old CFCA Action Plan expired on December 31, 2012, only the portion of the CFWI Planning Area that is within SWUCA has any special regulatory protection. The plan does indicate that the planning area will be listed as a water use caution area, but doesn't list the regulatory changes that this designation will require. A sixth concern is that the plan does not address the process that will be used to reduce current water use permits by nearly 200 MGD. The modeling work demonstrates the additional harm that will result if everyone withdrew water at their permitted capacity, but it says nothing about how these permits will be reduced so that they total the 850 MGD maximum. This report is very important in that it makes "official" what those of us that have lived in this area for the past 30 plus years already knew. That fact is that water levels are low and are unlikely to recover without intervention. A seventh concern is that the Plan fails to address the fact that our current groundwater permitting system does not work. The current system has failed to sustain the water resource known as the Floridan Aquifer and its related natural systems, but the plan provides no guidance nor provides any assurances that the permitting process will be modified to prevent this from happening to other water sources. The current practice of placing the responsibility of "proving" that the granting of their water use permit will not result in harm solely on the applicant's shoulders is inefficient, expensive, and naive.

CFWI RWSP Team Response *- Responses to these comments have been addressed previously. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.*

"The Solutions Planning Phase work has been initiated and will include assessing the balance between additional groundwater availability through management measures, amount of AWS and water conservation, and the costs to implement them."

Comment 112 (01/03/14) - What "authority" will the solution planning team have? Are they going to fine tune the list of projects, modify the conclusions of the Draft copy of the

CFWI RWSP, or what exactly is their role at this point of the process? Basically, what is the solution team going to do that wasn't already done as part of this plan? How will their report be used? Will it supersede this plan or compliment it? Will the public have an opportunity to see what the solution team is doing prior to the issuing of a report?

CFWI RWSP Team Response *- Responses to these comments have been addressed previously.*

"A Regulatory Team will establish consistent rules and regulations for the three Districts that meet the collaborative process goals and implement the results of this CFWI planning effort".

Comment 113 (01/03/14) - The CFWI RWSP basically defined the problems that will need to be addressed. When will the Regulatory Team have a draft copy of their work ready for review that indicates the proposed solutions to these problems? It's also apparent that several Florida Statutes will need to be modified in order to fully address the issues identified in the plan. When will the Regulatory Team be ready to present this revised wording to the FDEP Office of Water Policy?

CFWI RWSP Team Response *- The Regulatory Team has already developed language that is being used in currently issued CUPs. For additional information regarding the Regulatory Team, please see cfwiwater.com.*

CHAPTER 11 RECOMMENDATIONS/FUTURE DIRECTION

"*"This RWSP concludes that the current and future water demands of the CFWI Planning Area can be met through the 2035 planning horizon, while sustaining the water resources and related natural systems, through conservation, implementation of management strategies and measures, and implementation of water supply projects identified in this RWSP."*

Comment 114 (01/03/14) - I realize that the above statement is the conclusion of this plan, but what is there in the plan that would lead the public to actually believe that this is possible? We know that the SWUCA recovery strategy has yet to prove that it can accomplish its stated goals. The CFWI RWSP spends as great amount of space explaining why all of the numbers are riddled with uncertainty and challenges that are yet to be resolved. To me a more realistic conclusion of this plan is that it's now confirmed that a very real water supply problem exists and that solutions will be very difficult to identify. One issue that is not discussed in the plan is how do WMD's address water use permit applications, that are located in the planning area, right now, today. Should they be processed in accordance with existing regulations knowing that they are not adequate to protect the resource? Should they be placed on "hold" until the new regulations can be adopted? These are the types of questions that must be resolved sooner rather than later. The CFWI RWSP is an excellent first step in the acknowledgement of a real problem. The real question is how will water management districts respond to this challenge and can they truly work together as a coordinated team to protect Mother Nature realizing that she has no boundaries.

CFWI RWSP Team Response *- Responses to these comments have been addressed previously.*

Comment 115 (01/20/14) - I am attaching a document that shows the recommendations from the 2008 Water Congress. Could the people responsible for the generation of the CFWI

RWSP review this document and indicate how the CFWI RWSP is consistent with the 18 consensus recommendations and where there is inconsistency provide a narrative that indicates why what is being proposed in the RWSP is a superior approach to water supply management?

Century Commission
Third Annual Report to the Governor and Legislature

Recommendations from 2008 Water Congress

In September of 2008, delegates from government, industry and non-governmental sectors from around the state convened in Orlando for a Water Congress to address issues related to water conservation, re-use, ground and surface water supply, desalination and water policy administration. A total of 18 consensus recommendations were identified by the delegates, with four recommended priorities voted on with majority consent. The Century Commission believes that the four priorities should be acted upon without delay. The four consensus priority recommendations offered by the delegates of the 2008 Water Congress are as follows:

1. Reinstate the annual state funding for alternative water supply development and water quality improvement (i.e., SB 444 (2005) funding to be matched by Water Management Districts and local governments/ utilities). Make SB 444 funding a recurring source of annual state funding for alternative water supply development and reinstate original funding levels at a minimum.

2. Support regional partnerships, incentives and cooperative approaches to addressing long-term water sustainability for Florida. The Water Management Districts, the FDEP and local governments should aggressively identify opportunities and develop incentives for establishing multi-jurisdictional utility arrangements or water supply authorities and engage in other areas where partnerships should be beneficial and cost effective to the public.

3. Amend, as necessary, any statute, rule or policy so that quantifiable water conservation best management practices are considered an "alternative water supply" and are equally as eligible for funding as capital facility expansion proposals.

4. Set a per capita target or goal for water use and quantifiable best management water practices and provide a stable funding base for the Conserve Florida program directed by Sect. 373.227, F.S., including the statewide water conservation clearinghouse for public water supply.

After careful review and discussion of all eighteen recommendations, the Century Commission has determined that the following recommendation related to reclaimed water should also be acted upon and added as the fifth consensus priority.

5. While protecting water quality, maximize the beneficial use of reclaimed water and improve upon the capture and storage of excess water. Recruit and connect large industrial users to reclaimed water systems to reduce demand on existing and future potable systems. It is recommended that a goal of 100% beneficial and cost effective reuse of wastewater from publicly owned wastewater treatment facilities be established

for the year 2030. The management of wastewater needs to continue to evolve from a disposal problem to a valuable water supply opportunity.

The product of the two day Water Congress was the creation of eighteen consensus recommendations. The remaining thirteen recommendations are listed below.

1. Achieve dramatic improvements in landscape irrigation efficiency by requiring use of the recommendations found in the report, *Landscape Irrigation and Florida Friendly Design Standards*, (where applicable) as a condition of

- Consumptive Use Permits issued by Water Management Districts,
- Development orders issued by local governments,
- Development orders for Developments of Regional Impact as reviewed by Regional Planning Councils,
- Land use amendments reviewed by the Department of Community Affairs,
- Changes to land development regulations,
- Environmental Resources Permits issued by the Florida Department of Environmental Protection

2. Coordinate public information efforts statewide regarding water conservation, water quality, sustainability and energy using the most effective methods of conveying the messages and measuring the efficacy of the public information campaigns. Examples include but are not limited to:

- Landscape water conservation must be underscored by science based, practical and easily understood recommendations for homeowners and do it yourself gardeners to follow;
- Establish public and stakeholder outreach programs regarding costs, environmental advantages and effectiveness of water saving technologies;
- Educate all sectors regarding the interdependency of upland and wetland systems.

3. Amend Florida law to prohibit neighborhood organization and local ordinances from restricting the use of Florida friendly landscaping.

4. Support the development of robust incentive based cooperative funding programs by the Water Management Districts to encourage the development of alternative water supplies and implementation of conservation measures, including the maximum use of reclaimed water that will require seeking state and federal funding to complement water management district funding initiatives.

5. Amend the Florida Constitution to raise the millage cap for the Northwest Florida Water Management District.

6. Regulatory agencies should require a high level of use efficiency as a condition to incentives and long term permitting assurances.

7. Create incentives for private land owners to capture and store water.

8. Optimize the use of alternative water supplies which take and store peak surface water flows and also restores the natural system.

9. Minimum flows and levels (MFLs) must be set for all surface water bodies where consumptive use permits are sought; natural groundwater levels should not be ignored to the detriment and loss of the dependent natural ecological systems (wetlands and spring systems for example). Natural system ecological needs must not be compromised to meet the public water supply needs. (If MFLs are not achieved a recovery strategy should be implemented.)

10. Support Florida specific research on climate change and water management inter-relationship to better understand the state's water vulnerabilities and make appropriate and effective adaptations to water planning regulatory and financial programs. This research should include consideration of:

- Energy and greenhouse emission consequences of water supply activities
- Increased water use efficiencies to reduce carbon footprints
- The Protection of drinking water and wastewater infrastructure against the threat of rising sea level.

FDEP, Water Management Districts, the Florida Energy and Climate Commission and water managers should fully incorporate climate change implications into their water planning, regulatory, and financial assistance programs and should fully consider the energy and greenhouse gas emissions consequences of water resource and supply activities.

11. Make creation of new water storage (including new reservoirs, ASR, and wet season storage) a statewide priority by prioritizing funding, land acquisition, and needed regulatory reforms (for ASR).

12. Manage stormwater runoff that is discharged into municipal stormwater systems as a valuable water source to be used or reused for conservation purposes such as community irrigation, not as a waste product requiring quick disposal.

13. Encourage Low Impact Development practices as well as other source control measures to enhance ambient water quality in receiving water

CFWI RWSP Team Response *- Many of the findings of the 2008 Water Congress have already been implemented and are consistent with the findings in Chapter 11, Recommendations. These recommendations will be further developed by both the Solutions Planning and Regulatory Teams.*

Comment 116 (01/23/14) - The draft issue of the CFWI RWSP discusses the Peace Creek Watershed Management Project, but fails to mention latest studies or provide any indication as to the status, expected completion dates or any real indication that this is a viable, ongoing project. This section needs to be updated to indicate what the goals are of this effort and when we can expect to see some actual results. I have attached an executive summary from a 2009 PBS&J report that describes this project in more detail.

A regional water supply plan can't be a document that simply lists potential or ongoing projects. It is my understanding that this RWSP is intended to be a "comprehensive" effort that attempts to address water supply and preservation of our water related natural systems as an integrated "system". In order for it to be a " comprehensive plan" each project must be viewed as a piece of a regional puzzle. Each project must list specific goals and objectives that clearly indicate how the completion of the project will mesh with the overall goals of the "plan". In keeping with that concept, an overall project schedule must be developed that clearly shows the "connectivity" of each project. This schedule will then indicate the order that each project must be completed and thereby establish a "critical path" for the "plan". It also must list the person, department, WMD, etc. responsible for completing the project in a manner that both meets the project's goals and schedule

Sustainable Water Resources Management: *a conceptual plan for restoring and protecting the water resources of the Peace Creek Watershed near Winter Haven, Florida*

The City of Winter Haven has long realized that water plays a special role within the community. With 50 lakes inside or touching the City, and being at the top of both the Peace River watershed and the Floridan aquifer basin, it is critical that the community use water for public supply and natural resources before it leaves the system. To some degree, this circumstance exists for all of the communities within the Peace Creek watershed. The unique characteristics of this area require a special approach.

In January, 2009 Winter Haven hired PBS&J to help develop a Sustainable Water Resources Management Plan. The primary objective of the plan is to proactively protect and enhance water resources for long-term *human and environmental* use. The backbone of the plan is an interconnected network of lakes, canals, wetlands, aquifers, and 'nature parks', designed to store water long-term to meet future needs for water supply, water quality, flood protection, and the preservation of natural resources.

Because Winter Haven and the Peace Creek watershed are located at the headwaters of both the surface water and groundwater systems, water resources must serve all uses before it leaves the watershed. Historical alterations such as the construction of the Peace Creek Drainage Canal, the connection of lakes for navigation, and declines in the Floridan Aquifer from regional pumpage, have reduced water levels in lakes and the underlying aquifers by approximately 10 feet. The ability to recharge the lakes and aquifer has also been compromised by altering the land for urban development. This area of high aquifer recharge historically helped maintain water levels and water quality in the lakes. Restoring the hydrology of the watershed to increase the local storage of water is critical to meeting the long-term water needs of the area. It changes the thinking from 'getting rid' of water, to treating water as a special resource.

Figure 1. 1856 military map (J.C. Ives), showing Lake Hamilton and the wetland slough and broad floodplain south of the lake, flowing to Peace Creek.

1

This conceptual plan proposes an investment in the watershed's *natural* infrastructure (lakes, wetlands, recharge areas, and aquifers) as a means to manage water as opposed to *engineered* infrastructure (reservoirs, pipes, far away water supplies). Using natural infrastructure to provide multiple benefits results in a less costly, more efficient water storage and delivery system for all future uses. In contrast, the present hydrologic system is primarily operated to 'get rid' of water for flood protection.

To assist in developing the plan, PBS&J convened a number of meetings with key stakeholders in the community, including City and County staff, members of the City's Lakes Advisory Committee, concerned citizens, the Lake Region Lakes Management District and staff from the Southwest Florida Water Management District. The stakeholders provided key insights into how water historically moved through the watershed and how alterations within the watershed have changed the hydrology. One of the key realizations of the meetings is that the City of Winter Haven and the Peace Creek watershed are poised to grow significantly in the next decades. Once these alterations occur, many opportunities for using the existing natural infrastructure may be lost.

PBS&J and the University of Florida, Howard T. Odum Center for Wetlands, used the information provided by the stakeholders to develop a conceptual plan for increasing water storage throughout the watershed (**Figure 2**). Some of the key components of the plan include:

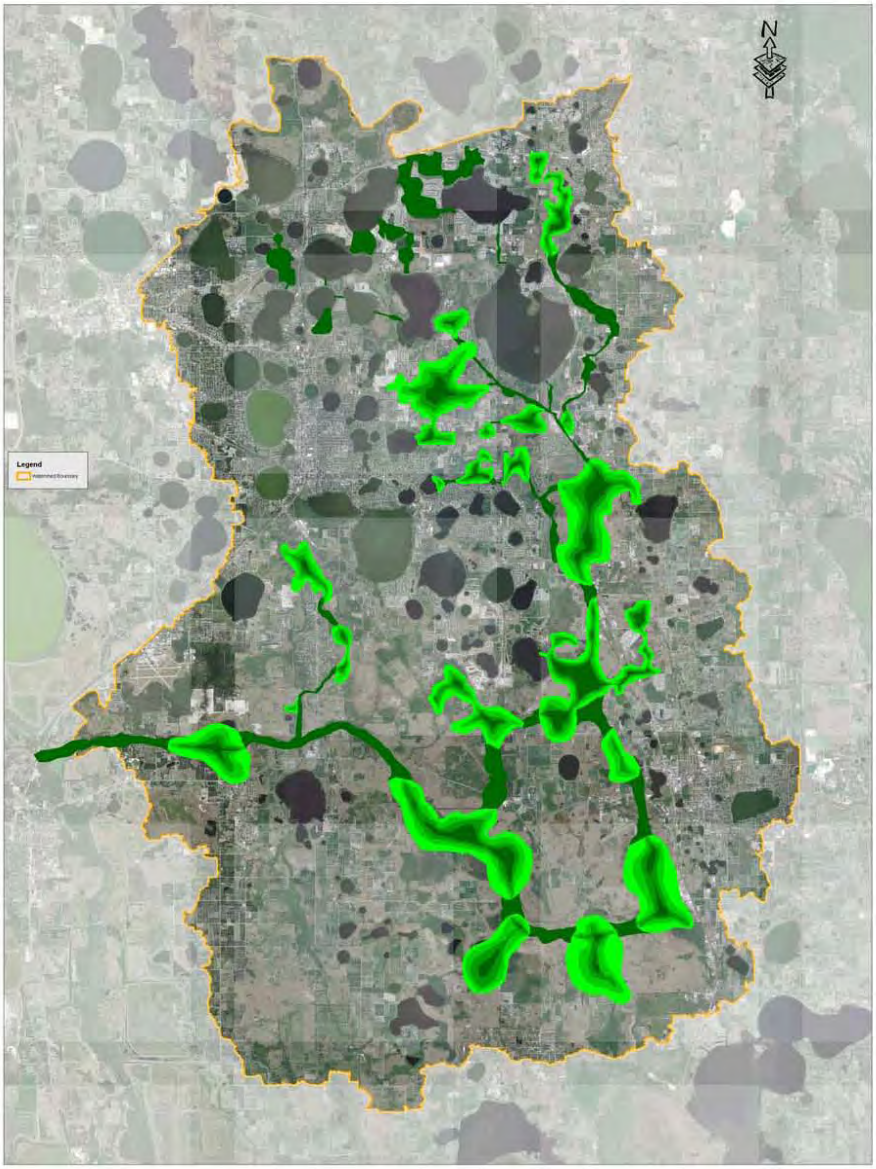
- *In the upper portion of the watershed, which encompasses the downtown area of Winter Haven and the ridge areas, rainwater will be directed to rain gardens, swales, and small isolated wetlands to recharge the surficial aquifer and provide water quality treatment. Instead of reuse water discharging directly away from the system to the Peace Creek, it will also be allowed to infiltrate into the soil. This will increase water levels in the surficial aquifer, increase groundwater flow into the lakes, increase water levels in the lakes and increase recharge to the Floridan Aquifer.*
- *The middle portion of the watershed, currently dominated by the Peace Creek Drainage Canal and the Wahneta Farms Drainage Canal, will be transformed into a series of sloughs and floodplains intended to slow the movement of water through the system to provide water quality treatment and recharge. During peak rainfall events, it will be designed to discharge floodwaters very quickly.*
- *The lower, downstream portion of the watershed, encompassing the "southern loop" of the Peace Creek Drainage Canal and the downstream portions of the creek leading to the Peace River, will be transformed into large water storage areas and broad floodplains to manage large hydraulic loads of water and provide flood attenuation.*

Regional Benefits

Because the Peace Creek watershed is at the top of the groundwater and surface water systems, it is critical that the water resource needs of the community and natural resources are met before the water leaves the system. It is also significant, however, that restoring the watershed also provides benefits to all downstream interests. Presently, the Peace River and many lakes within the watershed do not meet established minimum levels due to groundwater pumpage and hydrologic alterations. This is one of the reasons that the Southern Water Use Caution Area was established. By restoring this critical headwaters area, the long-term process of improving base flows to the Peace River, providing more water for lakes, and restoring recharge to the Floridan aquifer for all downstream users can begin.

2

Figure 2. Conceptual Restoration Plan of the Peace Creek Watershed



3

Implementation

With an ever changing economic and political climate, new partnerships between government and private interests will need to emerge. This conceptual plan establishes the framework for these partnerships. The plan is poised to use existing governmental tools as an economic incentive to insure that water resources play a key role in our future.

The primary tools needed to begin implementing the plan include:

- Land use planning with water as a key consideration;
- Creating incentives for future development to fully consider water management;
- Mitigation banking to create water storage;
- Partnerships with land owners and governmental agencies so that floodwaters can be stored in historically wet areas; and
- Using water storage areas as amenities for development with a series of interconnected nature parks with trails, boardwalks and open space.

The conceptual plan includes all or parts of the following communities: Winter Haven, Auburndale, Lake Alfred, Haines City, Lake Hamilton, Dundee, Lake Wales, Bartow, Eagle Lake and Polk County. Each of these communities relies on water resources for the future of its economy. Each community also has a role in insuring that water is a key consideration in how we move forward in the future. Downstream communities along the Peace River, Charlotte Harbor and all that use the Floridan aquifer will also benefit.

Sustainability

In many communities, the definition of sustainability includes economic and cultural sustainability in addition to that of natural environment. Although restoring the Peace Creek watershed provides local and regional benefits, the proposed plan also enhances economic and cultural sustainability. By incorporating restoration projects as landscape, open space and recreational improvements, the plan creates improved economic development and cultural opportunities. The interconnected series of water storage areas throughout Winter Haven and the Peace Creek corridor would become nature parks with trails and scenic corridors. These amenities will help attract economic development to the region as well as provide world class natural resource based recreation. This unique combination of natural systems management with future economic development is what makes the plan especially viable during changing economic times.

One of the underlying principles of the plan is this: if we do not move decisively to protect water today, the future costs for water supply, water quality and flood protection will have more of an economic, social and environmental impact in the future.

More detailed designs of the various elements of the conceptual plan will be presented to the community in a final report that will be completed in April, 2010. For more information, please contact Mike Britt, Director, Natural Resource Division, City of Winter Haven, at mbritt@mywinterhaven.com, or 863-291-5881.

4

CFWI RWSP Team Response *- See responses to your Comments 33 and 111.*

David Wiles, Concerned Citizen (01/16/14)

Comment 1 - The District needs to consider a coordinated modeling in the north Florida area between SRWMD and SJRWMD, similar to the CFWI coordinated modeling effort. This will appropriately allow examination of Jacksonville-related pumping impacts in the Suwannee area.

CFWI RWSP Team Response *-There is currently an ongoing effort between SJRWMD and SRWMD, which will result in a joint North Florida RWSP and includes the North Florida South East Georgia (NFSEG) Groundwater Flow Model.*

Comment 2 - Mandatory water conservation is needed for existing projects.

CFWI RWSP Team Response *- Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.*

Comment 3 - Allocations and actual use need to be examined to see if all of an allocation is needed or if it can be capped.

CFWI RWSP Team Response *- A Regulatory Team has been established that will: develop options for consistent regulations as well as identify legislative changes, as needed; implement the solution strategies identified through the CFWI process; assist with resource recovery strategies; and provide for equitable and predictable review of CUP applications among the Districts. Additional information regarding the Regulatory Team can be found at cfwiwater.com.*

Comment 4 - Desalination needs to be looked at as an option.

CFWI RWSP Team Response *- Water treatment via RO is discussed as a brackish water source option in Chapter 6 (page 108) and as a seawater water supply development option in Chapter 7 (page 130).*

Comment 5 - ASR use in north Florida is questionable because of the geology.

CFWI RWSP Team Response *- ASR is a viable option in the CFWI Planning Area.*

Comment 6 - The WSIS failed to look at the Ocklawaha River flow and acknowledge that it was part of the St. Johns River system.

CFWI RWSP Team Response *- The WSIS did look at the Ocklawaha River as an input into the St. Johns River. Information regarding the WSIS can be found on the SJRWMD's website.*

Jimmy Orth, St. Johns Riverkeeper Executive Director (01/16/14)

Comment 1 - We want a good plan and one that promotes water conservation. Water conservation needs to be a priority and mandatory. The plan does not prioritize water conservation. We do not have a water supply problem; we have a water use problem in this state. The District should go back to the nine rule enhancements. The WSIS is a good study, but parts of it are completely ludicrous. The study was on water supply, and did not address

water quality. There were limitations to the study. Toxic algal blooms are occurring on the river and surface water withdrawals will exacerbate the blooms.

CFWI RWSP Team Response *- The RWSP does address conservation and the WSIS did address water quality. Potential water quality effects arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent. The WSIS concluded that the effects of increased residence time on algal bloom density and duration was negligible, even under withdrawal scenarios that exceeded the maximum proposed allowable surface water withdrawal.*

Jim Callahan, Environmental Stakeholder (01/19/14)

Comment 1 - POLLUTION THREATS TO LONG TERM POTABLE WATER SUPPLY As Chair of the Central Florida Democratic Environmental Caucus, I have been investigating pollution issues in the Parramore neighborhood of Orlando. As a former Forecasting Analyst for OUC, I am familiar with the refrain that OUC draws its water from the lower Floridan aquifer. This paragraph from a January 2011, Orlando Weekly article, "Poison in the Well" is a good summary of the situation:
"The coal-gasification plant (also called a manufactured gas plant) left a mile-long swath of tar-tainted water percolating through the Upper Floridan aquifer beneath downtown Orlando. The EPA says the plume of contamination is not an immediate health hazard because the city gets its water from wells drilled deep into the Lower Floridan aquifer, which is separated from the Upper aquifer by a “confining layer” of rock. Though the county uses water from the Upper Floridan, hydrologists say its water sources are not within range of the plume. Activists, however, say it could take decades to clean up the contamination in the Upper aquifer, and at the rate the region consumes water, it may soon need to tap into the Upper aquifer to meet demand."
http://orlandoweekly.com/news/poison-in-the-well-1.1086304

Sanford has a similar former gasification plant site. The railroads which supplied coal to the gas plants used arsenic to control weeds until the advent of herbicides such as RoundUp. Cattle dips are another source of arsenic contamination.

Historic urban activities generated lead pollution from lead paint, gasoline with lead additives and lead-acid automotive batteries. Discarded ammunition at pistol ranges may be another source of lead contamination.

A recent study, by Dr. Russ Butler of Adventist University at Florida Hospital found high levels of iron in potable wells used by Bithlo residents.

The Central Florida Water Initiative did note the threat from salt water intrusion and climate change, but should also note the threats from historic pollution found in Superfund (publically funded cleanup efforts) and Superfund Alternative (privately funded cleanup efforts) and ongoing major point sources of pollution such as sewerage treatment plants and pulp and paper mills along the St John River. Sewage and stormwater runoff contribute to nutrient pollution leading to fecal and algal blooms. Can Lake Apopka be considered a potential water supply given its well known pollution issues?

The question is how much does historic and ongoing pollution reduce our potential water supply?

CFWI RWSP Team Response *- There are other state and local programs that deal with surface and groundwater pollution. Water Quality was investigated as part of the RWSP analyses from withdrawal effects. Proximity to pollution sources is evaluated during CUP review.*

Harriett Jones, Environmental Stakeholder (01/19/14)

Comment 1 - I OWN PROPERTY IN VIERA. THE LANDSCAPING IS RESTRICTED SO THAT EVERY HOUSE LOOKS LIKE IT IS IN A GOLF COURSE. SPRINKLER HEADS OFTEN ARE WITHIN 18 INCHES OF EACH OTHER WITH NO PLANNING BY THE BUILDERS TO IMPLEMENT CONSERVATION MEASURES. THERE ARE NO BUFFERS ALONG THE WATERWAYS TO REDUCE POLLUTION FROM RUNOFF. RESIDENTS ARE ALLOWED TO WATER LAWNS TWICE A WEEK WITH SOAKED MUSHY AREAS RESULTING AND THICK LAYERS OF LAWN WITH NO SOIL LEFT DUE TO OVERWATERING. HOW IS THE STATE TO IMPLEMENT VOLUNTARY CONSERVATION METHODS? STRICT METHODS OF WATER CONSERVATION HAVEN'T BEEN IMPLEMENTED AND THE CITIZENS DO NOT THINK THIS ADMINISTRATION IS SERIOUS ABOUT PLANNING FOR CLEAN WATER.

CFWI RWSP Team Response *- The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping. Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.*

Gina Evers, Concerned Citizen (01/22/14)

Comment 1 - Although the problems we face are certainly not simple, one thing is simple- water is the most important resource on our planet. We can live without oil, without many food items being grown, without malls, etc., but we will die in less than a week without water. Water is a public resource, belonging to all the citizens. Given the nature of people though, it is the government's duty to make decisions in the best interest of all people, not just developers or those with money. I once read that given how drastically we are depleting the ocean's resources, that one day in the not so distant future we will be eating jellyfish and pleased to do so. Well, one day in the not too distant future, if we don't make hard decisions now, we will be drinking reclaimed gray water and being glad to get it. So, here are my thoughts- 1. Too much water is wasted on lawns. We need to regulate water usage or develop a tiered price structure that would strongly discourage excess water use. If people want to worship green lawns, they need to move to another state because we can't afford to accommodate their wasteful whims.
2. Deny future water bottling permits and cut back those now in operation. At the very least charge them so they decide to go elsewhere. Why is a for profit company allowed to take and sell OUR water anyway?
3. No one, not even rich billionaires, gets to pump millions of gallons of water a day- not for cows, not for industry, nothing. Again, these individuals are not looking to pump their water, they would be pumping OUR water. Not ok.

4. Enough studies, enough stalling, enough kicking the can down the road. We know how water is removed, we know what pollutes the water, we know what has to be done. Just do it or at least set up a system that works, starting immediately, to solve the problems.

Bottom line, in 25 years, virtually no one will remember the names of the politicians, developers and ego-centric moguls who are putting pressure on government to cut the powerful breaks at the expense of the environment and all the rest of us. What future citizens will live with is the disastrous results if those of you with power, fail to act, fail to do the right thing and bow to those who are only motivated by their own agendas and benefit.

Thank you for your kind attention to my remarks. May you carry the vision of the environment you want for your children and grandchildren in your mind as you put forward your decisions.

CFWI RWSP Team Response *- The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping. Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.*

Applicants have to meet the criteria within the Applicants Handbook for CUP applications including the public interest test. Explanation of the permit review and meeting the reasonable assurances required under the CUP process can be found on the District's respective websites.

The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD,FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

In Addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information on the teams can be found at cfwiwater.com.

C Barks, Concerned Citizen (01/22/14)

Comment 1 - Sorry, but am against this proposal totally. Every time someone comes up with a new plan or board we end up with a new tax to go along with it. I already pay for TWO water districts and am tax poor because of the Lake County Commissioners. We do not need more of our money being taken to fund another useless committee, etc. that is already being addressed by existing boards or committees. And don't even bother saying that no there would be no new taxes to fund it.....there are too many instances of that already that

prove if you have a new board you are going to want funds to pay the board members. So, again, absolutely, unequivocally NO, NO, NO, NO!!!!!!!!!

CFWI RWSP Team Response *- Thank you for your comment.*

Bob Ulevich, St. Johns Improvement District (01/23/14)

Comment 1 - Solutions need to look outside the drawn project area. The Flood Control Act of 1954 attempt at resurrection through a regional attenuation project aka the "re-connection of the SJRWMD & the SFWMD in western Indian River and St. Lucie Counties and eastern portions of Okeechobee/Osceola Counties and associated projects, has been documented by both WMD's as having multiple benefits. i.e. a new supply source/ alternative water supply having the potential for the storage and distribution of hundreds of thousands of acre -feet of surface water. To not include a project of this potential benefit because it may line outside a designated -project line --is to ignore the potential positive regional water supply and environmental benefits.

CFWI RWSP Team Response *- The WSO Subgroup worked with utility representatives to prepare a draft list of potential water source options available to water users within the CFWI Planning Area. Completion of the RWSP does not mark the end of the CFWI effort. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD,FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.*

David F. Sinton, Commissioner, Town of Melbourne Village (01/24/14)

Comment 1 - I have reviewed the CFWI draft RWSP. On page 173 in the SEAWATER paragraph you suggest the Indian River Lagoon is a source of seawater. After all the concern for and publicity about the IRL during the last year this strikes me as insensitive and misguided. I would request that the any reference to the IRL as a source of water of any type for Central Florida should be deleted from your report. We have our own problems.

CFWI RWSP Team Response *- Indian River Lagoon has been removed from Page 173.*

Comment 2 - I am also concern about relationship of the CFWI draft RWSP and the SJRWMD water supply plan for which hearings are now being held? Could you address this issue in your final report.

CFWI RWSP Team Response *- The information in the SJRWMD District Water Supply Plan (DWSP) for Region 3 was taken directly from the CFWI RWSP. SJRWMD has acknowledged that if there are discrepancies, the CFWI RWSP will govern and language reflecting this will be added to the SJRWMD DWSP. Responses to Comments regarding the SJRWMD DWSP will be addressed in a separate SJRWMD DWSP Comments / Responses document and efforts to achieve consistency with the CFWI RWSP are underway.*

Linda Bystrak, President, OVAS (01/24/14 , 02/05/14, 02/19/14 & 02/20/14)

This letter of concern comes from the Oklawaha Valley Audubon Society (OVAS), which represents over 800 member households within Lake and Sumter Counties and The Villages. It lists our concerns over the proposed CFWI plan that includes parts of Lake County, the Wekiva Basin, and the St. Johns River. Please enter our comments into the official record of comments for the CFWI proposal.

Comment 1 (01/24/14 & 02/19/14) - In the CFWI plan, no mention is made regarding the growing number of tourists. According to state government statistics, over 91.5 million tourists visited FL in 2012, and 55 million of them were in Central Florida. Our Governor wants to increase that number to 100 million which is an increase of 8.5 million more tourists statewide. That could translate to as many as 5 million more tourists to the central FL region. That is almost double the number of full time residents in the CFWI (2.7million). No mention is made in the CFWI about meeting their water needs.

CFWI RWSP Team Response *- As noted in Chapter 2, permanent population was used in conjunction with a gross per capita average. The five-year gross per capita average, respective to each utility, does take into account all uses within a utility, including those uses by tourists.*

Comment 2 (01/24/14 & 02/19/14) - A large part of the CFWI plan is devoted to rationalizing the increased use of more ARS and AR technology. At the same time your report admits that ARS/AR can generate larger amounts of Arsenic *(As*) in the aquifer near the bottom of the injection sites in the aquifer. Your solution appears to be dilution of the *As* later on when it is pumped back up for potable water purposes, in order to meet drinking water standards. It does not address the problem of higher *As* levels in the aquifer which can, in some areas come to the surface via discharge into spring systems.

CFWI RWSP Team Response *- ASR has proven to be a cost effective tool for water management; particularly when the land footprint for a large storage feature (such as a reservoir or impoundment) is otherwise not available or feasible. ASR systems are currently used for storage and subsequent recovery of a variety of waters, including highly treated potable water, reclaimed water, groundwater and partially treated surface water. Implementation of any ASR project requires detailed evaluation of site-specific hydrogeologic conditions, to determine if a transmissive storage zone is overlain by a competent confining interval. In addition, compliance with applicable water quality criteria will be evaluated during issuance of any ASR permit.*

Comment 3 (01/24/14 & 02/19/14) - There is also little to no discussion about other possible contaminants from the use of ARS/AR technology such as endocrine disruptors, viruses, increases in bacteria, and the increased levels of chlorine byproducts into the aquifer that can cause cancer. These potential problems have not been adequately

addressed as well as they have been in other states that use ASR/AR. There should be more treatment of the secondary sewage effluent BEFORE it is injected into the aquifer, to avoid the dispersion of endocrine disruptors, such as pesticides, prescription drugs and human hormones underground within our aquifer. Farmers and others with wells may not be able to afford the RO and UV treatment necessary to remove most of these contaminants when they are later pumped back up for human use, including consumption. Other states employ these extra safeguards, and FL residents deserve the same protection. Our sand hills have little carbon in them to absorb these contaminants.

CFWI RWSP Team Response *- See response to your Comment 2.*

Comment 4 (01/24/14 & 02/19/14) - The proposal to use 35 more brackish water wells is of concern. While it is common in south FL to use brackish water for drinking water, it comes with a higher cost and increased dangers of lateral intrusion (page 3-3 of DWSP 2013) of more salt into neighboring areas of fresher water. I am referring to your TDS graphic on page 109. Since the confining layers between aquifers are not always continuous, there are too many places where saltier water can contaminate our fresher aquifer water within the CFWI. "Upconing", shown on page 3-3 of your DWSP 2013, illustrates the possible negative effects that can occur around these 35 brackish wells. This alternative water supply method needs more study.

CFWI RWSP Team Response *- Most of the brackish groundwater project options are for blending projects that were initially identified in the 2009 Polk County Comprehensive Water Supply Plan. Additional site-specific geologic and water quality data will be needed to determine the productivity of each project. See Chapter 8, which provides additional information regarding previous and ongoing studies to improve knowledge of the LFA.*

Comment 5 (01/24/14 & 02/19/14) - The District claims that lowering the St. Johns River 1.6 inches will not have serious impacts on the ecology of the river is questionable, and disregards the comments given by the National Research Council when they peer reviewed the study. Also, claiming that climate change will result in an increase in 5.5 inches in the rivers height and will offset the decline of 1.6 inches due to pumping, is not justification for withdrawing 150+mgd. When fresher surface water is withdrawn upriver, **Salt Water Incursion** takes place, and increases the salinity of the river. This could have a detrimental effect on the fish and their spawning requirements. The St. Johns River is an important fish spawning area and salinity and temperature are important to those fish. They are also part of an entire food chain that could suffer negative effects from such a large water withdraw and salinity changes.

CFWI RWSP Team Response *- Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects, including water quality, to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was*

peer-reviewed by the National Research Council (NRC), resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources. In addition, potential water quality effects arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent.

Comment 6 (01/24/14 & 02/19/14) - Diminishing the value of Water Conservation in your report is one of the most disturbing parts of the plan. In your report you claim, that only 42 mgd could be conserved throughout the CFWI. "Of this 42 mgd, 64% could be saved by public supply utilities and 26% by agricultural operations. The remainder would be conserved by other water use categories". That means only 10% or 4.2 mgd could be saved by non- ag or non-utility water conservation. Where does lawn irrigation fit into this picture? Replacing older toilets with newer, low volume toilets? Encouraging the use of cisterns to capture rainwater for irrigation purposes? Planting more drought tolerant yard plants? Low impact development? More public outreach and water conservation education? Pumping 151+ mgd surface water from the St. Johns River and 30+ mgd from the Ocklawaha should not even be considered until ALL water conservation efforts have been exhausted.

CFWI RWSP Team Response *- Chapter 5, Conservation, does include many of the Best Management Practices (BMPs) indicated above. The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.*

Comment 7 (01/24/14 & 02/19/14) - OVAS supports your efforts to increase public awareness of the water shortage, and of the few water conservation measures that you do endorse. However, we hope that you will direct your efforts towards more water conservation activities, before you support these higher risk, more expensive "alternative water supplies".

CFWI RWSP Team Response *- See response to your Comment 6.*

Comment 8 (02/05/14) - If any of the AWS projects, other than conservation, costs more than $3/1,000 gallons then the conservation cap for potential conservation projects should be raised to that same level (or cost), because conservation projects are the least harmful to the environment.

CFWI RWSP Team Response *- The $3.00 per 1,000 gallons cost limit for conservation practices is based on the typical retail charge for public water supplies in the CFWI Planning Area. The rationale is that water users generally will be motivated to voluntarily adopt conservation practices only if the practices are economically advantageous to them. Higher priced conservation practices will become more attractive over time as the price of water increases.*

Comment 9 (02/20/14) - The numbers SJRWMD based the 42mgd needed for water conservation under the CFWI are way too low! The amount saved should be 3x larger than what the District is asking for. Also, water conservation should be the #1 AWS target, before considering any other AWS.

CFWI RWSP Team Response *- See response to your Comment 6.*

Eric Searcy, Concerned Citizen (01/26/14)

Comment 1 - I've been a practicing veterinarian in St Augustine, FL, since graduating from Auburn University Vet School in 1977. I was born in Deland, and raised in NE Florida. Upon graduation, I took an oath to, among other things, protect the health of our citizens. We both know water can't be created or destroyed, just cycled around. It's obvious that we have already reached a population that is unsustainable with our God-given water supply in Florida.
This problem can't be solved by continuing to find new sources for water--there are none that don't have far-reaching detrimental consequences.
It's time to realize that we've surpassed the number of people we can provide water and waste disposal for. We need to focus on that problem and find a way to limit further growth. It is folly to believe we can continue to find new ways to provide more water for human consumption without leaving a terrible price for future generations to pay.

CFWI RWSP Team Response *- Thank you for your comment.*

Donald Blanchard, Concerned Citizen (02/05/14)

As a semi-retired, business and commercial lawyer, I have had the opportunity to review the CFWI documents. I understand the need for the various Water Management Districts (WMDs) to better coordinate and plan for the future water needs of central Florida.

While I am sensitive to the water usage needs of Florida businesses, and the employment opportunities that those various operations provide, I am concerned that the business community has taken an overly aggressive approach to this issue. The WMDs are the regulators that must protect the aquifer and surficial waters for current and future needs. Unfortunately, I have come to believe that you are now captive agencies and have been weakened by the current governor and his DEP administration.

Therefore, I urge three immediate steps for the CFWI project :

1. Implement a CUP moratorium for all commercial and golf course uses, to 'freeze' withdrawals at current levels. This should occur in all of the WMDs involved in the CFWI study, pending the completion of the CFWI project.
2. Implement a similar, immediate and interim moratorium for any withdrawals from the St. Johns River, and 3. Immediately withdraw the role of Attorney Ed de la Parte from any of the CFWI committees. His role presents a clear conflict of interest that could invalidate the entire CFWI process. This is not a personal attack on him, but his aggressive advocacy for his water-user clients is well known and will undermine the public's trust in the objectivity of the CFWI report and results.

Thank you for your consideration. Please put the collective interest of Floridians ahead of the financial interests of our permitted users. At some point in the near future, we will be forced to charge ALL users a reasonable per gallon fee for our limited and shrinking water

supply. We can no longer underwrite commercial users for their water use - if they need this public resource, they should pay for it. It can no longer be a "free", external cost that we absorb to support their increased profits.

CFWI RWSP Team Response *- CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.*

Sean Parks, Commissioner, Lake County (02/08/14 & 02/18/14)

Comment 1 - I've prepared three projects (Lower Floridan Aquifer Wellfield, Transmission Main, and Utility System Interconnesctions) for submission by the South Lake Regional Water Initiative group based on our latest discussions regarding the use of local sources for water supply. Because these projects have really not been explored and fleshed out, there is little information available other than the titles and general project descriptions. These projects may change significantly once we have our consultant on board and they have a chance to perform the necessary due diligence, but for now, these should suffice as placeholders.

CFWI RWSP Team Response *- Projects identified have been added to Table F-1 in Appendix F.*

Ronald E. Ney, Jr., Concerned Citizen (02/11/14)

Comment 1 - Was salt water intrusion considered during the assessment when groundwater supplies will run out?

CFWI RWSP Team Response *- Saltwater intrusion is discussed in Chapters 3 and 4.*

Comment 2 - Shouldn't salt water intrusion be included in the estimated time for aquifer run out because it could shorten the estimated time of useful water?

CFWI RWSP Team Response *- See response to your Comment 1.*

Comment 3 - What is the percent error in the predicted time for the groundwater supply to run out?

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in*

unacceptable impacts to water resources and related natural systems. This RWSP identifies programs and projects to ensure that adequate and sustainable water supplies are available to meet future water supply needs while protecting water resources.

Sheryl Stolzenberg, Principal Coordinator, Long Range Team, Seminole County Development Services (02/12/14)

Seminole County's Planning and Development Division has reviewed the population and water demand projections developed in the latest draft of the Regional Water Supply Plan (RWSP), and offer the following comments for the District's consideration. It is hoped that these comments will be used to re-evaluate the distribution of the population that has been projected for Seminole County and its cities in order to achieve a greater consistency between the RWSP and the adopted comprehensive plans of Seminole County and its cities. The policies of the County and city comprehensive plans reflect the policies of the Central Florida Regional Growth Vision ("How Shall We Grow?"), a regional future land use policy plan developed with the investment of significant state funding and accepted by the local governments who participated in the planning effort in 2008. As such, Seminole County and its cities have directed their capital budgeting funds toward supporting a future land use pattern that avoids suburban sprawl and incentivizes a 'centers and corridors' land use pattern. The RWSP population distribution is not supportive of or consistent with this long standing policy direction in Seminole County, which is why we are requesting a re-evaluation of that population distribution. It is hoped that if the distribution of population in Seminole County is not re-evaluated by the District, that the following comments are incorporated into the RWSP as a separate guiding policy that can be used by the District to evaluate future consumptive use permits from city utilities as a part of the RWSP in its final form.

Here are our comments:

1. We have been advised by the staff of the Department of Economic Opportunity (the State Land Planning Agency) that State law that governs consumptive use permits and relationship to the Regional Water Supply Plan was revised since the original Regional Water Supply plans (RWSP) were created. We understand that it is now a requirement that those issuing consumptive use permits (CUPs) take the RWSP into consideration. While that may not mean that the RWSP becomes as 'regulatory' for those issuing CUPs as a comprehensive plan is for those issuing rezonings and site plan approvals, it would make sense to at least take into consideration the fact that Sanford or any other city utility in Seminole County that seeks increased water resources to serve our joint existing future land use pattern may encounter difficulties, given a RWSP that assumes that most new growth in Seminole County will be self-served or served by small utilities. In other words, the RWSP will not show enough of a need for increased water in the urban areas unincorporated areas outside of that area served by the County to reflect the land use policies of Seminole County and its cities.
2. Our planning comments are not about population numbers. They are about the location of the projected population, which reflects a policy issue and not a population projection methodology issue. We find it puzzling that the methodology used by the Water Management District recognizes that all the other counties in this RWSP area will experience significant urban growth, but not Seminole County.

3. Seminole County's existing future land use plan will thus not be supported by projects identified in the RWSP that are designed to provide water to serve unincorporated growth outside of the County utility service area boundary. This creates an internal conflict within our comprehensive plan. That is a violation of Chapter 163, Part II, Florida Statutes. State law does not require us to adopt any new population projections reflected in the RWSP, but we cannot have a future land use map that says we are encouraging additional urban densities in areas such as where we are spending public funds on SunRail, when the RWSP population distribution figures do not anticipate that level of growth in those urban areas and includes no projects for those areas. In addition, we may be unable to amend our future land use map to reflect the increased population density in the SunRail area that will be based on the forthcoming HUD studies for the Sanford and Altamonte Springs SunRail station areas, and Aloma spur rail corridors. By our state planning laws, we cannot show density when we cannot show how it is going to be served.
4. Seminole County is especially concerned that the RWSP apparently portrays a significant growth in DSS water demand by 2035 in our two unincorporated, highly protected rural areas – the Wekiva River Protection Area (1 DU/acre impact allowed) and the East Rural Area (1 DU/3, 5 and 10 acres) and also in build-out subdivision utilities. According to the County and city adopted comprehensive plan policies (reflecting the regional policy), future growth in the County will be incentivized and attracted into urban areas, focusing on SunRail, and the LYNX transit corridors and not the outlying rural areas. To show otherwise in the RWSP is to create a conflict with the locally adopted Comprehensive Plan. Additional notes are below.

- Our first concern was raised by Table 3, "**Domestic self-supply population**", on page 19 of Chapter 2: Population and Water Demands of the RWSP.
- This table anticipates a percentage change in the self-supply population for Seminole County from 2010 to 2035 of **325**%. This is an amazing increase for any county.
- Coupled with the finding in Table 2, "**Public supply water demand projection**" on page 17 of that same chapter, which shows Seminole County's population to be served by public water supply to increase only 20% over that same time period, this raises very strong questions about whether the County's policy direction is being misinterpreted as one that emphasizes and accepts urban sprawl.
- We noted that the percentage increase projected for domestic self-supply for Lake County, which may have the greatest amount of land available for this type of growth, is only anticipated to reach an increase of 86% during this same time period.
- We also noted that all other counties in the Study Area are anticipated to have percentage increases in urban population to be served by public water supplies greatly in excess of those projected for Seminole County.
- In an effort to understand how the District's models could generate this projection, we asked our Consultant to project the incremental increase in population that would likely be served by domestic self-supply from 2010 through the District's planning horizon, given the County's policies.
- While there are some infill areas within the various public and private utility service areas in Seminole County to which service has not yet been extended (enterprise funded utilities don't install lines where customers are lacking), the areas within Seminole County that are

most likely to be served by self-supply are two large areas that are policy restricted from higher densities and intensities of development.

- One area is the approximately 19,739 acre Wekiva River Protection Area, which is restricted by State Statute.
- The other is Seminole County's Charter East Rural Area of approximately 74,414 acres, which is restricted by County Charter.

- Using the current future land use designations within those two areas, our consultant projected that, if all such areas were built to the maximums allowed, that percentage change by the District's target year would be an increase of only **73%** not an increase of **325**%. (His figures were a maximum of 4,000 additional people, not the population increase projected by the District.)
- The remainder of the population would, therefore, be located within the service areas of urban utilities in Seminole County (such as the cities), and not within policy-restricted rural areas.
- Please see the attached table for additional information.

We appreciate the opportunity to review and comment on this important plan, and these issues that are critical to the future of our region. We would be happy to provide additional information if needed, or to meet to discuss these concerns.

Co Planning Population Control Totals									
	BEBR 2011 Medium Fig.	2010	2015	2020	2025	2030	2035		
A	SemCo Total Pop	422,718	438,050	463,645	488,074	510,826	531,838		

Table 1 CFWI Public Supply Populations Projections								Inc	% Inc
		2010	2015	2020	2025	2030	2035		
	City of Cocoa	173,445	183,644	194,956	205,230	215,019	224,781	51,336	30%
	Lake	130,229	149,914	171,722	193,880	216,532	237,314	107,085	82%
	Orange	1,127,098	1,235,208	1,362,603	1,485,046	1,600,443	1,707,286	580,188	51%
	Osceola	202,198	253,108	303,718	354,661	405,938	453,751	251,553	124%
	Polk	547,344	592,082	644,124	695,952	744,727	789,760	242,416	44%
B1	Seminole	410,787	432,451	457,116	473,558	485,070	493,333	82,546	20%
	TOTALS	**2,593,111**	**2,848,422**	**3,136,259**	**3,410,352**	**3,669,759**	**3,908,260**	**1,315,149**	**51%**

Table 3. CFWI Domestic Self-Supply Population Projections *(Well and Small Utilities)*								Inc	% Inc
		2010	2015	2020	2025	2030	2035		
	Lake	13,486	15,950	17,789	20,445	23,190	25,080	11,594	86%
	Orange	18,858	16,792	14,997	13,554	12,157	10,414	-8,444	-45%
	Osceola	66,487	57,292	54,082	49,339	42,062	35,249	-31,238	-47%
	Polk	54,751	62,518	69,776	76,348	83,773	91,940	37,189	68%
C	Seminole	11,931	12,849	15,084	24,642	37,230	50,667	38,736	325%
	TOTALS	**165,513**	**165,401**	**171,728**	**184,328**	**198,412**	**213,350**	**47,837**	**29%**
	Percent of five county incremental DSS assigned to Seminole County. Besides seeming to be an unusually high percentage, the geographical areas targeted for DSS growth (those outside central water/sewer service areas) is at odds with the County's Comprehensive Plan.							81%	
B2	Assuming the WRPA and Rural Area are actually built-out by 2035 (estimated pop of 7,863) and assuming that the small utilities are already builtout such that no new DSS developjment will occur within their service areas - means the remainder of the DSS population (30,873) would go into the service areas of the larger public utilities by 2035, most likely on central water, not well							30,873	
G	This shift would increase the Table 1 2035 public supply population of County and City utilities to (B1+B2):							113,419	
	Estimated percent increase in County/City Public Supply (B2/G)							27%	

Sum of CFWI Public Supply and Domestic Population Projections							
	Original DSS population estimates were the delta between county BEBR and total utility estimates. (Draft CFWI,						
D	Seminole (B1+C)	422,718	445,300	472,200	498,200	522,300	544,000

Comparison of CFWI and BEBR Population Projections							
E	CFWI Pop excess over BEBR Pop (D-A)	-	7,250	8,555	10,126	11,474	12,162
F	CFWI Pop as % of BEBR Pop (D/A)	100%	102%	102%	102%	102%	102%

CFWI RWSP Team Response *- As part of the efforts to prepare a single RWSP and to achieve consistency for the CFWI Planning Area, a Demand Subgroup was formed to review and update population and water demand projections for the CFWI Planning Area. The Demand Subgroup review began in late 2011 and was completed in early 2013. The Demand Subgroup consisted of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area. Pursuant to Chapter 373 F.S., population projections for each county were controlled to the University of Florida's BEBR Medium population projections. The countywide population projections were spatially distributed, based on the best available data, via a GIS model that projected where in the county growth was likely to occur and applied growth rates similar to historic patterns (controlling overall to county BEBR Medium. Utility service areas were overlaid to determine utility specific projections. As such, any increase in a utilities' projections will result in an associated decrease from another utility or the DSS category. Utilities will need to work together to determine which areas should be reduced/increased; if justifiable, documented & supported methodology indicates changes should be made. It should be noted that these projections were made using a snapshot in time and the projections are intended solely for regional planning purposes to determine if WSO are needed in the future. The Demand Subgroup will continue to work with utilities and engage stakeholders during the next CFWI RWSP update, to ensure that the best available information is being used to estimate regional*

demands. Also, the BEBR Medium Population projection control for Seminole County is correct; Volume 44, Bulletin 159 was used by the Demand Subgroup.

Rod Ghioto, Consultant (02/13/14)

Comment 1 - It is extremely important that this effort (the CFWI, RWSP) be carried forward to its conclusion. It is the only organized program that could bring together all water users (public, industrial, and agricultural) while meeting environmental goals necessary to maintain central and south Florida's natural resources. It is also the only available framework with a defined system of performance measurement, as projects move forward and operational strategies are developed and tested.

CFWI RWSP Team Response *- CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.*

Samuel Kendall, Concerned Citizen (02/18/14)

Comment 1 - If there is a water shortage problem then the permit for the water bottling company made by the SJRWMD should be revoked. If we want to have water available for Central Florida we do not want water from the aquifer bottled and sold out of state.

Conservation of water should be incentivized. Cities, counties and the water management districts should provide monetary incentives for property owners to convert turf areas that require water into landscapes that can survive without supplemental watering. Convert water absorbing lawns into native landscapes that survive on natural rainfall.

Utilities should have tiers for pricing. Water use beyond the needs of drinking and washing should be priced higher.

CFWI RWSP Team Response *- The Districts do have water shortage plans; more information is available in Chapter 3 and via the District's respective websites. The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping. Water conservation rate structures and other conservation BMPs are discussed in Chapter 5.*

Marsha Weaver, Concerned Citizen (02/19/14)

Comment 1 - As a former 10 year Pinellas County homeowners we watched Tampa Bay Water-- encompassing SWFWMD, Pinellas, Pasco, Hillsborough and its citizens who developed a multi-source water supply-ground water, desalination, water re-use to meet the exploding water demands in Southwest FL Central FL with projected growth, millions of tourists, industry, rainfall deficits and continuing drought, & no active hurricane seasons since '04-'05 & no other options, like Tampa Bay is frightening. Desalination / pipelines from the Atlantic Ocean should be part of this plan, now.

CFWI RWSP Team Response *- Desalination is discussed in Chapters 6 and 7 and projects are listed in Appendix F.*

Carolyn Smith, Concerned Citizen (02/19/14)

Comment 1 - I would like to discuss with you your upcoming decision regarding the Central Florida Initiative. I am presently a St. John's county resident, but I am also a native Floridian. I was born in Miami and I grew up in Orlando. So, I have lived in Florida long enough to see the growth we have seen in the last six decades. I love Florida and don't mind sharing it with others who come here from the north. I like Disney and the theme parks and the economic security they offer a state that has little in no industry other than tourism. However, when it comes to using up our clean, safe drinking water with accountability I think we have to draw the line!

There are a lot of ways to help us; the citizens of Florida be more accountable when it comes to our clean water. First, there must be a plan in place to conserve the drinking water for drinking…not irrigation of homes and golf courses, not flushing our toilets etc. There are also new ways of making salt water useable for some or all of these needs.

I love Florida and I think there are ways to accommodate growth and tourism and still make wise decisions about our water supply. I am not against providing water to areas of the state who have more residents, but I am against giving it to those areas who are not willing to make some honest efforts to use our drinking water for drinking only while putting in place water usage policies and conservation efforts that use only recycled water for non-drinking purposes.

Please approve the Central Florida Initiative ONLY if there is accountability for the usage of clean drinking water in the initiative. This should not be a political issue; this should be an issue of doing what is right in future scheme of things. Doing what is right for future Floridians and the future of our Earth.

I hope you will consider these requests when voting on whether or not to approve the Initiative.

Thank you in advance for your attention.

CFWI RWSP Team Response *-This RWSP identifies programs and projects to ensure that adequate and sustainable water supplies are available to meet future water supply needs while protecting water resources. CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation*

and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Doug Head, Concerned Citizen (02/19/14)

Comment 1 - Great emphasis should be placed on CONSERVATION rather than more growth driven production. Stop the madness of the current consumption curve and let's work to stop uses not central to our survival. Banning watering of lawns can be a starting place.

CFWI RWSP Team Response *- Thank you for your comment. The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass that is used for landscaping.*

Roger Griffiths, Concerned Citizen (02/20/14)

Comment 1 - It is certainly good to see three of the water management district meeting and working together. However, reading the plan, the results of the meetings do not offer much hope. Most of the folks who are in water management were already aware that the current plan is not sustainable. I assume this was the reason for these three water management groups to come together. This plan again documents that current pumping and permitting is not only not sustainable but that damage is already occurring. "Previous central Florida planning efforts ...have documented that the rate of groundwater withdrawal ...is either rapidly approaching, or hs surpassed the maximum rate that can be sustained without causing harm or adverse impacts..." This plan comes up with several very expensive solutions - with no money source - and "uncertainty" that the solutions will actually work. One example being water conservation which as the plan states requires "...behavioral changes of la!
rge populations ...that may not yield the desired water saving calculated ..." This report sadly states that its documenting of unsustainable limits of groundwater withdrawals "...should not be viewed as regulatory constraints for ... permits." It appears that we are to all accept the huge future growth with its water demands. Those of us already here will need to accept the cost of meeting this demand by paying not just a little more but a great deal more per gallon of water. All in the name of progress. We will also need to accept the degredation of the existing wetlands, reduction of floodplains, the changing of the landscape in order to accept the growth machine. We seem to be running in a direction that will destroy the very things that made this area so desirable in the first place. If the existing public were asked they would say "Lets address the 900 pound gorilla in the room which is growth at all cost." Maybe we should look at the cause of the problem inst!
ead of the result of the problem.

CFWI RWSP Team Response *- CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.*

L. Remier, Concerned Citizen (02/20/14)

Comment 1 - It is a worrisome development when on Feb. 6th, 2014 , the Associated Industries of Florida, started the Florida H2O Coalition. These groups include the Florida Home Builders Association, the Florida Fertilizer and Agrichemical Association, and the Association of Florida Community Developers. The latter two oppose the Senate spring proposal. These groups do not care about Polk County and our water supply. These groups just want to use the Polk County water to get rich, they do not care about future generations of local residents and our desire for clean water. This is really sad and awful.

Florida H2O will be "encouraging lawmakers to support a comprehensive, statewide plan to address our current problems and plan for future needs."

Yes, but is this plan a binding plan? No! Does this plan put into place rules regarding water that will be enforced?

No!

This plan is another waste of time and money.

These industries keep spending tax payers money on these plans, but nothing comes out of it.

There is no enforcement for any clean water standards.

There is no rules that keep this plan in place. This plan can be disregarded in a moments notice.

This plan can be disregarded, and these industries can go back to wasting Polk County water, destroying our clean water.

This plan says it is advocating a science-based solutions.

But where is the push to enforce this plan?

No where.

The plan says that "adequate funding for badly needed programs, supporting alternative-water-supply options and highlighting the need to fund regional projects that are in line and ready to deliver results," said Tom Feeney, CEO and president of AIF. This plan has been studies to death. Let us go forward now to enforce true clean water standards.

True Polk County water advocates who sounded early warnings about the soundness of Florida's water supply, are

again upset. This Florida H2O Coalition will do nothing but waste more time and money!

. Even now that Florida H2O is in existence, one must wonder how its founding bias against spring protection can "address our current problems" with water. We need to have Fl. parks and lands that store water. We cannot spend money pumping water around the state.

We must conserve the clean water we have, we must set aside lands for this effort.

CFWI RWSP Team Response *- CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.*

Jim Boyd, Boyd Environmental Engineering, Inc., Representing Orange county Research and Development Authority (02/20/14)

Comment 1 - I am the agent for the Orange County Research and Development Authority in regard to its Consumptive Use Permit ("CUP") No. 2-095-3300-6. Accordingly, I would like to take this opportunity to provide a comment regarding the draft Central Florida Water Initiative ("CFWI") Regional Water Supply Plan ("RWSP").

When reviewing Appendix A of the RWSP, I can find no reference to the above referenced CUP, which is associated with permitted groundwater withdrawal facilities located within the Central Florida Research Park in Orlando, Florida. Specifically, I would expect to find CUP No. 2-095-3300-6 included within Tables A-1, A-9 and A-16 of Appendix A, along with other public supply permittees located in Orange County. Furthermore, I would expect the water demand projections contained within Appendix A to reflect the permitted groundwater allocations contained with Condition No. 15 of the CUP (please see attached).

Mr. Bartol, please advise if the CFWI intends to include CUP No. 2-095-3300-6 within the RWSP. If the CFWI does not intend to include CUP No. 2-095-3300-6, please provide the rationale for its exclusion.

CFWI RWSP Team Response *– The CUP referenced is categorized as institutional. Demand projections for the commercial, industrial and institutional (C/I/I) category were made at the county level based on historical water use trends and population growth and not on an individual permit basis.*

Jean Reed, Concerned Citizen (02/20/14)

Comment 1 - Why don't you encourage preserving aquifer recharge areas? I am not impressed by the lower aquifer use; essentially and eventually it will negatively affect the upper aquifer.
Even more importantly, why does SJWMD permit bottling of our limited water? Nearly 1,000,000 gallons a day sold at a profit around the country.....meanwhile we wonder where our future water supply is. And who will fund getting water out of the lower aquifer, treating it, and pumping it to water needy cities? Sorry, but this study appears to be a waste of money and effort. I have not read all of it but so far, I am not impressed.

CFWI RWSP Team Response *- The Districts do encourage local governments to preserve aquifer recharge areas.*

In its review, District staff determined that the application met the conditions for issuance of the permit and that the proposed use of water is a reasonable and beneficial water use; will not interfere with any presently existing legal use of water; and is consistent with the public interest.

Dr. William C. McCormick, Environmental Stakeholder (02/20/14)

Comment 1 - First, I thank the staff of the SJR Water Management Districts for their efforts in addressing what is clearly a Districtwide water deficit that with the growing population is only going to get worse. Each of the water supply planning regions are Water Reource Caution Areas and a comprehensive approach is needed to our water use and supply issues.

Based on the presentations I have listioned to, as well as the reports that I have studied, I believe water conservation is the number one priority for adoption of a strategy and action plan to address the problems and implement solutions. While the Water Management District takes its responsibilities seriously and should be praised for its efforts, citizens also have responsibility to monitor the process of any public resource, which in this case is potable water.

The SJR Water Management District has used population projections and other factors to project total water demand (groundwater and surface water) will increase by 314 million gallons per day (MGD) by 2035. At the same time they project water conservation can only reduce water demand projections in 2035 by a minimum of 84 MGD up to 214 MGD.

But if we just observe current usage and means of addressing the water deficit, we are presently using water at an unsustainable rate and consuming water from the aquifer at a rate that exceeds recharge processes.

In a previous plan, the SJRWMD determined that nearly 288 MGD could be potentially saved with a $1.6 billion investment in conservation. Since that estimate has shrunk to 214 MGD in this plan it appears conservation efforts are going backward. Meanwhile the CFWI calls for potentially withdrawiing 155 MGD from the St. Johns River at a cost of $1.5 billion. I understand that the National Resource Council (NRC) conducted a peer review of the SJR Water Supply Impact Study and expressed concerns that the study "operated within a range of constraints that ultimately imposed both limitations and uncertainties on the study's overall conclusions."

It is evident that the SJRWMD does not believe that Florida's water deficits will be solved by water conservation efforts alone. It is also a problem that will be with us for a long time, perhaps forever as long as we exist and continue to grow in population.

However, it also is true that requests from special interests and directives from the Scott Administration are resulting in water withdrawals from rivers, lakes, and springs in order to justify additional growth despite the fact that the Aquifeer system cannot support additional pumping.

The Matanzas Riverkeeper and the St. Johns Riverkeeper have provided useful information to the public who are interested in SJRWMD Water Supply Plan. As an active citizen involved in a number of citizen activist groups, I am encouraging them to be involved in long-term study of government actions impacting us economically, as well as our quality of life. Many of Florida's residents have migrated here because of the wonderful environment is provide. We intend to preserve it and we have every intention of holding accountable those who may threaten it.

CFWI RWSP Team Response *- Thank you for your comment.*

Nancy Beebe, Environmental Stakeholder (02/20/14)

Comment 1 - I feel we can do a lot more to promote conservation. Much of Florida relied on cisterns at one time for all water needs. My suggestions:

Require cisterns to be installed wherever feasible with new construction. Where not possible, build community cisterns to tap for lawn watering, car washing, etc. and/or utilize retention ponds for that purpose.

Install meters on all wells and charge a fee when more than reasonable amounts are being used.

Stop handing out permits to give our water away to outside interests to make a personal profit.

Devise ways to reuse the rinse water from a washing machine.

New construction should require 'instant' water heaters in all kitchens and bathrooms so that gallons of water are not wasted waiting for the water to get hot.

We personally try hard to conserve and reuse water, but many people don't care enough - unless it hits their wallet!

CFWI RWSP Team Response *- Thank you for your comment. Conservation is an integral part of this RWSP; conservation BMPs are described in Chapter 5. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other*

management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

Ann Schumacher Esterson, Agricultural Stakeholder (02/20/14)

As an owner of farms in central Seminole County, I am concerned that the drawdown projected by the CFWI process would damage the ability to irrigate our land. Our family farms have relied upon artesian wells in the Upper Floridan Aquifer for irrigation since the 1920's.

The map displayed in Figure 10 of Chapter 4 (pg. 71) of the CFWI report shows the potential for 1-3 feet of aquifer drawdown in the area where our wells are located (along the north shore of Lake Jesup). This amount of drawdown would terminate artesian flow in most, if not all, of our irrigation wells. These wells are not easily replaced as they are in remote locations without electric service or roads necessary for vehicle access if gas powered pumps were used.

Our farms are located adjacent to areas with much higher salinity groundwater. We are concerned that additional regional groundwater pumpage could not only extinguish artesian flow in our wells but also result in salinity increases above a level suitable for irrigation.

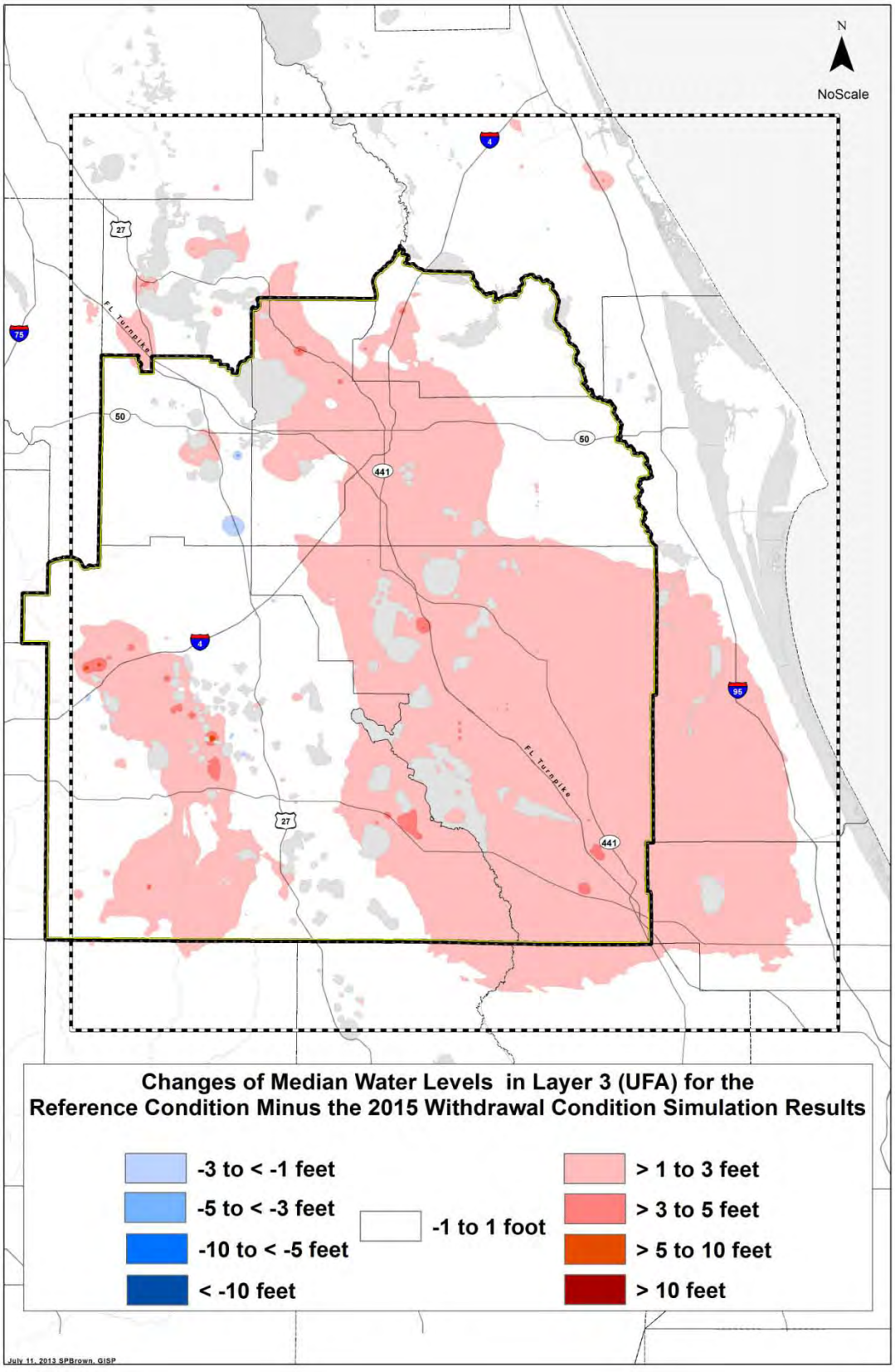
Comments on the assessment process:

1.) Areas of Seminole County with artesian wells should be included as "measuring sticks" for assessing aquifer drawdown impacts. Any future water supply scenario resulting in termination of artesian conditions should be eliminated from consideration.

CFWI RWSP Team Response *- Future updates to the CFWI RWSP and associated analyses may include the consideration of additional "measuring sticks." See response to your assessment process Comment 2 and your study conclusions Comment 1.*

2.) Provide maps showing regions in Seminole County where current artesian well flow conditions are projected to be terminated by future groundwater pumpage.

CFWI RWSP Team Response *- Figure 10 represents the UFA drawdown map for the Reference Condition (2005) to 2035. The results of the 2035 withdrawal condition were not considered sustainable, thus the 2015 withdrawal condition was evaluated. The Reference Condition (2005) to 2015 drawdown map is shown below. Additional maps can be found in Appendix B.*


N
NoScale
Changes of Median Water Levels in Layer 3 (UFA) for the
Reference Condition Minus the 2015 Withdrawal Condition Simulation Results
-3 to < -1 feet
-5 to < -3 feet
-10 to < -5 feet
< -10 feet
-1 to 1 foot
> 1 to 3 feet
> 3 to 5 feet
> 5 to 10 feet
> 10 feet
July 11, 2013 SPBrown, GISP

3.) Groundwater quality, especially salinity, is critically important to our irrigation practices but seems to be excluded from modeling and analysis. Specify what approaches were undertaken in the CFWI process to ensure that projected groundwater pumpage will not degrade groundwater quality as a result of migration of saline groundwater.

CFWI RWSP Team Response *- Water utilities monitor water quality conditions at production wells and monitoring wells as required in their permit condition. SJRWMD also maintains a District Observation Well Network (DOWN) that includes stations for monitoring regional water quality conditions in the Surficial Aquifer System, UFA, LFA and springs in Seminole County to detect potential trends in water quality degradation due to saline water intrusion. It is anticipated that the CUP and DOWN water quality monitoring network would trigger an early alarm for degrading conditions.*

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Comments on the study's conclusions:

1.) Explain whether SJRWMD considers the projected termination of artesian conditions in our area, as a result of future regional water pumpage, to be a legal and permissible impact to existing users.

CFWI RWSP Team Response *- The impact of groundwater withdrawals on the artesian conditions in a given area and the "legality" of such withdrawals would be considered in SJRWMD's CUP program. In order to receive a CUP from SJRWMD, a permit applicant must provide reasonable assurance that the use will not interfere with any presently existing legal use of water, Rule 40C-2.301(2)(b), F.A.C. In making this determination, the District presumes that an interference occurs when the withdrawal capability of any individual withdrawal facility of a presently existing legal use of water experiences a 10% or greater reduction in withdrawal capability or when the existing user experiences economic, health, or other type of hardship as a result of the new use, Section 9.4.4, Applicant's Handbook: Consumptive Uses of Water (September 16, 2012). Details regarding the how the percentage reduction in withdrawal capability is calculated can be found in Section 9.4.4 of the Applicant's Handbook.*

2.) Explain whether the SJRWMD has a mitigation plan for replacing water supply for Seminole County farmers where impacts from aquifer drawdown is projected to terminate artesian flow, or where salinity is driven too high to be suitable for irrigation

CFWI RWSP Team Response *- See response to your assessment process Comment 3. Although SJRWMD typically does not require water quality monitoring by permitted agricultural withdrawals in Seminole County, it is anticipated that the CUP and DOWN water quality monitoring network would trigger an early alarm for degrading water quality conditions.*

Sarah Whitaker, President, SMW GeoSciences, Inc. (02/20/14)

Comment 1 - Page iv. Bottom paragraph, 3rd sentence: needs to emphasize that this document is for "planning purposes only and should not be viewed as regulatory constraints for specific water use permits." This also needs to be re-emphasized elsewhere in document. With that said, I won't harp on specific differences in the document's growth and demand projections that used BEBR data assumptions as opposed to the planning numbers requested by the District and provided by several Lake County governments and their utility managers regarding the number of approved and potential number of new homes and their associated water demands anticipated within the next 20 years (2035).

CFWI RWSP Team Response *- Thank you for your comment; this is addressed in the RWSP and Appendices.*

Comment 2 - Page 5. Last paragraph. As a Professional Geologist I do not support the statement that there are "four distinct groundwater basins." Withdrawals and recharge to the Floridan and surficial aquifers in the CFWI area have the potential to impact Floridan aquifer conditions throughout the entire CFWI area and all of Central Florida. The basin lines drawn on the accompanying figure in the report do not in any way represent distinct basin boundaries across which water cannot flow. They in no way represent hydrogeologic boundaries and do not restrict the impacts of withdrawals that occur in one “basin” from impacting water levels or water pressures in aquifers in what are labeled as other “basins.” Otherwise why wouldn’t we have four distinct groundwater models for this area? Even HAT group members are recommending that the boundaries of the ECFT model be expanded so that impacts from regional groundwater withdrawals can be properly evaluated.

CFWI RWSP Team Response *- Figure 13 in Chapter 6 shows the locations of the groundwater basins within the CFWI Planning Area. These basins are generally defined by the average potentiometric surface within the FAS. As shown in the figure, Polk County represents the regional potentiometric high from which water flows out radially into the four groundwater basins in the region. Groundwater basins lines can shift however based upon rainfall conditions. The concept of the groundwater basin is inherently built into the ECFT model as part of the calibration process to match observed groundwater levels.*

Comment 3 - Page 9. Last paragraph. 6th sentence. The Floridan aquifer is a semi-confined aquifer. Can you add "semi" before confined? Also consider the same for the intermediate aquifer. If it were truly confined then aquifer recharge programs to the surficial aquifer (e.g. Conserv II) would be of no benefit to the Floridan aquifer– and this is not the case.

CFWI RWSP Team Response *- “Semi” has been added as requested.*

Comment 4 - Page 140. Table 22. Actual and projected funding for water resource development activities and projects benefitting the CFWI Planning Area. 5th row - Lower

Floridan Aquifer Investigations. This row indicates that ONLY SFWMD and SWFWMD have in the past or plan on funding Lower Floridan aquifer studies. The other two CFWI WMDs have proposed to significantly increase funding for LFA investigations.

CFWI RWSP Team Response *- Table 22 is correct, SJRWMD currently does not have funding allocated. However, this may change and will be reflected in future updates to the RWSP.*

Comment 5 - The Lower Floridan aquifer is an unexplored resource for south Lake County and it is the MFL water bodies in this area that are taking the brunt from regional cumulative groundwater withdrawals throughout the CFWI. In fact, according to regional groundwater models, withdrawals outside of south Lake County have a greater impact to MFLs and spring flows in this area when their withdrawals are from the Lower Floridan aquifer as opposed to the Upper Floridan aquifer! Currently there is no planned funding or cost-share programs proposed by the SJRWMD for Lower Floridan aquifer studies. The SJRWMD needs to provide funding for Lower Floridan aquifer studies in south Lake County and truly evaluate the effect of Lower Floridan aquifer withdrawals elsewhere throughout the District.

CFWI RWSP Team Response *- See response to your Comment 4.*

James Payne, Agricultural Stakeholder (02/20/14)

East Central Florida Services, Inc., and Farmland Reserve, Inc. (collectively "Deseret") submit the following comments to the draft Central Florida Water Initiative (CFWI) regional water supply plan (RWSP). As background, within the CFWI, Deseret owns approximately 255,000 acres primarily in agricultural production. Within the CFWI area, Deseret's agricultural operations occur in Orange and Osceola Counties. Deseret also has agricultural operations within Brevard County. Deseret's existing permitted agricultural water use is approximately 13.0 million gallons per day (MGD). This makes Deseret is one of the largest landowners and agricultural operations within the CFWI.

Much of Deseret's land is currently used as unirrigated pasture with no water use allocation. Over time, Deseret has steadily intensified portions of its agricultural production and associated water usage in response to market conditions. For example, in the past seven years, Deseret's permitted allocation for agricultural irrigation has increased by 6.0 MGD. Deseret's agricultural operations and associated water use make it substantially affected by the provisions of the draft CFWI RWSP.

Lack of Identified Sources to Meet Agricultural Water Need and Recognition of Agriculture's Limited Alternative Water Supply Options

As it relates to the projected agricultural needs in Osceola County, including Deseret's projected needs, the draft CFWI RSWP appears to not comply with statutory requirements. Subsection 373.709(2)(a)2., F.S., requires that a regional water supply plan contain a list of water supply development project options, including traditional and alternative water supply project options, from which self-suppliers may choose for water supply development. That subsection also states that the list of water supply development options in a regional water supply plan must contain provisions recognizing that alternative water supply options for agricultural self-suppliers are limited.

Other than conservation, the draft CFWI RWSP does not list any significant water supply options – either traditional or alternative – from which agricultural self-suppliers may choose for water supply development. For agricultural conservation within the CFWI area

overall, the draft CFWI RWSP estimates that through the greater use of mobile irrigation laboratory (MIL) evaluations and greater implementation of BMPs, an estimated 87.2 MGD of water can be conserved by the year 2035. (See table 19 on page 82.) Assuming these conservation savings are correct, this still leaves an unmet agricultural water demand for the year 2035 of 126.8 MGD. Agricultural conservation savings are not broken out by county in the draft CFWI RWSP.

The only other water source identified for agriculture is reclaimed water. However, for the CFWI area overall, Appendix E, Table E-2 (on page E-10) states that reclaimed water used for agricultural irrigation will provide only 12.06 MGD of alternative supply for agriculture by the year 2035. This leaves 115.8 MGD of agricultural water demand in the year 2035 for which the draft CFWI RWSP does not identify any significant corresponding project options – either traditional or alternative.

For Osceola County specifically, reclaimed water is not identified as a significant agricultural water supply project option. According to Appendix E, Table E-2, of the draft CFWI RWSP, reclaimed water is projected only to provide 0.61 MGD of agricultural irrigation supply in Osceola County by the year 2035.

The groundwater availability assessment for the CFWI and Chapter 6 of the draft CFWI RWSP indicates that localized Upper Floridan Aquifer development is possible in certain areas on a case-by-case evaluation basis without causing unacceptable environmental impacts, and that Upper Floridan Aquifer withdrawals in eastern Osceola County produced the least impact on environmental areas of concern. Given that (a) agricultural water demands in Osceola County are projected to increase to at least 101.83 MGD by 2035; (b) alternative water supply options for agricultural self suppliers are limited (see §373.709(2)(a)2., F.S.); (c) no significant reclaimed water or other water sources have been identified to meet the 2035 agricultural water demands in Osceola County; and (d) groundwater availability modeling results indicate that Upper Floridan Aquifer groundwater can be used in localized instances in Osceola County without causing unacceptable environmental impacts, Deseret requests that language be added to Chapter 7 of the draft CFWI RWSP clearly stating that alternative water supply options for agriculture are limited, and thus, agricultural water demand in Osceola County is expected to be met primarily using agricultural water conservation and fresh groundwater with approximately 0.68 MGD of this demand being met by the use of reclaimed water.

If this language is not included in the draft CFWI RWSP, then the RWSP does not meet statutory requirements because it does not identify water supply project options – either traditional or alternative - for agricultural self suppliers in Osceola County, nor does the RWSP list of water supply development options contain provisions recognizing that alternative water supply options for agricultural self-suppliers are limited.

Thank you for considering these comments. If you have any questions, please do not hesitate to contact me.

CFWI RWSP Team Response *- The WSO Subgroup, consisting of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area worked with utility representatives, as well as FDACS staff, to solicit and prepare a draft list of potential water source options available to all water users within the CFWI Planning Area. The projects listed in Appendix F of the RWSP were submitted by public supply utilities and local governments. During the WSO Subgroup process, no project options were submitted by other user stakeholders.*

The following sentence will be added to Page 133, first paragraph under Table 21, second sentence: As described in Chapter 373.709(2)(a)2., F.S., AWS options for agricultural self-suppliers are limited.

In addition, CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Krystal Azzarella, Utilities Environmental Manager, Polk County Utilities (02/20/14)

Comment 1 - Polk County values the coordination efforts towards the development of a single Regional Water Supply Plan (RWSP), specific to the Central Florida Water Initiative (CFWI) Area. Polk County reiterates the following comments that were originally noted at the time of the development of the demand projections for the RWSP by the CFWI Population and Water Demand Subgroup (*January 23, 2012*):

"In review of the draft projections, Polk County feels that the values underestimate the needs for Public Supply, specifically for the NERUSA and the City of Winter Haven. The projections are based on the permanent population (based on BEBR medium growth rates), instead of a functionalized population, and do not incorporate some of the important demand drivers inherent to these service areas: seasonal population (short-term rentals) and the tourist population. These proposed planning projections under estimate the projected 2035 demand, based on detailed analyses conducted by Polk County, by 10.6 MGD and 8.5 MGD for NERUSA and the City of Winter Haven respectively. Furthermore, when compared to BEBR high growth rates, the demands are still under estimated by 10.33 MGD and 4.96 MGD for NERUSA and the City of Winter Haven respectively.

Although planning projections are not permitting projections, in the past, RWSPs have been historically used to review permitting projections; these projections will be used in the CFWI regional water supply plan and Polk County feels that its needs are underestimated and it may not receive [adequate] water supply solutions from the process. In Polk County's opinion themethodology for these projections should be reconsidered using all of the pertinent and historical envisioned data to ensure that Polk County has access to the limited inland water supply. Polk County is concerned that these low projections will give utilities and regulators a false sense of need as far as the development of AWS is concerned. This would severely undermine any attempts to pursue regional projects which could lessen the strain on the aquifer and other water resources in the state."

CFWI RWSP Team Response *- As part of the efforts to prepare a single RWSP and to achieve consistency for the CFWI Planning Area, a Population and Water Demand Subgroup (Demand Subgroup) was formed to review and update population and water demand projections for the CFWI Planning Area. The Demand Subgroup review began in late 2011 and was completed in early 2013. The Demand Subgroup consisted of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area. Pursuant to Chapter 373 F.S., population projections for each county were controlled to the University of Florida's Bureau of Economic and Business Research (BEBR) Medium population projections. The countywide population projections were spatially distributed, based on the best available data, via a Geographic Information System (GIS) model that projected where in the county growth was likely to occur and applied growth rates similar to historic patterns (controlling overall to county BEBR Medium). Utility service areas were overlaid to determine utility specific projections. As such, any increase in a utilities' projections will result in an associated decrease from another utility or the Domestic Self-supply (DSS) category. Utilities will need to work together to determine which areas should be reduced/increased; if justifiable, documented & supported methodology indicates changes should be made. It should be noted that these projections were made using a snapshot in time and the projections are intended solely for regional planning purposes to determine if water supply options (WSO) are needed in the future. The Demand Subgroup will continue to work with utilities and engage stakeholders during the next CFWI RWSP update, to ensure that the best available information is being used to estimate regional demands.*

Other comments to be reiterated:

Comment 2 - Executive Summary, Page iv, Last Paragraph: Recommend mentioning the range of groundwater availability determined by the Groundwater Availability Team (GAT) when discussing the groundwater availability limit of 850 MGD.

CFWI RWSP Team Response *- It was decided to not include discussion of the potential range in the CFWI RWSP. Any quantity of water above the groundwater availability limit of 850 mgd will be evaluated by the Solutions Planning Team.*

Comment 3 - General Comment: The RWSP as directed by the Steering Committee focuses on the lower end (850 MGD) of the groundwater availability range (850 to 925 MGD) recommended by the GAT. The plan makes some references to higher quantities of groundwater being available if additional potentially more costly management options are implemented. It should be indicated that the GAT determined the range to be 850 to 925 MGD, but that for conservatism the Steering Committee directed the RWSP to be based on 850 MGD. Page 73 is an appropriate location for expansion of this discussion.

CFWI RWSP Team Response *- See response to your Comment 2.*

Comment 4 - General Comment: The offset of potable water demands as a result of reclaimed water irrigation is discussed in the plan. However, the plan does not mention that additional potential future reclaimed water recharge (via RIBs or irrigation) was not included in the groundwater flow modeling and may serve to offset some of the impacts that were predicted at the constraint locations used to develop the groundwater availability estimate of 850 MGD. This is particularly important as AWS sources such as surface water are implemented and the quantity of water extracted from the groundwater system ceases to increase but the quantity of water returned to the groundwater system (via RIBs and irrigation) continues to increase. Mention of this should be included in the report.

CFWI RWSP Team Response *- The HAT technical document, which will be available at cfwiwater.com will address all components of the ECFT modeling efforts.*

Comment 5 - Chapter 6, Page 108, 4th Paragraph: The first sentence of this paragraph makes reference to the Water Cooperative of Central Florida (WCCF), Orange County Utilities and RCID. Suggest referring to the "Coop and RCID" everywhere, or stating all the Utilities in the WCCF.

CFWI RWSP Team Response *- Thank you for your comments. Page 108 will be updated to indicate that utilities included in the WCCF.*

Comments Regarding River Alternative Water Supply Projects

Jo Ann Ford, Concerned Citizen (12/10/13)

Comment 1 - I vigorously oppose any water withdrawls from the St. John's River to support the increased needs of Central Florida. Conservation and limiting growth are the only ways to stop the waste of our limited resources and a primary source of our economy, not just on the First Coast, but in Central Florida as well. The rivers draw fishermen and boating enthusiasts not only from Florida, but from other parts of the country as well and are a vital part of stabilizing our economy.

James Terrell, Concerned Citizen (12/10/13)

Comment 1 - Leave the St Johns River alone

Thomas Thomas, Concerned Citizen (12/10/13)

Comment 1 - I am opposed to any additional withdrawals of water from the St Johns River. Our focus should be on conservation efforts in order to insure long term availability and sustainability of our water supply.

Dr. Susan Arnold, Concerned Citizen (12/10/13)

Comment 1 - Stop taking water out of the river! We are not the only beings that use it! Widespread public opinion is against it. I know you think you are acting in the interest of the public, but so far it does not appear that you are listening to us!

Cynthia Bliss, Concerned Citizen (12/10/13)

Comment 1 - Central Florida needs to invest in getting their water from the Atlantic , not the fragile St. Johns. Desalination is a viable option done in other parts of the world. Also,there is at least one spring off St. Augustine pumping fresh water into the ocean . if that many people are moving there they can certainly pay for better options.

Maureen Kirschhofer, Environmental Stakeholder (12/10/13)

Comment 1 - Please preserve our river. I can't believe the we are sacrificing the St. John's to Central Florida. This is very disconcerting. Please have a back bone and do not let this happen.

Linda Black, Concerned Citizen (12/10/13)

Comment 1 - It is unfortunate that Central FL has tapped it's own water supply to this point. How can we allow them to lean on us when people water their yards just to maintain a lawn that is built on plants that are not native to their area.

Everyone can change the way their landscape looks. Everyone can turn off the water while brushing their teeth. Let's help them learn to conserve the water that is available.

Salinity will eventually get all of us if we don't do our part.

Anne Reid Hawkins, Concerned Citizen (12/10/13)

Comment 1 - Instead of siphoning millions of gallons of water a day from our rivers, Central Florida should be focused on aggressive conservation and efficiency measures. Unfortunately, the Draft Regional Water Supply Plan determined that only "3.9 percent of the projected demand for 2035 can be eliminated by water conservation." Irrigation is responsible for over 50% of total residential water use and leaks account for 10% of indoor use. Clearly, opportunities abound for significant reductions in water use, and future demand can be met with conservation at far less expense. I and many others including the St. Johns Riverkeeper have serious concerns that surface withdrawals from the St. Johns River will worsen the pollution problems that already exist, increase salinity levels, and adversely impact fisheries, wildlife, and vegetation all along the St. Johns River and its tributaries.
Extremely high levels of algal toxins were found from river water samples tested in October, 2013, and algal blooms have become frequent.
We need to make water conservation a priority and protect our natural resources by addressing the root causes of our water problems.

Patricia DeStephano, Environmental Stakeholder (12/10/13)

Comment 1 - Please do not remove water from the St. Johns! Conservation is the key!!!

Barlow Curran, Concerned Citizen (12/10/13)

Comment 1 - Please stop, or don't increase, the water withdrawals from the St. Johns river. I was born on the banks of Christopher Creek {east bank of the St. Johns immediately north of Eping Forest, formerly the DuPont estate}.

The cypress trees in the creek have died, due to salinity.

The fishing form the Fuller Warren bridge to Mandarin Point has declined 75%, mostly due to sediment, possibly from dredging and construction. That is, the eel grass beds are all gone.

The limits on the amount of water available to central Florida are not liberal or conservative, the are set by nature and not subject to political alteration.

The desire of developers and the thirst of local governments for tax money is unsatiable.

Thank you for letting me speak.

Pat Gurley, Environmental Stakeholder (12/10/13)

Comment 1 - Our river is such a vital resource to the area pleas be mindful of how the decisions you make now with affect our children and their children. Draining millions of gallons of water from the St Johns River daily may make short term economic sense but

Floridians will pay heavily for it in the long term. The price we will have to pay is one that we simply can not afford in terms of loss of a precious resource.

John Lovejoy, Concerned Citizen (12/10/13)

Comment 1 - The St Johns River is endangered. i have lived here for 75 years and seen change is from loss of ell grass, salt water intrusion and now the loss of more water. i oppose with drawing more water from the river basin in central Florida. This area was created to supply the river and because so much is being withdrawn, we are getting green slim and salt water intrusion.

Paul MacNeill, Concerned Citizen (12/10/13)

Comment 1 - Re: Central Fla Reg. Water Supply Plan. Lived on the St.Johns since 1995 2 miles north of Lake George. Hope you did withdrawal feasibility study when river was at end of summer levels. Many years, I have had concerns about low water levels on the health of the river. I could see withdrawals during high water conditions, but depleting the supply during lows would be disasterous, and make the river unnavigable. Conservation and curtailment of commercial usage would be better.

Richard Villadoniga, Concerned Citizen (12/10/13)

Comment 1 - I am opposed to allowing Central Florida access to millions of gallons of water currently being used by North Florida. Central Florida should be focused on aggressive conservation efforts rather than tapping into others' sources of water.

Todd Griffin, Concerned Citizen (12/10/13)

Comment 1 - I urge you not to allow water withdrawal from the surface waters of the St. Johns River.
The beauty and tranquility of this ecosystem is amazing and cannot be replaced. How many times have we in the past used current "science" to justify something that often turns out with unintended consequences. The science cannot predict the effects of withdrawal and the negatives associated.
As a homeowner on the river, I urge you to protect our state asset.

Wm Carr Smith, Environmental Stakeholder (12/10/13)

Comment 1 - We must manage growth, conserve our existing resources and stop the depletion, deterioration and damage to the resources that make Florida unique. No additional withdrawal from the St. John's or the Oclawaha is in the actual long term interest of Florida or Floridians, or the citizens of the nation who share an interest in what cannot be replaced.

Kathryn Hutchinson, Concerned Citizen (12/10/13)

Comment 1 - Please listen to the Riverkeeper!!! No withdrawals!!!

James Waler, Concerned Citizen (12/10/13)

Comment 1 - As an owner of multiple river/canal front real estate in Putnam county, I am appalled and concerned about the integrity of the already fragile health of the St. Johns river with these current proposals. There needs to be immediate reconsiderations given some of the study proposals on the impact of these withdrawals.

Donald T. Dunham, Concerned Citizen (12/10/13)

Comment 1 - Since 1948 I have lived on and around the St. Johns River in the vicinity of Picolata. During this time I have witnessed continuing degradation of the quality of the water (clarity, salinity, and algal growth). I have also cruised the Oklawaha River as far as Eustis.

Flow quantity reduction, increasing population, and ignorance have all contributed to this degradation of my river. The Central Florida Water Initiative will, if approved, further reduce the flow rates of this river. With flow reduction will come stagnation, increased salinity and even greater difficulty of reducing pollution in the river.

For the sake of future generations of Floridians and for the sake of the environment you/we must not approve any further proposals to remove water from the river basin.

Alternatives will be difficult and expensive. Desalination is one possibility. Serious additional effort must be placed in conservation programs such as NO lawn irrigation, greatly reduced agricultural irrigation, reuse of water, NO bottling plants, further restrictions on aquifer withdrawal (and yes, I do have a small artesian well), major restrictions on further land/housing development in currently undeveloped areas and large impact fees to support the cost of new water sources.

Thank you for the opportunity to comment. Science and good sense must prevail over greedy development.

Karl Price, Concerned Citizen (12/10/13)

Comment 1 - Just moved here from Texas where they have virtually dried up the Rio Grande River. Please don't let our water resources here disappear one step at a time because you could duplicate the Texas problem.

James Tucker, Concerned Citizen (12/11/13)

Comment 1 - I am against pulling water out of any of our supply resources. Things like this will do nothing but degrade Florida and eventually destroy. Leave the water alone. I was born and raised here and have watched the destruction of our beautiful state, we need to stop now before it is gone.

Rick Kilby, Concerned Citizen (12/11/13)

Comment 1 - The last thing we should do is consider withdrawing water from the St. Johns and Ocklawaha Rivers. Those are two of the most beautiful water bodies in the state, and

there is now way we could be 100% certain that withdrawals would not have a negative effect. There are so many other options including increasing conservation awareness that this should only be considered as last option. In my opinion we are not there yet.

Knox Bagwell, Concerned Citizen (12/11/13 & 1/18/14)

Comment 1 (12/11/13) - Water scientist know exactly what sustains surface waters...rainfall and ground water-level tables. Where as climate change is also changing rainfall allocations, bring longer, dryer periods, the fix to that is beyond the scope of this plan.

Ground-water table levels is squarely the controlling factor on this plan. Without sufficient, supporting ground water levels/pressures....most surface waters in this region would decrease significantly, as more than few run completely dry during low rainfall periods now. This is primarily due to over pumping of ground water from unwise, issued CUP's.

Deny sound science, proposing to elevate the aquifer draw-downs in this region, by making large percentage (compared to volumes and current amounts withdrawn from aquifer) withdrawals from already decreasing surface waters...is the typical, government short term view of robbing Peter to pay Paul.

There are ONLY two sustainable solutions.....water conservation...as users in the Central Florida area consume 2-3 times the average of North Florida areas...largest part being for green lawns and golf courses. The other solution is paying the true cost of over consumption/wasteful water use through desalination..of which is considerably more expensive when allowing for safe residue disposal.

DEP, the states overseer of water, is decades behind a sustainable, state water policy and effective implementation....and to this day, it's stated function is altered by the political winds, as seen by the long standing, state-wide surface and springs waters pollution.

One thing for sure.... big money...does not sway MOTHER NATURE!

Comment 2 (01/18/14) - The previous Seminole CUP 1.5 M day, along with continuing variable/decreased rainfall patterns and the total inability of Central Florida water users to get their daily use in line with the rest of the districts regions..has brought increase salt/brackish water into the St. Johns River....all of the above causing significant decline in the water/plant/fish quality and quantity. Many of the river's supply springs significantly decrease and/or stop flowing frequently due to over-pumping of ground waters. While surface waters may appear to the district as an easy, cheap and unnoticeable solution to the already over pumping/wasteful lawn use of it's Central Florida users..as all educated people know, total water reserves will run out within less that a decade. Complete enforcement of significant reduction in non necessary water use...(lawns, utilities leaky pipes, flood irrigation, bottling waters)..along with greatly increase re-claimed waters will be FORCED upon! us by either SJWMD now ....or MOTHER NATURE shortly.....SO do we kick the can a little further down the road of unsustainable water uses...or do we DO the job you are paid to do by the taxpayers.....not by those that would destroy our life here in Florida by greasing the governor's and DEP palms ????

Michael Nutini, Concerned Citizen (12/11/13)

Comment 1 - Strong programs requiring measurable and mandatory water conservation, and water resource development projects that do not harm our natural resources must be used rather than draining our rivers and lakes dry.

Rivers like the **Withlacoochee** and **Ocklawaha**, and the **Clermont Chain of Lakes** already suffer from dry-outs. Some portions even go completely dry today without additional water withdrawals. The **Kissimmee River** – *restored at a cost to taxpayers of approximately $1 billion* - is going to need sufficient water to allow the natural river to flow.

I would hope that decision makers won't take the easy way out by deciding to drain lakes & rivers to supply water.

Shirley Thacker, Concerned Citizen (12/11/13)

Comment 1 - ***I am against the proposed plan that includes a set of "surface water" projects that propose to suck about 250 mgd from our rivers and lakes - including over 150 mgd from the St. John's River and up to 25 mgd from the Kissimmee River basin, costing in the ballpark of $1.8 to $2 billion! I also understand that this could impact Lake Apopka, the Ocklawaha River, Withlacoochee River, Peace River and the Clermont and Upper Kissimmee Chains of lakes.***

You must consider that Rivers like the Withlacoochee and Ocklawaha and the Clermont Chain of Lakes already suffer from dry-outs. Some portions even go completely dry today without additional water withdrawals. The Kissimmee River - restored at a cost to taxpayers of approximately $1 billion - is going to need sufficient water to allow the natural river to flow. It is for these reasons I am asking you to say "NO!" to this plan.

I further implore you to develop strong programs requiring measurable and mandatory water conservation, and water resource development projects that do not harm our natural resources must be used rather than draining our rivers and lakes dry.

Nick and Carolyn Galante, Concerned Citizen (12/11/13)

Comment 1 - There is a plan out there that includes a set of "surface water" projects that propose to suck about 250 mgd from our rivers and lakes- including over 150 mgd from the St. John's River and up to 25 mgd from the Kissimmee River basin, costing in the ballpark of $1.8 to $2 billion! It may also impact Lake Apopka, the Ocklawaha River, Withlacoochee River, Peace River and the Clermont and Upper Kissimmee Chains of Lakes.
We are totally against this! We believe we need strong programs requiring measurable and mandatory water conservation, and water resource development projects that do not harm our natural resources. These measures must be used rather than draining our rivers and lakes dry.
Rivers like the Withlacoochee and Ocklawaha, and the Clermont Chain of Lakes already suffer from dry-outs. Some portions even go completely dry today without additional water

withdrawals. The Kissimmee River – restored at a cost to taxpayers of approximately $1 billion - is going to need sufficient water to allow the natural river to flow.
Thank you for your consideration on this important issue facing Central Florida.

Cheryl Robb, Concerned Citizen (12/11/13)

Comment 1 - I am a concerned Florida resident and I oppose the proposal to shift the regional public water supply from groundwater to a greater reliance on other sources of water. What we need is more conservation. There need to be stronger programs that require measurable and mandatory, not voluntary, water conservation. Water resource development projects should not harm our natural resources and our natural resources must be protected rather than drained dry by taking water from our rivers and lakes.

Many lakes, rivers and streams run almost dry during periods of drought now. If we take start to take water from them, they could run dry completely and not come back. The proposal to use the rivers and lakes is short-sighted at best. While developments of housing almost always take precedence in this state over all else, we need to stop this mentality and realize that if we keep taking and never giving back we will end up with nothing. Nothing for our future residents. No water for our children, grandchildren, or any wild habitat that is currently left in this state.

Please look at other options. Reuse water or grey water on public golf courses and median strips. Make it mandatory to restrict water usage during dry periods with steep fines if not followed. I lived in Windermere for 9 years and can't tell you how many residents watered their lawns during peak hours of 11-4 p.m. and on days they weren't supposed to. Other things can be done to help also is to require new developments to follow xeriscaping and ban St. Augustine grass in its entirety. It is a terrible water hog, just to keep it green. We need to be proactive and not allow this horrific choice to happen.

Act now before it's too late and we have no more lakes or rivers, part of what makes Florida beautiful.

Laura Braly, Concerned Citizen (12/11/13 & 1/22/14)

Comment 1 (12/11/13) - Measurable and mandatory water conservation is necessary in our beloved state in order to prevent our rivers, lakes, aquafirs, and streams from being drained dry.

Our ground water is finite!

Please keep our natural resources healthy. Retain our ground water and keep it clean and healthy!

Comment 2 (01/22/14) - I am opposed to withdrawing water from the St. Johns River, and any other Florida waterway, for that matter! We need water conservation measures to be enacted first! Thank you! *(Two identical comments submitted via webpage)*

Brian Paradise, Concerned Citizen (12/11/13)

Comment 1 - **Please do not allow water to be withdrawn from our rivers and streams. We must have mandatory water conservation and water development projects that are beneficial to our environment and do not drain precious quantities from our waterways.**
Thanks for your consideration of these comments.

Rose Marie Alarcon, Concerned Citizen (12/11/13)

Comment 1 - Withdrawals from the St. Johns River will only worsen existing pollution problems, increase salinity levels, and adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries.
Many of these withdrawals would also require treatment by reverse osmosis (RO). The byproduct, or pollutant, that results from RO is called "concentrate". The concentrate has a high mineral and/or salt content and could be discharged back into the river, creating additional pollution problems.
Instead of siphoning millions of gallons of water a day from our rivers, Central Florida should be focused on aggressive conservation and efficiency measures. Unfortunately, the Draft Regional Water Supply Plan determined that only "3.9 percent of the projected demand for 2035 can be eliminated by water conservation." Irrigation is responsible for over 50% of total residential water use and leaks account for 10% of indoor use. Clearly, opportunities abound for significant reductions in water use, and future demand can be met with conservation at far less expense.
Unfortunately, our limited public resources are being directed towards finding expensive new sources of water, such as surface water withdrawals and desalination, before we have addressed the root causes of our water supply problems and exhausted all opportunities to use existing water resources more efficiently.
The bottom line is that water conservation does work, can potentially meet most if not all of our water supply needs, and is much more cost-effective and environmentally-responsible. However, we must finally begin to demonstrate the will and commitment to make it happen. Instead, our leaders and public officials tasked with protecting our water resources continue to pay lip service to conservation, while doubling down on expensive alternative water supply sources that pose significant long-term threats to our environment and our economy.

Lyman Goodnight, Concerned Citizen (12/11/13)

Comment 1 - I strongly oppose any further withdrawals from the St' Johns and Ocklawaha Rivers. It would only encourage more ecologically unfriendly practices. The springs are already greatly degraded by nutrient runoff. People in Central Florida should be put on strict water rationing and charged 100 times the current rates for exceeding their allocation. That would encourage wise use and the development of alternative sources.

Hollie Hollon, Concerned Citizen (12/11/13)

Comment 1 - I have read that the St. Johns, Southwest Florida, and South Florida Water Management Districts, as well as the Florida Department of Environmental Protection now officially recognize that groundwater in Central Florida's subsurface aquifers is ***running***

out. The Central Florida Water Initiative is a collaboration between these entities to plan for the region's water future. Water demand is going to increase to 1.1 Billion gallons per day by 2035 – yet the aquifer will sustain only 850 million gallons per day (mgd) in pumping for water supply use. There is only about 50 mgd available **before** that cap is reached.
The **draft plan** includes a set of "*surface water*" projects that **propose to suck about 250 mgd from our rivers and lakes**- including over 150 mgd from the St. John's River and up to 25 mgd from the Kissimmee River basin, costing in the ballpark of $1.8 to $2 billion! It may also impact Lake Apopka, the Ocklawaha River, Withlacoochee River, Peace River and the Clermont and Upper Kissimmee Chains of Lakes.
We need for you to tell the water planners "NO!" Tell them that strong programs requiring measurable and mandatory water conservation, and water resource development projects that do not harm our natural resources must be used rather than draining our rivers and lakes dry.Rivers like the **Withlacoochee** and **Ocklawaha**, and the **Clermont Chain of Lakes** already suffer from dry-outs. Some portions even go completely dry today without additional water withdrawals. The **Kissimmee River** – *restored at a cost to taxpayers of approximately $1 billion* - is going to need sufficient water to allow the natural river to flow.

Please take a stand and the the necessary action to stop the water planners now.

Thank you for your time and consideration on this very important issue.

David Gore, Concerned Citizen (12/12/13)

Comment 1 - The draft plan states that there is a new or greater source of water available within the Floridan aquifer by withdrawing a less quality of water from it at different depths or locations than the current water withdrawals. This idea appears to ignore the basic dynamics of water flows and storage of Fla's hydrology as any withdrawal adds to the cumulative draw down of aquifer pressure and an increase of MFL problems. Several of the proposals of alternate sources rely on drawing water from sources that will rely on water flow emptying from the same stressed water storage at the lands water table elevation that is the critical source that sustains all the flows of water withdrawals and natural systems in Fla.

The plan also appears to be based on the idea computer generated information that uses only water withdrawal type information as being the cause of declining pressure and water table elevations that limit the supply of water we have available. This idea appears to ignore the very substantial effect of the ongoing land draining type of human impacts that are reducing the water table and available water storage capacity across Fla's whole overall land platform.

The plans part about protecting water resources doesn't even mention the critical need to protect the natural containment ability of the land that effects the elevation of the water table and water storage capacity that is very critical to effect the amount of water that is available for water withdrawals and to sustain natural flows and levels.

The very large costs proposed to citizens of this area by some ways to develop new water sources should require that they be based only on sound science and sound thinking and not on unproven theory or ideas that ignore the basic.and known dynamics of useful water storage and flow of an area.

The only sure way new sources of water were developed to reduce groundwater withdrawals in SWFWMD was to construct several surface water reservoirs that store water at the water table level and where the withdrawal of water from them does not effect groundwater aquifers or area surface water conditions.

The plan needs to address and create a more effective ability to protect the lands future natural water containment ability as this is critical to the future of our water supply and natural resources

Suzy Faggard, Environmental Stakeholder (12/12/13)

Comment 1 - I am really sorry to read that you have approved the withdrawal of the massive gallons daily of water from Silver springs and the river. It has already been shown that Silver springs is now 50 per cent down on volume. So you have just placed the lid on the coffin. We will see in our life time the death of spring. We have enjoyed these waters for many years. But I guess the cows and golf courses are more important. I wait for the day that it goes dry and hope you do also to realize your mistake.

Elizabeth Hubbard, Environmental Stakeholder (12/12/13)

Comment 1 - Listen to the experts and the people. Overdrawing water from our waterways is a bad thing. Do you have children? What kind of a world do you intend their children to live in? *(Three identical comments submitted via webpage)*

Alberta Espie, Concerned Citizen (12/12/13)

Comment 1 - Central Florida must not take more water from the St. Johns or from the Oklawaha. Conservation is the only answer. Plant native plants, outlaw St. Augustine grass and other water hungry plantations. Refuse to permit expanded cattle agriculture. Do the right things, and we and the springs will all have enough water.

Michael Boyle, Concerned Citizen (12/12/13)

Comment 1 - Sir, I believe and experts on the subject of water consumption and water sustainability believe that the water planning for central Florida is greatly flawed.Water conservation is the answer let us not repeat the mistakes of the past .There are no easy outs but let us not pick the easy out of more of the same.Say no to the Plan.

Sheryl McNichols, Environmental Stakeholder (12/12/13)

Comment 1 - Instead of siphoning millions of gallons of water a day from our river, Central Florida should be focused on aggressive conservation efforts.

Unfortunately, the draft regional water supply plan determined that only "3.9 percent of the projected demand for 2035 can be eliminated by water conservation." We know much more can be done. Conservation is simply more cost-effective and safer for our environment and water resources, and numerous proven, quantifiable strategies are available.

As a member of the St. John's Riverkeeper organization I support their initiatives to remove the threats from surface water withdrawals and help us protect the St. Johns and Ocklawaha!

Jo-Ellen Baxley, Environmental Stakeholder (12/13/13)

Comment 1 - We just got the St. Johns cleaned up (remember when the Buchmann bridge exploded just before it was to first open). We need to find other water sources

Susan Dobson, Concerned Citizen (12/13/13)

Comment 1 - Please do not withdraw any more water from the St. John's! We do not want our river to end up becoming a dried-up, tiny river like the Colorado River!. Also, remember the marshes will be affected, and they cannot disappear --since marshes offer protection from water surges in the event of a hurricane (learn from Hurricane Katrina!).

Kris Pagenkopf, Concerned Citizen (12/13/13)

Comment 1 - I oppose additional water withdrawals from the St. Johns and Ocklawaha and instead support conservation.

The CFWI released a Draft Regional Water Supply Plan that relies heavily on surface water withdrawals from the St. Johns River. The plan calls for withdrawing over 150 million gallons of water a day from the St. Johns at an estimated cost of nearly $1.5 billion. The Ocklawaha, one of the most important tributaries of the St. Johns, is also identified for potential withdrawals.

The surface water withdrawals are being justified based on the findings of a flawed study by the St. Johns River Water Management District. A group of independent scientists and experts from the National Research Council (NRC) conducted a peer review of the St. Johns River Water Supply Impact Study (WSIS), which identifies significant shortcomings in the study and expressing concerns regarding many of the conclusions. According to the NRC, "the WSIS operated within a range of constraints that ultimately imposed both limitations and uncertainties on the study's overall conclusions."

The withdrawals will only worsen existing pollution problems, increase salinity levels, and adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries.

Many of these withdrawals would also require treatment by reverse osmosis (RO). The byproduct, or pollutant, that results from RO is called "concentrate". The concentrate has a high mineral and/or salt content and could be discharged back into the river, creating additional pollution problems.

Instead of siphoning millions of gallons of water a day from our rivers, Central Florida should be focused on aggressive conservation and efficiency measures. Unfortunately, the Draft Regional Water Supply Plan determined that only "3.9 percent of the projected demand for 2035 can be eliminated by water conservation." Irrigation is responsible for

over 50% of total residential water use and leaks account for 10% of indoor use. Clearly, opportunities abound for significant reductions in water use, and future demand can be met with conservation at far less expense.

Previously, The St. Johns River Water Management District determined that nearly 288 million gallons of water could potentially be saved with a $1.6 billion investment in conservation. The 2005 District Water Supply Plan – Fourth Addendum stated that "analysis indicates a reasonable possibility that a substantial portion of the projected increase in SJRWMD water use between 2005 and 2025 could be met through improved water use efficiency, provided aggressive programs are implemented…."

In addition, the Central Florida Plan only estimates the potential of water conservation "based on voluntary consumer actions, with encouragement through education, and a level of financial incentives…" Voluntary measures alone are not sufficient. Water pricing strategies and mandatory requirements must also be implemented and enforced to achieve maximum conservation and efficiency benefits.

Our imited public resources are being directed towards finding expensive new sources of water, such as surface water withdrawals and desalination, before we have addressed the root causes of our water supply problems and exhausted all opportunities to use existing water resources more efficiently.

The bottom line is that water conservation does work, can potentially meet most if not all of our water supply needs, and is much more cost-effective and environmentally-responsible. However, we must finally begin to demonstrate the will and commitment to make it happen. Instead, our leaders and public officials tasked with protecting our water resources continue to pay lip service to conservation, while doubling down on expensive alternative water supply sources that pose significant long-term threats to our environment and our economy. *(Two identical comments submitted via webpage and email to Tom Bartol)*

Maria McCadden, Concerned Citizen (12/13/13)

Comment 1 - "Instead of siphoning millions of gallons of water a day from our rivers, Central Florida should be focused on aggressive conservation and efficiency measures." Anyone with common sense knows how we humans are destroying the only planet we have. We cannot have it both ways. We need to change our usage & consumption habits or lose our precious water.

Charles Cold, Environmental Stakeholder (12/13/13)

Comment 1 - There needs to be a complete analysis of the proposal, that takes into account ground water, tidal salinity, tributaries, plant and animal life, recreational, and chemical composition impact to the river(s), wetlands, and long-term viability of fresh water in the state.

Comment 2 - At this time the proposal does not address all of these concerns and leans toward the interests of developers, agriculture, and tourism. It does not provide for long-term protections of the Florida environment.

Any proposal should have a specific minimum acceptable long-term steady state resulting from any comprehensive planned water initiative. An example would be targeted daily water consumption per X. Whatever those levels would be must be significantly lower than current levels.

Joy Ford, Concerned Citizen (12/13/13)

Comment 1 - This is not a solution. It is part of the problem and will only band-aid the inevitable. Florida will run out of water because it is misused by all. Tighter restrictions need to be made on water usage and concreting everything must slow down considerably to even begin to solve our water shortage issue. Our lakes and rivers are not the solution. They already suffer from run off and too little rain.

Barbara Schwartz, Environmental Stakeholder (12/13/13 & 12/20/13)

Comment 1 (12/13/13) - this is a giant step in the wrong direction. I oppose this plan.

Comment 2 (12/20/13) - I oppose this plan. I support conservation of water resources at all levels via education and effective water management decisions. Please do this!

Patricia Gadbaw, Environmental Stakeholder (12/14/13)

Comment 1 - Do not drawdown our already failing springs and river system. We need stringent laws AND enforcement on water use. We need to raise the price of water making it unreasonable to water grass

Comment 2 - Water is Florida's most important commodity. Do not draw down on the St John's River. Support increased water costs across the state, so that we conserve and not continue to recklessly water the landscape.

Patricia Kemp, Concerned Citizen (12/14/13)

Comment 1 - We need to start recognizing the limits of our water supply. We can only use the water sustainably. We should not draw anymore or add any more minerals or pollutants into the water after osmosis.

Clifford Miller, Concerned Citizen (12/14/13)

Comment 1 - I am opposed to removing water from the St. Johns river or Oklawaha (spelling). I'm opposed to the Yankee Lake drawing water from the St. Johns for Seminole County.

Before we start drawing down these rivers we should really crack down on lawns and watering using fresh drinking water. Limit water usage, and find easier quicker ways to reconvert grey water back to clean drinking water.

Janet Renuart, Concerned Citizen (12/14/13)

Comment 1 - Central FL is not considering the good of the state over its growth. People love FL for its rivers, springs, lakes, and beaches. We cannot afford to let population growth destroy our ground water sources. It would be the equivalent of cutting off your nose to save your face. Everyone looses. Will we have water wars like in the west? Will we end up rationing water? Don't allow my rivers to be sucked dry.

Sarah Harrison, Concerned Citizen (12/14/13)

Comment 1 - Please do not take any more water out of the river. All you have to do is look at it to see that it is stressed.
People use too much water and, since it is not limitless, we all need to learn to use less. Conservation needs to be the focus, not just same approaches as in the past.
This has become a serious matter--partly because of drought, partly because there are so many people, partly because it is not seen as important. But it is! Think conservation!!

Julie Coolidge, Concerned Citizen (12/15/13)

Comment 1 - This email is intended to comment on the plan presented last week, a plan that is open to comment until January 10, 2014.

I continue to be dismayed at the short-sightedness of what is called "water planning" in Florida. So many plans, like this one, include provisions for pumping millions of gallons of water from the St. Johns River, the Kissimmee, and other Central Florida rivers. The truth is that water in Florida, like so many other places, is becoming a scarce commodity.

No matter how much we want to open Florida for new homes and other development, water is not an unlimited resource; in fact, our supplies are shrinking fast. We must limit development to what the water supplies can handle, even if that means a drastic limitation on development. While some legislators and developers crave the tax revenues and the profits that come with development, we will be developing a "ghost land" that will be unsustainable because there simply won't be enough water to maintain it.

I strongly urge all involved to

*protect surface water sources and springs

*maximize water conservation efforts

They won't come back when they're pumped out -- they are Florida's most delicate and important natural resource.

Theresa Waldron, Concerned Citizen (12/16/13)

Comment 1 - It was very discerning to learn about the proposed surface water withdrawals from the St. John's River and others in the region. I have been a nature conservator my entire life and know through conscientious and controlled actions, nature can be preserved and furthered for our future.

I understand the report that these decisions for withdrawal are based on is an inaccurate and perhaps misleading report. If this is so and there is no documentation to actually verify the assumed conclusions of such report, then how can highly educated, I assume, and highly paid 'water guards' just willy nilly pick the choice of withdrawals from sources that are already in a diminished state?

I would ask that these withdrawal choices be stopped and instead put the money, our money,
into either laws to enforce conservation, fair to all, or education. There are better ways to protect our water sources than this choice.

James Schwarz, Concerned Citizen (12/16/13)

Comment 1 - We only need to look across the state to the Apalachicola River to see the bad results of taking river water to serve the need of unfettered population growth and irrigation. Millions of gallons a day are already being pumped from the St Johns River and its tributaries and lakes.

If there is not enough water available to meet the community's needs, without harming the environment, then growth in that area should be stopped. Sounds harsh, but that might motivate communities to conserve and re-use water.

I am opposed to more water being taken from the St Johns River.

Cynthia Jordan, Concerned Citizen (12/16/13)

Comment 1 - I have serious concerns that the withdrawals would only worsen existing pollution problems, increase salinity levels, and negatively impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries. I am strongly opposed to this plan and recommend exploring other options, such as water conservation, etc.

Hewitt Charles Gehres, Concerned Citizen (12/16/13)

Comment 1 - DON'T DO IT!!

Yayoi Koizumi, Concerned Citizen (12/16/13)

Comment 1 - Florida's assault to the natural environment seems endless. Why don't you think about protecting the environment for the enjoyment of future generations? This environment should not be destroyed just for the sake of profit or convenience that will be tangible only for a few years or a decade. The planners seem to be extremely shortsighted to remove over 150 million gallons per day from the St. John's River and surrounding tributaries.

John Ruskuski, Concerned Citizen (12/17/13)

Comment 1 - It's useless to say but I'll say it anyway; once more, Ya'all are giving in again to the moneyed interests and politicians. But I'm sure it adds to ya'alls job security.

as an avid canoer and hiker it makes me sad, and also those in the related organizations involved in those activities, to see what is happening to our naturally beautiful State. Just look at Silver Springs.

Lisa Greene, Concerned Citizen (12/17/13)

Comment 1 - Central Florida is already reaching the sustainable limits of its predominant source of water, the Florida aquifer system, with water use expected to continue to increase from 772 million gallons a day (mgd) in 2010 to over 1,246 mgd in 2035. As a result, the three water management districts in this five county area - the St. Johns River Water Management District, South Florida Water Management District and Southwest Florida Water Management District - have been working with other agencies and stakeholders through the Central Florida Water Initiative (CFWI) to identify alternative sources of water to meet demand, and as usual, they are way off base.

Recently, the CFWI released a Draft Regional Water Supply Plan that relies heavily on surface water withdrawals from the St. Johns River. The Ocklawaha, one of the most important tributaries of the St. Johns, is also identified for potential withdrawals.

The surface water withdrawals are being justified based on the findings of a flawed study by the St. Johns River Water Management District. A group of independent scientists and experts from the National Research Council (NRC) conducted a peer review of the St. Johns River Water Supply Impact Study (WSIS), identifying significant shortcomings in the study and expressing concerns regarding many of the conclusions. According to the NRC, "the WSIS operated within a range of constraints that ultimately imposed both limitations and uncertainties on the study's overall conclusions."

We have serious concerns that the withdrawals would only worsen existing pollution problems, increase salinity levels, and adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries.

Many of these withdrawals would also require treatment by reverse osmosis (RO). The byproduct, or pollutant, that results from RO is called "concentrate". The concentrate has a high mineral and/or salt content and could be discharged back into the river, creating additional pollution problems.

Instead of siphoning millions of gallons of water a day from our rivers, Central Florida should be focused on aggressive conservation and efficiency measures. Unfortunately, the Draft Regional Water Supply Plan determined that only "3.9 percent of the projected demand for 2035 can be eliminated by water conservation." Irrigation is responsible for over 50% of total residential water use and leaks account for 10% of indoor use. Clearly, opportunities abound for significant reductions in water use, and future demand can be met with conservation at far less expense.

Previously, The St. Johns River Water Management District determined that nearly 288 million gallons of water could potentially be saved with a $1.6 billion investment in conservation. The 2005 District Water Supply Plan – Fourth Addendum stated that "analysis indicates a reasonable possibility that a substantial portion of the projected increase in

SJRWMD water use between 2005 and 2025 could be met through improved water use efficiency, provided aggressive programs are implemented…."

In addition, the Central Florida Plan only estimates the potential of water conservation "based on voluntary consumer actions, with encouragement through education, and a level of financial incentives…" Voluntary measures alone are not sufficient. Water pricing strategies and mandatory requirements must also be implemented and enforced to achieve maximum conservation and efficiency benefits.

Unfortunately, our limited public resources are being directed towards finding expensive new sources of water, such as surface water withdrawals and desalination, before we have addressed the root causes of our water supply problems and exhausted all opportunities to use existing water resources more efficiently.

The bottom line is that water conservation does work, can potentially meet most if not all of our water supply needs, and is much more cost-effective and environmentally-responsible. However, we must finally begin to demonstrate the will and commitment to make it happen. Instead, our leaders and public officials tasked with protecting our water resources continue to pay lip service to conservation, while doubling down on expensive alternative water supply sources that pose significant long-term threats to our environment and our economy. When will we learn???

Ruth Berkelman, Concerned Citizen (12/20/13)

Comment 1 - the lack of emphasis on reducing demand appears to be a major flaw and will likely diminish both the quality of the report and its acceptance by the public

Lucille Campaniello, Environmental Stakeholder (12/21/13)

Comment 1 - The Florida Water Initiative draft Regional Water Supply Plan is a bad idea. I'm not young anymore and the long term effects of this plan may never affect me but it will surely affect generations to come. We must stop siphoning from additional resources and instead start controlling growth to meet the available water supply. Just because there is undeveloped land in Florida does not mean that there is also ample resources to sustain further development. Does no one in government care about the environment of Florida as a whole? Are you all just bowing to the demands of the lobbyists? Please, for the sake of the environment and people already living here do NOT go thru with this plan.

Karen Sahakian-Cortinas, Concerned Citizen (12/21/13)

Comment 1 - It's a slippery slope. Water in St John's River is precious. Please vote No---Karen S.Cortinas. a supporter of St. John's River Keeper Association.

Tony Deakins, Concerned Citizen (12/26/13)

Comment 1 - Having lived for a decade and a half in Orlando, I have seen the cost of unbridled development. Even when water restrictions were imposed, so many waivers were doled out as to make water management a joke. For example, car dealerships were exempted from restrictions on watering and they ran sprinklers even in the mid-afternoon

to insure their grass stayed green. And, while Central Florida whines about there not being enough water to support another million or so lawns, they allow critical water collection lands to be paved over further exacerbating water issues. What is needed in Central Florida ... and Florida. As a whole … is substantive growth management focused on achieving less not more population. Otherwise, the St Johns River will follow the Colorado river as a harsh example of how not to practice sensible and sustainable environmental resource management.

As for the 155 million gallon a day proposed withdrawal being benign to the systemic health of the river's ecosystem, you don't need much more than a high double digit IQ to know that is not true. Oh, sure, maybe when the river is flush from a heavy rainy season; in which case developers will only insist on higher "benign" withdrawals. But, what about when seasonal rainfalls are not enough, will the the withdrawals be adjusted lower? I seriously doubt it.

December and Lee McSherry, Concerned Citizen (12/27/13)

Comment 1 - We oppose the "taking" of St.Johns River water for shipment south to central Florida. Policies can be established and mandated in the south to reduce excessive water withdrawals from the Floridan Aquifer.
Stop this grand theft and potential ecological destruction of our river.

Matthew Braly, Concerned Citizen (12/27/13)

Comment 1 - I am a Florida resident who wants to preserve our waterways. If more water is allowed to be removed from the St. Johns River, what will stop subsequent requests? I do not believe that the removal of 155 million gallons of water per day is a "safe amount." Water conservation and curtailing rampant, irresponsible development is the answer to preserving our waterways and quality of life. Increasing the possibility of more algae blooms by removing more water from the river is pure foolishness.

Samuel Floyd, Concerned Citizen (12/27/13)

Comment 1 - The Aquafer is alredy taxed to the limit, the population in Florida is increasing at an alarming pace, droughts are constant. We have destryed almost 80% of our wetlands, salt water intrusion is possible. The Jax. Port Auth. is trying to deepen the Harbor tp 47 FT. which will cause salt water to go as far as Palatka, all grass beds,eel grass and fresh water nursery grounds will be destroyed and now your going to suck up to 150,000,000 gallons a day out of the lower river. Maybe it time to step back and deliberate whether this is a bad idea for our state. in my opinion if we don't make the right decisions now it will be too late later.

Mary Keim, Environmental Stakeholder (12/30/13)

Comment 1 - We need to develop strong mandatory water conservation programs. Water development projects need to protect our rivers and lakes. Flows of river systems and levels of lakes must be protected for water quality and habitat protection.

Central Florida waters have already suffered from excess water use.

We must increase our emphasis on conservation and not take 250 mgd from our rivers and lakes.

Doug Miller, Concerned Citizen (01/04/14 & 01/06/14)

Comment 1 - St. Johns Riverkeeper has serious concerns that the withdrawals would only worsen existing pollution problems, increase salinity levels, and adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries. I agree with this statement no more water withdrawls. *(Two identical comments submitted via webpage and email to Tom Bartol)*

Mike Elliott, Concerned Citizen (01/08/14)

Comment 1 - We live on the river in the Picolata area of St. Johns County. After looking for property for years, we found this higher priced and higher taxed lot to enjoy fishing, boating, swimming, etc.. Now Algae blooms have shown up and are ever more prevalent. My family, 3 generations, is fearful of the detrimental effect from drawing more water out of the St. Johns River. Please protect this wonderful asset. Thank you for your kind consideration.

Klem Kaho, Concerned Citizen (01/14/14)

Comment 1 - Count me as a no water withdrawal vote. It is staggering how often wealthy business and corrupt regulators collude to steal community assets and strip our children of their heritage. We really do apply our death penalty to the wrong crimes.

Richard Moran, Environmental Stakeholder (01/14/14)

Comment 1 - Our river is in bad shape and more extensive withdraw would only compound the problem. Two years ago I paddled my sup the entire ST Johns from Lake Blue Cypress to Mayport, I truely love our river and refuse to sit back and allow more harm to be done. I fear the reduced flow will be the straw that breaks the camels back. Please help to protect our river!

Karen Ahlers, Environmental Stakeholder (01/16/14)

Comment 1 - The District's interpretation of the current alternative water supply laws is incorrect. The District is incentivizing alternative water supply projects and water withdrawals for the St. Johns and Ocklawaha Rivers. These projects are not in the public interest. The District is failing to make water conservation a priority and not effectively incentivizing conservation. The challenge to the previous District Water Supply Plan is unresolved and on appeal. Moving forward with the plan and river withdrawals is premature until that case is resolved.

Jane Bowley, Environmental Stakeholder (01/19/14)

Comment 1 - PLEASE do not destroy our beautiful St. John's River by pumping millions of gallons out of it to supply water to south Florida!
It will destroy the wildlife, fishing and any water activities which so many people now enjoy.

It is a crime to even think of doing this to the beautiful natural inhabitants here on the river.

Frances Hyde, Concerned Citizen (01/24/14)

Comment 1 - I do not support the plan to withdrawal water from the St. John's river and it's tributaries

Kim Whitaker, Environmental Stakeholder (01/28/14)

Comment 1 - I am totally against North Florida sending water to Central Florida, water that we need and for the health of the river. We are on water restrictions in St. John's county, which we adjust to; but not to give the water away.

Lisa Phillips, Concerned Citizen (01/28/14)

Comment 1 - I have concerns regarding the huge amounts of water being drawn from the St. Johns and from springs throughout Florida. I believe that much more care and evaluation needs to be exercised before approving businesses that use huge amounts of water. All businesses need to find more effective ways to use water.

Whitey Markle, Conservation Chair, Suwannee/St. Johns Sierra Club (1/31/14)

Comment 1 - The Suwannee/St. Johns Sierra Club opposes the Central Florida Water Initiative.
The Sierra Club is centered on conservation in all forms, including water conservation. We feel the Districts are downplaying the importance of conservation in dealing with the water crisis we are in.
Conservation projects would be far cheaper on the economy if the Districts would emphasize such projects. Building pipelines and installing pumps are far more expensive. Additionally, the planned projects in the draft plan can only be detrimental to our Lakes and Rivers (The Ocklawaha, St. Johns, and Withlacoochee rivers in our realm of responsibility). As you must be aware, the Ocklawaha has been mandated by Statute to be restored for several years, not depleted as an "Alternative Water" source.
we need strong programs that require mandatory measurable water conservation and water resource development projects that are not environmentally harmful and don't suck our rivers and lakes dry.
The Suwannee/St. Johns Sierra Club Group joins the Florida Sierra Club Chapter in opposing this irresponsible plan.

Carolyn Smith, Concerned Citizen (02/04/14)

Comment 1 - I protest the proposal by the Central Florida Water Initiative to drain 150 million gallons of water each day from the St. Johns to help water problems in Central Florida. North Florida also has water problems, and draining the St. Johns from its source (near Jacksonville) will harm towns and cities in North Florida. The whole state needs to follow California and set up water conservation plans and policies. Draining rivers merely puts off the problems of coming warming and droughts. STOP DRAINING.

Asmitha Buddam, Concerned Citizen (02/07/14)

Comment 1 - I would like to oppose withdrawl of water from st johns river as propsed by the central florida water initiative draft, i believe as a society we waste lot of water on our lawns and swimming pools, I think efforts should be made to educate people regarding conserving water, like using plants and landscape that uses less water, rain water harvesting.

I agree with st Johns Riverkeeper concerns that these proposed withdrawals would:

Worsen existing pollution problems,
Increase the frequency of toxic algal blooms, Further reduce flow and increase salinity levels farther upstream, and Adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries.

Donna Polhamus, Concerned Citizen (02/15/14)

Comment 1 - Florida's water is at peril. The springs and our groundwater are at risk and we need to conserve them-- not let political considerations dictate policy. Our springs and wetlands are not only necessary for our subsistence, but also generate our tourism and our own pleaure at the beauty of Florida. Please protect the water andf do not develop them and use them to their peril.

C Liew, Concerned Citizen (02/15/14)

Comment 1 - With all of the information that we lately have received in regards to the demand of the water supply that's needed from the St Johns river, we are truly concerned that we are not looking and considering the long term effects this might have on the st Johns river.
It's very understandably that with the upcoming growth in the Jacksonville and Orlando areas,that all areas are in need and the economic development is great. But we need to be able to supply our own area first and be able to conserve its nature and natural habitat so that our kids will be able to have a future here too enjoying the beaches, the river and boating and fishing.
Son often, we take those decisions that sounds ok for the moment it because the financial deals that are being made. However, the long term are disastrous and non-beneficial to Jacksonville and it's citizens.
Please conserve our St Johns river and let Jacksonville prosper accordingly to what it's capable of maintaining and let it's conserve and preserve its natural accordingly.

Audubon Generated Email – 1,113 Emails / 1,059 Concerned Citizens (Adam Dean, Adelia Vachon, Adriene Barmann, Al McClain (2), Alberta Householder, Alejandra Vega, Aleta Wallach, Alex Oshiro, Alexandr Yantselovskiy Svyatoshynska, Alexandra Gordon, Alexis LaMere, Alexis Maestre-Saborit, Alicie Warren, Alison Tyler, Allie Tennant, Allison Anderson, Amanda Fagan, Amanda Miles, Amy Elepano, Amy Zaengle-Calabro, Andra Heide, Andrea Grainger, Andrew Kaplan, Andrew Stamper, Angela Hughes, AniMaeChi Drabic, Anita Garrison, Ann Colchin, Ann Hancock, Ann Harwood-Nuss, Ann Kasperski, Ann Rainey, Ann Stickel, Ann Wagler,

Anna Camarata, Anna Naisbett, Anna Zancan, Anne Cox, Anne OFlaherty, Anne Prevatt, Anne Robison, Annette Windham, Annie Potts, Annie Svetlik, Antje Fray, April Wilk, Arlene Flisik, Aubrey Guilbault, Audra Burroughs, Babs Marchand, Barb Watts, Barbara Adkins, Barbara Albrecht, Barbara B. Ruge, Barbara Burtnett ,Barbara Howard, Barbara Hurley, Barbara Jean Smith, Barbara Kantola, Barbara Knutson, Barbara Kotacka, Barbara Logan, Barbara Nafpliotis, Barbara Prynoski, Barbara Thornton, Barbara Wood, Becky Wern, Belinda Scarborough, Beth Prudden, Beth Rosenberg, Betti Small, Bettina Moser (2), Bev Hansen, Beverlee Goynes, Beverly Linton, Beverly Nelmes, Bill Herrera, Bill Maden, Birgit Hermann, Bob Decay, Bob Fay, Bobbie Wendelken, Bodhi Kohler, Bonna Mettie, Bonnie Barfield, Bonnie Hurley, Bonnie Samuelsen, Bonnie Smith, Brenda James, Brenda Tarkowski, Brian Paradise, Brig Larson, Brina Beury, Bruce Blackwell, Bruce McQueen, Bruce Mohr, Bruce Rosenkrantz, Butch Bennett, C Hasbargen, C.J. Fogarty, Camilla Spicer, Camille Gilbert, Candace Lorkiewicz, Candi Shelton, Candy Cerjan, Carla Garbin, Carmen Harris, Carmen Ramsey, Carmen Williams, Carol Ahearn, Carol Barrows, Carol Collier, Carol Collins, Carol Joan Patterson, Carol Johnson, Carol McGeehan, Carol Meyer, Carol Ohlendorf, Carol Patton, Carol Schaming, Carol Thompson, Carol Waldner, Carolann Melora, Carole Butler, Carole Carver, Carole Cece, Carole Greene, Carole Hartleb, Carole Hines, Carole Larsen, Carolyn Edmunds, Carolyn Grimes, Carolyn Kile, Carolyn Smith, Carolyn West, Cassandra Browning, Catherine McNamara, Catherine Nelson, Catherine Tayler-Houle, Cathy King-Chuparkoff, Cathy Pohlman, Cathy Reynolds, Cathy Trick, Chadd Charland, Charlene Paul, Charles Fryman, Charles West, Charlisa Arthur, Chelsea Krebs, Cheri Halstead, Cheryl Calliari, Cheryl DeShaies, Cheryl Owen (2), Cheryl Slechta, Chris Drumright, Chris McCarty, Christina Chappell, Christina M Dudley, Christine B, Christine Crosby, Christine Rohal, Cinzia Mattiace, Claudia Reynolds, Clifford Nigh, Colleen McGlone, Colleen Rosell (2), Colonel Meyer (3), Connie Raper, Constance Miller, Corbett Kroehler, Craig Lee Asbury,Crystal Cumbus, Cyndi Markis,Cynthia Crawford, Cynthia Gay,Cynthia Guerra, Cynthia Murphy,Cynthia Nemoga (2), Cynthia Patterson,D Kapusta, D SOULAS,Da Lo, Dale LaCognata,Dale Potter, Dale Riehart, Dan Hubbard, Dan Meier, Dana LaRoche, Dane Hughes, Daniel Newsome, Daniel Strack, Danielle Johnston, Danuta Watola, Daphne Martin, Darlene Wolf, Dave Delson, Dave Howard, David Hastings, David Hollister, David Hopkins, David Johnson, David Kersten, David Knight, David Laing, David Neral, David Penca, David Urich, David Will, Dawn O'Donnell, Dawn Spitz, Deann Grant, Debbie Dunkle, Debbie Koundry, Debbie Sierchio, Debbie Slack, Debbie Williamson, Debi Bergsma, Deborah Boomhower, Deborah Burroughs, Deborah Daniels, Debra Bradford, Debra Jones, Debra Muncaster, Debra Plishka, Dena Gross Leavengood, Denise Thomas, Dennis Dubina, Dennis Hall (2), Dennis Kemm, Dennis Rajtora, Desta Horner, Dian Berger, Diana Booth, Diana Grove, Diana Kekule, Diane and Jerry Tabbott, Diane Casey, Diane Froias, Diane Johnson, Diane Rickman-Buckalew, Diane Smith, Dianne Douglas, Dianne Trujillo, Diinda Evans, Dina Frigo, DivyaDarshan Gurrala, Don Margeson, Donald Clark, Donald Dugger, Donald Shaw, Donna Buford, Donna Hamilton, Donna Jones, Donna Minard (3), Donna Pemberton, Donna Petersen, Donna Selquist, Dori Cole, Dorothea L. Cappadona, Dorothy Cardlin, Dorothy Doyle, Dorothy Kaluzny,

Dorothy Robbins, Doug Byron, Doug Franklin, Doug Krause, Doug Landau, Douglas Sphar, Drollene Brown, Dru Ann Delgado, E. Lynne Wright, Edie Driest, Edward Cubero, Edward Rowell, Eileen Duclau, Eileen Greene, Eileen Snitzer, Elaine Al Meqdad, Elaine Becker, Elaine Fischer, Eleanor Cohen, Elisabeth Bechmann, Elisabeth Carroll, Elise Evans, Elizabeth Aden, Elizabeth Cassidy, Elizabeth Dodd, Elizabeth Ramsey, Elizabeth Scherbak, Ellen Allen, Ellen Koivisto, Ellen Walsh (2), Ellen Winston, Elmo Dunn, Elsy Shallman, Emilia Boccagna, Emilia Hernando, Emma Spurgin Hussey, Enzo Mulas, Eric Hensgen, Eric Rohrig, Eric West, Erica Coco, Erik Booth, Erin Handy, Erin Hogg, Errikka Jordan, Esther Garvett, Euaebio Andres, Evelyn Adams (2), Evelyn Mason, Ewa Piasecka, Fay Forman, Fran Teders, Frances Mostov, Frank and Bonnie Mc Cune (2), Franshisca Dearma, Fred Fall, Fred Kahn, Fred Merker, G G, Gabriel Sheets, Gabrielle Granofsky, Gale Rullmann, Gary Usinger (3), Gayle Ryan, George Craciun, George Johnson, George Neste, Georgina Wright, Gerald Goen, Gerald Shaw, Geraldine Card-Derr, Geri Kriska (2), Gerri Reaves, Gerrilynn Conn, Gina Gatto, Gina Rice, Glenn Bristol, Glenn Rogers (2), Gloria Diggle, Gloria Picchetti, Grace Neff, Grant Campbell (2), Gregory Dudley, Gregory Rosasco, Gregory Wilson, Gretchen Griffin, Gudrun Dennis, H Hollon, H Nachtsheim, Harold Dana Sims, Harold Rhoads, Harriett Jones, Hartson Doak, Heather Landis, Heike Feldmann, Helen McGrail, Helen Obenchain, Henry Weinberg, Hilary Jones, Hiroe Watanabe, Holly Draluck (2), Hope French, Howard Fogelson, Hugh Turner (2), Ida Little, Ida Nissen, Ingrid Anderson, Irena Franchi, Irene Gomes, Irene Keim, Irene Prosser, Iris Chynoweth, Irwin Seitelman, Isolt Lea, J. Alexander, J. Holley Taylor, J. Michael Wilhelm, J. Thomas Lamb, Jack Mangus, Jack Steinberg, Jack Stiefel, Jacki Clark, Jackie Grguric, Jacqueline Marie Dolphin, Jacqueline Taylor, Jai Parekh, Jake Paredes, James Barrett, James Brunton, James Durocher, James Moyers, James Parker, James Pitts, James Rizzolo, James Sommers, James Valk, James Visconti, James York, Jan Conley, Jan Novotny, Jane Schnee, Janet Forman, Janet Maker, Janet Marks, Janet Moser, Janet Neihart, Janet Rabin, Janet Robinson, Janice Booher, Janis Keller, Janis Sawyer, Janna Kepley, Jay Rose, Jean Auris, Jean Morse, Jeanene Farrell, Jeanie Dignan, Jeanne Heer, Jeanne Sozio, Jeannie Finlay-Kochanowski, Jeannie Mounger, Jeff Omans, Jelica Roland, Jennifer Cuadra, Jennifer Hopton, Jennifer Staiger, Jennifer Thomas, Jere Herrington, Jerol Gardner, Jerry Bohmann, Jerry Burns, Jerry Rivers, Jessica Wheeler, Jill Bittner, Jill McGuire, Jim Ewing, Jim Janowicz, Jim Sumler, Jo Chen, Joan Eukitis, Joan McGowan, Joan Miles, Joan Morgan, Joan Thornquist, JoAnn Osmer, JoAnn Tredennick, Joanne Cummings, Joanne Jackson (3), Joanne Kennedy, Jody Gibson, Jody Smith, Joe Perugini, Joe Zawaski (2), Joel Meza, John and Martha Stoltenberg, John Circharo, John Fargnoli, John Goodbread, John Henderson, John Hill, John Hood, John Moszyk (2), John Orcutt, John Smith, John Valentine, John Varga, John Whitley, Jon Krueger, Jon Levin, Jon Zedick, Jonathan Gray, Jonathan Nash, Joseph Cator, Joseph Kahl, Joseph Sebastian, Joseph Tanner, Joseph Vasquez, Josephine DiClemente, Joshua Maizel, Joy Cole, Joy Turner, Joyce Firebaugh, Joyce King, Joyce LeClair, Joyce Rabon, Judith Parker, Judith Shematek, Judy Albury, Judy Jacobs, Judy McCluney, Judy Moran, Judy Rose, Julee Hagerson, Julia Diehl, Juliana M Gill, Julie A, Julie Acs-Ray, Julie Altschuler, Julie Brickell, Julie Byrne, Julie Coolidge, Julie Elbert, Julie Henderson, Julie See (2), Julien

Kaven Parcou, June Gentle, K K, K. Holliday, Karen Hart, Karen Lyons Kalmenson, Karen Paradiso, Karen Paul, Karen Quaritius, Karen Smith, Karen Stickney, Karen Turnbull, Karen Vasily, Karen Verloove, Karina Black, Karl Zedell, Kat Raisky, Kate Ellison, Kate Ellison, Kate Gallagher, Katharine Yang, Katherine Babiak, Katherine Cadury, Kathi Ridgway, Kathleen Baker, Kathleen Buckley, Kathleen Dempsey, Kathleen Gutierrez, Kathleen Helmer, Kathleen Kaye, Kathleen O'Connell, Kathleen Patton, Kathleen Scott, Kathryn White, Kathy Behl-Whiting, Kathy Dolan, Kathy Harkleroad, Kathy Sheerin, Katrin Rosinski, Kay Cummings, Kay Quackenbush, Keith Smith, Kelleen Knight, Kelli Mathers, Kelly Riley, Ken Gilmour, Ken Martin, Ken Rudzki, Ken Torres, Kenneth Nusbaum, Kenneth Robertson, Kerstin Green, Kevin Doty, Kevin Peed, Kevin Vaught, Kim Church, Kim Diaz, Kim White, Kimberly Church, Kimberly Schmidt, Kimberly Taggart, Klaus Steinbrecher, Kristen Renton, Kristi Carpenter, KX BX, Kyle Bracken, L W, L Wilson, L.J. Stetson, Laina Shockley, Landis Crockett, Lanette Rapp (2), Lani Friend, Laraine Winn, Larry Goodman, Laura Berkelman, Laura Collins, Laura Krause, Laura Marie Pepsin, Laura Murchison, Lauri Tyeryar, Laurie Douglass, Laurie Eberle, Leah Bowman, Lee Dalton, Lee Russ, Leila Newcomb, Lennie Rodoff (2), Lenore Reeves, Leon Mandell, Leona Klerer, Leonard & Martha Reiss (2), Lesley Cox, Leslie Davis, Leslie Fellows, Leslie Gregory, Leticia Reyes, Lewis Deene, Lillian Deslandes, Lillian Maniscalco (2), Linda Ashton, Linda Burianek, Linda Burke, Linda Butler, Linda Fowler, Linda Hawk, Linda Headley, Linda Koren, Linda Pease, Linda Petrulias, Lindsay Johnson, Lisa D'Innocenzo, Lisa Doran, Lisa Frey, Lisa Greene, Lisa Jelks, Lisa Kramer, Lisa LaDore, Lisa Longacre, Lisa Modola, Lisa Neste, Lisa Salazar, Lisa Tart (2), Lisbeth Bruce, Liu Wai Ling, Liz Reed, Lois Page, Lois Sparkman, Lora Smith, Loren Evans (2), Lorenz Steininger, Loretta Goldenberg, Loretta Riquetti, Lori Biagini, Lori Currie, Lori Straits, Lorna Wallach, Lorraine Margeson, Louis Kovach, Louise Preston, Lowell Palm, Lucinda Faulkner Merritt, Luise Frech, Luy ñyh, Lydia Garvey, Lyman Goodnight, Lynn Elliott (2), Lynn Fischer, Lynn Holland, Madelaine Sutphin, Madeline Klinko, Maggie Vitali-Cornell, Marc Silverman, Marcella Daniels, Marcia Burr, Marcia Foosaner (2), Marcia Hoodwin, Marcia Mathison, Marcus O'Bryon, Maresa Luzier, Margaret Cox, Margaret Ginolfi, Margaret Hartzler, Margaret Sears (2), Margaret Silver, Marguerite Foust, Maria Fernandez, Maria Henderson, Marian Linda Perry, Mariann Pirchio, Marianne Boschen, Marianne Shaw, Marie Danna, Marilyn & Tom Finnelli, Marilyn Cochran, Marilyn Muir, Mario Giannone, Marion Coward, Marjorie Ewell, Marjorie Williams, Mark Donaldson, Mark Gillono, Mark Jordan, Mark Meyer, Marsha Lowry, Martha Archuleta, Martha Harnit, Martha Leahy, Martha Spencer, Martin Slater, Martin Wieland, Marvin George, Mary Bowie, Mary Detrick, Mary Ellen Flowers, Mary Ellen Thursby, Mary Erickson, Mary Holly Allison, Mary Holmes, Mary Jalane Speer, Mary Keim, Mary Leitch, Mary Maxwell, Mary Tanoury, Mary Thomison, Matt Feightner, Matthew Haehl, Matthew Heyden, Matthew Rosa, Matthew Schaut, Maureen Crawford, Maureen O'Neal, Maurice Hartman, Meagan Fastuca, Meghan Wood, Melania Padilla, Melanie Clements, Melinda Henderson, Melissa Allen, Melissa Brown, Melissa Buhler, Melissa Burton, Melissa Gaskins, Melissa Potapow, Melissa Tripson, Meredith Russo, Merrill Horswill, Meryl Pinque, Meyer Jordan, Michael Bachand, Michael Bates, Michael Boyle, Michael Carney, Michael DeLoye, Michael

Kintzer, Michael Kirkby (2), Michael McGuire, Michael Mitsuda, Michael Nutini, Michael Spradlin, Michael W Evans, Michele May, Michele Mercer, Micki Marshall, Mignon Craig, Mike Wolski ,Miranda Everett, Missy Kendrick, Misty Munoz, Mont Cooper, Morris Firebaugh, Nan Stevenson, Nancy Farris, Nancy Griffin, Nancy Hoffman, Nancy Kosa, Nancy Kost, Nancy Starrett, Nancy Stiefel, Nancy Tucker (2), Natalie Schrey, Natalie Van Leekwijck, Ned Overton, Nicholas Pappas, Nicholas Prychodko (2), Nicholas Williams, Nickolas Gutierrez, Nicole Shaffer, Nolan White, Norm Herlihy, Norma Gangone, Norma Washburn, Norman Taylor (2), Ondine James, Pam Meharg (2), Pamela Peltier, Pandora Edmonston, Pascha Donaldson, Pat Lewis, Pat Maisonnave, Pat Rose, Patricia Archuleta, Patricia Crepeau, Patricia Gallo, Patricia Kusierski, Patricia Lattanzia, Patricia Maden, Patricia McDonald, Patricia Norton, Patricia Reonas, Patricia Roberts, Patricia Rossi, Patricia Sheridan, Patricia Southward, Patricia Todd-Dennis, Patricia Tokar, Patricia Turpin, Patricia Vazquez, Patricia Walker, Patrick Finerty, Patrick O'Meara, Patrick Sennello (2), Patti Martin, Patti Packer, Paul Kidd, Paul Kripli, Paul Martin, Paul Midney, Paul Schmalzer, Paula Hooyman, Paula Montgomery, Paula Schoenwether, Peggy Goldberg, Peggy Oba, Peggy White, Penny Jackson, Peter Bromer, Petra Hays, Phil James, Philip Capobianco, Philip Kane, Phillip Leija, Phillip Leija, Phyl Morello, Phyllis Hall, Phyllis Roth, Preston Whetstone, R David Wicker, R. Martin, Rachael Moore, Rachel Garibay-Wynnberry, Rachelle Mazar, Ralph Bird, Ramicah Watkins, Randolph Gyulay, Randy Harrison, Ray Crickenberger, Ray DiZefalo, Raya Engler, Raymond Kane, Rebecca Janssen, Rebecca Ryan, Rebecca Sego, Relman R Diaz, Rene Robert, Renee Andrews, Renee Sosslau, Renee Thomas, Renne Leatto, Rho Andrae-Lawford, Rhonda Lawford, Richard Bryant, Richard Han, Richard Murphy, Richard Pirovano, Richard Rothstein, Richard Smith, Richard Strong, Rick Martinilisabelle Kanz, Robert A. Cospito, Robert Bernstein, Robert Blackiston, Robert DFilippo, Robert Keiser, Robert Mahoney, Robert O'Brien, Robert Petersen, Robert Rinehart, Robert Thomas, Robert Wolf, Roberta Claypool, Roberta Gastmeyer, Roberta Vandehey, Robin Banks, Robin Dolbear, Robyn Reichert (2), Rodger Silvers, Roger Vaughan, Ron Ayers, Ron Browall, Ron Silver (2), Ronald Baltrunas, Ronald Beard, Ronald Eike, Ronald Murphy, Ronald Ney, Rosalie Shaffer, Rose Eckert (2), Rosemarie Grubba, Ross Kelsonpetit, Roth Woods, Roxanne Williams, Russ Berger, Russell Mitchell, Russell Weisz, Ruthann Roka, Ryan Handeland, Sally Hess, Sally Hill, Samuel Durkin, Sandi Scanlon, Sandra Couch, Sandra Hazzard, Sandra Kanner, Sandra Koelble, Sandra Lyon (2), Sandra Schnettler, Sandra Walters, Sandra Watts Kennedy, Sandy Commons ,Sandy Levine, Sandy McGee, Sandy Sundquist, Sanja Lalic, Sara Courte, Sara Wersinger, Sarah Hamilton, Sarah Harrison, Sarah Oswaldf, Saskia Santos, Scott Taylor, Shane Nodurft, Sharldne White, Sharon Bailey, Sharon Bramlett, Sharon Miller (2), Sharon Rich (2), Sharron Laplante, Shawn Williamson (2), Sheila Desmond, Sheila Dillon, Sheri Cutright, Sherry Fargnoli, Sherry Stockert (2), Sheryl Salvaggio, Sheryll Topping, Shirley Hinnau, Shirley Lasseter, Shirley Robinson, Sidney Axinn, Skip Clement, Skipper Hammond, Sofie Buyniski, Sonya Gendron, Sonya Myers, Stacey Calvert, Stanley Pannaman, Stefan Taylor, Stephen Donnelly, Stephen Gerwer, Stephen Perakis, Stephen Potts, Stephen Priebe, Stephen Wallace, Steve Iverson, Steve Jens-Rochow, Steve Schildwachter, Steve Zoellner, Steven

Handwerker, Steven Morris (2), Steven Schuemann, Steven Zeit, Stewart Rosenkrantz, Stuart Hill, Summer Devlin, Susan Arkin, Susan Barrons, Susan Burtnett, Susan Cummings, Susan Esposito, Susan Horlick, Susan McDonough, Susan Navidad, Susan Oldershaw, Susan Pelakh, Susan Preston, Susan Rose, Susan Tjarks, Susana Murray, Susanna Purucker, Susie Cooke, Suzann McAlister, Suzanne Kral, Suzanne Murphy-Larronde, Suzanne Saunders, Suzanne Valencia, Suzy Berkowitz, Suzy Siegmann, Sylvia Andrews, Sylvie Carpentier, Tamara Hendershot, Tanya Tweeton, Tara Hottenstein, Ted Fishman, Tedd Greenwald, Terrence Langlois, Terri Haines, Terry Forrest, Terry Tedescp-Kerrick, Thea Surrey, Theodore Spachidakis, Theresa Reiff, Thomas Alexander, Thomas Brenner (2), Thomas Natiello, Timothy Coons, Timothy Foley, Tina Horowitz, Tina Mizhir, Tina Tine, Tom Caine, Tom Finholt (2), Toni Crockett, Toni Lubka, Toni Wolfson, Tony Marra, Tracy Cole, Tracy Marinello, Trina Mitchell, Tye Block, V Rogerson, Val Marjoricastle, Valerie Kennedy-Grisham, Vance Arquilla, Vaughan Greene, Verona Morse, Victoria Bonetti, Victoria Johnston, Vijay Satoskar, Vince and Sandi Vanacore, Vinny Mullins, Virginia Selley, Walter McKenzie, Wayne Valachovic, Wendy Brezin, Wendy H, Whitey Markle, William Claiborn, William Grow, William Hayes, WIlliam Hillberg, William Parsons, William Peterson, William Snyder, William Toner, William Warfel, William White, Wilson Bagwell (2), Winnie Foster, Yemel Bryan, Yvonne Fast, Zach Platt, II (2), Zana Burnette and Zena Tucker) **(02/16/14 - 02/20/14)**

Florida's treasured rivers, lakes, wetlands, and springs are special places where memories are made. Overconsumption of water has reduced flows and damaged wetlands and springs throughout Central Florida. If the right steps are not taken now, the places I hold so dear risk being lost forever.

The Central Florida Water Initiative Draft Regional Water Supply Plan is an opportunity for Florida. The state can show it is a national leader in water conservation efforts and a leader in protecting and restoring natural areas abundant with wildlife and flowing clear blue water.

Please change the Draft Water Supply Plan to reflect the following:

1.Do not move forward with risky surface water projects in the plan.
Do not drain the St Johns River. Do not put the Kissimmee River Restoration project at risk. These proposed projects are expensive, unreliable, and environmentally risky.
2.Greatly expand water conservation efforts through incentive programs and measurable and mandatory regulations. This should be exhausted before planners look at further tapping our strained groundwater and surface waters.
3.Protect and recover our stressed springs, wetlands, and other natural systems.

This is a golden opportunity to make Florida a national leader in water sustainability and ecosystem recovery. Let's not miss it.

Lisa Kelly, Concerned Citizen (02/17/14)

Comment 1 - This plan is a bad idea. Conservation of resources is the best initiative that can be taken at this time and for all time. I read about the district squandering our water resources and I think who's interest do they represent because it does not seem to be the citizens of the district or Florida for that matter. We must protect the finite resource. This is the answer! Not expensive projects that destroy our precious lifegiving resource.

Michael R. Walsh, Concerned Citizen (02/17/14)

Comment 1 - The Central Florida WMD is supposed to be conserving the fresh water on behalf of our current citizens, (including me), and on behalf of future generations of children not yet conceived. What are you thinking to even contemplate giving away our precious water in exchange for immediate appreciation? Don't you want your legacy to exceed that of your peers and predecessors? Or have you just given up on the future needs of all beings in northern Florida ... including us humans? Thanks a lot!

Katherine Trusty, Concerned Citizen (02/18/14)

Comment 1 - Please do not move forward with plans to siphon millions more gallons of water from the St. Johns's River and its tributaries. The damage would be widespread and long lasting. Your focus should be instead on conservation. We cannot sustain the current levels of water waste we have now. Siphoning more water from the river will damage the Florida we love and our children and their children will not know the true natural beauty of Florida.

Bill Stokes, Environmental Stakeholder (02/19/14)

Comment 1 - It would be foolhardy to allow further withdrawals. Inside ring the inevitable near term future demands. Please do not approve this additional withdrawal request.

Carol Sisco, Concerned Citizen (02/19/14)

Comment 1 - Unbridled and unsustainable growth.
Weak water conservation policies and enforcement.
Personal and commercial waste of water and pollution of water.

I protest the draw down of additional water from the St. Johns River (and other bodies of water in the state) until we have meaningful and enforceable conservation policies, laws and actions. How awful would it be to restrict residential growth, water golf courses and some agriculture and lawns with reclaimed water, and then to actually fine wasters of water?

We can not depend on Mother Nature to give us the water we want and need. A life dependent natural resource that becomes more limited by the day demands reasonable and effective action.

Millie Ganzel, Concerned Citizen (02/19/14)

Comment 1 - This is a horrible idea. CFWI will destroy an already fragile tributary known as the St. John's River. The St. John's River's springs are struggling right now. Salt water intrusion is creeping south and algae and other toxins are thriving. Please, think of future generations of North Floridians and don't turn off the freshwater upstream. We need our wetlands, aquifer, and wells.

Ann Taylor, President, South Anastasia Communities Association (02/20/14)

Comment 1 - I am speaking for the South Anastasia Communities Association, a private non-profit organization dedicated to the preservation and protection of the quality of life along the southern coast of St Johns County.

I have three major points make: (1) water is a finite resource; (2) current strategies for supplying our water needs are not workable; and (3) any viable solution requires 'practices' that put the highest priority on comprehensively improving conservation and protecting recharge.

The CFWI Draft Water Supply Plan acknowledges that Central Florida is reaching the sustainable limits of its source of water, the Florida Aquifer.

As a result, the three water management districts in this area created the Central Florida Water Initiative. They are proposing withdrawing 150 gallons/day from the St Johns Rivers at an infrastructure cost of $1.5 billion.

In addition, however, the SJRWMD recently released a Water Supply Plan for all the counties within its jurisdiction calling for the withdrawals of an additional 210 million gallons of water/day for the St. Johns and the Ocklawaha at a cost of $3.9 billion. Clearly our rivers are under attack.

According to the CFWI, one of their guiding principles is:
"Identify the sustainable quantities of traditional groundwater sources available for water supplies that can be used without causing *unacceptable* harm to the water resources and associated natural system."

Perhaps is it the definition of "unacceptable" that we differ on.

The St Johns River has already been "harmed." The recent algae blooms and fish kills tell us this. To propose to draw additional quantities from the River is "unacceptable."

Meeting the water demands of south and central counties simply by taking more water from the St Johns is what is "unacceptable." That sort of near future, problem–of-the-moment thinking has gotten us into our current predicament. We've maxed out withdrawals from the aquifer in 40 short years and now we're going to take down the St Johns River?

We engaged in this discussion 6 years ago when the Yankee Lake project proposed to with draw 85 million gallons/day from the St Johns. There was a huge public outcry with opposition from environmental groups and the County Commissioners from both Duval and

St Johns counties. Yet the district approved this additional withdrawal, but acknowledged the need for additional rules and regulations to encourage conservation.

Over an 18 month period--dozens of meetings, hundreds of people and thousands of hours--new rules and regulations were proposed…comprehensively addressing conservation for public utilities, agriculture, industry and residential use. That was December, 2009. In January of 2010 we had a new administration in Tallahassee and one of the new governor's first proclamations was that there was to be a moratorium on new rules and regulations. So the proposal is still gathering dust. It's not that we don't know what to do to conserve water, it's that we don't have the political will.

I urge all of the water management districts of the Central Florida Water Initiative to be faithful to their mandate to be stewards of our rivers and lakes.

I return to my 3 major points:
1. Water is a finite resource;
2. Our current strategies are unworkable and not sustainable;
3. Conservation is critical if we are going to have a sustainable water supply.

Thank you for providing the opportunity to comment on this draft plan.

Gabriel Hanson, Environmental Stakeholder (02/20/14)

As Vice-Chair of the NE FL Chapter of Sierra Club, Please let me remind you that water quality issues have long been priorities of Sierra -- particularly in FL. The Club works with St. Johns Riverkeeper and our views coincide closely enough for me to say that we endorse and second Riverkeeper's water supply plan comments.
If you have any questions, please feel free to contact me.

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.*

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to

provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The effect on the severity of algal booms arising from withdrawal-mediated residence time increase was the primary mechanism examined by the Plankton group of the WSIS. The investigation found that while residence time is correlated to algal biomass for short to medium residence time, beyond this level nutrient limitation is reached and maximum algal biomass is uncorrelated to residence time. As phosphorus load continues to be reduced under the Total Maximum Daily Load (TMDL) requirements, the residence time effect on algal biomass will continue to diminish. The WSIS concluded that the effects of increased residence time on algal bloom density and duration was negligible, even under withdrawal scenarios that exceeded the maximum proposed allowable surface water withdrawal.

Regarding assertions that upstream water withdrawals will "increase pollution problems" and increase salinity. "Pollution", or the addition of contaminants to the river, is unrelated to water withdrawal. While a decreased flow could conceivably lead to reduced flushing rates and advection of waste, the reduction of point source pollution in the Lower St. Johns River from TMDL enforcement has led to a low level of pollution entering the Lower St. Johns River during low flow, when withdrawals would be more likely to exert an effect.

In addition, potential water quality effects arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent. Potential water quality effects were not integrated into future land use scenarios, under the assumption that future development would occur with BMPs that would not lead to a significant increase in pollutant load, and would also replace some existing polluting land uses.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

Comments Regarding Niagara CUP

Donna Lea Needham, Concerned Citizen (12/17/13)

Comment 1 - Where can I address comments concerning Niagara CUP?

Joann Applewhite, Concerned Citizen (01/01/14)

Comment 1 - Dear Water Representatives, I have already written, but I will write again because I am just sick to think that anyone would even consider giving Niagra Bottling Co the ability to take out 910,000 gallons a day. Water is part of the commons, which means it belongs to the people. I realize that you are under pressure from this corporation, but trust me this is not the best choice for Florida. We need to stop thinking short term and look long term. Please watch the documentary Last Call at the Oasis. We need forward thinking, not just caving in to the powerful.

Douglas Bucher, Concerned Citizen (01/01/14)

Comment 1 - No more water needs to be given to Niagra Bottling. The water belongs to the people of Florida for our needs, now and in the future. Not given away to some private bussiness to profit from selling it all over the world. They will make the profit while Floridians get a pittance. We are already on the hook for half a million galons a day for the next 20 years! We don't need to double our mistake.

Eric Jenison, Concerned Citizen (01/02/14)

Comment 1 - As a resident of Lake County I oppose the removal of additional water from our aquifer by a for profit company. We are advised on a daily basis about the water crisis in the State of Florida. Our water rates continue to rise and our use of water is restricted. Please reconsider Niagara's request to take additional amounts of our water.

Melissa Lynch, Concerned Citizen (01/11/14, 01/28/14 & 01/30/14)

Comment 1 (01/11/14) - All of our water is connected whether it is a deep layer or an upper layer. The condition of our lakes is certainly failing. I feel like this renewal of the Niagara Bottling permit is totally not in the public's interest. Please do not let big business sway your judgment and vote in the best interest of the public. The public can certainly on the next election vote is someone who is more environmentally minded.

Comment 2 (01/28/14) - All of our water is connected whether it is a deep layer or an upper layer. The condition of our lakes is certainly failing.
I feel like this renewal of the Niagara Bottling permit is totally NOT in the public's interest. Please do not let big business sway your judgment and vote in the best interest of the public instead. The public can certainly vote in someone who will stand up for the environment for the next election.

Comment 3 (01/28/14) - Please don't allow this to happen. All Florida's water is connected. Our lakes are so low already. We need all our water both upper and lower levels.

Comment 4 (01/30/14) - Please don't approve this plan. Florida's water is all connected. I feel that this would lead to salt water intrusion and more sink holes. Tell Niagara Bottling NO

Marie Len, Concerned Citizen (01/19/14)

Comment 1 - Objection to 20-069-114010-4 Niagara Bottling, LLC Please do not renew permit to continue pumping water from our aquifer. We need to conserve our natural resources and selling our water to Niagara Bottling does not benefit our citizens in the long run. They can find some other ways to make money not at our expense.

Margaret Garrison, Concerned Citizen (01/23/14)

Comment 1 - PLEASE DO NOT INCREASE THE AMOUNT OF WATER NIAGARA BOTTLING CO. IS TAKING FROM OUR AQUIFER. THIS WATER IS AND WILL ALWAYS IN THE FUTURE BE NEEDED BY THE TAXPAYING CITIZENS OF THE FLORIDAN AQUIFER AREA.

Kenneth Buuck, Concerned Citizen (02/10/14)

Comment 1 - Please do not let Niagara use any water.
We do not have enough water now, taking aquiver water is known to have a detrimental effect on the aquiver .
Please do not do this. *(Two identical comments submitted via website.)*

John M, Concerned Citizen (02/10/14)

Comment 1 - DENY Niagra.
Their taking our water to ship elsewhere for their profit is NOT an efficient use of OUR water.

Robert Hudak, Concerned Citizen (02/11/14)

Comment 1 - Please do not thwart the will of the citizens, who overwhelmingly do not want to increase the amount of our water taken to be sold by Niagara.

I do not want ANY water taken from us . I want you to end their exploitative arrangement immediately..
We wish to stop all selling of our water for your benefit.

Ignore the wishes of the people to your own peril. You will not be able to escape being forced to answer the hard questions.We will hold you personally accountable.

Remember to serve the public who has trusted you.

Nancy Alloway, Concerned Citizen (02/11/14)

Comment 1 - I am appaled that Florida would ever allow this water to be removed from our state. If California bottling companies want water why don't they use their own state's water. Why, because Californians WON'T ALLOW it, yet we are supposed to sit back and let this happen. We have been told all these years that we need to conserve our water, it's running out, we can't replace it. Well, if all of this is true, why in the world would any of those representing us allow our water to be taken. It's bad enough that it might even cause sinkholes to form, leaving homes vulnerable, but if we want drinking water we have to buy OUR water back. This is terrible!!!!!

Earlene Bradley, Concerned Citizen (02/11/14)

Comment 1 - Why is permission given to companies wanting to remove water from our aquifer to make money for themselves while the people who live here and are constantly paying more for their own water use. In other words, we are paying more because of our low water supply. Many actually buy bottled water for drinking for fear of having their water contaminated. They are paying double for drinking water.
I do not believe permission should be granted for companies to take from the people. We have a right to use this water. What happens when there is not enough water to supply the population? We encourage people to locate in Florida. We need to be able to supply for their needs. What are the plans for supplying water when we no longer have enough water for our own use?

Priscilla Black, Concerned Citizen (02/11/14)

Comment 1 - If Niagara's request for more water meets state standards, then the standards must be changed.
How much does Niagara pay for the water it extracts from the aquifer? How much profit is it making on water that should be going to the public utilities?
This madness needs to stop now.

Dianne Benedetti, Concerned Citizen (02/11/14)

Comment 1 - How can you possibly justify allowing any commercial water bottling enterprise to continue to drain the Floridan Aquifer? I have been reading about serious water issues affecting Floridians for years, and of the changes that we all are expected to make in preparation for that time when there is no water left? WHAT ARE THE LEGISLATORS THINKING? Am I the only one who suspects that someone must be lining their pockets at the expense of Florida's citizens and their precious resources? SHAME ON THE NEGLIGENCE OF THIS OUTSIDE CORPORATION AND ALL OF THEIR SUPPORTERS!

Jerry Pitts, Concerned Citizen (02/19/14)

Comment 1 - Please stop selling water from the aquifer to commercial water bottlers.

Theresa Salamone, Concerned Citizen (02/19/14)

Comment 1 - I am appalled with the over usage of dwindling water supplies from our aquifer by utilities, farmers/ranchers, numerous golf courses and now Niagara which is bottling our water and selling it elsewhere! Studying this problem has been going on since the early 90's. It has been studied enough and now we need strict regulations so we have life sustaining water to drink vs. watering lawns, etc. There is tremendous waste and newcomers to our State are totally unaware of how careful we need to be with utilization of our water resources. Start with the heavy users by higher rates and penalties. They will get the message when it hits their cash flow. Let's get to work and stop the committees and studies.

Laura Glick, Concerned Citizen (02/20/14)

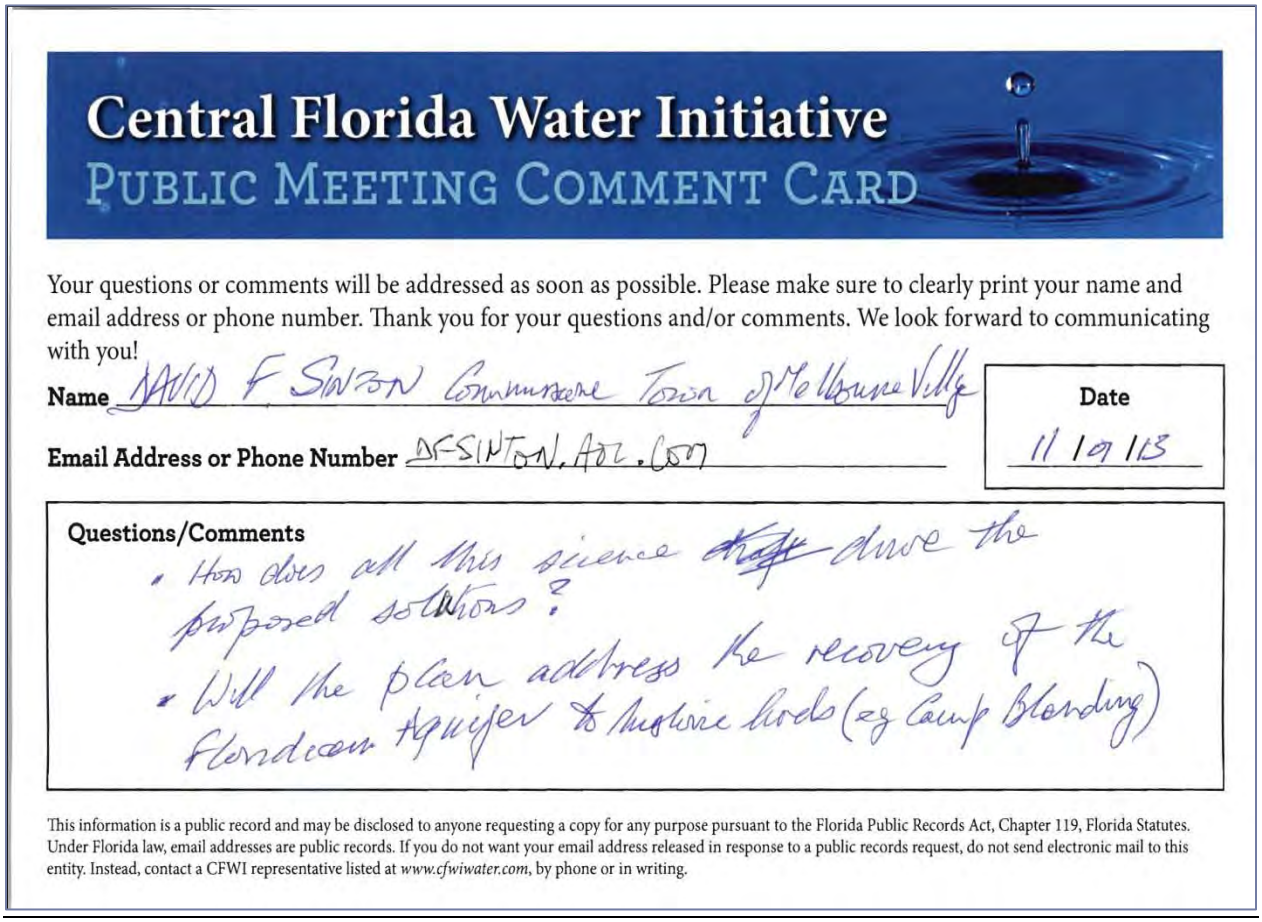
Comment 1 - Pulling water from lakes and rivers is not a viable solution. Encourage more sustainable practices from Government agencies, corporations and citizens. The simplest solution is to cancel all of the contracts allowing bottling Companies to pump millions of gallons per day from the aquifer. They are stealing our water and selling it for a profit and the residents of Florida get nothing in return except a promise that Florida will be out of water in approximately 20 years. Don't destroy our wetlands. Don't take away the places where we kayak, swim, and enjoy the outdoors. Give companies like Niagara water the boot and keep Florida's water at home where we need it.

CFWI RWSP Team Response *- In its review, District staff determined that the application meets the conditions for issuance of this permit and that the proposed use of water is a reasonable and beneficial water use; will not interfere with any presently existing legal use of water; and is consistent with the public interest.*

Board members reviewed the staff's report and recommendation, and letters and emails received from the public, before making a decision on whether to issue the permit and approved a 20-year permit for Niagara at the public Board meeting on February 11, 2014.

Copies (Pictures) of Letters Received Via Mail / Comment Cards

David F. Sinton, Commissioner, Town of Melbourne Village (11/07/13 & 12/12/13)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name DAVID F SINTON Commissioner Town of Melbourne Village

Date 11/07/13

Email Address or Phone Number DFSINTON.ADL.COM

Questions/Comments

- How does all this science ~~stuff~~ drive the proposed solutions?
- Will the plan address the recovery of the Floridan Aquifer & historic levels (eg Camp Blanding)

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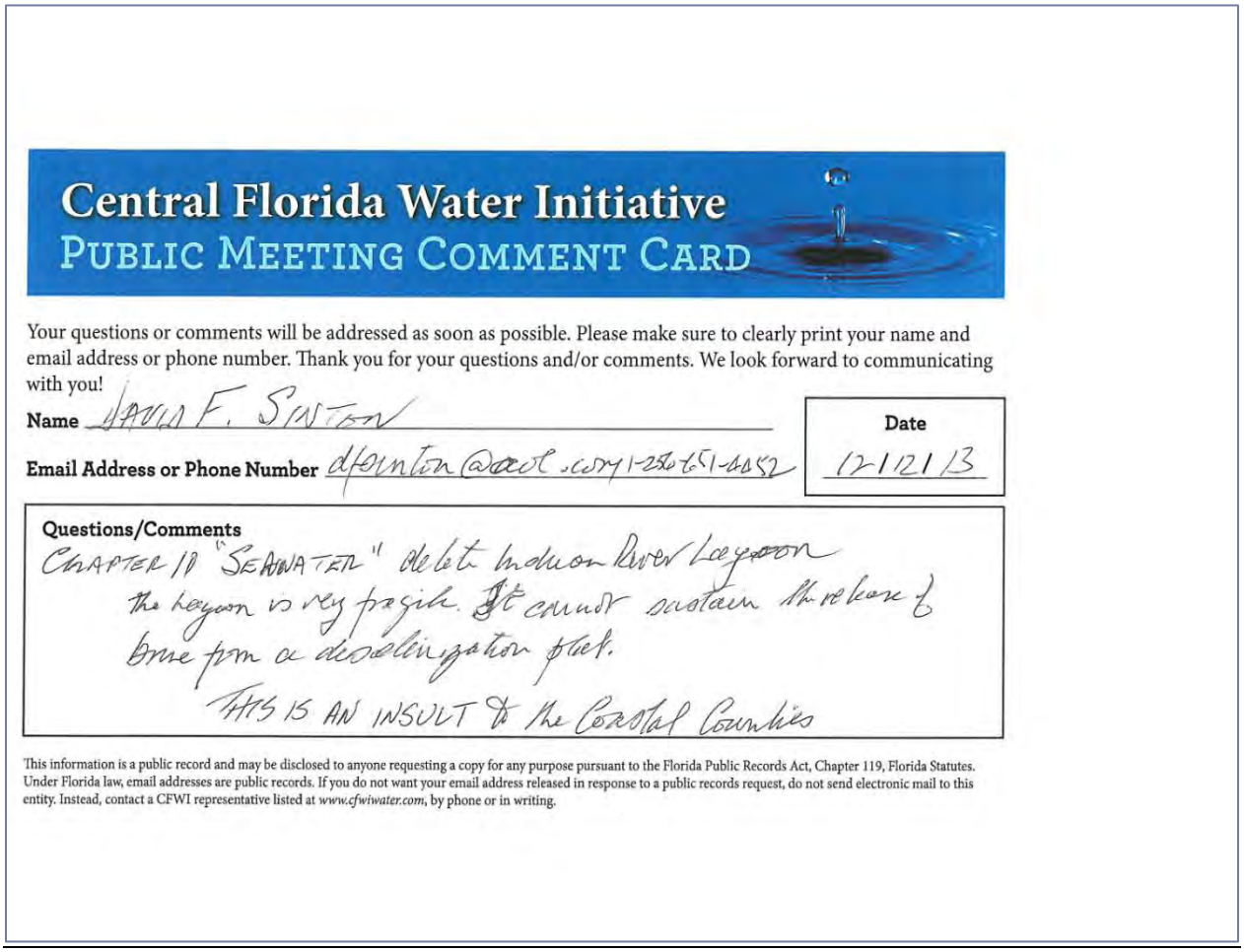
CFWI RWSP Team Response *- The goal of the RWSP is to provide a plan to meet all existing and future reasonable-beneficial uses of water while making sure there is sufficient water to sustain the water resources and related natural systems over the planning period. For the current phase of the CFWI, the plan addresses projected demands for water out to 2035. As presented in the RWSP, water demands are projected to increase by about 300 mgd. Using information obtained from the ECFT groundwater flow model and environmental monitoring in the area, it was determined that it is possible to meet an additional 50 mgd of water demand using groundwater without causing adverse impacts. Development of groundwater beyond the additional 50 mgd will likely require management efforts to avoid adverse impacts. It is anticipated that much of the remaining 250 mgd demand will be met through development of mitigation projects and AWS including conservation, reclaimed water, surface water, stormwater, brackish and seawater sources.*

The plan acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.

The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

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Name DAVID F. SINTON

Email Address or Phone Number dfsinton@aol.com 1-239-851-6052

Date 12/12/13

Questions/Comments

CHAPTER 10 "SEAWATER" delete Indian River Lagoon
the lagoon is very fragile. It cannot sustain the release of brine from a desalinization plant.
THIS IS AN INSULT to the Coastal Counties

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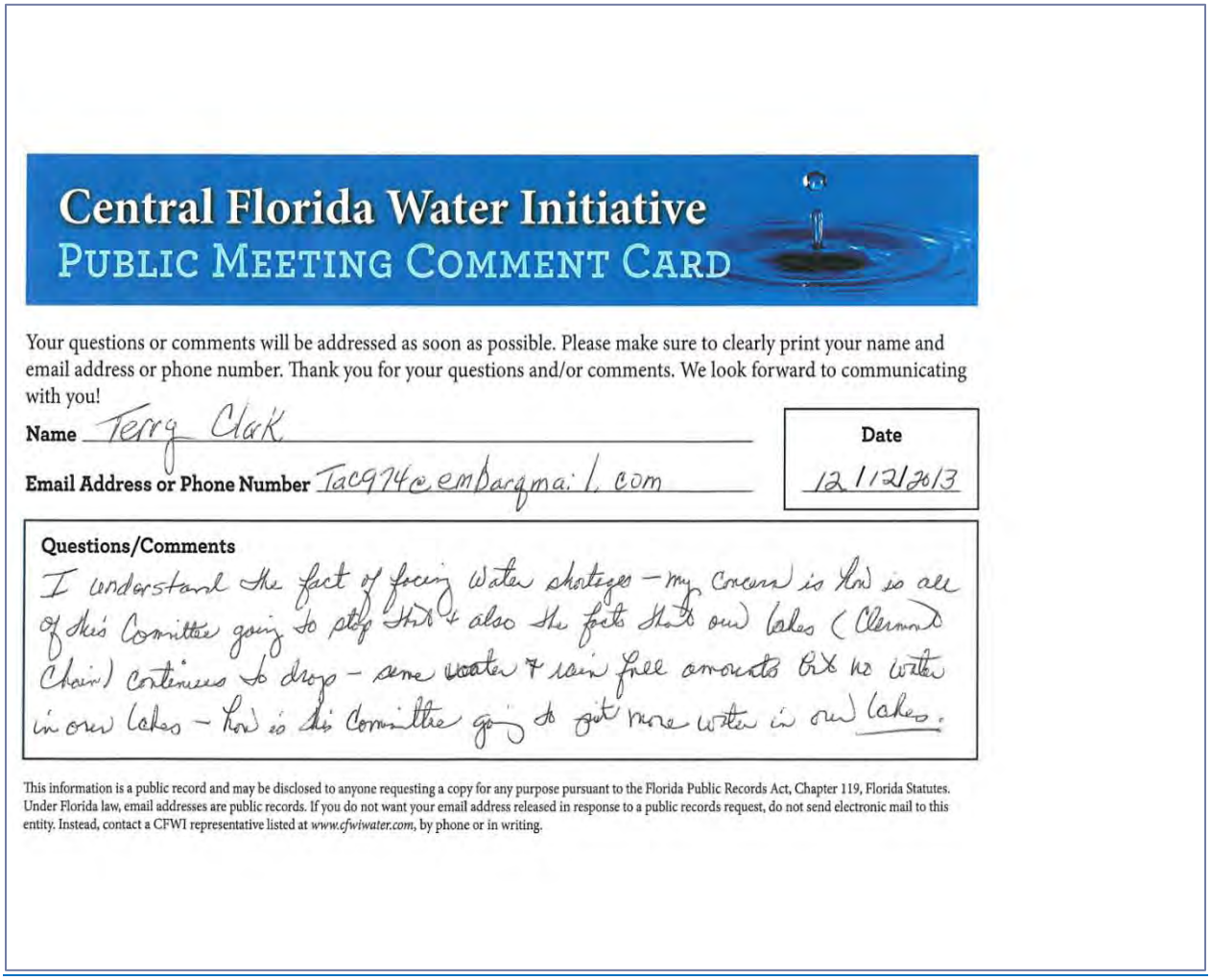
CFWI RWSP Team Response *- Indian River Lagoon has been removed from Page 173.*

Terry Clark, Concerned Citizen (12/12/13)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

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Name Terry Clark

Email Address or Phone Number Tac974@embarqmail.com

Date 12/12/2013

Questions/Comments

I understand the fact of facing water shortages – my concern is how is all of this Committee going to stop that & also the fact that our lakes (Clermont Chain) continues to drop – same water & rain fall amounts but no water in our lakes – how is this Committee going to get more water in our lakes.

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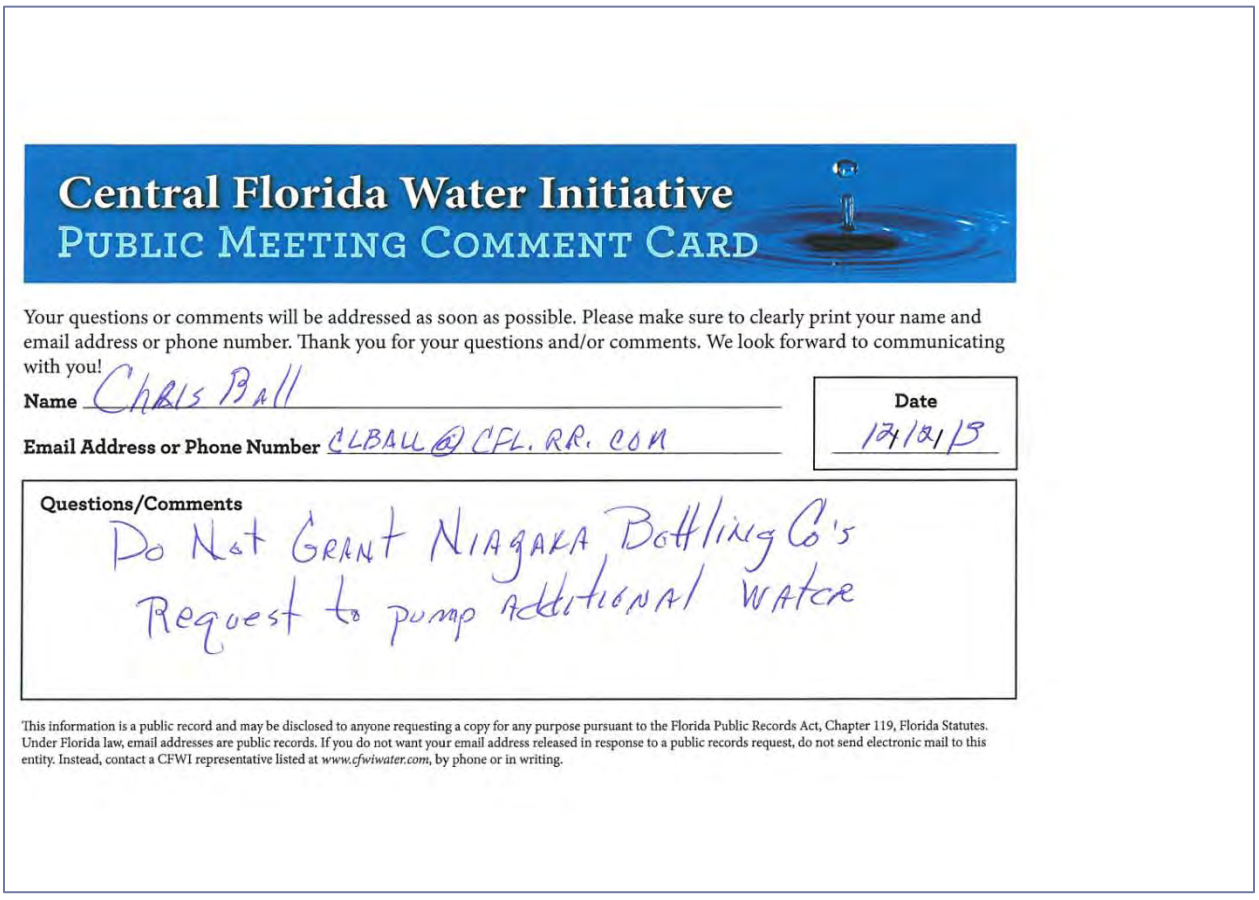
In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Chris Ball, Concerned Citizen (12/12/13)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name Chris Ball

Email Address or Phone Number CLBALL@CFL.RR.COM

Date 12/12/13

Questions/Comments

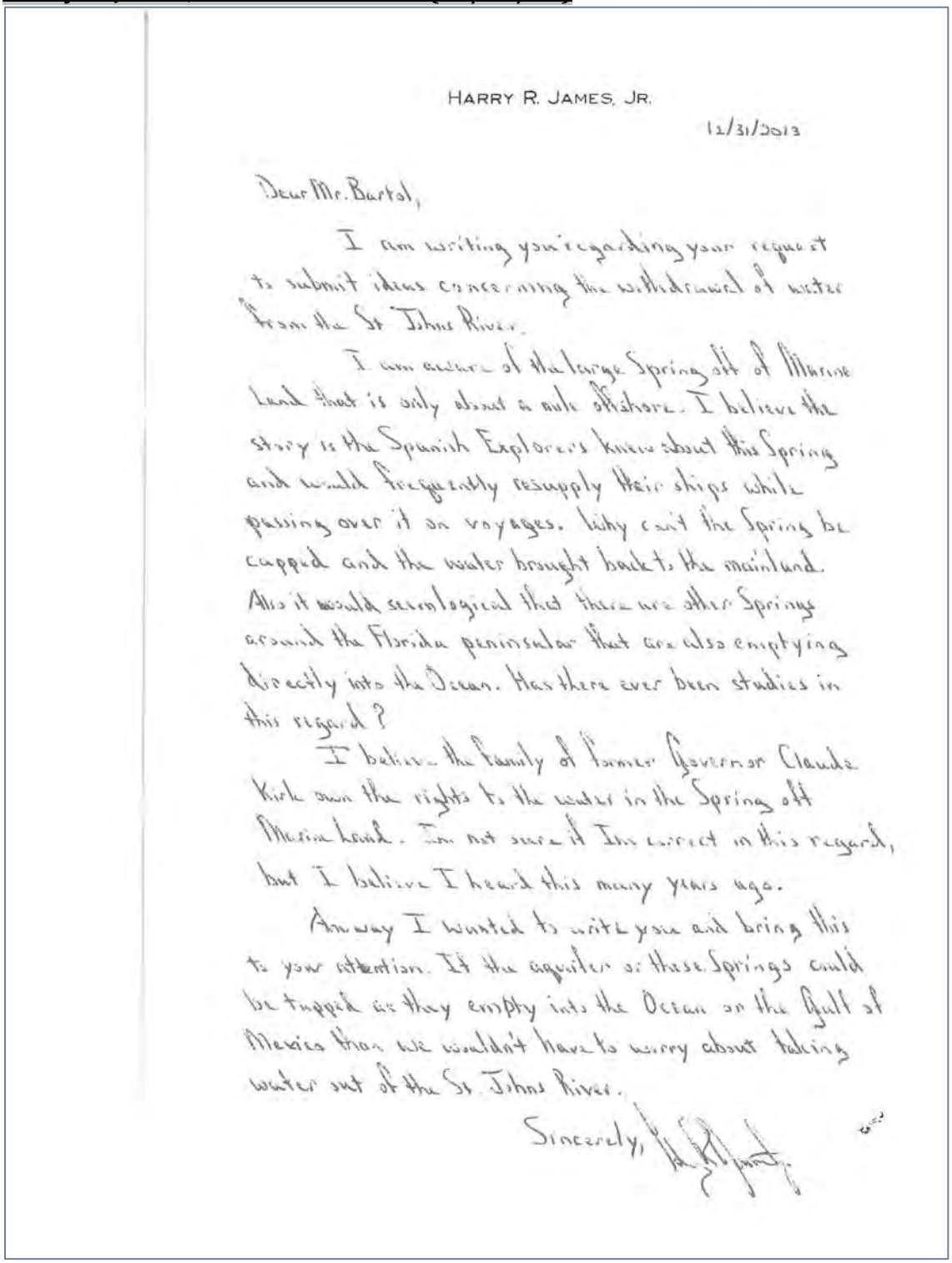
Do Not Grant Niagara Bottling Co's Request to pump additional water

This information is a public record and may be disclosed to anyone requesting a copy for any purpose pursuant to the Florida Public Records Act, Chapter 119, Florida Statutes. Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact a CFWI representative listed at *www.cfwiwater.com*, by phone or in writing.

CFWI RWSP Team Response *- In its review, District staff determined that the application meets the conditions for issuance of this permit and that the proposed use of water is a reasonable and beneficial water use; will not interfere with any presently existing legal use of water; and is consistent with the public interest.*

Board members reviewed the staff's report and recommendation, and letters and emails received from the public, before making a decision on whether to issue the permit and approved a 20-year permit for Niagara at the public Board meeting on February 11, 2014.

Henry R. James, Concerned Citizen (12/31/13)



HARRY R. JAMES, JR.

12/31/2013

Dear Mr. Bartol,

I am writing you regarding your request to submit ideas concerning the withdrawal of water from the St Johns River.

I am aware of the large Spring off of Marine Land that is only about a mile offshore. I believe the story is the Spanish Explorers knew about this Spring and would frequently resupply their ships while passing over it on voyages. Why can't the Spring be capped and the water brought back to the mainland. Also it would seem logical that there are other Springs around the Florida peninsular that are also emptying directly into the Ocean. Has there ever been studies in this regard?

I believe the family of former Governor Claude Kirk own the rights to the water in the Spring off Marine land. I'm not sure if I'm correct in this regard, but I believe I heard this many years ago.

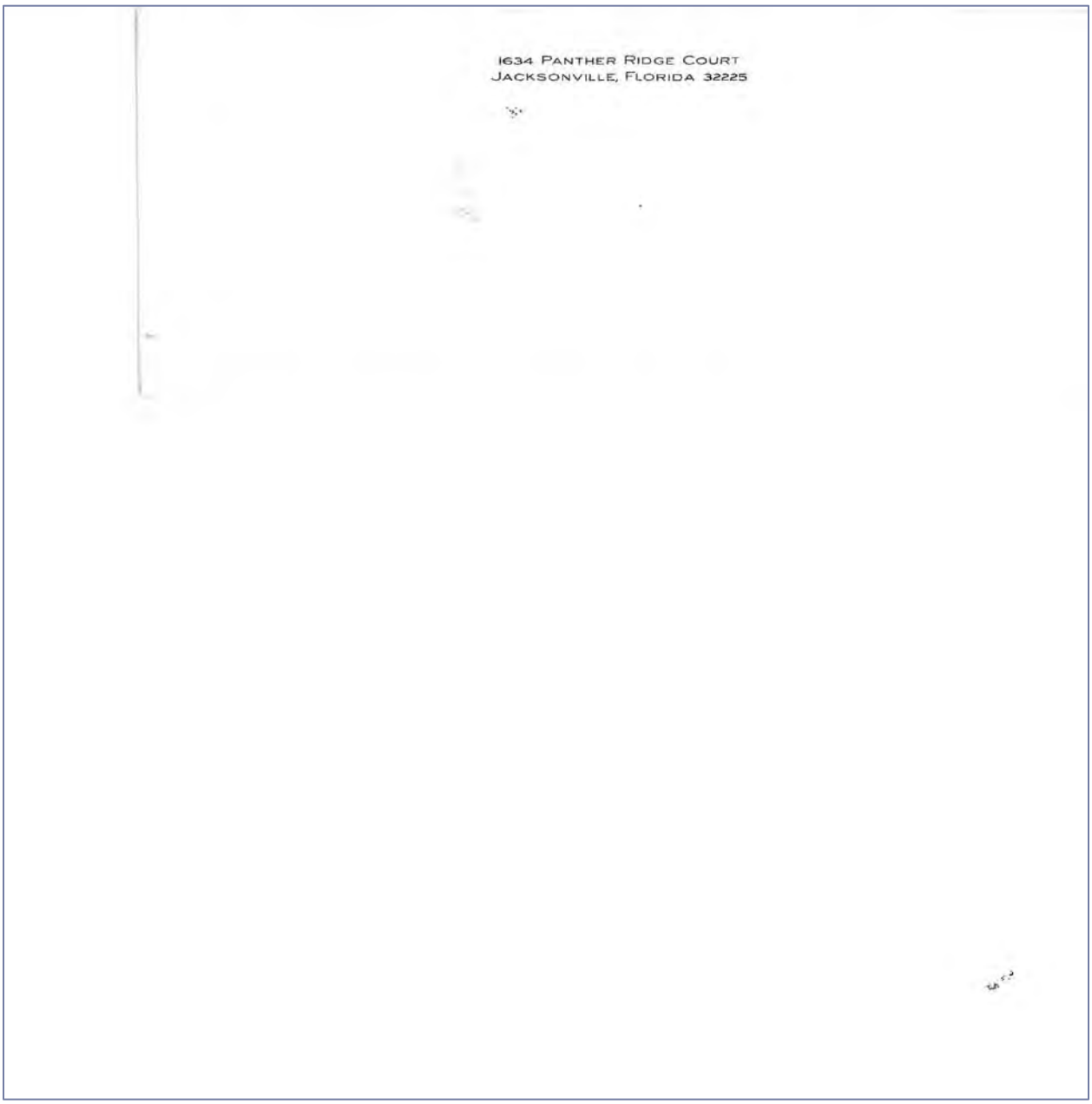
Anyway I wanted to write you and bring this to your attention. If the aquifer at these Springs could be tapped as they empty into the Ocean or the Gulf of Mexico then we wouldn't have to worry about taking water out of the St Johns River.

Sincerely,

JACKSONVILLE FL 320
02 JAN 2014 PM 1 L

SJRWMD
JAN 06 2014
MAIL CENTER

Mr. Tom Bartol
St. Johns River Water Management District
4049 Reid St.
Palatka, Florida
32177



CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental*

resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

Henry C. Warner, St. Johns Soil and Water Conservation District, Supervisor (01/09/14)

Comments: The St. Johns River Water Management District Draft Amended Water Supply Plan

My comments will address primarily the conservation elements of the Plan and can also be applied to the CFWMD Draft Water Supply Plan . As Mr. Ron Littlepage, columnist, Jacksonville Times Union Newspaper has stated in his column on December 20, 2014…"a water disaster looms" . In the column he addresses many issues concerning losses of environmental resources, including surface water bodies , springs and aquifer limitations in meeting projected water plan needs for Florida's population growth.

It should be noted that future approaches to managing Florida's water resources will require greater cooperation / involvement of local, municipal and county governments. In meeting the future growth projected the most efficient way to maximize resources available is through conservation efforts. Much of that information is available on the Districts website.

Residential

It is suggested for new residential developments centralized storm water and runoff be designed as a means to more effectively re-use water that's available. Also, rainwater collection can be a resource that most often is ignored. Annual rainfall averages data is available and can be used as a basis for determining its possible usage in supplementing residential water resources. North Carolina State University has established a model that can be used to determine the quantity of rainwater that could be collected from roof water catch systems. This water could be used for consumption and lawn irrigation.(The Rainwater Harvester Computer Model) Like other countries such systems might be incorporated into new residential development as supplemental or independent water sources.

Again as cited in the Draft plan a rich amount of information is available for consumers to act upon. Consumers need to know the greatest users are residential lawn / landscape and agriculture producers. These are the areas of that have the greatest potential for potable water savings.

An interesting note concerning lawn and landscape irrigation is that in the early forties residential in ground irrigation through sprinkler systems was a luxury, a standard for the more expensive home developments. When necessary homeowners would drag out their hose and lawn sprinkler when the grass began to turn brown. Now most new homes come with in place irrigation systems with automatic on and off systems.

Outside residential use of limited groundwater needs to be addressed in every community in Florida with the intent of great reduction or even elimination of the routine practice. One of the actions taken by the SJRWMD was in the winter months in North Florida limit residential irrigation to once a week. While the results of that policy, although studied, have never to my knowledge been released. There are many questions concerning the effectiveness of this policy. Such as, impact upon reduction water usage, compliance to policy and impact upon utilities, including average reduction of water use by residents, costs, etc.

Again, the SJWMD Draft Amended Plan calls for utility water leakage audits reporting and correction. Recent media reports have indicated that over ten % water loss from utility to delivery point was not unusual. Report on utility usage conservation efforts, for the most part, in the past has been tiered (ladder) of pricing. What impact upon water consumption is another area for public reporting? Utility Audit and correction reports should be available to the public. Again public knowledge and cooperation should be a part of any planning. Within that knowledge base of reporting to the public should be trend line information on total consumption,

average monthly household consumption and individual rates of use by gallons per day. (DEP)

Agriculture

For many counties in our state agriculture is the second major industry. Large farms use thousands of gallons of groundwater daily to produce food for our tables and elsewhere. Attaining greater efficiency of resources and increasing production is a goal of most producers. The District within it's Draft plan addresses the MIL (Mobile Irrigation Lab) this combined with Basic Management Practices allows for the producer to reach a balance that hopes to achieve the above goal of efficient resource use and productivity. Increase the incentives to expand the use of MIL by producers for this volunteer service. In addition, recently introduced into St. Johns County subsurface closed end irrigation systems have proven to greatly reduce groundwater use. An example of that system is been available on video tape (Jones Farm). Increased effort by the WMD to expand these and other water conserving systems can pay off in large reductions consumption and have other environmental benefits.

IFAS stations within the District has a number of projects that can assist the WMD in reaching its goals and the cooperative relationship needs to be reviewed and promising programs identified and demonstrated on a wider scale. An example is the use of drought resistant grasses. The application of cistern uses and advantages. Residential landscaping of native plants as applied at the Hancock Place demonstration. The cooperative project (developer and IFAS) provided a great reduction in need for irrigation (St. Johns County). Another project for farmers CFWMD has initiated a onsite weather reporting system. This can aid in the decision to irrigate or not.

Recommendations Summary:

"Adequate " water supply needs to be re defined in the law to establish reasonable priorities for use. For example: the average human body requires approximately 1.2 liters of potable of water to maintain health. The use of nearly 50% of residential water consumption for landscaping / lawn maintenance is out of balance when the District is projecting "water shortages". The WMD has outlined the average indoor use and encourages the use of water saving appliances. It is our outdoor residential use that must be substantially curbed. Some of the ways to achieve that are known and listed above.

The focus on groundwater / surface water planning and usage must be addressed more broadly than that of the utility suppliers. For example a third of St. Johns County residents are reported to be on their own wells. County and Soil and Water Conservation District committees can serve a useful role in highlighting local issues and resolutions. SWCD already serve on reviews of state park management periodically. Preservation of Florida's natural resources should be more strongly addressed in the Plan including the description the of environmental goals to be achieved. (DEP) EPA's list of non-conforming water bodies could be a starting point.

Sincerely,

Henry C. Warner, Supervisor
St. Johns Soil and Water Conservation District

The material above is my own and not necessarily those of other Board members.

" Declining revenue brought about by water conservation efforts is indeed a major problem that many utilities, and cities, now face or will potentially face in the future. The first question to be asked is whether conservation is truly necessary in every area. While conservation is a popular subject, and topic, many areas may have adequate water resources for their present and future needs and not be faced with answering a theoretical question that you pose. In my opinion , the application of a blanket mandatory water conservation program for all areas of the state, or district of a state, may be unnecessary and unwarranted."

- Note this was not the question. Editorial comment by respondent.

***

" For many utilities the incentive is solely to comply with the requirements if their consumptive use permit."

"...reduced water consumption does not have to result in an overall decrease in revenue to a city. However, if ad valorem revenues are restricted by other government actions, then water rates may have to be increased to generate equal water revenues. This unfairly penalizes consumers who conserve water but unfortunately seems to be necessary.

Reduced water consumption may also have other benefits that effect the total financial picture. Reduced consumption will lead to some reduction in operating expenses, e.g. less treatment chemicals maybe needed, less electricity may be used, etc. and may eliminate or reduce the need for capital improvements and their associated expenses. The reductions may be sufficient to offset the revenue loss, thereby allowing the utility to make the same contribution to the general fund of city. "

Water Conservation and Water Utilities

St. Johns River Water Management District and the Central Florida Water Management District are currently updating their plans for the future. These plans address the growth of population and the potable water needed. Water conservation plays a key role in areas of that projected growth and how water supply "need" is to be met. Water utilities provide Florida's population much of that needed water from Florida aquifers, rivers, springs and lakes.

Do water utilities and their water conservation efforts make sense? Water utilities are in business to sell water to its customers. So how do utility managers address this seemingly conflict of interest? Several years ago an informal survey was completed to establish some rationale dealing with this issue.

The question posed was "Since many utilities (public and private) make their profits selling water to consumers what is their incentive to reduce water consumption?"

"The use of utilities to supplement income to cities or counties could be a substantial issue in initiating a water conservation program. What are the implications of such practices?

The following are responses from water utility specialists and managers to the above questions.

" Your Question goes to the heart of why the work of a water conservation coordinator is so difficult. The revenue stream from water sales is less understood by the public and less often questioned as a money source to a city's General Fund than taxes. In a sense, many utilities give little support to conservation, as they fear revenues can be reduced.

Utilities respond to regulatory requirements regarding water conservation, such as the educational activities required by the St. Johns Water Management District. However, monitoring of a utility's compliance with these requirements by most of the Districts is very weak, so the coordinator may struggle for funding and support within a utility.

Utilities that have actually "hit the wall" in terms of water supply, like those in Southwest Florida Water Management District , finally start understanding that water efficiency is more is more cost effective than building new water supply sources. The Southwest Water Management District through it basin boards and other cost sharing programs actively supports utilities in water efficiency efforts."

***

"Many of the efficiency measures are more cost effective than alternative water supply because they avoid the capital costs with debt service and operational and management costs."

***

"Adjusting customers water rates, utilizing research on customers response to rate changes based on income is another important effort. As the cost of water goes up using tiered rates, those customers that cannot afford to use water or that believe that in conservation will use as little as they can and will not be penalized while those that don't care and can afford it will contribute to the revenues."

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"

" Declining revenues brought about by water conservation efforts is indeed a major problem that many utilities, and cities, now face or will potentially face in the future. The first question to be asked is whether conservation is truly necessary in every area. While conservation is a popular subject, and topic, many areas may have adequate water resources for their present and future needs and not be faced with answering a theoretical question that you pose. In my opinion, the application of a blanket mandatory water conservation program for all areas of the state, or district of a state, may be unnecessary and unwarranted."

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***

" For many utilities the incentive is solely to comply with the requirements if their consumptive use permit."

"...reduced water consumption does not have to result in an overall decrease in revenue to a city. However, if ad valorem revenues are restricted by other government actions, then water rates may have to be increased to generate equal water revenues. This unfairly penalizes consumers who conserve water but unfortunately seems to be necessary.

Reduced water consumption may also have other benefits that effect the total financial picture. Reduced consumption will lead to some reduction in operating expenses, e.g. less treatment chemicals maybe needed, less electricity may be used, etc. and may eliminate or reduce the need for capital improvements and their associated expenses. The reductions may be sufficient to offset the revenue loss, thereby allowing the utility to make the same contribution to the general fund of city. "

***

"Utilities that have, or start, reclaimed water systems may be able to offset lost potable water revenues and maintain contributions to the government's general funds by the sale of reclaimed water, if rates for equivalent to those of potable water. The use of reclaimed water is an efficient method of reducing potable water use that can be revenue neutral."

***

"When you think of water conservation, think of " negative flow" into the wastewater system. Imagine a 5% decrease (by water conservation_ not irrigation in wastewater flow and the impact that has on the energy values of pumping, aeration requirements, chemical treatments, etc. to the activated sludge waster treatment plants. The energy balance would more than offset the loss of revenue due to water conservation efforts: it is pure physics. Sometimes we look at water conservation as the benefit, offset of water, etc, but also perceived as loss of water sale ands loss of revenues. Don't stop there. Look at the energy saving on the waterside. Look at the hydraulic advantage. **(Quantities)** and the load **(Qualitative)** on the water stream and see how the water conservation affects the overall water budget and cost. Step back…doesn't think as a engineer, or chemist, or manager, think as a environmental economist. Collecting all the thoughts, figures, and parameters, and putting them together."

***

" Don't think water conservation and decreasing revenues. THINK overall water efficiencies and economic advantage. Balance that, and we all come out winners. **DON'T think limited finance and lose of revenue, think total economics and good policy and better business."**

The responses of this informal survey sampling are appreciated very much. The candor and insight is not generally available to many professionals involved in this aspect of the water conservation scene.

Summary Conclusions:

1. **Perhaps much more in oversight and planning is being given then is apparent by government agencies such as DEP and WMD, however respondent comments would lead to the conclusion that more involvement is required to provide guidance in meeting the Water Supply conservation goals.**

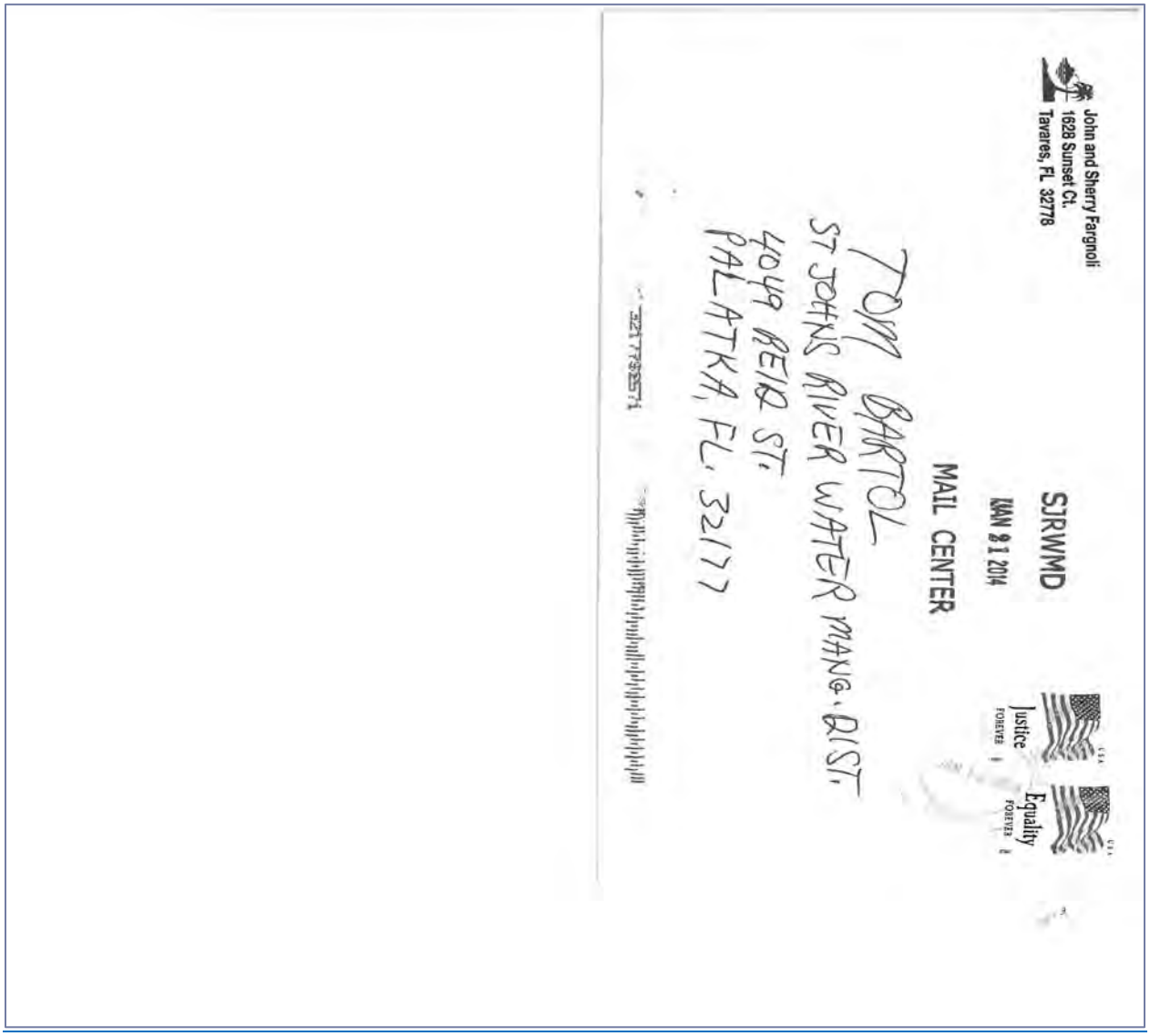
2. **Media can play an important role in changing the realistic role that industry and government attitude toward water conversation goals. Knowing the dynamics in play can impact on needed changes that can protect our environment, including water resources.**

3. **Whether the State can politically improve the management of water resources is a very important issue at stake for growth of population and preservation of natural resources. Local government / utility relationships and conservation of water resources need review to develop more workable relationships. Reference is being made to SB 444 (2005) This addresses Water Protection and Sustainability trust Fund for alternative water supply.**

CFWI RWSP Team Response *- Thank you for your comments. The Districts agree that conservation is an important element in meeting future water demands. CFWI work will*

continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Sherry Fargnoli, Concerned Citizen (01/15/14)



John and Sherry Fargnoli
1628 Sunset Ct.
Tavares, FL 32778

SJRWMD
JAN 21 2014
MAIL CENTER

Justice FOREVER
Equality FOREVER

TOM BARTOL
ST JOHNS RIVER WATER MANG. DIST.
4049 REID ST.
PALATKA, FL. 32177

32177$2571

Email - Thanksgiving - Native American Rights Fund http://narf.convio.net/site/MessageViewer?em_id=10981.0&dlv_id=14041

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NATIVE AMERICAN RIGHTS FUND

Native Heritage Month

November is American Indian & Alaska Native Heritage Month. Heritage Month is a time to celebrate the rich and diverse cultures, traditions, and histories and to acknowledge the important contributions of Native people. It's also an opportunity to highlight the important contributions of Native peoples and the shared histories between tribal nations and other communities.

Thanksgiving

Each November in America we celebrate the harvest festival of Thanksgiving. Over the years, much lore has evolved surrounding early Thanksgivings and feelings of brotherhood and good will between pilgrim settlers and the Native inhabitants of North America. Sadly, most of these stories are inaccurate at best, and serve to ignore or gloss over a broad history of atrocities. In our hearts, we cannot celebrate Thanksgiving Day in the way revisionist history teaches our school children. We still feel the pain and suffering of our ancestors as the pilgrims celebrated their thanksgivings by theft of our lands and the genocide of our peoples.

Still, Native Americans are grateful for all that nature provides, and many of us celebrate the Thanksgiving holiday in our own ways. Moreover, we give thanks every day as we greet the morning star in the eastern sky giving thanks to the Creator, our families, our ancestors and our survival.

We wish you and your families a happy holiday, and hope you are able to set images of pilgrims aside and join in gratitude for the bounty the living earth provides us. In that spirit, let us share with you the words of "Thanksgiving" from our Mohawk relatives in belief that one day there will truly be a Thanksgiving for all.

Thanksgiving Address

Greetings to the Natural World

The People

Today we have gathered and we see that the cycles of life continue. We have been given the duty to live in balance and harmony with each other and all living things. So now, we bring our minds together as one as we give greetings and thanks to each other as people.

Now our minds are one.

(2)

The Earth Mother
We are all thankful to our Mother, the Earth, for she gives us all that we need for life. She supports our feet as we walk about upon her. It gives us joy that she continues to care for us as she has from the beginning of time. To our mother, we send greetings and thanks.

Now our minds are one.

The Waters
We give thanks to all the waters of the world for quenching our thirst and providing us with strength. Water is life. We know its power in many forms-waterfalls and rain, mists and streams, rivers and oceans. With one mind, we send greetings and thanks to the spirit of Water.

Now our minds are one.

The Fish
We turn our minds to the all the Fish life in the water. They were instructed to cleanse and purify the water. They also give themselves to us as food. We are grateful that we can still find pure water. So, we turn now to the Fish and send our greetings and thanks.

Now our minds are one.

The Plants
Now we turn toward the vast fields of Plant life. As far as the eye can see, the Plants grow, working many wonders. They sustain many life forms. With our minds gathered together, we give thanks and look forward to seeing Plant life for many generations to come.

Now our minds are one.

The Food Plants
With one mind, we turn to honor and thank all the Food Plants we harvest from the garden. Since the beginning of time, the grains, vegetables, beans and berries have helped the people survive. Many other living things draw strength from them too. We gather all the Plant Foods together as one and send them a greeting of thanks.

Now our minds are one.

The Medicine Herbs
Now we turn to all the Medicine herbs of the world. From the beginning they were instructed to take away sickness. They are always waiting and ready to heal us. We are happy there are still among us those special few who remember how to use these plants for healing. With one mind, we send greetings and thanks to the Medicines and to the keepers of the Medicines.

Now our minds are one.

The Animals
We gather our minds together to send greetings and thanks to all the Animal life in the world. They have many things to teach us as people. We are honored by them when they give up their lives so we may use their bodies as food for our people. We see them near our homes and in the deep forests. We are glad they are still here and we hope that it will always be so.
Now our minds are one.

The Trees
We now turn our thoughts to the Trees. The Earth has many families of Trees who have their own instructions and uses. Some provide us with shelter and shade, others with fruit, beauty and other useful things. Many people of the world use a Tree as a symbol of peace and strength. With one mind, we greet and thank the Tree life.

Now our minds are one.

The Birds
We put our minds together as one and thank all the Birds who move and fly about over our heads. The Creator gave them beautiful songs. Each day they remind us to enjoy and appreciate life. The Eagle was chosen to be their leader. To all the Birds-from the smallest to the largest-we send our joyful greetings and thanks.

(OVER)

3

Now our minds are one.

The Four Winds
We are all thankful to the powers we know as the Four Winds. We hear their voices in the moving air as they refresh us and purify the air we breathe. They help us to bring the change of seasons. From the four directions they come, bringing us messages and giving us strength. With one mind, we send our greetings and thanks to the Four Winds.

Now our minds are one.

The Thunderers
Now we turn to the west where our grandfathers, the Thunder Beings, live. With lightning and thundering voices, they bring with them the water that renews life. We are thankful that they keep those evil things made by Okwiseres underground. We bring our minds together as one to send greetings and thanks to our Grandfathers, the Thunderers.

Now our minds are one.

The Sun
We now send greetings and thanks to our eldest Brother, the Sun. Each day without fail he travels the sky from east to west, bringing the light of a new day. He is the source of all the fires of life. With one mind, we send greetings and thanks to our Brother, the Sun.

Now our minds are one.

Grandmother Moon
We put our minds together to give thanks to our oldest Grandmother, the Moon, who lights the night-time sky. She is the leader of woman all over the world, and she governs the movement of the ocean tides. By her changing face we measure time, and it is the Moon who watches over the arrival of children here on Earth. With one mind, we send greetings and thanks to our Grandmother, the Moon.

Now our minds are one.

The Stars
We give thanks to the Stars who are spread across the sky like jewelry. We see them in the night, helping the Moon to light the darkness and bringing dew to the gardens and growing things. When we travel at night, they guide us home. With our minds gathered together as one, we send greetings and thanks to the Stars.

Now our minds are one.

The Enlightened Teachers
We gather our minds to greet and thank the enlightened Teachers who have come to help throughout the ages. When we forget how to live in harmony, they remind us of the way we were instructed to live as people. With one mind, we send greetings and thanks to these caring teachers.

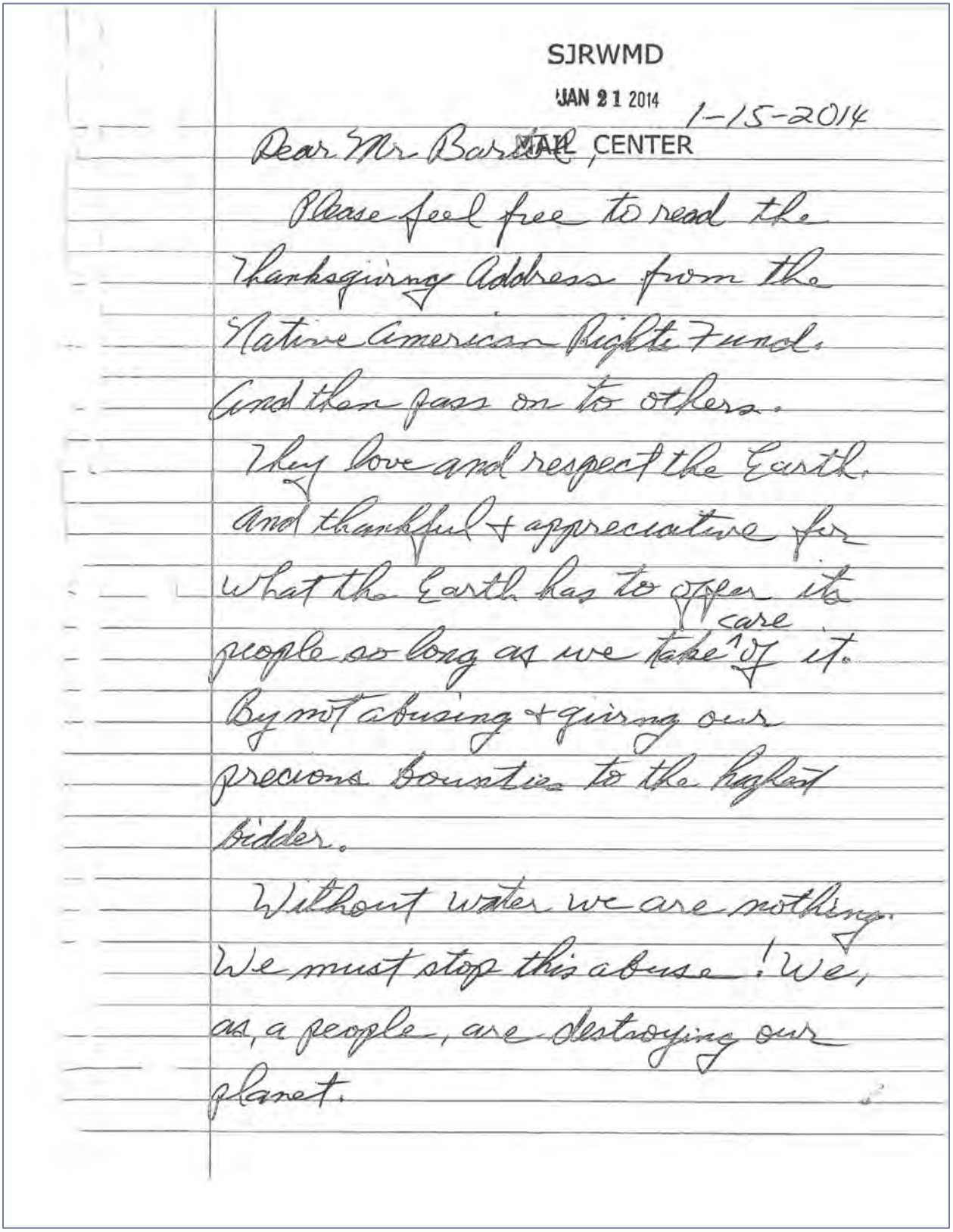
Now our minds are one.

The Creator
Now we turn our thoughts to the creator, or Great Spirit, and send greetings and thanks for all the gifts of Creation. Everything we need to live a good life is here on this Mother Earth. For all the love that is still around us, we gather our minds together as one and send our choicest words of greetings and thanks to the Creator.

Now our minds are one.

Closing Words
We have now arrived at the place where we end our words. Of all the things we have named, it was not our intention to leave anything out. If something was forgotten, we leave it to each individual to send such greetings and thanks in their own way.

Now our minds are one.



SJRWMD
JAN 21 2014
MAIL CENTER

1-15-2014

Dear Mr. Barsuhn,

Please feel free to read the Thanksgiving Address from the Native American Rights Fund. And then pass on to others. They love and respect the Earth and thankful & appreciature for what the Earth has to offer its people as long as we take care of it. By not abusing & giving our precious bounties to the highest bidder.

Without water we are nothing. We must stop this abuse! We, as a people, are destroying our planet.

Can we not just stand up and say "NO" to these water bottle companies? Are we afraid of hurting their feelings or putting more people out of work? When "our" water comes to an end, they won't have jobs any way. These water bottle companies have gotten way out of hand & with that the people who buy this water have gotten lazy. Cars have "cup" holders; there are all sorts of thermos' including different sizes. We don't have to walk

over please

around with a phone in one hand & a bottle of water in the other.

Thank you, Scott Maxwell, for your important beliefs & write ups as well as Peggy Cof.

The article that was written in the Daily Commercial on Sept. 19th, 2013 about Nestlé wanting to increase the average daily withdrawal to 910,000 GPD; maybe the largest family owned & operated bottle water company in the U.S. (with dozens of facilities nationwide) should consider another

way to get rich with out stripping our country of its water.

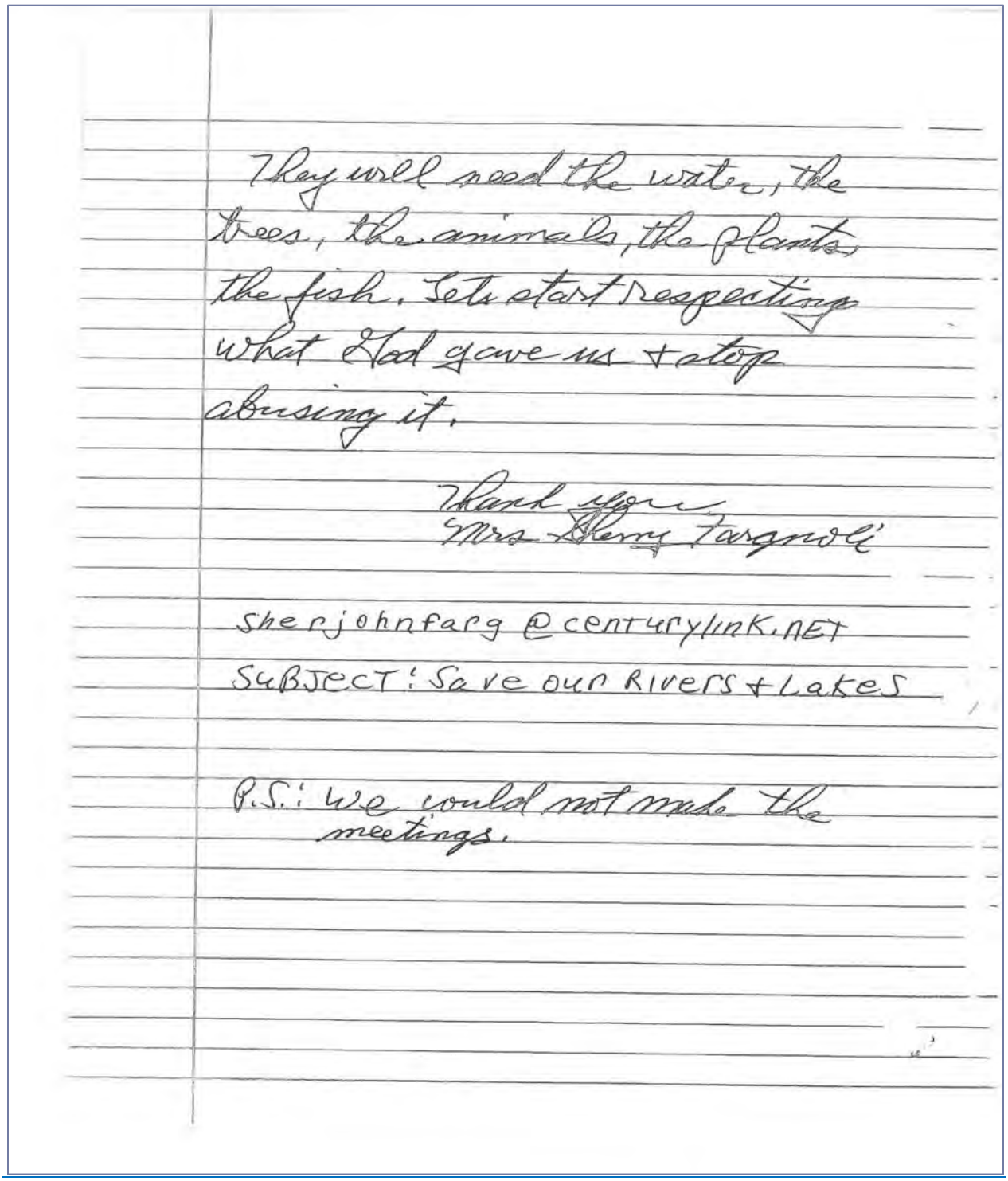
You people in power who can do what needs to be done; we know you relize this is a crisis that hopefully is not to late to correct.

We treat the Earth like it's going to be here forever, like all the precious gifts we consume from it will always be there for us.

You best think again + act!

If not for you, how about your children + grandchildren.

over please



They will need the water, the trees, the animals, the plants, the fish. Lets start respecting what God gave us + stop abusing it.

Thank you
Mrs Sherry Fargnoli

sherjohnfarg@centurylink.net

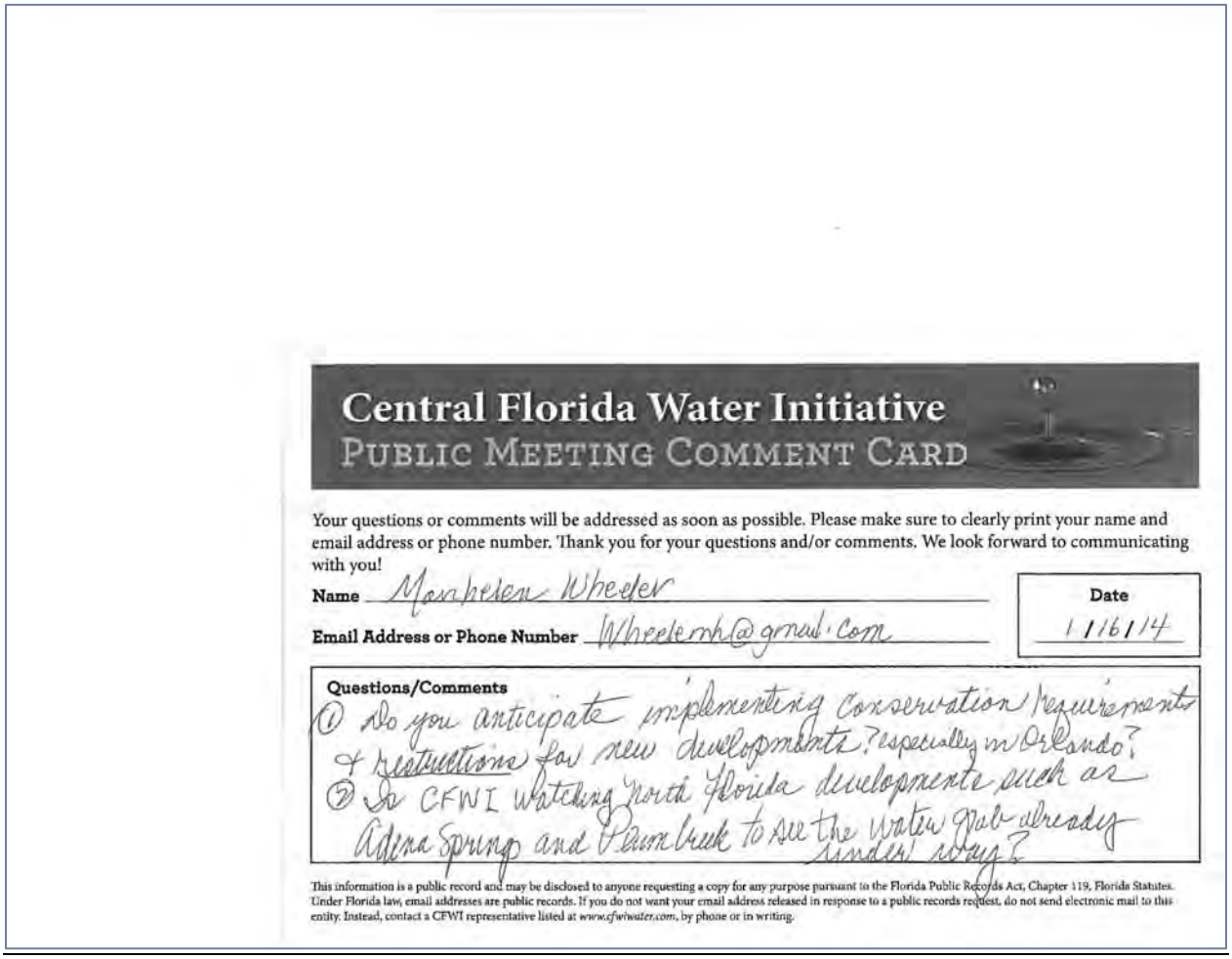
SUBJECT: Save our Rivers + Lakes

P.S.: We could not make the meetings.

CFWI RWSP Team Response *- In its review, District staff determined that the application meets the conditions for issuance of this permit and that the proposed use of water is a reasonable and beneficial water use; will not interfere with any presently existing legal use of water; and is consistent with the public interest.*

Board members reviewed the staff's report and recommendation, and letters and emails received from the public, before making a decision on whether to issue the permit and approved a 20-year permit for Niagara at the public Board meeting on February 11, 2014.

Marie Helen Wheeler, Concerned Citizen (01/16/14, Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name Marie Helen Wheeler

Email Address or Phone Number Wheelermh@gmail.com

Date 1/16/14

Questions/Comments

① Do you anticipate implementing conservation requirements & restrictions for new developments? especially in Orlando?
② Is CFWI watching North Florida developments such as Adena Springs and Plum Creek to see the water pub already under way?

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Comment 3 - People are concerned about maintaining the quality and level of life. We are activists and are passionate about our water. People should be watching north Florida development and developments such as Adena Springs and Plum Creek in Alachua County.

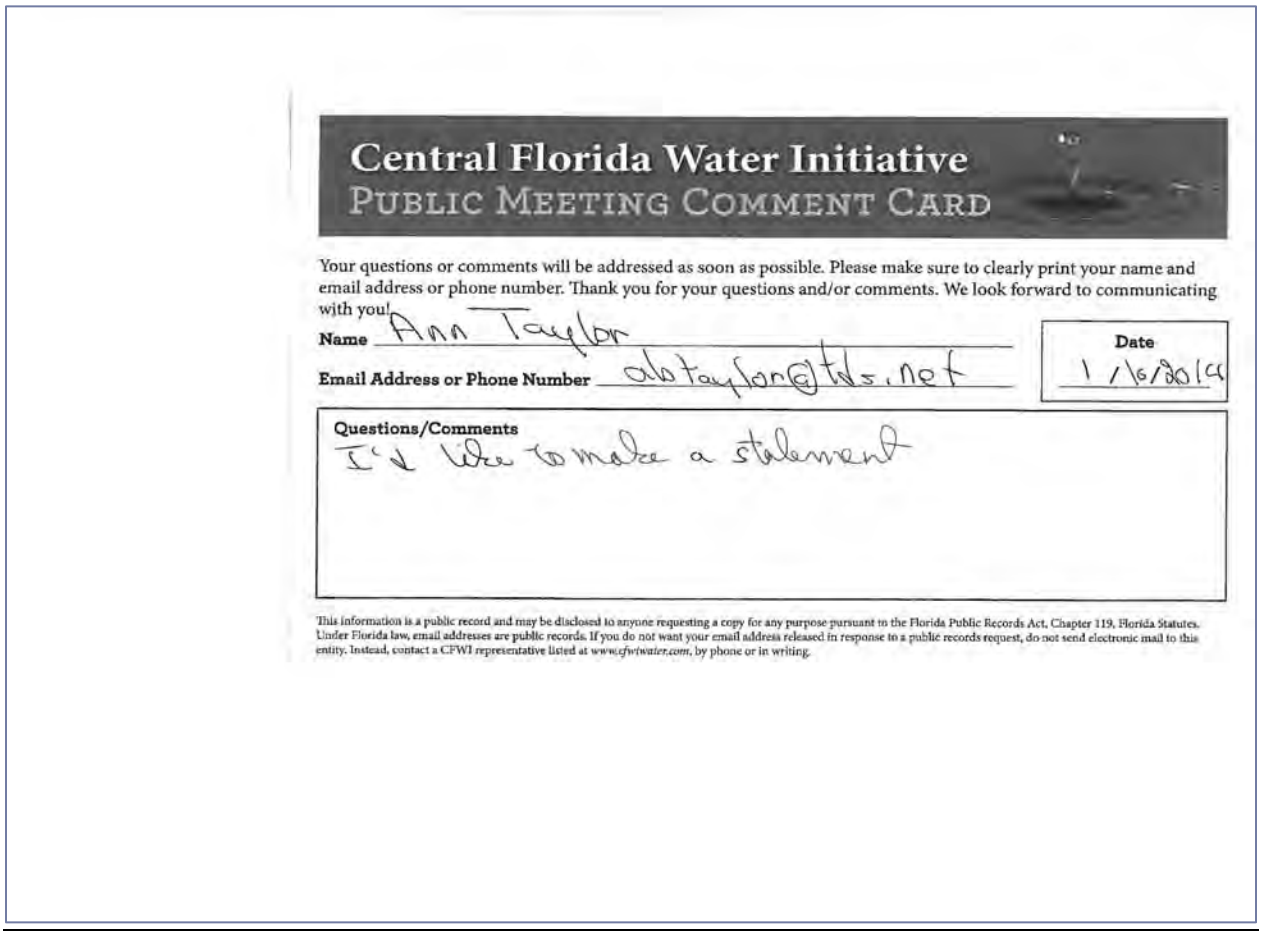
CFWI RWSP Team Response *- Thank you for your comments. The Districts agree that conservation is an important element in meeting future water demands. The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping. Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.*

CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

There is currently an ongoing effort between SJRWMD and SRWMD, which will result in a joint North Florida RWSP and includes the NFSEG Groundwater Flow Model.

The core responsibilities to be carried out by the FDEP and the State's five Districts, as they relate to managing and protecting the State's water resources, have been established in detail in Chapter 373, F.S. The core missions are Water Supply, Flood Protection, Water Quality and Natural Systems.

Ann Taylor, Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name Ann Taylor

Email Address or Phone Number alotaylor@tds.net

Date 1/16/2014

Questions/Comments
I'd like to make a statement

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Comment 1 - The District's current strategies are not workable or sustainable. Focus should first be on improving water conservation and protecting recharge. The plan recognizes that groundwater is not sustainable. District staff and the public each have a different definition of harm. Algal blooms and fish kills demonstrate that the river is already harmed. It is unacceptable to take river water to supply central Florida. The effort to establish water conservation programs was dismantled by the Governor. Water conservation is critical.

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the*

CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

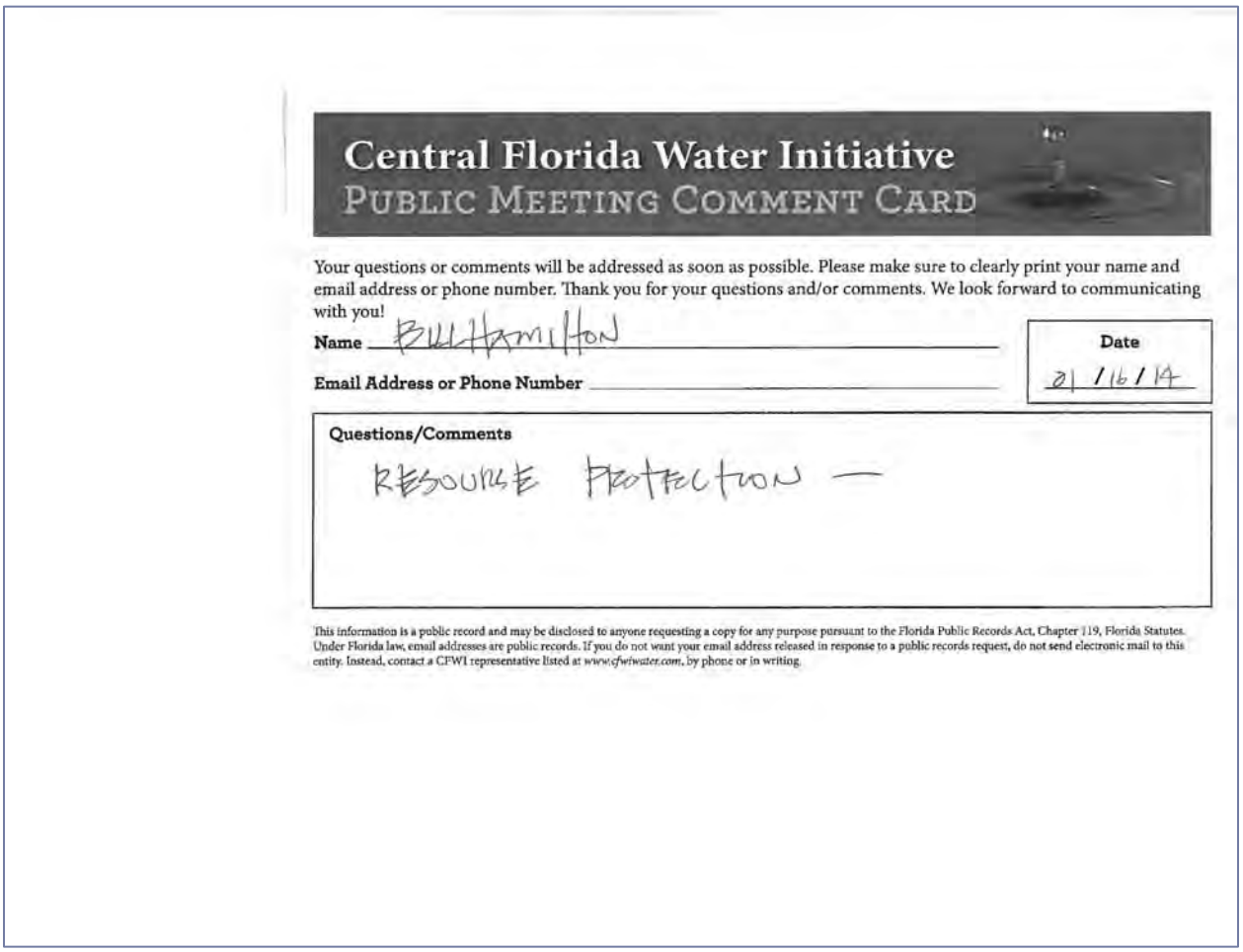
The effect on the severity of algal booms arising from withdrawal-mediated residence time increase was the primary mechanism examined by the Plankton group of the WSIS. The investigation found that while residence time is correlated to algal biomass for short to medium residence time, beyond this level nutrient limitation is reached and maximum algal biomass is uncorrelated to residence time. As phosphorus load continues to be reduced under the TMDL requirements, the residence time effect on algal biomass will continue to diminish. The WSIS concluded that the effects of increased residence time on algal bloom density and duration was negligible, even under withdrawal scenarios that exceeded the maximum proposed allowable surface water withdrawal. In addition, water quality effects potentially arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

The Districts agree that conservation is an important element in meeting future water demands and support FFL principles and water conservation. However, the Districts do not have any regulatory power to restrict the type of grass used for landscaping. Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.

Bill Hamilton, Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name Bill Hamilton

Email Address or Phone Number

Date 01/16/14

Questions/Comments

RESOURCE PROTECTION —

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Comment 1 - Water supply is limited and only so much can be withdrawn. The aquifer needs time to recharge. The District should first determine resource demands and establish minimum flows and levels (MFLs). The government has a responsibility to protect the resource and regulations should be established to protect the resource for the long term. Aquifer, storage and recovery (ASR) is a concern because of nutrients, chemicals, arsenic, and pesticides. Climate change impacts to water supply must be considered and recognized. If withdrawal of 155 million gallons a day (mgd) affects the river, it should not be done at all.

CFWI RWSP Team Response *- CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.*

ASR has proven to be a cost effective tool for water management; particularly when the land footprint for a large storage feature (such as a reservoir or impoundment) is otherwise not available or feasible. ASR systems are currently used for storage and subsequent recovery of a variety of waters, including highly treated potable water, reclaimed water, groundwater and partially treated surface water. Implementation of any ASR project requires detailed evaluation of site-specific hydrogeologic conditions, to determine if a transmissive storage zone is overlain by a competent confining interval. In addition, compliance with applicable water quality criteria will be evaluated during issuance of any ASR permit.

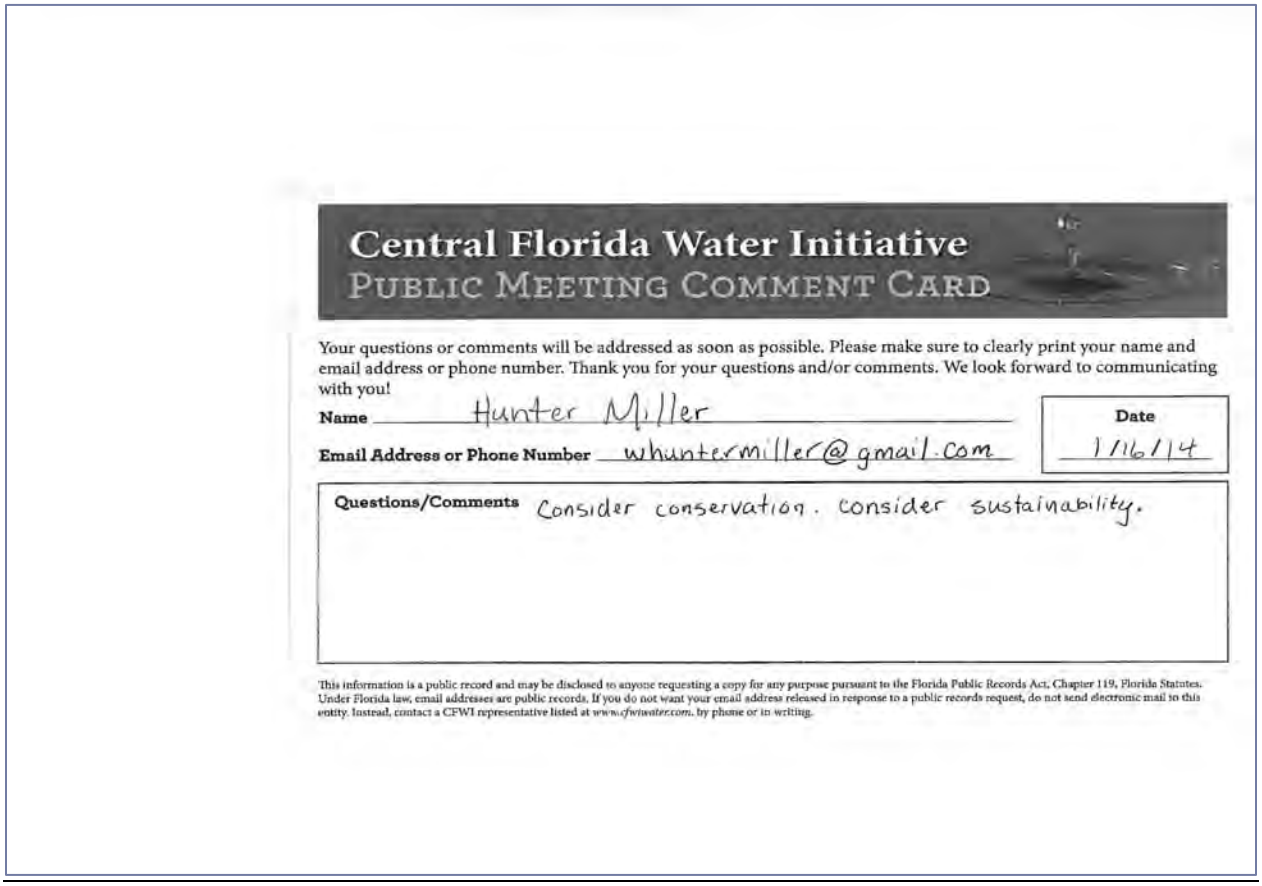
As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5,SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of

earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

Climate Change is discussed in Chapter 3.

Hunter Miller, Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name: Hunter Miller

Email Address or Phone Number: whuntermiller@gmail.com

Date: 1/16/14

Questions/Comments: Consider conservation. Consider sustainability.

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Comment 2 - The Environmental Youth Council is worried about the District's plan to withdraw 150 mgd from the St. Johns River. The Council is also worried about the economic factors of the river, health of the river, worsening of pollution problems, algal blooms, and by products from desalination. There should be mandatory conservation on approved and planned projects.

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. This RWSP identifies programs and projects to ensure that adequate and sustainable water supplies are available to meet future water supply needs while protecting water resources.*

The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The effect on the severity of algal booms arising from withdrawal-mediated residence time increase was the primary mechanism examined by the Plankton group of the WSIS. The investigation found that while residence time is correlated to algal biomass for short to medium residence time, beyond this level nutrient limitation is reached and maximum algal biomass is uncorrelated to residence time. As phosphorus load continues to be reduced under the TMDL requirements, the residence time effect on algal biomass will continue to diminish. The WSIS concluded that the effects of increased residence time on algal bloom density and duration was negligible, even under withdrawal scenarios that exceeded the maximum proposed allowable surface water withdrawal.

Regarding assertions that upstream water withdrawals will "increase pollution problems" and increase salinity. "Pollution", or the addition of contaminants to the river, is unrelated to water withdrawal. While a decreased flow could conceivably lead to reduced flushing rates and advection of waste, the reduction of point source pollution in the Lower St. Johns River from TMDL enforcement has led to a low level of pollution entering the Lower St. Johns River during low flow, when withdrawals would be more likely to exert an effect.

In addition, potential water quality effects arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent. Potential water quality effects were not integrated into future land use scenarios, under the assumption that future development would occur with BMPs that

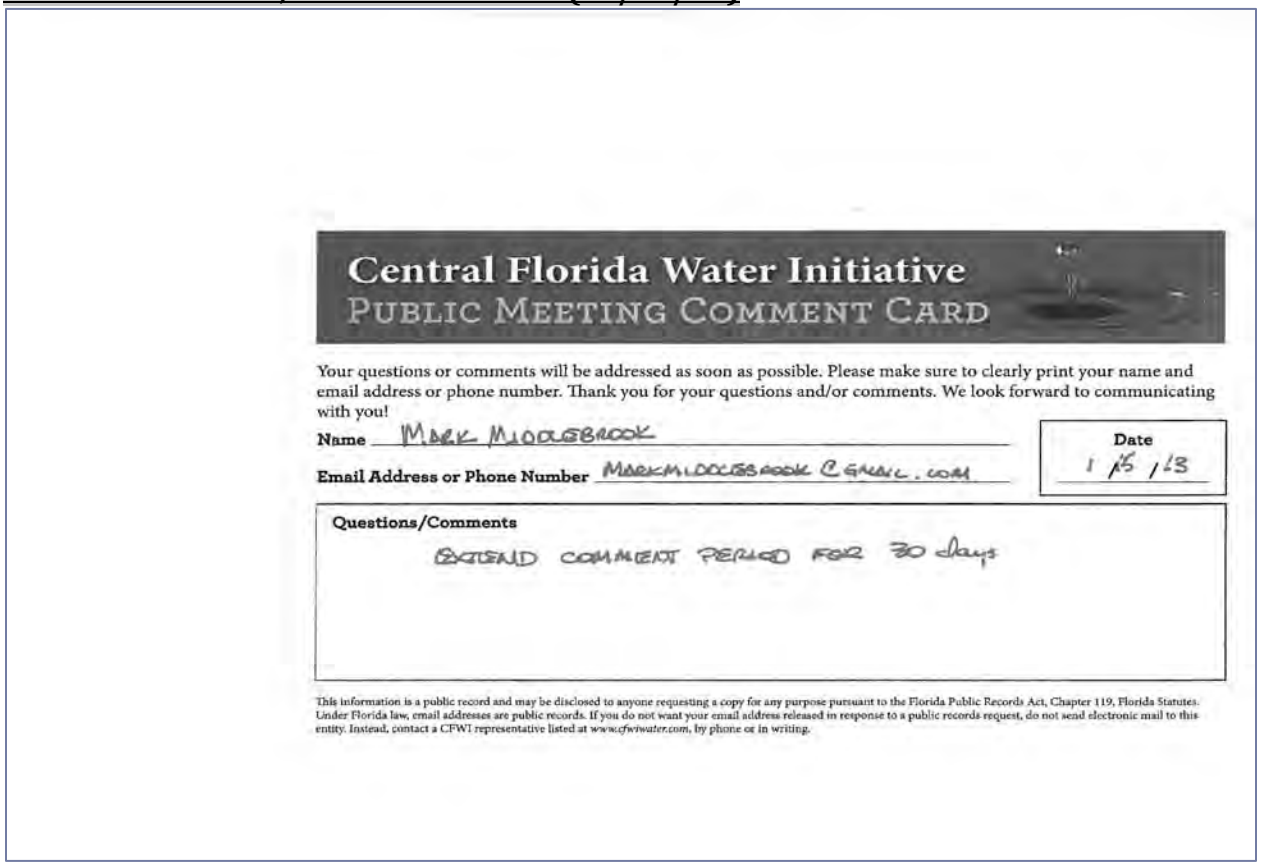
would not lead to a significant increase in pollutant load, and would also replace some existing polluting land uses.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping. Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.

Mark Middlebrook, Concerned Citizen (01/16/14)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name MARK MIDDLEBROOK

Email Address or Phone Number MARKMIDDLEBROOK@GMAIL.COM

Date 1/15/13

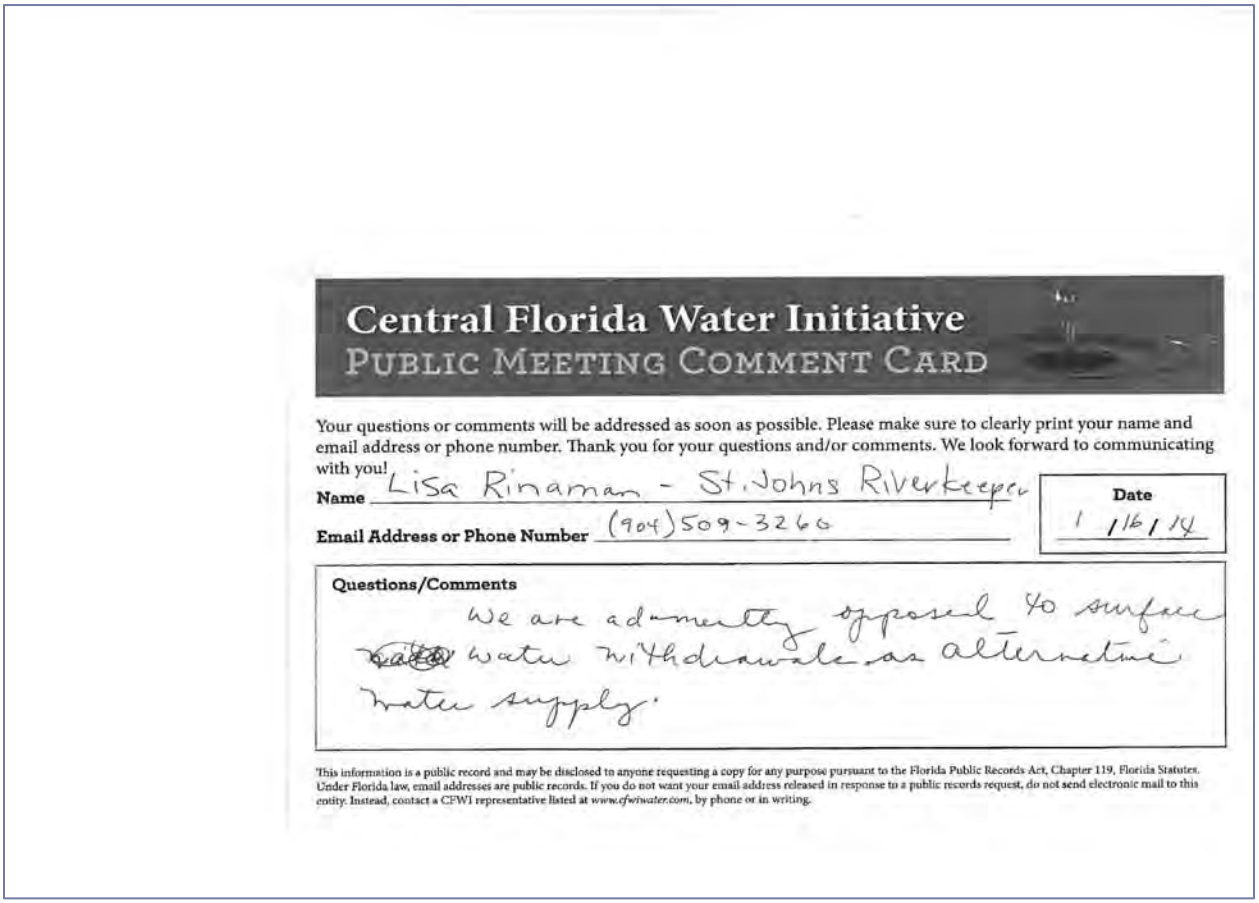
Questions/Comments

EXTEND COMMENT PERIOD FOR 30 days

This information is a public record and may be disclosed to anyone requesting a copy for any purpose pursuant to the Florida Public Records Act, Chapter 119, Florida Statutes. Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact a CFWI representative listed at www.cfwiwater.com, by phone or in writing.

CFWI RWSP Team Response *- As a result of public comment, the Steering Committee extended the deadline for public comments on the CFWI RWSP to February 20, 2014.*

Lisa Rinaman, St. Johns Riverkeeper (01/16/14 Comment Card and Public Workshop Comment & 02/20/14 Letter)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name: Lisa Rinaman - St. Johns Riverkeeper

Email Address or Phone Number: (904) 509-3260

Date: 1/16/14

Questions/Comments

We are adamantly opposed to surface water withdrawals as alternative water supply.

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In addition, potential water quality effects arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent. Potential water quality effects were not integrated into future land use scenarios, under the assumption that future development would occur with BMPs that would not lead to a significant increase in pollutant load, and would also replace some existing polluting land uses.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

The Districts also agree that conservation is an important element in meeting future water demands and support FFL principles and water conservation. However, the Districts do not have any regulatory power to restrict the type of grass used for landscaping.

Comment 2 (01/16/14) - The St. Johns Riverkeeper is not happy to have had to request this workshop in the north Florida area. The St. Johns Riverkeeper is adamantly opposed to surface water withdrawals to any river, lake, or other surface water. Northeast Florida will have negative impacts from surface water withdrawals. The District's plan and process is flawed by saying that the water source is sustainable. CFWI solutions and regulatory committees should be subject to sunshine laws. Solutions, regulatory, and environmental assessments should be done before the plan is adopted. If the plan is approved, then the projects identified will be eligible for State funding. The Water Supply Impact Study (WSIS) was not comprehensive and did not look at water quality. Sea level rise and increased land development all create water quality issues that are not addressed by the study. The plan should not be approved with surface water projects in it. The District needs to make aggressive conservation a priority.

CFWI RWSP Team Response *- See response to your Comment 1.*

Comments (02/20/14) - Attached are the St. Johns Riverkeeper comments for both the Central Florida Water Initiative Water Supply Plan and the St. Johns River Water Management District's Water Supply Plan. You will also find an attachment to be included in our comments.

Thank you for your consideration and for future cooperation. Please contact me at anytime for additional information.

ST. JOHNS RIVERKEEPER®

February 20, 2014

Mr. Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Mr. Jim Gross
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Mr. Bartol and Mr. Gross:

The St. Johns River is a treasured watershed that provides enormous ecological, recreational, economic and aesthetic benefits for all Floridians. In 1998, President Clinton recognized the importance of the St. Johns River with a designation of an American Heritage River. The St. Johns is the only river in Florida and one of only 14 rivers in the entire United States to receive this prestigious national recognition. More recently, the America's Great Waters Coalition named the St. Johns to its list of our country's Great Waters.

Unfortunately, the ecological health and integrity of the St. Johns River system is threatened due to years of neglect and the cumulative impacts of a growing population.

Clean, fresh water is the lifeblood of the St. Johns River and its tributaries. Our wetlands, forests, riparian zones adjacent to waterways, and aquatic plants provide the habitat and food sources that sustain healthy plant, fish, and wildlife populations. The St. Johns system also sustains nearly 5 million people who live within its watershed.

The St. Johns Riverkeeper's (SJRK) mission is to work on behalf of the community for clean and healthy waters in the St. Johns River, its tributaries and its wetlands, through citizen-based advocacy.

Since 2005, SJRK has actively participated in the public conversation regarding the controversial proposals to remove water from the St. Johns River. SJRK continues to be adamantly opposed to surface water withdrawals to meet future water demand due to the ecological impacts to the St. Johns and its tributaries. SJRK challenges the need for water withdrawals and questions the societal benefits in light of the enormous economic and environmental costs. SJRK continues to urge our leadership to make water conservation the priority.

1

Unfortunately, Florida's water planners continue to rely heavily on unsustainable surface water withdrawals, as is evident in the recently released Central Florida Water Initiative Regional Water Supply Plan (CFWI-RWSP) and the St. Johns River Water Management District Water Supply Plan (SJRWMD-RWSP).

Below you will find the St. Johns Riverkeeper's comments regarding the CFWI-RWSP and the SJRWMD-RWSP.

Central Florida Water Initiative Regional Water Supply Plan (CFWI-RWSP)

According to the Central Florida Water Initiative, Central Florida is reaching the sustainable limits of it predominant source of water, the Floridan Aquifer. As a result, the St. Johns River, South Florida and Southwest Florida Water Management Districts created the Central Florida Water Initiative (CFWI) to identify alternative sources of water to meet growing demand.

The CFWI Planning area is located in Central Florida and consists of all of Orange, Osceola, Seminole, and Polk counties and southern Lake County, covering approximately 5,268 square miles.

The CFWI Planning area is currently home to approximately 2.7 million people and supports a large tourism industry, significant agricultural industry, and a growing industrial and commercial sector. According to the CFWI, the area's population is projected to reach approximately 4.1 million by 2035, which is a 49 percent increase from the 2010 estimate.

The CFWI-RWSP calls for potentially withdrawing more than 150 million gallons of water a day from the St. Johns at an estimated expense of nearly $1.5 billion. The CFWI-RWSP also identifies the Ocklawaha River, the largest tributary of the St. Johns, as a source for potentially millions of additional gallons of water.

St. Johns River Water Management District Regional Water Supply Plan (SJRWMD-RWSP)
The St. Johns River Water Management District released a Regional Water Supply Plan for all of the 18 counties within its jurisdiction. The SJRWMD-RWSP calls for the withdrawal of an additional 125 million gallons of water a day from the St. Johns at an estimated cost of $1.8 billion and more than 85 million gallons from the Ocklawaha River at an estimated cost of $2.1 billion. It also includes the 150 mgd from the St. Johns that is proposed by the CFWI-RWSP. The plan is also anticipated to include the findings and recommendations from the North Florida Regional Water Supply Partnership that are not expected to be completed for approximately 18 months, further hindering the conclusions of the SJRWMD-RWSP.

The SJRWMD-RWSP predicts that population will increase by almost 1.8 million people from 2010 to 2035, and total water use will increase by 314 million gallons per day. The SJRWMD determines that groundwater cannot supply the projected 2035 increase. Instead of prioritizing conservation and efficiency strategies, the RWSP relies heavily on an unreliable and unsustainable source, surface water withdrawals.

Unfortunately, the CFWI-RWSP and the SJRWMD-RWSP fail the public by failing to protect the public's natural resources. Both plans were developed using a flawed process, leading to flawed plans that have been unjustifiably deemed sustainable.

The Florida Constitution - Article II SECTION 7. Natural resources and scenic beauty.—
(a) It shall be the policy of the state to conserve and protect its natural resources and scenic beauty. Adequate provision shall be made by law for the abatement of air and water pollution and of excessive and unnecessary noise and for the conservation and protection of natural resources.

Flawed Process

The governing board of each water management district shall conduct water supply planning for a water supply planning region within the district identified in the appropriate district water supply plan under s. 373.036, where it determines that existing sources of water are not adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems for the planning period. The planning must be conducted in an open public process, in coordination and cooperation with local governments, regional water supply authorities, government-owned and privately owned water and wastewater utilities, multijurisdictional water supply entities, self-suppliers, reuse utilities, the Department of Environmental Protection, the Department of Agriculture and Consumer Services, and other affected and interested parties. The districts shall actively engage in public education and outreach to all affected local entities and their officials, as well as members of the public, in the planning process and in seeking input. (Section 373.709(1), Florida Statue)

CFWI-RWSP

Limited Public Participation

The draft CFWI RWSP reports "The Districts conducted more than 91 public workshops, presentations, and meetings to explain the CFWI RWSP, collect input on the major components of the CFWI RWSP, and develop water resource and water supply development project options." Unfortunately, all of the referenced workshops and meetings were held in the CFWI Planning Area. Although years of discussion took place developing water policy and water supply decisions that affect the entirety of the three participating Water Management Districts, the meetings were limited to the five county area of the CFWI, ignoring stakeholders in the other 43 affected counties. In addition, the CFWI completely failed to engage public officials outside the CFWI Planning Area in the planning process or even to reach out to them to make sure they were aware of the impending plan and the opportunities that existed to provide input. This flawed public process does not meet the requirements of Florida Statute, foster public participation or provide an open public process.

Meetings Outside the Sunshine

The CFWI Planning Teams continue to meet regularly to develop water policy, more detailed water supply plans, consistent rules and amended regulations for the South Florida, Southwest Florida and St. Johns River Water Management District.

"The CFWI Solutions Planning Team will use this CFWI-RWSP to select specific water supply and water resource development projects to meet the water needs of the region." (Pg. iii, CFWI-RWSP Executive Summary)

"A (CFWI) Regulatory Team will establish consistent rules and regulations for the three Districts that meet the collaborative process goals and implement the results of this CFWI planning effort." (Pg. 168, CFWI-RWSP)

Members of the public are sometimes invited to attend or call-in to these critical committees, but the public is not allowed to participate or ask questions. In addition, not all meetings are even open to the public.

The failure to operate in the sunshine also allows for CFWI identified stakeholder groups to be left out of important team decisions. Each team is set up to represent important stakeholders groups – public water supply utilities, regional leaders, business representatives, agriculture landowners and the environmental organizations. Without the requirement of noticed, transparent, and open public meetings, individual participants and special interests have a greater opportunity to privately drive the agenda. This lack of stakeholder involvement and transparency could lead to rules, regulations, and water supply projects that are not in the best interest of the public or the St. Johns River

In 2007-2008, more than 60 local government and civic organizations passed resolutions opposed to water withdrawals from the St. Johns and Ocklawaha Rivers. Four resolutions opposing the water withdrawals included in the CFWI-RWSP and the SJRWMD-RWSP have been unanimously adopted in 2014, including the City of Neptune Beach and the City of Jacksonville/Duval County.

SJRWMD RWSP

Limited Public Participation

The SJRWMD surprised its constituents with the new draft SJRWMD-RWSP on December 19, 2013. Unlike the CFWI-RWSP and previously developed water supply plans, the SJRWMD did not have any public meetings prior to the release of the SJRWMD-RWSP. Once the draft plan was released, only 7 public meetings were held throughout the District. A meeting in Jacksonville, an affected community and the largest contributor of property taxes in the watershed, was added only after pressure from the Florida Times-Union and concerned citizens. This lack of proactive public involvement is in stark contrast to the opportunities

provided for public participation prior to the release of the previous SJRWMD RWSPs, and even the outreach that was conducted by the CFWI within its planning area.

Active Legal Challenge

Putnam County Environmental Council's (PCEC) Florida Land and Water Adjudicatory Commission (FLWAC) legal challenge of the 2005 SJRWMD-RWSP regarding SJRWMD's misinterpretation of the Florida Legislature's intent to only allow surface water captured during high flow to be used as an alternative water supply is still open and active. SJRK, along with the Public Trust Environmental Legal Institute of Florida, Inc., Florida Audubon Society, Inc. and Florida Defenders of the Environment, submitted an Amici Curiae Brief supporting PCEC's case. (Attachment A). This legal challenge must be resolved before the CFWI-RWSP or the SJRWMD-RWSP can be finalized.

Flawed Plan

Florida does not have a Water Supply Problem. Florida has a Water Use Problem.

According to the SJRWMD, "lawn and landscape irrigation accounts for more than half of all residential water use."

"It is the duty of the state and local governments, as well as water providers, to educate, incentivize and, in some cases, require actions, which lead to conservation." (Pg. 77 – CFWI RWSP)

Unfortunately, many effective tools driving water conservation have been eliminated recently due to budget cuts and special interests.

- Educational programs designed to promote water conservation have been abandoned.
- Incentive programs are lacking.
- Deregulation in Tallahassee relies on voluntary, less aggressive conservation measures.
- Enforcement of existing protective regulations is insufficient.

The CFWI-RWSP determined that only "42.3 million gallons per day (mgd) or 3.9 percent of the projected demand for 2035 can be eliminated by water conservation" and those estimates are "based on voluntary consumer actions."(P. 78, chapter 5) Despite that fact that such a large percentage of water from the public supply is used for irrigation, the CFWI-RWSP only estimates a 2.8% potential savings rate for outdoor conservation. The plan also estimates a meager 1.2% potential savings rate for Commercial/Industrial/Institutional customers.

The SJRWMD-RWSP presents a wide range of conservation water savings between 84 to 212 mgd depending on how aggressive requirements will be.

In Appendix D of the SJRWMD-RWSP, it states "The estimates of water conservation presented here are a level that can be likely attained under present economic and regulatory conditions.

However, considerably greater potential for water conservation exists if more incentives are provided, stricter regulation is required, or the cost of new water supplies rises sharply."

In addition, both the CFWI-RWSP and the SJRWMD-RWSP estimated future public supply water demand by multiplying the average 2006 to 2010 unadjusted gross per capita rate by the projected population for each five-year increment of the plans. This flawed approach ignores the historical trends of declining per capita rates of consumption, the potential of ongoing conservation programs and incentives and the likelihood of future advances in conservation technologies, strategies, and policies. As a result, the conclusions and recommendations of both plans are based on unrealistic water use deficit projections that are likely to significantly exceed actual demand in 2035.

The State of Florida needs bold leadership to craft statewide water policy that prioritizes water conservation, sustainable building and planning practices, incentives that encourage the efficient use of water, and market solutions, such as aggressive conservation rates and pricing strategies for CUP withdrawals

Water Conservation Should Be the Priority

"The overall conservation goal of the state is to prevent and reduce wasteful, uneconomical, impractical, or unreasonable use of water resources. (Section 373.227(1), F.S.)

Unfortunately, our limited public resources are being directed towards new risky sources of water, such as surface water withdrawals and desalination, instead of addressing the root causes of our water supply problems and exhausting all opportunities to use existing water resources more efficiently.

In its previous regional water supply plan, SJRWMD determined that nearly 288 million gallons of water could potentially be saved with a $1.6 billion investment in conservation, significantly more cost effective than water withdrawals and desalination alternatives.

According to the American Water Works Association (AWWA), "There is a growing body of research that conclusively demonstrates quantifiable savings from implementation of common practices such as conservation rate structures and equipment and fixture upgrades."

Voluntary measures alone are not sufficient. Water pricing strategies and mandatory requirements must also be implemented and enforced to achieve maximum conservation and efficiency benefits.

Water conservation and smart growth management practices will realistically save billions of dollars and potentially save the St. Johns River, the Ocklawaha River and other Florida waters from significant harm. Water conservation will also save taxpayers billions of dollars by reducing the need for environmental restoration to restore the damage done by over consumption.

The bottom line is that water conservation does work, can potentially meet most if not all of our water supply needs, and is much more cost-effective and environmentally-responsible.

Surface Water is NOT a Sustainable Alternative Water Supply Source

Massive water withdrawals will worsen existing pollution problems, increase the frequency of toxic algal outbreaks, further reduce flow, increase salinity levels farther upstream, and adversely impact the fisheries, wildlife and submerged vegetation in and along the St. Johns and its tributaries.

The St. Johns River drops less than 30 feet from the source to its mouth, making it difficult for our river to efficiently flush pollutants and sediments. Removing millions of gallons a day from the river will potentially worsen current pollution problems, including toxic algal blooms.

Many of these withdrawals would also require treatment by reverse osmosis (RO). The byproduct or pollutant that results from RO is called "concentrate". The concentrate has a high mineral and/or salt content and could be discharged back into the river, creating additional pollution problems.

Flawed Justification: Limited Study Does Not Give a Green Light for Water Withdrawals

Surface water withdrawals are being justified based on the findings of a limited St. Johns River Water Management District Study, the St. Johns River Water Supply Impact Study (WSIS). A group of independent scientists and experts from the National Research Council (NRC) conducted a peer review of the WSIS and identified significant shortcomings in the study and expressing concerns regarding many of the conclusions. According to the NRC review "the WSIS operated within a range of constraints that ultimately imposed both limitations and uncertainties on the study's overall conclusions."

The WSIS was not comprehensive and its shortcomings are well documented.

"A cumulative impact assessment should consider not only the impact of current and future actions on the environment, but also the impacts of past actions. Anyone evaluating the impact of proposed withdrawals should be able to consider the extent to which the waterbody has been degraded by historic actions such as drainage, diversion, withdrawals of ground or surface water, dredging or damming. Depending on the extent of those impacts, a decision-maker might conclude that restoration rather than additional degradation is appropriate. Unless the study documents the effects of historic impacts, it cannot be termed a cumulative impacts assessment and should not be used as the basis for determining whether to allow additional withdrawals." – 9/24/08 Memo from Richard Hamann to SJRWMD

"The report (WSIS) lacks a comprehensive synthesis of the model results." (pg. 34, NRC WSIS Final Report)

"Of particular concern is that the uncertainty analysis has not been synthesized with the water level, salinity, and age analysis to provide a deeper understanding of the model's ability to explain the system." (Pg. 35, NRC WSIS Final Report)

"The committee expressed concern from the outset of this study about the exclusion from the WSIS of potential effects of withdrawals on the Ocklawaha River (NRC, 2009)." (Pg. 102, NRC WSIS Final Report)

"The Committee concludes that the WSIS should have included a water quality workgroup." (pg. 35, NRC WSIS Final Report)

"The modeling conducted by the District did not have a water quality component, and the District considered the potential ecological effects of significant increases in degraded stormwater runoff, as well as, changes in the frequency distribution of stream flows in urbanized areas, to be outside the scope of the WSIS." (pg. 102, NRC WSIS Final Report)

"The standard for evaluating impacts is also troubling. If the goal is to determine the point at which "significant harm" occurs, then it is too limited. Significant harm is the standard for establishing minimum flows and levels (MFL). MFLs should not, however, be the only limit on withdrawals. Decision-makers might choose to allow some lesser degree of harm in the allocation of water. They might choose, for example, to reserve water from consumptive use for the "protection" of fish and wildlife. The permitting process itself is intended to insure that use is "not harmful to the water resources" and "consistent with the overall objectives of the district". The reasonable beneficial use and public interest criteria are also applicable and, in some circumstances, might provide the basis for determining that a withdrawal that does not violate MFLs should not be permitted. Hopefully this concern is only one of semantics and the results can be used in other contexts than establishing an MFL. "– 9/24/08 Memo from Richard Hamann to SJRWMD

Flawed Groundwater Model

The hydrologic model, MODFLOW, to model groundwater levels and to evaluate consumption use permits (CUP) for additional water use does not incorporate the critical interface between surface water and groundwater. This flaw must be corrected before adoption of either plan.

Not Consistent with Chapter 373, Florida Statutes and Chapter 62-40, F.A.C.

For the forgoing reasons, the proposed surface water withdrawals are not consistent with Chapter 373, Florida Statutes and Chapter 62-40, Florida Administrative Code and must not be approved as Alternative Water Supplies.

8

SJRK Recommendations

The CFWI-RWSP and the SJRWMD-RWSP fail the public and fail to protect Florida's natural resources. Adoption of either plan is premature and potentially damaging to the very natural resources they are intended to protect.

However, there is an opportunity to correct the process and the unsustainable plan.

The inherent flaws in both the process and the plan must be corrected and the constitutional and statutory obligations must be met.

- Robust public outreach with stakeholders and local governmental officials is achieved throughout the 48 counties that will be affected by these plans.
- Complete and publish the work of the Solutions Team and Regulatory Team prior to the adoption of the CFWI-RWSP and the SJRWMD-RWSP.
- Complete and publish the North Florida Regional Water Supply Partnership for inclusion in the SJRWMD-RWSP prior to its adoption.
- All legal challenges, including the active PCEC/FLWAC case, are resolved.
- The St. Johns River, the Ocklawaha and other Florida waterways must be fully protected by removing surface water withdrawal projects from both the CFWI-RWSP and the SJRWMD-RWSP.
- This flawed groundwater model must be corrected before adoption of either plan.
- River, springs, lakes and wetlands throughout all three water management districts must prioritize protection and restoration with comprehensive MFLs, recovery and prevention strategies, and a prohibition from using surface water or groundwater as supplementation for reclaimed water.
- Water Conservation must be made a priority. The focus should be living within our water means. As a result, we must develop a statewide water policy that prioritizes water conservation; mandates sustainable building, landscaping and planning practices; incentivizes the efficient use of water; establishes regulations that protect our water resources and mandate efficiency where needed; and implements market solutions, such as aggressive tiered conservation rates and CUP pricing strategies.
- Establish rules and regulations necessary to mandate and incentivize efficiency and protect our water resources. First and foremost, reinstate the rulemaking process to implement the following nine water conservation "rule enhancements" to the Consumptive Use Permit (CUP) and Environmental Resource Permit (ERP) application

processes proposed by SRJWMD staff in 2010 to require: 1) landscape irrigation ordinance, 2) informative billing, 3) stormwater reuse, 4) water use reporting for per capita calculations, 5)updated regulatory approach for public supply water conservation, 6) ERP water conservation provisions, 7) concurrent ERP/CUP application processing, 8) water conservation rate structure, and 9) landscape irrigation system design/installation constraints.

On behalf of the St. Johns River and the St. Johns Riverkeeper members, I submit these comments for your consideration. I look forward to the opportunity to participate in a fully open, public process that will further explore the flaws noted in the comments above and will strive to achieve a balanced approach to Florida's water needs and protection of Florida's natural resources.

For the River,

Lisa Rinaman

Lisa Rinaman
St. Johns Riverkeeper

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DISTRICT COURT OF APPEAL, FIRST DISTRICT

PUTNAM COUNTY ENVIRONMENTAL COUNCIL, INC. Appellant, vs. ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, Appellee.	)	Case No.: 13-2669 LT Case Nos.: WMD-08-005 WMD-09-005

AMENDED JOINT AMICI CURIAE BRIEF

IN SUPPORT OF THE APPELLANT

The Public Trust Environmental
Legal Institute of Florida, Inc.
2029 N. 3rd Street
Jacksonville Beach, Florida 32250
Phone: (904) 247-1972
adm@publictrustlaw.org
Attorneys for Amici
Attorney Andrew D. Miller, Esq.
Florida Bar No. 61491
Attorney Warren K. Anderson, Esq.
Florida Bar No. 233250

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IDENTITY AND INTEREST OF THE AMICI CURIAE

This brief is filed in support of the Appellant on behalf of the St. Johns Riverkeeper ("Riverkeeper"), Florida Audubon Society, Inc. ("Audubon"), and Florida Defenders of the Environment ("Defenders"), collectively referred to as "amici." Amici are non-profit environmental organizations dedicated to the protection of Florida's water bodies through various means. Each of the amici have a connection and interest in the waters under the jurisdiction of the Appellee.

The movants' interest in this matter is the proper resolution of whether the Secretary of Florida Land and Water Adjudicatory Commission ("FLWAC") incorrectly determined that the Fourth Addendum did not raise issues of policy, statutory interpretation, or rule interpretation that have regional or statewide significance from the standpoint of agency precedent.

SUMMARY OF THE ARGUMENT

This case concerns Appellant's request for review of Appellee's Fourth Addendum to its Regional Water Supply Plan. That request was denied by the Secretary of the FLWAC [VXLI 7407-7410][1] and the decision to deny the request has now been appealed to this Court. In the initial denial letter from FLWAC the Secretary stated that the challenged portions of the Fourth Addendum do not raise issues of policy, statutory interpretation, or rule interpretation that have regional or

[1] Citations to the record are by Volume and Page number(s), e.g. [VXLI 7407-7410] cites to Volume 41, Pages 7407 – 7410 record on appeal.

statewide significance from the standpoint of agency precedent. [VXLI 7409]. However, the Secretary of FLWAC has incorrectly applied Chapter 373 and specifically § 373.1961(1)(a) Fla. Stat. of the Florida Statutes.

The Appellee has not amended its water conservation rules contained in Fl. Admin. Code Chapter 40 since 2008, and the 2009 Fourth Addendum does not propose a single water conservation measure in its "water supply development projects" [VI 61-177]. The Fourth Addendum unlawfully fails to make water conservation a priority, a violation of § 373.1961(1)(a) Fla. Stat. Thus the Fourth Addendum raises issues of policy, statutory interpretation, or rule interpretation that have regional or statewide significance from the standpoint of agency precedent.

The amici support the position of the Appellant that the Secretary of FLWAC failed to follow statutory and rule requirements requiring consideration by the commission once a request for review is determined to be sufficient. In addition, amici urges this Court to find that the Secretary of FLWAC incorrectly determined that the Fourth Addendum did not raise issues of policy, statutory interpretation, or rule interpretation that have regional or statewide significance from the standpoint of agency precedent.

ARGUMENT

I. THE FOURTH ADDENDUM FAILS TO MAKE CONSERVATION A PRIORITY IN VIOLATION OF FLORIDA STATUTE 373.1961(1)(a) AND THUS RAISES ISSUES OF POLICY, STATUTORY INTERPRETATION, RULE INTERPRETATION THAT HAVE REGIONAL OR STATEWISE SIGNIFICANCE FROM THE STANDPOINT OF AGENCY PRECEDENT.

Appellate court review of issues of statutory interpretation is *de novo*. *Cason v. Florida Dept. of Management Services*, 944 So.2d 306, 309 (Fla. 2006).

On June 9, 2009, Appellant initiated the proceedings below by filing with the FLWAC a Request for Review pursuant to § 373.114(1)(a), Fla. Stat. [VXLI 7217-7238]. Appellant's Request for Review asserted that the Fourth Addendum was not consistent with Chapter 373 Fla. Stat. because the Fourth Addendum:

> 1) improperly designated surface water withdrawals that are not limited to "capture predominately during wet-weather flows" as non-traditional water supply sources, contrary to § 373.019(1), Fla. Stat.;
> 2) failed to make conservation a priority, contrary to § 373.1961(1)(a)[2], Fla. Stat; and
> 3) was adopted after an inadequate public participation process, contrary to §373.0361(1), Fla. Stat.

[VXLI 7225, 7227]. While amici agree with Appellant on all three points, amici will only focus on this second assertion, i.e. that the Fourth Addendum failed to make conservation a priority in violation of § 373.703(1) Fla. Stat.

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[2] The provisions of § 373.1961(1)(a) and § 373.0361(1) Fla. Stat. were moved to § 373.703(1) and § 373.709(1) Fla. Stat., respectively, by Chapter 210, Laws of Florida (2010). These provisions will hereafter be referenced by their *current* codification of the Florida Statutes.

Appellee's Duty to Make Water Conservation a Priority

§ 373.036(2)(a) Fla. Stat.[3] states that Appellee "shall develop a district water management plan for water resources within its region...." This plan "shall include ... A districtwide water supply assessment ... which determines for each water supply planning region: ... b. Whether existing and reasonably anticipated ... conservation efforts are adequate ...." In addition, § 373.036(2)(d)(8) Fla. Stat. requires that in the formulation of these plans the Appellee "shall give due consideration to: ... The state water resources policy as expressed by this chapter." *Water conservation* is perhaps the most important water resource policy repeated throughout Chapter 373. Evidence of its primacy is the fact that in its "Declaration of Policy," the Legislature remarkably recognized that water conservation is most important because it has heretofore been ignored. The section's *first* policy states,

> (1) The waters in the state are among its basic resources. **Such waters have not heretofore been conserved** ....

(§ 373.016(1) Fla. Stat. (emphasis added). The section then continues,

> (3) It is further declared to be the policy of the Legislature: ...
> (b) **To promote the conservation** ... of surface and groundwater; ...
> (h) **To promote the public policy set forth in s. 403.021**; ...
> (5) ... It is therefore the intent of the Legislature to vest in the Department of Environmental Protection ... the power and responsibility to accomplish the conservation ... of the waters of the state ... to accomplish these ends through delegation of appropriate

[3] The Court will notice that this brief heavily cites Florida Statutes. Amici have not found a single case which cites § 373.1961(1)(a) Fla. Stat. or its current iteration § 373.703(1) Fla. Stat., the central statute at issue in this brief.

> powers to the various water management districts … to the greatest extent practicable, such power should be delegated to the governing board of a water management district. ….

(§ 373.016 Fla. Stat.) The statutory section referenced in § 373.016(3)(h) Fla. Stat. is § 403.021 Fla. Stat., a section entitled "Legislative declaration; public policy," which reiterates, "… (2) It is declared to be the public policy of this state to **conserve the waters of the state** …." (emphasis added).

The Legislature wanted to make sure that the Appellee had the power to implement this public policy of water conservation and thus included it again in § 373.227 Fla. Stat. which states,

> (1) … To achieve these [water] conservation objectives, the state should emphasize goal-based, accountable, tailored, and measurable water conservation programs for public water supply. ... (5) The department or a water management district may adopt rules pursuant to ss. 120.536(1) to carry out the purposes of this section.

§ 373.019(25) Fla. Stat. perhaps states this oft-repeated public policy most succinctly, "The waters of the state are among its most basic resources. Such waters should be managed to conserve and protect water resources …." § 373.703(1) Fla. Stat. is further on point with the issues in this case and takes the "should" language of § 373.019(25) Fla. Stat. one-step further. § 373.703(1) Fla. Stat. makes it crystal-clear that

> [i]n the performance of, and in conjunction with, its other powers and duties, **the governing board of a water management district** existing pursuant to this chapter: (1) **Shall engage in planning** … **in such manner as will give priority to encouraging conservation** ….

(emphasis added).[4] There is no interpretation needed, water management districts shall give priority to encouraging conservation when engaging in planning. There can be no mistake that through these "Declarations of Policy" and additional statutory requirements, the Legislature made it clear that:

1) Our waters have heretofore not been conserved;
2) It is the policy of the Legislature to promote conservation through water supply planning;
3) The legislature delegated to the greatest extent practicable, the appropriate power to the Appellee needed in order to accomplish conservation; and
4) The Appellee shall give priority to encouraging water conservation.

The 2005 plan and the 4th Addendum were no exception to these rules. In approving the Fourth Addendum, the Appellee was required to give priority to encouraging conservation per § 373.703(1) Fla. Stat. and to the greatest extent practicable, use the appropriate power needed in order to accomplish conservation per § 373.016(5) Fla. Stat.

The Appellee has even admitted the importance of water conservation in the record. In the District Staff Report the Appellee writes, "[w]ater conservation is viewed by the District as a critical tool to address water supply needs, deserving of

[4] The 1st DCA has held that "shall" has a "mandatory connotation" in specific contradiction to "may," and that "[i]n statutory construction it has been consistently held that statutes must be given their plain and obvious meaning. It must be assumed that the Legislature of this state must know the plain and ordinary meaning of words...." *Brooks v. Anastasia Mosquito Control District*, 148 So.2d 64 (Fla. 1st DCA 1963).

significant commitment of resources...." [VIII 524]. The Appellee further admits that the magnitude of the necessary reduction in water consumption "has influenced the District's decision" to strongly promote and require the implementation of greater levels of water conservation. [VIII 523]. The Appellee then continues,

> [i]t is not a matter of additional water conservation **or** alternative water supply options; rather the District concludes that both additional water conservation and alternative water supply project options are needed ....

[VIII 523-24] (emphasis in original). Thus the Appellee admits that it *should be* implementing more water conservation efforts, and that "[e]ffective water conservation depends greatly on ... committed action...." [VIII 524]. And yet, as will be demonstrated *infra*, the Appellee unlawfully fails to take such committed action in the Fourth Addendum.

The Appellee has admitted that its water conservation policies have been insufficient in the past. Appellee states, "local responses to [the District's water conservation efforts] have been highly variable and have not always been effective." [VIII 524]. This statement comes from the document which begins,

> Water management districts must develop water supply plans [which] must identify programs and project options that will **ensure** adequate water supplies are available to meet future water use needs while sustaining the water resources and related natural systems.

[VIII 514] (emphasis added). Such statements show that at the time the Appellee

drafted and adopted the Fourth Addendum, the Appellee knew:

> 1) it was required to ensure that its plans identify options designed to meet future water use needs while sustaining water resources; and
> 2) its prior water conservation efforts had been ineffective.

Thus any failure to make water conservation a priority in the Fourth Addendum is a clear derivation of a mandatory recognized duty and a willing abandonment of a recognized need. And yet, the Fourth Addendum does not make water conservation a priority.

The Fourth Addendum's Failure to Make Water Conservation a Priority

Merriam-Webster's Dictionary defines "priority" as "something that is more important than other things and that needs to be done or dealt with first." The Fourth Addendum is 177 pages long and amends the 2005 plan. However, these lengthy amendments do not change the 2005 plan in any way that demonstrates that the Appellee has made water conservation a priority as it is required to do by § 373.703(1) Fla. Stat. Rather, the addendum merely lauds the importance of water conservation, describes past or continuing water conservation efforts that are not new to the Fourth Addendum, or at best, adopts very minimal water conservation efforts that in the face of its call for 219.46 MGD in water withdrawal from the St. Johns River, cannot be said to make water conservation a priority.

A fair reading of the Fourth Addendum shows three amendments to the 2005 plan that touch on water conservation which may be summarized as follows:

1) amends the existing Executive Summary and Introductory Chapter;
2) adds a chapter entitled, "Water Conservation Component"; and
3) amends the existing Recommendations chapter.

Amici will address each change in turn.[5]

1. *Amendment to the Existing Executive Summary and Introductory Chapter*

The Fourth Addendum amends the Executive Summary by adding "A water conservation component" to the list of components in the Executive Summary. [VI 7]. Although this language sounds promising, as will be shown many times throughout the addendum, this is not a change which demonstrates that Appellee made water conservation a priority, but rather is an empty gesture which accomplishes no real change. Specifically in this instance, this amendment is just a *list of components* that the plan *supposedly* contains. [VI 7]. The same is true with the very similar amendment to the language in the introductory chapter. [VI 7]. Such amendments to the 2005 plan do not accomplish anything with real impacts on the district's water use or planning, they do not conserve a drop of water.

[5] Amici is limited to 20 pages in its brief challenging the 177 page addendum. Amici believe they have given a fair summary of the entire addendum in this review.

2. Adds a Chapter Entitled, "Water Conservation Component"

The Fourth Addendum adds a chapter entitled, "Water Conservation Component" to the 2005 plan. [VI 8-15]. The Appellee will surely point to this section to argue that the Fourth Addendum does make water conservation a priority. However, a careful reading of this new chapter will show:

> 1) that it largely speaks of *past* efforts; and
> 2) any "new" requirements are minimal at best, especially when compared to the water *withdrawals* that the addendum also allows.

A careful reading of the first section of this new chapter shows that it does not implement any *new* water conservation policies. This section only states that the Appellee has, in the past, taken efforts like ensuring that Consumptive Use Permits must meet certain water conservation requirements. If anything, this section underlines the importance of water conservation policies from a financial standpoint that actually accomplish *tangible results* when it states,

> ... there has also been a realization that alternative water supply projects will be significantly more costly than projects that rely on traditional groundwater sources and pose additional concerns about harm to water resources. This reality has focused heightened attention on water conservation.

[VI 8].

The new chapter continues with a section entitled "Water Conservation Potential." In describing water conservation options the first paragraph states,

> A high potential exists for improved efficiency but the actual degree that will be attained cannot be specifically known until it is

> accomplished. Success of this approach is highly dependent upon aggressive implementation.

[V1 9]. In this quotation we see that even the Appellee will admit that success in water conservation is dependent upon actual implementation of water conservation options, *aggressive* implementation even. This is the very basis of amici's argument here, in order for the Fourth Addendum to follow the requirements of § 373.703(1) Fla. Stat. and make water conservation a priority, it must *actually do something* aggressive and meaningful about water conservation.

The remainder of the "Water Conservation Potential" section laments the costs of water conservation efforts. [V1 9, 11].[6] The Appellee then outlines the difficulty in predicting the success of water conservation efforts, but applauds the efforts of the "Conserve Florida" program which is developing a database documenting water conservation practices. [V1 11]. The Appellee then rests on the future promise that this "information will then be used by water management districts and water supply utilities to maximize water conservation benefits," and adds that it "proposes" to continue supporting this effort. [V1 11]. Again, this only makes amici's argument for them, describing the importance of actual "aggressive implementation" of water conservation options, while incongruously implementing none.

[6] On this point, while amici admit that Chapter 373 does not call for water conservation at all costs, F.S. 373.703(1) does *not* require Appellee to make water conservation a priority *only if* such projects are financially profitable.

The next section is entitled "Specific Water Conservation Measures Required for Consumptive Use Permits." [VI 11]. This section summarizes the provisions of Fla. Admin. Code R. 40C-2, which implement requirements to all consumptive use permit applications. Included is a summary of the practices that are required of public supply utilities, listing eight practices. [V1 11-12]. The problem however, is that none of these practices are *new* requirements. They are again merely recitations of old practices which have admittedly failed. This amendment to the 2005 plan thus makes no actual *changes* that would accomplish water conservation. This section concludes by similarly describing what "[o]ther types of water users, including agriculture and industry" are already required to do in terms of water conservation. [V1 12]. And the next section entitled "Watering Restrictions for Landscape Irrigation" is more of the same. [V1 12-13]. Thus again we see the theme of amendments to the 2005 plan that do not actually conserve even one drop of water.

The next section, entitled "Non-Regulatory Water Conservation Initiatives," alleges that the Appellee has initiated "a number of other projects and initiatives to improve water conservation ... ," and yet lists none. [VI 13]. The FLWAC, in determining whether to permit a request for a review of the Fourth Addendum, cannot simply accept one sentence in the 177 page addendum that on its face only

states that the Appellee has done "a number of things" in the past as enough to satisfy the requirements of § 373.703(1) Fla. Stat.

The next section of the Fourth Addendum's "new" chapter on water conservation is entitled "Conserve Florida Water Conservation Information Clearinghouse." [VI 14]. This section only repeats what the Appellee already included in the first paragraph of the "Water Conservation Potential" section addressed *supra*. This effort, which the Appellee labels as the "Water Resource Development Component," is not only merely a promise that the Appellee "proposes to continue to support," but also is not a new effort. Appellee fails to point out in the Fourth Addendum that the "Water Resource Development Component" was already a part of the 2005 plan. [VII 343-349]. Planning on proposing to continue to support the Conserve Florida program is not making water conservation a priority. It is passively hoping that the Conserve Florida program will come up with the solution.

In its next "new" section, "Landscape Water Conservation Ordinance Guidelines," the Appellee describes a document it produced in 2005 which provides guidance for the creation of local landscape water conservation ordinances that meet the requirements specified in § 373.185, Fla. Stat. [VI 14]. The Appellee promises it will "update and revise its document ... to take into account its recently amended water conservation rule and other new information

and developments concerning water conservation practices and technology." [VI 14]. However, as of the date of this filing, Appellee has not updated these "Landscape Water Conservation Ordinance Guidelines" since 2006.

This same section continues by describing Appellee's efforts in contributing

> technical expertise to the statewide effort, required by Section 373.228, F.S., to develop landscape irrigation and Xeriscape design standards for new construction. ... SJRWMD now promotes these statewide standards and will incorporate them in its revised document that provides guidance and example language.

VI 14]. While these efforts theoretically help to conserve water, the only thing this section of the Fourth Addendum actually accomplishes is a restatement of what is already required of the Appellee by the Florida Statutes. Prior to the passage of the Fourth Addendum, § 373.228(4) Fla. Stat. required the Appellee

> to develop landscape irrigation and Florida-friendly landscaping design standards for new construction which incorporate a landscape irrigation system and develop scientifically based model guidelines ...

Doing what is already required by the law is not making water conservation a priority, it is doing the minimum, to do otherwise would be unlawful.

The new "Water Conservation Public Awareness Campaign" section correctly points out that the Appellee "partners with local governments and water supply utilities to conduct an annual multimedia campaign, which has included television, radio, newspaper, the Internet, direct mail and billboards, a Web site, and printed materials ...." [VI 14]. However, since 2008 the Appellee has actually

spent less and less on outreach each year. And thus Appellee actually has done *less* in outreach after the Fourth Addendum than it did before it, and has continued to do less and less each year since. This is the opposite of making water conservation a priority.

The second to last new section is entitled "SJRWMD Strategic Water Conservation Initiative." [VI 15]. This section, like others before it, merely lists several programs that the Appellee already had in place and Appellee claims it will review these programs. [VI 15]. Such review hardly develops new actions which will accomplish more water conservation. And Appellee admits this. As the second to last sentence of this new section states, "The *other* overarching goal is to develop *new actions* … to achieve a significant reduction in water use …." [VI 15] (emphasis added). Thus all this section accomplishes is a stated desire by the Appellee to one day take on new actions that will actually achieve water conservation goals; it does not itself initiate any new actions. This is striking considering the Appellee has stated it needs both alternative water supply options and additional water conservation. [VIII 523-24].

The final new section of the new chapter is entitled "Environmental Resource Permit (ERP) and Consumptive Use Permit (CUP) Linkage." The language from this section states, "SJRWMD is *planning to initiate* rulemaking *in the near future* to more closely link the ERP and CUP permitting processes for

certain projects with landscape requiring irrigation." [VI 15] (emphasis added). Such a plan fails to make water conservation a priority in the Fourth Addendum and instead kicks the can down the road.

3. Amendment to the Existing Recommendations Chapter

The final amendment to the 2005 plan outlines changes to the existing Recommendations chapter. Specifically it:

> 1) adds "Water conservation and reuse" as a new first bullet to the categories of implementation strategies; and
> 2) adds new Water Conservation and Reuse recommendations before the Minimum Flows and Levels recommendation.

[VI 17-18]. These changes appear promising on their face, but again, when scrutinized reveal that they do not actually accomplish water conservation.

The first change is merely an addition of a new bullet point, it does not implement any new strategy. [VI 17]. The second change, adding three relevant recommendations before the Minimum Flows and Levels recommendation, do not reach the point of actual water conservation either. The first new recommendation is to "Implement the projects as described in the Water Conservation and Reuse chapter of this fourth addendum." Assuming the Appellee meant the new chapter that is described *supra*, this brief has already addressed each of these "changes." The second new recommendation calls for the Appellee to "Initiate rulemaking to create linkage between certain environmental resource permit and consumptive use permit applications." This again is a promise to do something in the future. But

not a single water conservation rule in the Fla. Admin. Code has been changed since 2/13/08, a full year and half before the Fourth Addendum was approved. Thus this promise to initiate rulemaking in the future rings hollow.

The final new recommendation states that the Appellee is to "Evaluate measures in place to encourage or improve conservation … when considering cooperative funding grants for alternative water supply development or other cooperative funding grant programs of SJRWMD." [VI 18]. This hyper-specific plan, to be done only "when considering cooperative funding grants," is yet another example of the Appellee's plan to review *existing* measures.

Beyond these changes, except for a citation to "Landscape Water Conservation Ordinance Guidelines. St. Johns River Water Management District, Palatka, Fla.," the word "conservation" is not even used past page 18 of the 177 page Fourth Addendum. [VI 51]. Moreover, not a single one of the projects listed in Appendix N, a section that outlines the Appellee's plans for "water supply development projects," is a water conservation measure. When the Appellee approved the Fourth Addendum which voluntarily *withdraws* 219.46 MGD from the St. Johns River but did not take any real affirmative action to concurrently

conserve water, it is clear that the Appellee made water *withdrawal* the priority, not conservation. [VXLI 7357].[7]

The State of Florida has mandated the Appellee to make water conservation a priority in its water supply planning. The law requires the Appellee to "promote the conservation of water," (§ 373.016(3)(b) Fla. Stat.), to "conserve the waters of the state," (§ 403.021(2) Fla. Stat.), to "give priority to encouraging conservation," (§ 373.703(1) Fla. Stat.) and "to the greatest extent practicable" use the appropriate power needed in order "to accomplish the conservation ... of the waters of the state." (§ 373.016(5) Fla. Stat.).

The Fourth Addendum adds a lot of language to the 2005 plan regarding water conservation. But this language merely recites old policies and efforts which the Appellee admits have been ineffective in the past, or at best promises to take action "in the near future" even though their budgets and rules demonstrate that they have failed to live up to these promises. This empty language and promises of efforts in the future are clearly not what the Legislature had in mind when they drafted § 373.227 Fla. Stat. which states,

> (1) ... The Legislature encourages the use of efficient, effective, and affordable water conservation measures. ... To achieve these conservation objectives, the state should emphasize goal-based, accountable, tailored, and measurable water conservation programs for public water supply.

[7] The Appellee even rejected proposed simple water conservation efforts like requiring the installation of low-flow toilets for new customers. [VIII 525].

Nowhere in the Fourth Addendum can one find goal-based, accountable, tailored and measurable water conservation programs.

In short, the Fourth Addendum, by failing to make water conservation a priority, violates the mandatory provisions of § 373.703(1) Fla. Stat. The proof of such failure is the absence of any goal-based, accountable, tailored, or measurable change regarding water conservation. Thus the Secretary of FLWAC incorrectly determined that the Fourth Addendum did not raise issues of policy, statutory interpretation, or rule interpretation that have regional or statewide significance from the standpoint of agency precedent. A water supply plan which clearly violates the very statutory chapter which requires its creation certainly raises issues of policy and statutory interpretation.

CONCLUSION AND RELIEF SOUGHT

WHEREFORE, amici respectfully request this Honorable Court to reverse the final order and hold: that the FLWAC Secretary failed to adhere to applicable statutory and rule procedures; that the Fourth Addendum does raise issues of policy, statutory interpretation, or rule interpretation that have regional or statewide significance from the standpoint of agency precedent; and remand for further proceedings in accordance with applicable law.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the JOINT AMICI CURIAE BRIEF IN SUPPORT OF THE APPELLANT was served via email upon the following on November 25th, 2013: John Thomas, Esquire, 233 Third Street North, Suite 101, St. Petersberg, FL 33701, Attorney for Appellant; Agency Clerk of Appellee, St. Johns River Water Management District; Thomas I. Mayton, Jr., Esquire, St. Johns River Water Management District, 4049 Reid Street, Palatka, Florida 32177-2529, Attorney for Appellee; and Edward P. de la Parte, P.O. Box 2350, Tampa, FL 33601-2350, Attorney for Seminole County and Orlando Utilities Commission.

Respectfully submitted,

/s/ Andrew D. Miller
Andrew D. Miller, Esq.
Florida Bar No. 61491
Warren K. Anderson, Esq.
Florida Bar No. 233250
The Public Trust Environmental
Legal Institute of Florida, Inc.
2029 N. 3rd Street
Jacksonville Beach, Florida 32250
Phone: (904) 247-1972
adm@publictrustlaw.org

ATTORNEY FOR AMICUS CURIAE IN SUPPORT OF THE APPELLANTS

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CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY that the text herein is printed in Times New Roman 14-point font, and that this notice complies with the font requirements of Florida Rule of Appellate Procedure 9.210.

/s/ Andrew D. Miller
Andrew D. Miller, Esq.

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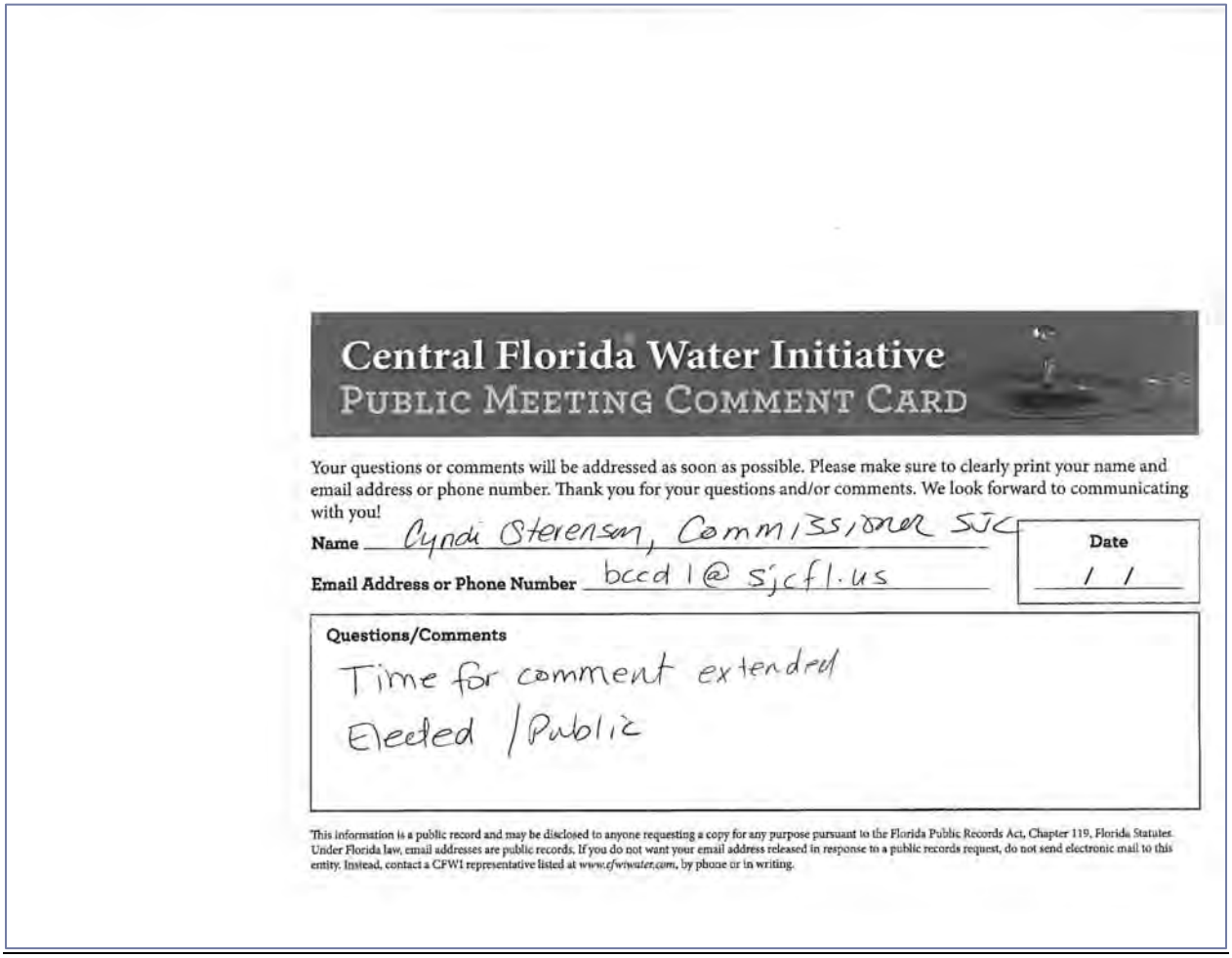
CFWI RWSP Team Response *- Thank you for your comments. The CFWI RWSP was prepared using the best available information and tools and the Districts seek to finalize the plan as*

expeditiously as possible to meet its statutory obligations. Please see response to your previous Comments.

Cyndi Stevenson, Commissioner, St. Johns County (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name: Cyndi Stevenson, Commissioner SJC

Email Address or Phone Number: bccd1@sjcfl.us

Date: 1/1

Questions/Comments

Time for comment extended
Elected / Public

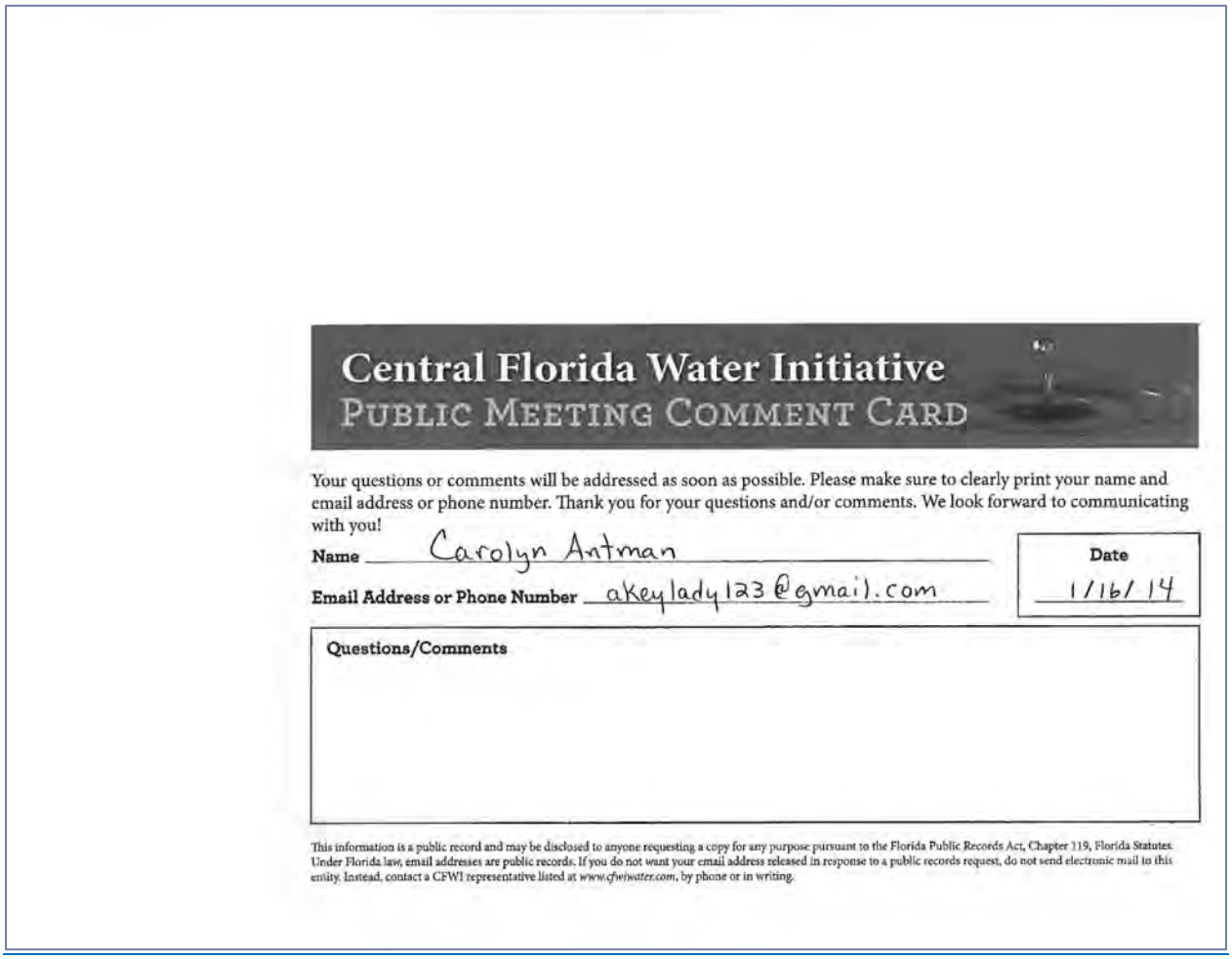
This information is a public record and may be disclosed to anyone requesting a copy for any purpose pursuant to the Florida Public Records Act, Chapter 119, Florida Statutes. Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact a CFWI representative listed at www.cfwiwater.com, by phone or in writing.

CFWI RWSP Team Response *- As a result of public comment, the Steering Committee extended the deadline for public comments on the CFWI RWSP to February 20, 2014.*

Comment 2 - More time is needed to consider some of the issues, understand the water sources and supply better, and get questions answered. More time is needed to respond to the plan. We need to be able to look our constituents in the eye and be comfortable. We need to ask for more money from the Governor for water conservation and education. Central Florida is doing a great job on conservation and we need to do better as well. There should be an increase in restoration efforts and funding. We request additional time to answer questions from our constituents.

CFWI RWSP Team Response *- See response to your Comment 1.*

Carolyn Antman, Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name Carolyn Antman

Email Address or Phone Number akeylady123@gmail.com

Date 1/16/14

Questions/Comments

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Comment 1 - I am skeptical of withdrawals from the St. Johns River. Surface water withdrawals will have devastating effects. Surface water withdrawals are a short-term solution and the impacts are costly to reverse.

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors*

including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

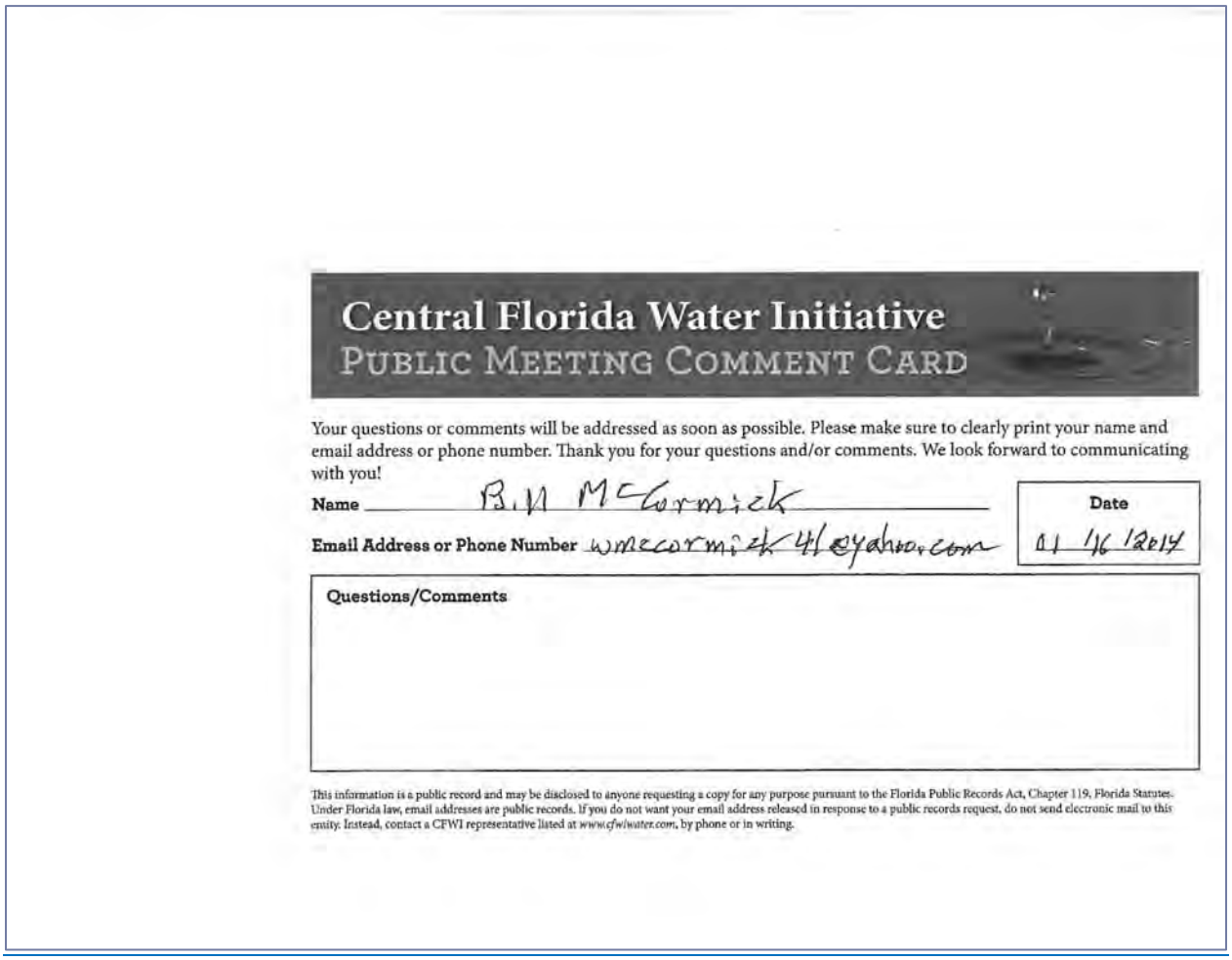
Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Bill McCormick, Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

Your questions or comments will be addressed as soon as possible. Please make sure to clearly print your name and email address or phone number. Thank you for your questions and/or comments. We look forward to communicating with you!

Name Bill McCormick

Email Address or Phone Number wmccormick4l@yahoo.com

Date 01/16/2014

Questions/Comments

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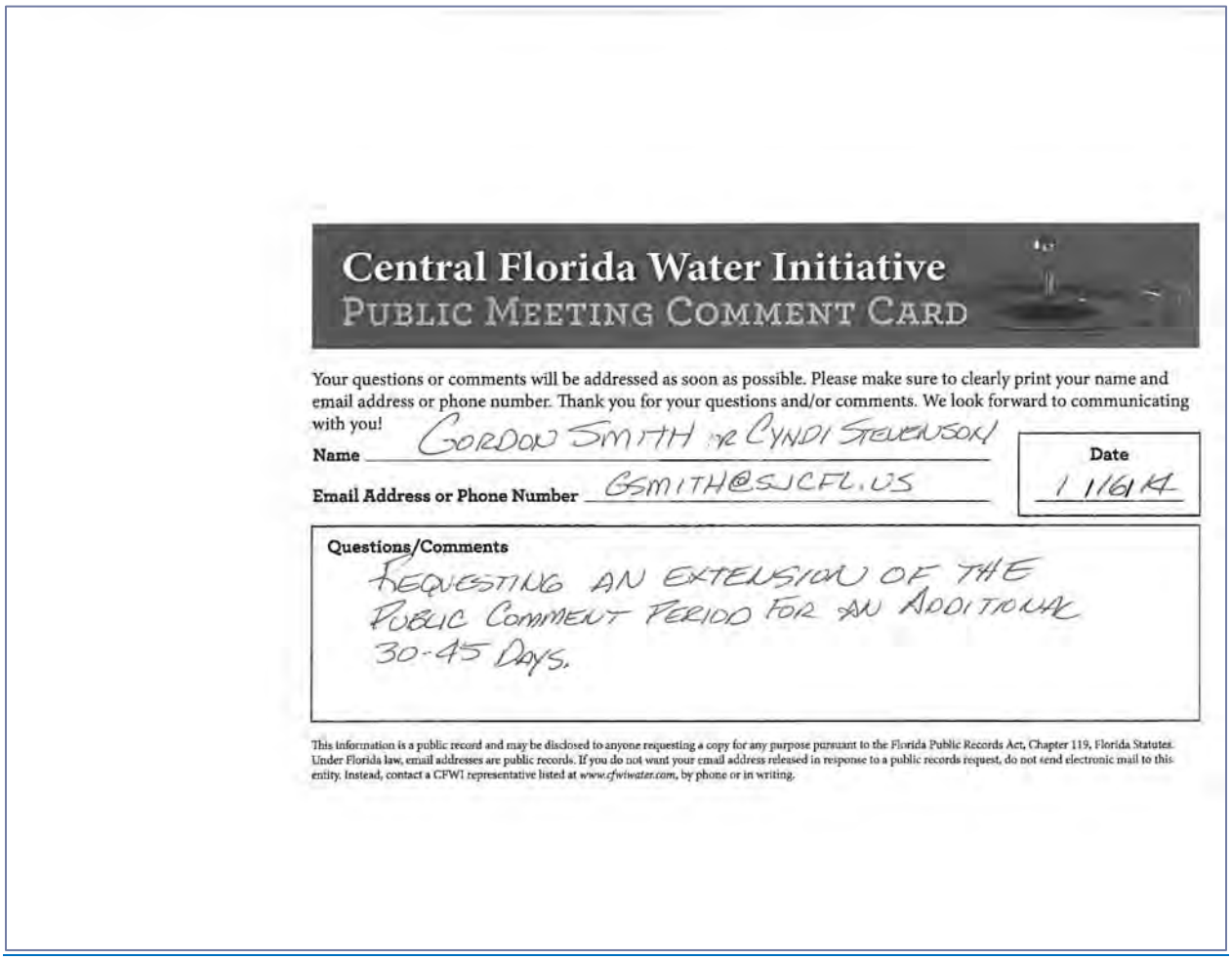
Comment 1 - The District is considering issuing a permit for Niagara water bottling that doubles the amount of groundwater that they are using. The District did a study on water conservation, but we did not use it. Water conservation needs to be a priority.

CFWI RWSP Team Response *- In its review, District staff determined that the application meets the conditions for issuance of this permit and that the proposed use of water is a reasonable and beneficial water use; will not interfere with any presently existing legal use of water; and is consistent with the public interest.*

Board members reviewed the staff's report and recommendation, and letters and emails received from the public, before making a decision on whether to issue the permit and approved a 20-year permit for Niagara at the public Board meeting on February 11, 2014.

Gordon Smith, Concerned Citizen (01/16/14)



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Name GORDON SMITH & CYNDI STEVENSON

Email Address or Phone Number GSMITH@SJCFL.US

Date 1/16/14

Questions/Comments

REQUESTING AN EXTENSION OF THE PUBLIC COMMENT PERIOD FOR AN ADDITIONAL 30-45 DAYS.

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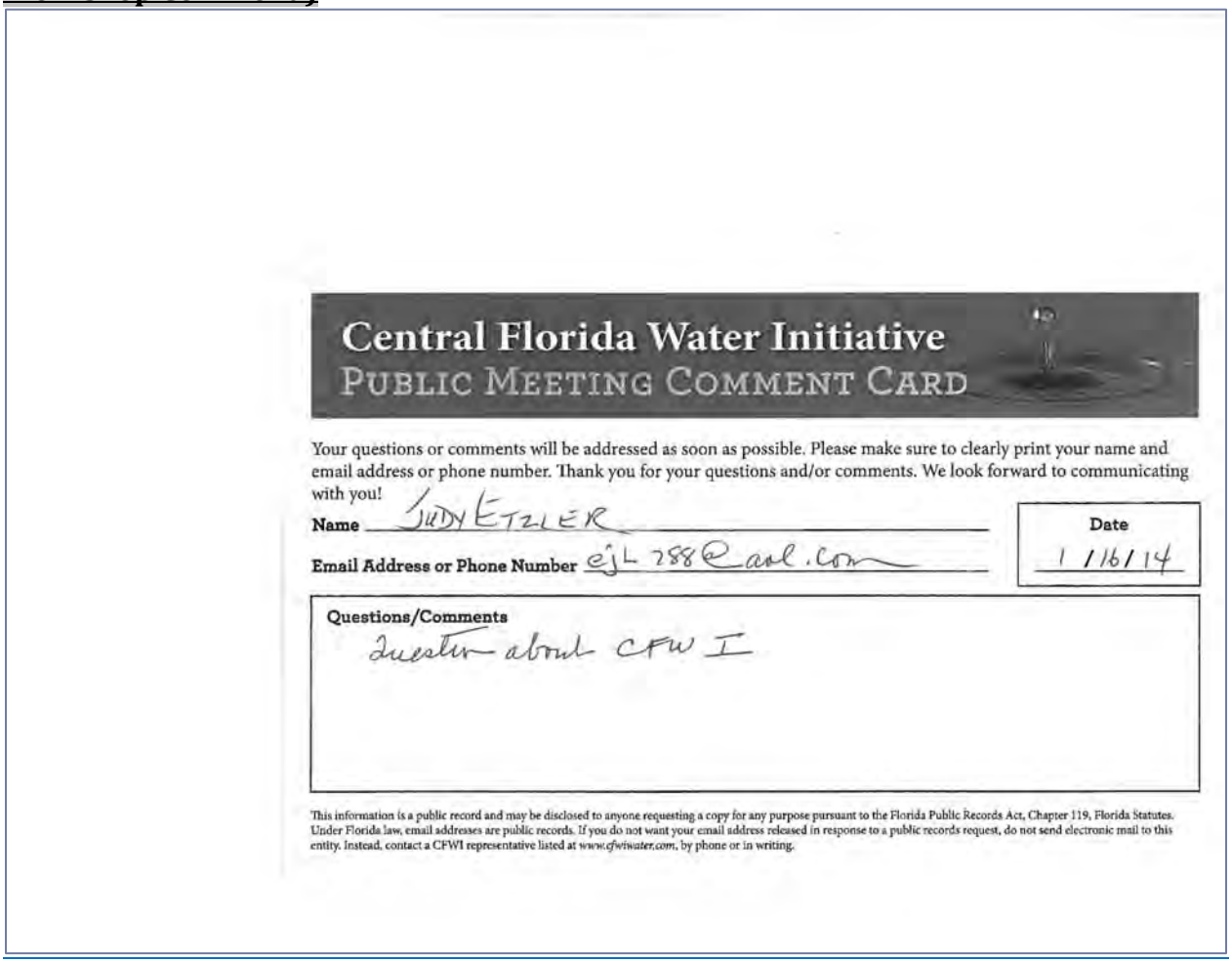
CFWI RWSP Team Response *- As a result of public comment, the Steering Committee extended the deadline for public comments on the CFWI RWSP to February 20, 2014.*

Judy Etzler, Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



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Name JUDY ETZLER

Email Address or Phone Number ejl788@aol.com

Date 1/16/14

Questions/Comments

Question about CFW I

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Comment 1 - Nobody is paying attention to what the residents are saying. It is unconceivable to use river water. We do not want withdrawals from the river. The District needs to take care of domestic self-supply people. We have had to drill deeper wells due to groundwater withdrawals. Agriculture CUPs should be capped. The Adena Springs CUP should not be allowed because they are selling beef out of Florida. Niagara bottling sells water outside of Florida and should not be permitted to take water out of the state. There is no activity from the CFWI regulatory and solutions teams.

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield*

for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

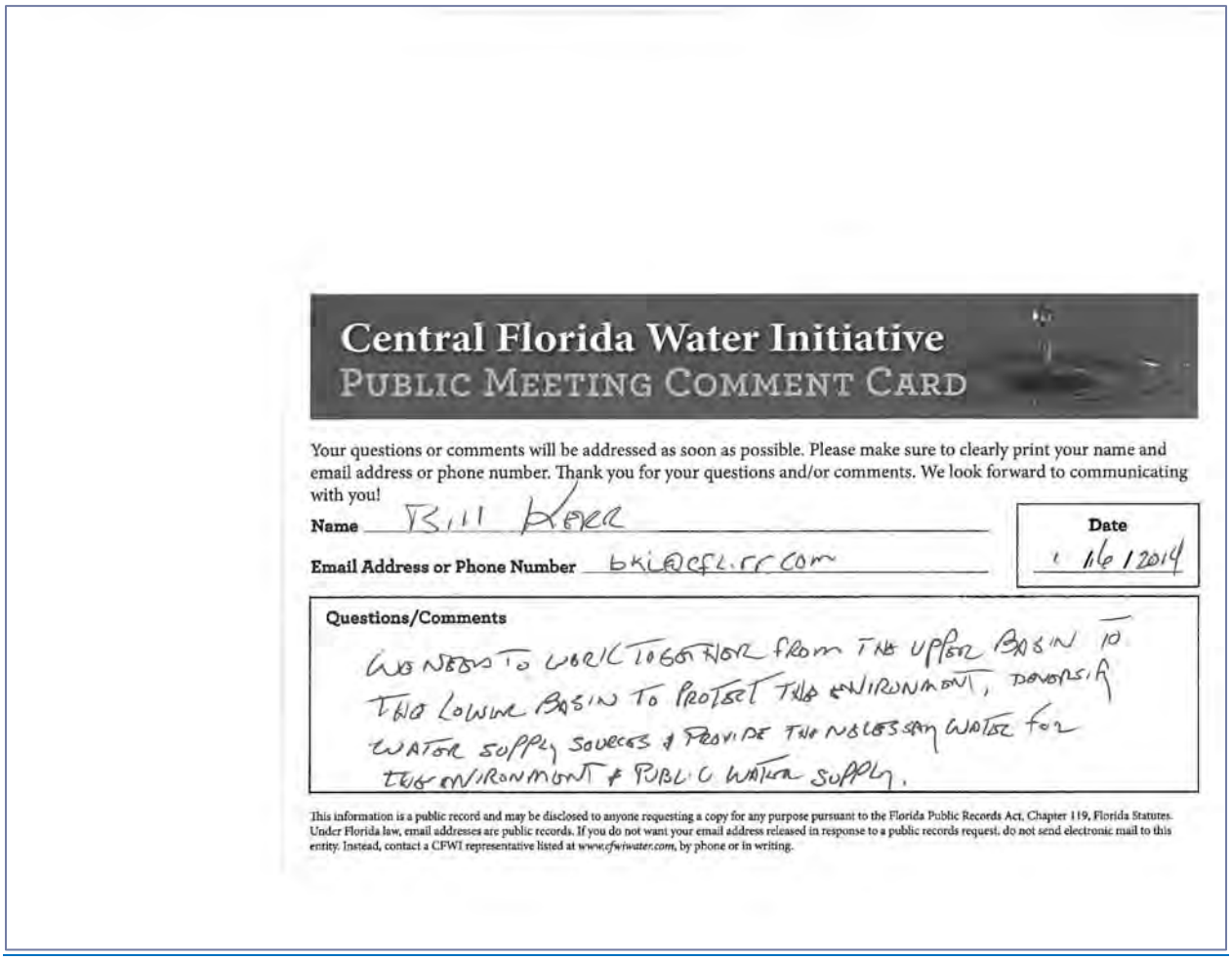
Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

As noted in Chapter 373.223, F.S., "to obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water: is a reasonable-beneficial use as defined in s. 373.019; will not interfere with any presently existing legal use of water; and is consistent with the public interest.

CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Bill Kerr, Former SJRWMD Governing Board Member / Concerned Citizen (01/16/14 Comment Card and Public Workshop Comment)



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Name Bill Kerr

Email Address or Phone Number bkl@cfl.rr.com

Date 1/16/2014

Questions/Comments

We need to work together from the upper basin to the lower basin to protect the environment, diversify water supply sources & provide the highest water for the environment & public water supply.

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CFWI RWSP Team Response - *Thank you for your comments.*

Comment 2 - We have created this issue ourselves. Water management districts are charged with planning for the future population and Florida has a growing population. The water management district has restored a significant amount of area in the upper basin of the river. Except for the Everglades, the upper basin restoration is the largest restoration project in the nation. We have to come up with a plan to have water for the growing population. The CFWI plan is not perfect, but we have to do it. The District is mandated to do it. We have to diversify our water resources. All withdrawals will cause some harm, but we have to mitigate and diversify. The plan does address water conservation. Conservation will not solve all of our demand. We have to cooperate and work together. The St. Johns River is a water source now and will be a source in the future. Let us not spend the money on arguing. Let us cooperate and spend it working on a plan.

CFWI RWSP Team Response - *Thank you for your comments.*

Rachel Bardin, Concerned Citizen (01/16/14)

Central Florida Water Initiative
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Name Rachel Bardin

Email Address or Phone Number 850 524 2937

Date 01/16/2013

Questions/Comments Why are you recommending pumping water from one of Florida's most polluted bodies of water, the Indian River Lagoon, into St. Johns River?
Why should our water quality suffer on account of over development in your region?
Is the St. Johns county population growth being taken into account?

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What are the projected impacts in terms of sinkhole formation from water table drops?

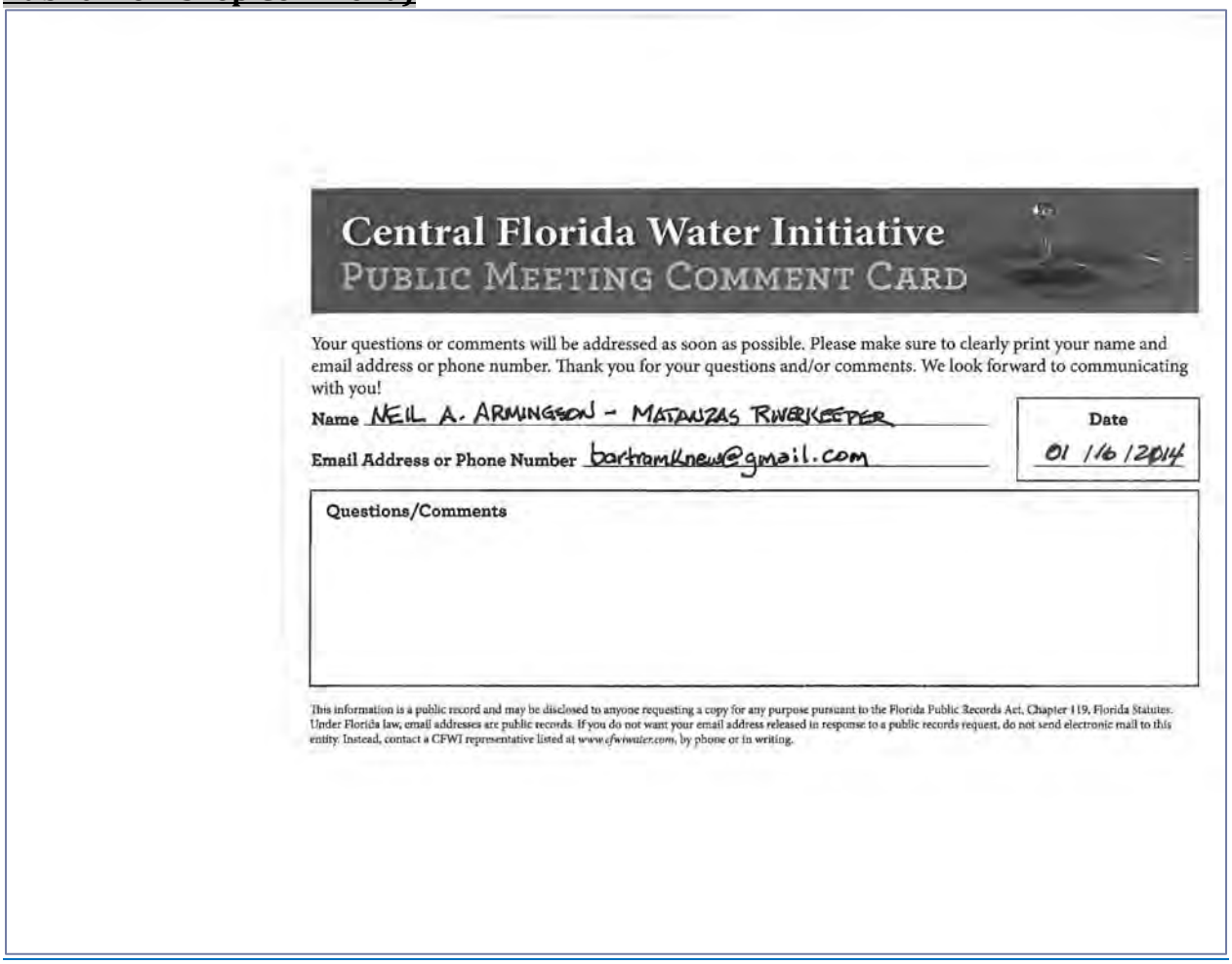
If there is less water flow, how will that impact discharge permits which depend on dilution? (GP for example)

CFWI RWSP Team Response *- Indian River Lagoon has been removed from Page 173.*

There are number of factors that contribute to sinkhole formation however, the Districts do not project potential sinkhole occurrences.

Permit specific information will be dealt with under the CUP process respective to each District. A Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery.

Neil A. Armingeon, Matanzas Riverkeeper (01/16/14 Comment Card and Public Workshop Comment)



Central Florida Water Initiative
PUBLIC MEETING COMMENT CARD

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Name NEIL A. ARMINGSON - MATANZAS RIVERKEEPER

Email Address or Phone Number bartramknews@gmail.com

Date 01/16/2014

Questions/Comments

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Matanzas Riverkeeper

201 Owens Avenue
St. Augustine, FL 32080

January 16, 2014

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

RE: Initial comments to the CFWI Regional Water Supply Plan

Dear Mr. Bartol,

On behalf of the Friends of Matanzas, Inc. (FOM), and the Matanzas Riverkeeper (MRK), please enter this letter and document into the administrative record for the CFWI Regional Water Plan. These are our initial comments, and it is our intention to submit additional remarks before the public comment deadline.

For almost nine years, I have personally been involved with the District's proposal to siphon millions of gallons of freshwater from the St. Johns and Ocklawaha Rivers. I spoke out against withdrawals from the St. Johns River at a meeting in Sanford Florida in 2005. I've spent the equivalent of months of my life at meetings, public hearings, workshops, an administrative hearing, and a subsequent appeal process. Through these countless events, I can honestly say, nothing has changed. This Plan could have been authored in 2005 just as easily as today.

Let the record show that FOM and MRK oppose the removal of water from the St. Johns and Ocklawaha Rivers. We oppose is with the same tenacity as I did in 2005 in the Sanford Commission Chambers. The most cost-effective, environmentally acceptable solution to Florida's water supply problem is water conservation.

Starting in the spring of 2009, the District spent 18 months in a comprehensive plan to revise and strengthen water conservation programs and regulations. The District determined that nearly 288 million gallons of water could be potentially saved with a substantial investment in conservation. Today, that entire effort sits on a shelf, and once again we discuss water withdrawals from the St. Johns and Ocklawaha Rivers.

The accompanying document is included because the staff of the SJRWMD is publicly stating the 2011 National Academy of Science Study states removing 150 MGD will not harm the St. Johns River. Nothing could be further from the truth. To that end, I've

included a review of that NAS study I wrote while I served as the St. Johns Riverkeeper. The document speaks for itself.

The definition of insanity is to repeat the same actions and expect different results. The only question that remains is who is the deranged party?

Is it the District, who follows a decade long path of stating the State is running out of water and does nothing about it but present the same path—remove millions of gallons of water from our rivers and springs to continue an unsustainable life style?

Or is the public who participates in public hearings such as this one expecting the SJRWMD to actually provide leadership and actions to solve these problems while protecting Florida's diminishing resources?

Nine years down the road, I suggest I'm as prepared as anyone to answer that question. We participate not because we believe the District will consider our remarks and take them to heart. No, we're beyond that level of naiveté.

We come here to defend our rivers and springs against those who place greed and short-term gain above their health, because as the owners of those resources, through the public trust doctrine, we have the moral obligation speak on the water's behalf.

Thank you for this opportunity to comment.

For the Matanzas,

Neil A. Armingeon
Matanzas Riverkeeper

Review of the *St. Johns River Water Supply Impact Study: Final Report*

Neil A. Armingeon
St. Johns Riverkeeper
January 17, 2012

Introduction

St. Johns Riverkeeper (SJRK) is a citizens group based in Jacksonville Florida whose focus is the protection and restoration of the St. Johns River. In 2005, the SJRK attended a water withdrawal public meeting in Sanford, Florida where the subject of removing water from the St. Johns River was discussed. Since that time, SJRK has been involved with the subject of potential water withdrawals from the St. Johns and Ocklawaha Rivers.

In the St. Johns River basin, a 2005-2006 water supply planning study conducted by the St. Johns River Water Management District (SJRWMD) showed that increasing water withdrawals from the Upper Floridan Aquifer—the principal groundwater supply of the basin and most of peninsular Florida—beyond those projected to occur by 2013 would lead to undesirable declines in the aquifer's piezometric surface, and damages to lakes and wetlands. As a consequence, the District began to consider alternative sources of supply for the population growth that was expected in the region. These sources included recycling and reuse of wastewater and a variety of water conservation measures, but the District concluded that these would not be sufficient and thus began to consider surface water withdrawals from the St. Johns River and its major tributary, the Ocklawaha River.

SJRK has been the most vocal opponent of water withdrawals (WW) to meet future water demand in the watershed. SJRK has challenged the need for these projects and the societal costs and benefits. SJRK has championed the use of water conservation as an alternative to WW and finally, warned of the potential ecological impacts of WW on the St. Johns and Ocklawaha Rivers.

SJRK, St. Johns County, and Jacksonville challenged Seminole County's Yankee Lake WW project, the first, of potentially many, water withdrawal projects that will remove hundreds of millions of gallons of water from the St. Johns and Ocklawaha Rivers. Almost 400 citizens tried to attend the Yankee Lake CUP hearing in Palatka. SJRK's administrative challenge was ultimately unsuccessful in the legal arena. Seminole County was granted a Consumptive Use Permit (CUP) to allow them to remove 5.5 million gallons of water per day (MGD) from the St. Johns. The plant design will ultimately allow 55 MGD to be removed from the river.

The SJRK used the opposition to the Yankee Lake project to raise public awareness about other proposed WW projects. SJRK, and the public, believed no additional WW projects should be permitted until all remaining questions about the ecological impacts of these projects could be answered. Due to public concerns voiced during the Yankee Lake hearing, and at subsequent meetings and forums, the SJRWMD Board members directed the staff to undertake a comprehensive analysis of the potential ecological impacts of WW projects on the health of the St. Johns and Ocklawaha Rivers.

In 2008, the SJRWMD began a large scientific study on the potential hydrologic and ecological effects of withdrawing water from the St. Johns River and its major tributary, the Ocklawaha River. The District requested that their study, called the Water Supply Impact Study (WSIS), be reviewed as it progressed by a committee of the National Research Council (NRC).

In late 2008, the Water Science and Technology Board (WSTB) of the National Academies was asked to review the progress of the WSIS, including such scientific aspects as hydrologic and water quality modeling and how river withdrawals will affect wetlands, biogeochemical processes, plankton, benthos, the littoral zone, fish, and wetlands wildlife in the basin.

The NRC issued their draft final report in December, 2011. SJRK has reviewed the NRC's report, based upon the work of eight SJRWMD work groups. What follows is our analysis of that work and the draft report. SJRK attended the majority of the NRC's meeting, and made comments to the SJRWMD and the NRC during public comment periods. SJRK attended the field trip to the middle and lower basins, including the field visit to the Ocklawaha River.

SJRK's comments represent our opinion(s), and they are based solely on the NRC report. In some cases, the comments echo the report verbatim. In some cases, the review draws its own conclusions based upon our review of the NRC work and our attendance at NRC meetings in Florida.

Our purpose in this review is to provide feedback to the SJRWMD as well as publish an overview of the process to our membership and the general public.

The WSIS was a complex, timely, and in some ways, an historic undertaking that required great time and resources from both the SJRWMD and NRC committee members. On behalf of SJRK, thanks to both groups for their efforts and the commitment.

Much was learned, but many questions about the ecological impacts of water withdrawals on the St. Johns and Ocklawaha Rivers remain. One conclusion is clear; the WSIS does not provide carte blanche to remove water from the St. Johns River.

Simply put, the WSIS is another tool that will help all of us to better understand and protect our great river, the St. Johns.

St. Johns Riverkeeper comments on the *Review of the St. Johns River Water Supply Impact Study: Final Report*

General Comments

1. The work/involvement of the National Resource Council (NRC), who authored *Review of the St. Johns River Water Supply Impact Study: Final Report*, was directly due to the public's concerns and/or involvement with the proposed water withdrawals from the St. Johns and Ocklawaha Rivers.

2. The St. Johns River Water Management District (SJRWMD) responded to the public's concerns and contracted and funded the NRC study. While St. Johns Riverkeeper (SJRK) has reservations about the study, we commended the SJRWMD for acting upon the public's apprehension.
3. The SJRWMD's scientists gained knowledge about the system that the District manages--the St. Johns River Watershed. In addition, SJRWMD gained useful experience in conducting large-scale environmental impact studies, and hopefully, their involvement will result in improvements in their analyses. Although this process will serve the District well in the future, limitations and questions remain about the impacts of water withdrawals on the St. Johns River.
4. The NRC lays out a variety of additional, specific, analyses that must be completed before any additional water withdrawals from the St. Johns River are considered.

Study Limitations

1) The St. Johns Riverkeeper (SJRK) agreed the Water Supply Impact Study (WSIS) was warranted and welcome, but public input to the process was limited. In general, the SJRWMD, and consequently the NRC, generally ignored suggestions and recommendations from the public, especially in the early stages of the project.
2) In 2008, St. Johns Riverkeeper Neil Armingeon, and Putnam County Environmental Council (PCEC) members Karen Ahlers and Robin Lewis argued early in the process that the original review should be a so-called "Cumulative Impact Study of Water Withdrawals from the St. Johns River." This suggestion was not acceptable to SJRWMD. It was clear that SJRWMD had no intention to actually look at cumulative impacts from many decades of modifications to the river and its flows, and place the most recent proposed withdrawals in a true ecosystem impact context.
3) A decision was made to artificially establish the year 1995 as the baseline (pristine) year and assume no impact from anything prior to that date, and to totally ignore any historical impacts to the Ocklawaha River (OR), such as the Kirkpatrick Dam, or the 30% reduction in flows from Silver Springs in the last decade, that has contributed to stress/decrease freshwater flow to the St. Johns River (SJR).
4) The SJRWMD chose to rename the study and chose to isolate the proposed "new" withdrawals from any previous impacts. In effect, this approach limited any meaningful ecological conclusions about how the SJR might change in the future with, or without, proposed water withdrawals. Other process decisions exacerbate the shortcomings of this approach.
5) The Ocklawaha River (OR), the largest tributary of the St. Johns River, was not included in the WSIS—despite the fact that the Ocklawaha contributes one-third of the total flow of the SJR. The NRC expressed concern from the outset of this study about the exclusion of potential effects of withdrawals on the Ocklawaha River from the WSIS (NRC, 2009). The SJRWMD made the decision to omit the OR from the study.
6) The District gave two primary reasons for excluding the Ocklawaha River from the WSIS. First, a Minimum Flows and Levels study (MFL) had not yet been conducted for the Ocklawaha, but one was planned for the near future. The District thought it would be premature to include the Ocklawaha in the current WSIS without the existence of an MFL. As of this date, there is still not an MFL for the Ocklawaha River.

7) District scientists and administrators felt that a focus on the potential effects of water withdrawals on the main channel of the St. Johns River was a sufficiently complicated (and costly) undertaking of its own, and they did not wish to dilute that effort by including the Ocklawaha in the present study.
8) Concerning the Ocklawaha MFL, the NRC noted, "The Committee wishes again to emphasize the importance of doing this analysis in a thoughtful and comprehensive way that is informed by lessons learned from the current study." The NRC recommended the SJRWMD should develop an MFL for the OR that is similar in detail and scope to the WSIS rather than the "cursory approach" used by the SJRWMD in the St. Johns River-Deland MFL study.
9) To its credit, SJRWMD indicated that it realizes the potential withdrawal effects on the Ocklawaha do need to be addressed. Unfortunately, the SJRWMD now has less staff and far less financial resources that it had when this study was started. The OR study is being cut back in scope and detail every day. For example, the essential soils study for the OR has been canceled. Again, the omission of the OR from this analysis prevents, or severely limits, the opportunity to draw meaningful ecological conclusions from the WSIS.
10) While decisions and omissions have reduced the comprehensive nature of the WSIS, the study still has merit. We support this use of the WSIS as a tool for the SJRWMD and the citizens of the Sr. Johns Watershed.

Hydrology and Hydrodynamics

1. The NRC believes the hydrology and hydrodynamic (H&H) work group's analysis is state-of-the art science, including the hydrologic and hydrodynamic models. However, additional work is needed.
2. The H&H group should continue to fine tune the model to consider the impacts of sea level rise and land use changes on the outputs.
3. The model provides limited analysis on the ecological impacts of water withdrawals on surrounding wetlands. SJRWMD should continue developing the Hydroperiod Tool and analyzing water level data from transects used to develop regulations MFLs to determine the correspondence between river stage and wetland hydroperiod and thus the potential responses of different wetland types to water withdrawals.
4. The model does not fully address the relationship between groundwater and the river. The SJRWMD should develop a groundwater model that simulates the full interaction of the river with the surficial aquifer system and the Upper Floridan aquifer under both steady state and transient conditions. The NRC believes the additional analyses are needed including an uncertainty analysis for groundwater discharge to the river based on hydraulic conductivity, which may have uncertainties of an order of magnitude or more for basins the size of the St. Johns.

Environmental Workgroups

Wetlands

1. The wetlands work group produced an analysis process that can be used to predict potential impacts from water withdrawals to the St. Johns River. NRC

recommends using these methods--based on the Ortega River-- and adapting them to other river segments as more data and resources become available.
2. The wetland group focused on river segment 8—Chain of Lakes-- in the upper basin, where impacts to river stage were predicted to be greatest, and segment 2,--Doctors Lake Segment-- where changes in the salinity regime were predicted to be highest.
3. The wetlands workgroup found "moderate" impacts to wetlands in segments 2 and 8 under the most extreme future withdrawal scenarios.

Biogeochemistry

1. The workgroup concluded that two effects of water withdrawal had potentially high significance: reduced nutrient sequestration and increased release of colored dissolved organic matter.
2. Due to experimental failure, only segment 8 received the full analysis, and the workgroup found that the impacts of an extreme withdrawal scenario would be negligible.

Plankton

1. The plankton workgroup was charged with determining the possible environmental impacts of water withdrawals on plankton communities in the St. Johns River, most of which were consequences of enhanced growth of phytoplankton. This group's work is particularly significant because the St. Johns River suffers from toxic blue green algae blooms on a regular basis.
2. The workgroup concluded that the range of withdrawal scenarios likely would have little impact in excess of pre-existing algal bloom conditions in segments 2, 3—Deep Creek--, 4—Lake George--, and 6—Central Lakes--of the St. Johns River. Keep in mind, however, currently, the Florida Department of Environmental Protection lists segments 2 and 3 impaired for nutrient pollution.
3. The WSIS noted water withdrawals may not worsen conditions, but clearly they will not improve conditions in the river.

Littoral Zone: Submersed Aquatic Vegetation (SAV)

1. The littoral zone work group focused their analysis in the middle and lower basin *Vallisneria americana*, which has been identified in 92 percent of the MFL, transects in the basin.
2. The assessments appear to be "state of the art" and robust with regard to salinity and water levels.
3. The WSIS advised the District of two management issues related to SAVs. The first is that future water withdrawals will be necessitated by increased population density, which will lead to higher nutrient loadings from the watershed and thus increase the duration and intensity of phytoplankton blooms in the St. Johns River unless strong management efforts are undertaken to control nutrient export. This secondary effect of the proposed water withdrawals could be as much a problem as salinity and water levels in determining the fate of SAV in the St. Johns.
4. Salinity will increase in the estuarine portion of the St. Johns River as downstream dredging projects, e.g., JAXPORT channel deepening, and sea-level rise progress.

Benthos –Freshwater

1. The workgroup based its analysis on the hypothesis that changes in stage prompted by water withdrawals would have a direct impact on the density and distribution of target taxa, as well as on community and population metrics such as diversity, density, and biomass.
2. The workgroup's final predictions for the extreme withdrawal scenarios ranged from negligible to moderate.
3. Limited data and lack of a hydro ecological model limited the NRC's ability to test the hypothesis.

Benthos--Estuarine

1. The estuarine benthic community was hypothesized to be susceptible to changes in flow and salinity that might accompany water withdrawal. The estuarine benthos analyses were more sophisticated than the freshwater benthos analyses, but the analysis was still limited.
2. The NRC noted there were no direct statistical models for abundance and inflow such that quantitative predictions could be made (as in other ecological parts of the WSIS). The interpretations appear to have been derived from how salinity changes with withdrawal scenarios and how abundance relates to salinity.
3. NRC suggested more work on the direct effects of salinity on epifauna needs to be completed before epifaunal impacts can be dismissed.
4. Additional study is required to better understand impacts to benthic organisms from salinity increases, combined with low DO levels, which could occur periodically in the lower river.

Fish--Freshwater

1. The processes of concern to the freshwater fish workgroup included how changes in water levels, flow, floodplain inundation and frequency, and entrainment/impingement, may lead to changes in vital fish metrics at different levels of organization.
2. The workgroup's predictions regarding impacts ranged from minor to major (for entrainment/impingement) under extreme withdrawal scenarios, but there are limitations to the analysis.
3. The NRC notes the approach focuses mainly on mean water level with a few comparisons of extreme levels (low and high); it does not capture cumulative effects of water withdrawals on fishes, such as concentration of fishes into reduced water volumes and loss of prey for wading and fish-eating birds, snakes, and mammals.
4. Consecutive drought years, which likely would have considerably more negative impacts on fishes, were not examined.
5. NRC notes the workgroup report was written as if the entire assemblage of fishes within each habitat-guild had been examined when, in fact, only common representatives of each assemblage were examined.
6. Lastly, the discussion of entrainment and impingement of fish species by withdrawal focused on various shad species and did not fully consider all species collected.

Fish-- Estuarine

1. The effects of water withdrawals on estuarine fish assemblages (open water small estuarine fishes, estuarine marsh fishes, estuarine benthic fishes, sciaenid fishes, and marine fishes) relate to changes in water levels, flow, and changes in spatial distribution of salinity.
2. The analyses were conducted for "pseudo species" only, defined as gear-, size class-, month-, and zone-specific designations for each species. For all groups, the workgroup predicted moderate impacts under the worst case withdrawal scenario in river segment 1--Mill Cove and segment 3--Deep Creek.
3. The fish workgroup predicted a "major" response to water withdrawal, but this was for an extreme scenario that is not plausible.
4. The NRC suggested precautions be when designing intake structures to avoid impacts of the potential entrainment or impingement of larval organisms at intake sites.
5. NRC also noted SJRWMD should consider when entrainment/impingement is temporally important (such as during seasonal spawning peaks), permit conditions be written that require reduction of withdrawals during peak recruitment periods.

Wetlands Wildlife

1. The wetlands wildlife workgroup assessed the potential effects of surface water withdrawals on 320 species of vertebrate wildlife that depend on the St. John's River floodplain habitat.
2. The wetlands wildlife analysis was limited by the lack of quantitative, species specific information on the response of wildlife to altered hydrology and salinity.
3. Under the extreme withdrawal scenario, major impacts were predicted for estuarine wildlife in segment 1--Mill Cove, moderate impacts were predicted for estuarine wildlife in segment 2--Doctors Lake, and moderate impacts were predicted to freshwater wildlife in segments 2--Doctors Lake, 7--State Road 50, and 8--Chain of Lakes.
4. The findings of the wildlife workgroup were obscured by the diverse ways in which species were classified according to their hydrologic attributes. Establishing wildlife hydrologic types is a sound way to deal with the diversity of habitat requirements for the species included in the analysis, but the terms used to describe them are not fully appropriate. This methodology may not be appropriate for all species, for example, amphibians.

General Conclusions about the WSIS

1. The SJRWMD welcomed the Committee's recommendations and implemented them when feasible, thus overcoming many of the limitations noted by the Committee early in the project.
2. The WSIS was not designed to address all the outstanding issues related to water withdrawals. There are critical issues beyond the District's control or statutory responsibility. These issues include future sea level rises and increased stormwater runoff and water quality degradation of surface runoff engendered by future population growth and increases in impervious area and pollutant generation associated with urban development. As noted earlier, these issues singularly, or in

combination, could result in greater negative impacts to the river than would be experienced from water withdrawals.

3. Workgroups did not appear to consider the possibility of "back-to-back" extreme events (e.g., several extreme droughts separated by only a short period of normal rainfall) in their impact analyses.
4. Many of the workgroup's driver variable were computed using mean values. Although mean values are the most likely responses from a statistical perspective, ranges (or variances) of responses also should be considered in analyzing potential environmental impacts of changes in driver variables. The WSIS also tended to present mean responses to changes in driver variables with little or no consideration of the variance in response.
5. The use of mean values tends to overlook the potential impacts from responses that while less likely than mean values with negligible probabilities, could be more detrimental than the mean responses.
6. The District's MFL program/regulations limit the withdrawal volume allowable during low flow periods. The NRC raised concerns whether MFLs will be rigidly enforced in the future. If there is an extended drought in the future, water suppliers might not be able to withdraw water from the river for months or even years on end. The NRC questioned if this delay would be socially acceptable. We would add politically acceptable to the NRC's concerns.
7. Then NRC recommends the results of the WSIS be combined with previous water supply studies which focused on the potential impacts to natural vegetation from groundwater withdrawals.

Public Workshop Comment - We have been talking for nine years about taking surface water out of the rivers and have not made any progress. Following issuance of the Seminole County Yankee Lake permit, and after 18 months of planning and meetings, the District was on the verge of adopting water conservation rule changes. However, the Governor stopped

all rule making. These rules need to be put back into progress and the District needs to be allowed to pass rules to promote conservation. Friends of Matanzas and Matanzas Riverkeeper adamantly oppose surface water withdrawals from the St. Johns and Ocklawaha rivers. The District needs to get serious about water conservation. District staff is incorrect in stating that the National Research Council (NRC) said that 150 mgd could safely be withdrawn from the river. The NRC said that there was not enough information and that the study did not look at the Ocklawaha River. The water management districts are lying and we need to tell them to stop. Note: After providing verbal comments, Mr. Armigeon provide District staff with a letter dated January 16, 2014.

CFWI RWSP Team Response *- Thank you for your comments. As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. This RWSP identifies programs and projects to ensure that adequate and sustainable water supplies are available to meet future water supply needs while protecting water resources.*

The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations. Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The effect on the severity of algal booms arising from withdrawal-mediated residence time increase was the primary mechanism examined by the Plankton group of the WSIS. The investigation found that while residence time is correlated to algal biomass for short to medium residence time, beyond this level nutrient limitation is reached and maximum algal biomass is uncorrelated to residence time. As phosphorus load continues to be reduced under the TMDL requirements, the residence time effect on algal biomass will continue to

diminish. The WSIS concluded that the effects of increased residence time on algal bloom density and duration was negligible, even under withdrawal scenarios that exceeded the maximum proposed allowable surface water withdrawal. In addition, potential water quality effects arising from water withdrawal were examined in both the Biogeochemistry and Plankton chapters of the WSIS, and these effects were found to be negligible or nonexistent. Potential water quality effects were not integrated into future land use scenarios, under the assumption that future development would occur with BMPs that would not lead to a significant increase in pollutant load, and would also replace some existing polluting land uses.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

William B. Killingsworth, Director, Division of Community Development, DEO (01/28/14)

Rick Scott
GOVERNOR

FLORIDA DEPARTMENT of ECONOMIC OPPORTUNITY

Jesse Panuccio
EXECUTIVE DIRECTOR

SJRWMD
FEB 03 2014
MAIL CENTER

January 28, 2014

Mr. Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Re: Comments on Central Florida Water Initiative (CFWI) Draft Plan

Dear Mr. Bartol:

The Department of Economic Opportunity (Department), pursuant to its role as the State's Land Planning Agency, has reviewed the Draft Central Florida Regional Water Supply Plan. The plan offers general guidance for the development of water supplies in the central Florida region for the planning horizon of 2015 to 2035. A summarization of the document indicates the following major issues of concern and general mitigation measures:

- Total average water demand is projected to increase from approximately 800 million gallons per day (mgd) in 2010 to about 1,100 mgd in 2035, a projected increase of approximately 300 mgd, or 40%.
- The planning area is rapidly approaching, or has surpassed the maximum rate that can be sustained without causing harm or adverse impacts to water resources and related natural systems, especially in the Southern Water Use Caution Area (SWUCA).
- Overall, the results of modeling estimate that the sustainable "groundwater" withdrawal limit is 850 mgd, resulting in a groundwater deficit of 250 mgd by the end of the planning horizon.
- Sources explored for supplying water to the planning area are: 1) surficial, intermediate and Floridan Aquifer; 2) brackish groundwater; 3) surface water; 4) seawater; 5) reclaimed water; 6) conservation; and, 7) reservoirs and aquifer storage and recovery.
- The planning area's population projection, according to the document, is presently 2.7 million with a large tourist, agricultural, commercial, and industrial sector. The population is projected to reach approximately 4.1 million by 2035, a 49% increase.

Thank you for the opportunity to comment on the draft document. To that end, the Department offers the following comments and questions.

Florida Department of Economic Opportunity | The Caldwell Building | 107 E. Madison Street | Tallahassee, FL 32399-4120
866.FLA.2345 | 850.245.7105 | 850.921.3223 Fax | www.FloridaJobs.org | www.twitter.com/FLDEO | www.facebook.com/FLDEO

(1) Page IV of the document states that "[p]rimary areas that appear to be more susceptible to the affects of groundwater withdrawal include the Wekiva Springs River System, western Seminole County, western Orange County, southern Lake County, and the Lake Wales Ridge."

Figure 7, Page 64 of the plan depicts changes in the surficial aquifer water levels between 2005 and 2035 within the Planning Area. Additionally, Figure 8, Page 65 of the document depicts changes in the Upper Florida Aquifer water levels between 2005 and 2035 in the CFWI Planning Area.

The Department notes that in these scenarios, negative one to three foot levels begin encroaching into the northern portion of Polk County near the Upper Floridan Aquifer's potentiometric high within the Green Swamp Area of Critical State Concern. Simulated conditions worsen moving west toward a region where the limestone of the Floridan Aquifer is near and/or breaches land surface, is unconfined, and vulnerable to pollutants and increased karst activity.

The Green Swamp Area of Critical State Concern is charged, pursuant to Section 380.05, Florida Statutes, and Chapter 28-26, Florida Administrative Code, with enforcing the Principles for Guiding Development (Please see Appendix A) and, as stated in sub-policy 28-26.006(d), [The Green Swamp] "should not exceed the safe yield per acre as determined by the Southwest Florida Water Management District or its successor agency."

Therefore, please explain why northern Polk County is not included in this list of areas susceptible to water withdrawal, given the importance of the potentiometric high in pressurizing the Upper Floridan Aquifer, its proximity to growth areas, and its designation as the Green Swamp Area of Critical State Concern. The Green Swamp was designated an area of Critical State Concern due to the fact that it is the highest point of the Upper Floridan Aquifer and the origin of five major rivers.

The northern area of Polk County is susceptible to the affects of groundwater withdrawal from increased karst activity and causing potential pollutant introduction to the aquifer. Staff has received complaints of sinkhole activity southwest of State Road 33 and the Polk County line. Although the overlying surface wetlands, surficial aquifer, and intermediate unit in this area have low recharge rates at the sub-surface potentiometric high, leakance to the Upper Floridan Aquifer occurs, and is likely important in maintaining potentiometric pressure.

(2) Page 100 summarizes the advantages of conservation measures meeting some of the goals for water availability within the planning horizon. Additionally, page 125 indicates the development of stormwater to provide water within the planning horizon.

Stormwater use may be challenging since stormwater facilities are designed to clean stormwater and either provide for its recharge, in the case of (retention facilities), or its contribution to receiving waters, in the case of (detention facilities). The plan does not make

it clear as to the volume of stormwater withdrawal that could reduce recharge or damage receiving wetlands/surface waters to unacceptable levels.

Many peripheral water bodies within the Green Swamp in southern Lake County (i.e., Lake Louisa, Lake Minneola, Boggy Marsh) are presently considered stressed systems. These systems make up the headwaters of the Ocklawaha River. We therefore recommend focusing greater emphasis on conservation, reclaimed waters, and reverse osmosis supplied water as opposed to extensive surface and groundwater withdrawal in this area. We further recommend proactive methods in achieving more environmentally friendly and less costly ways to retrieve reclaimed and reverse osmosis water for supplemental use.

(3) In the overview of river systems beginning on page 110, the document does not include the Hillsborough River.

The Hillsborough River, an Outstanding Florida Water, is, at certain water levels, a major distributary of the Withlacoochee River, receives significant inflow from the Green Swamp within the study boundaries, and is a potable water source for the Tampa Bay region. The Hillsborough River and its headwater basin should be described, as it is highly likely to be affected by water withdrawals from resources within central and northern Polk County.

(4) Page 105 (Floridan Aquifer System) cites Figure 13 as the "location where four major groundwater basins meet and represents an area of high recharge with groundwater flow radiating in all directions from that location."

This is the approximate point of the potentiometric high of the Upper Floridan Aquifer and the statement that water radiates in all directions from this point is accurate. However, while it is an area of important recharge, it is not a high recharge area as stated on page 105. Most rainfall is either held in cypress dome swamps or contributes, via bay dominant wetland strands, to the headwaters of the Withlacoochee and Ocklawaha Rivers. Unless there is data contrary, this statement should be changed to reflect the low but vital recharge rates, as it has been a contentious issue in the past.

(5) Page 113 states that the Withlacoochee River system's average flow is 152 Cubic feet per second at the Pasco/Polk County border, which is also the boundary of the study area. It further states that Minimum Flows and Levels will not be established for the river until 2016.

The Withlacoochee River, an Outstanding Florida Water, originates in the core conservation area of the Green Swamp Area of Critical State Concern. The headwaters are vital for water attenuation and maintenance of extensive forested and herbaceous wetlands. The portion of the river beginning at State Road 33 in the study area should be a low priority when determining potential surface water withdrawal to meet the planning horizon needs. The Department recommends studying the river's total basin east of State Road 33 when establishing its Minimum Flows and Levels.

(6) Page 122 discusses (In Part) the development of reservoir systems in the upper Peace River.

The Department notes that the upper Peace River, which originates in the Green Swamp, is presently within the Southern Water Use Caution Area and at times has little or no flow. In addition, the Peace River has, and is projected to fall below its adopted Minimum Flows and Levels, according to the plan. If reservoir systems are constructed along the Peace River, explain measures that will be taken to prevent the disruption/reduction of flow of the River and whether it is assumed that minimum flows and levels can be met. Moreover, additional information should be provided relative to how water held in reservoirs will affect the downstream Charlotte Harbor estuary.

(7) Page 132 indicates that Polk County has identified, as an option, transitioning from agricultural water use to Residential and Commercial uses. The document explains that this would result in less water withdrawal or at least a "balanced sheet" approach, verified by groundwater modeling.

Many of the transition wells will likely come from the surficial aquifer, while other proximate water withdrawal may simultaneously come from nearby portions of the Upper Floridan Aquifer. This is a concern because withdrawing water partially from the Green Swamp portion of the Lake Wales Ridge has been mentioned in other parts of the document (Page 104), stating: "In the region of the Lake Wales Ridge in eastern Polk County, the aquifer thickens to between 100 and 200 feet and becomes more favorable for water supply development."

However, wetlands at the base of the Lake Wales Ridge within the Green Swamp boundary have already been impacted by the Van Fleet municipal well withdrawal located near the intersection of I-4 and US 27. The well primarily impacted cypress dome swamps near its cone of influence, under permitted pumping volumes. According to the Southwest Florida Water Management District, after a "Consent Order" was issued to the Northeast Regional Utility Services of Polk County and a more sustainable water quantity was withdrawn, the wetlands recovered.

Therefore, the Department recommends a cumulative study of the total withdrawal of water from surficial, intermediate, and Upper Floridan Aquifer relative to such issues as surface and groundwater Minimum Flows and Levels, potential surface water and wetland stressors, dewatering and the potential for increased karst activity within the areas that will transition from agricultural to non-agricultural development.

(8) Table 21 on Page 133 indicates that Polk County has projects under evaluation for surface water withdrawal of 15 mgd, and 5 mgd for southern Lake County.

It is unclear as to which surface waters these values apply. The Department's main concerns are that the upper Withlacoochee River, Lake Louisa, Lake Minneola, and Boggy Marsh may be under consideration. All but the Withlacoochee River are currently considered stressed

water bodies. Please provide additional information regarding where the noted 20 million gallons day of surface water is to come from.

(9) Page 148 refers to an indirect aquifer recharge feasibility study and pilot project for applying highly treated reclaimed water to a rapid infiltration basin in northeastern Polk County.

The Department requests a copy of the study.

Conclusion:

In conclusion, the Department strongly encourages conservation measures take a higher priority in reaching the stated goal of projected water needs beyond the proposed 42 million gallons per day. Additionally, other sources, including reclaimed water and reverse osmosis should be explored more closely for replacing some of the proposed surface and groundwater withdrawals. Moreover, the draft and/or final plan should demonstrate that groundwater withdrawals in and around the Green Swamp will not lower the potentiometric surface below its present altitude.

Thank you for the opportunity to comment on the document. If you have any questions, please call Robin Branda, Planning Analyst, at (850) 717-8495, or email Robin.Branda@deo.myflorida.com.

Sincerely,

William B. Killingsworth, Director
Division of Community Development

WBK/rb

Appendix A

Green Swamp Principles for Guiding Development

(1) Objectives to Be Achieved

(a) Minimize the adverse impacts of development on resources of the Floridan Aquifer, wetlands, and flood-detention areas.

(b) Protect the normal quantity, quality and flow of ground water and surface water which are necessary for the protection of resources of state and regional concern.

(c) Protect the water available for aquifer recharge.

(d) Protect the functions of the Green Swamp Potentiometric High of the Floridan Aquifer.

(e) Protect the normal supply of ground and surface water.

(f) Prevent further salt-water intrusion into the Floridan Aquifer.

(g) Protect or improve existing ground and surface-water quality.

(h) Protect the water-retention capabilities of wetlands.

(i) Protect the biological-filtering capabilities of wetlands.

(j) Protect the natural flow regime of drainage basins.

(k) Protect the design capacity of flood-detention areas and the water-management objectives of these areas through the maintenance of hydrologic characteristics of drainage basins.

CFWI RWSP Team Response to Comment 1 *- Thank you for your comments. Northern Polk is included as depicted in the Lake Wales Ridge. CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014. In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.*

CFWI RWSP Team Response to Comment 2 *- The Districts agree that conservation is an important element in meeting future water demands. As noted above, a Solutions Team will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.*

CFWI RWSP Team Response to Comment 3 *- The Hillsborough River was not included in the CFWI RWSP, as it is not within the CFWI Planning Area boundaries. For more information regarding the Hillsborough River and Tampa Bay region, please see the SWFWMD's 2010 RWSP.*

CFWI RWSP Team Response to Comment 4 *- The text has been updated to read as follows: The FAS spans four groundwater basins encompassing the CFWI Planning Area as shown in Figure 13. Central Polk County marks the location where the four major groundwater basins meet and in general represents an important area of ~~high~~ recharge with groundwater flow radiating out in all directions from that location.*

CFWI RWSP Team Response to Comment 5 *- The Withlacoochee River was not considered a viable water supply source for the CFWI Planning Area. A few supply options were identified in the SWFWMD 2010 RWSP from the river for utilities in the SWFWMD's northern counties, but the closest project option would only provide seasonal supply with poor annual reliability, and is sited over 30 miles away from utilities and would likely yield little water for the CFWI Planning Area. For more information regarding the Withlacoochee River, please see the SWFWMD's 2010 RWSP.*

CFWI RWSP Team Response to Comment 6 *- There is currently a recovery strategy in place that addresses the MFLs for the Peace River. Please see the SWFWMD's website for additional information.*

CFWI RWSP Team Response to Comment 7 *- Please see responses to your Comments 1 and 2. In addition, applicants have to meet the criteria within the Applicants Handbook for CUP applications including the public interest test. Explanation of the permit review and meeting*

the reasonable assurances required under the CUP process can be found on the District's respective websites.

CFWI RWSP Team Response to Comment 8 *- See response to your Comment 1. A WSO Subgroup, consisting of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area was formed to prepare a draft list of potential water source options available to water users within the CFWI Planning Area. These projects are listed in Appendix F.*

CFWI RWSP Team Response to Comment 9 *- The study (by Jones Edmunds & Associates, Polk County Groundwater Recharge Investigation, Prepared for Polk County Board of County Commissioners and the SWFWMD) can be obtained via the SWFWMD's Agency Clerk. Please see the SWFWMD's website for the Agency Clerk contact information.*

John O'Connor, Deputy-VP, Association of Florida Soil and Water Conservation Districts (01/30/14)

I would like to draw your attention to 2 reports that have been published and distributed to Dept. of Natural Resources and others in 1987 and the Addendum of this 1987 report requested and addressed to the USACE AEIS Project Manager in 2012. Both reports were authored by George C. Brooks, Phosphate Consultant (Mulberry 863 512-0764) entitled "Utilization of Mined Florida Phosphate Lands for Fresh Water Storage and Natural Resource Recovery" and the Addendum to the original report. (These reports are being sent to you by US Mail.)

Both of these reports identify areas of mined out phosphate land that can be used for water storage. These areas are indicated on Exhibit I in the earlier report. These potential water storage areas are located in a number of counties from Hamilton, Columbia, Union, Baker and Alachua in the north to Polk, Hardee, De Soto, and Manatee counties in the central part of the state. Much of these mined lands fall into mandatory reclamation requirements and will eventually be reclaimed.

These reports advocate the partnership among the phosphate industry, agriculture and government to accelerate the reclamation of these lands and combining them to store on the order of 100 billion of gallons of fresh surface water for distribution in-lieu of using the Floridan Aquifer.

These reports should form a sound basis for the development of surface water storage.

THE BROOKS REPORT

UTILIZATION OF MINED FLORIDA PHOSPHATE LANDS FOR FRESH WATER STORAGE AND NATURAL RESOURCE RECOVERY

Prepared By:

GEORGE C. BROOKS
PHOSPHATE CONSULTANT
P.O. BOX 800
LAKELAND, FLORIDA 33802

Prepared For:

FLORIDA DEPARTMENT OF NATURAL RESOURCES
TALLAHASSEE, FLORIDA

September 8, 1987

TABLE OF CONTENTS

GEORGE C. BROOKS
P. O. DRAWER 800
LAKELAND, FLORIDA 33802, U.S.A.

MEMBER:
AMERICAN INSTITUTE OF MINING,
METALLURGICAL & PETROLEUM ENGINEERS
AMERICAN MANAGEMENT ASSOCIATION

PHOSPHATE CONSULTANT
TELEPHONE
AREA CODE 813
688-2478

September 9, 1987

Mr. Tom E. Gardner, Executive Director
Florida Department of Natural Resources
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Re: Mined Phosphate Lands

Dear Mr. Gardner:

I am pleased to submit herewith a report entitled "Utilization of Mined Phosphate Lands for Fresh Water Storage and Natural Resource Recovery" for your review and consideration.

This opportunity is taken to proffer appreciation for your consideration to this conceptual approach regarding a serious problem in the State of Florida.

Please advise should clarification be required concerning the matter.

Very Truly Yours,

George C. Brooks

George C. Brooks

GCB/nd

Enclosure

I. INTRODUCTION

INTRODUCTION

Today there exists two sets of conditions in Florida, which if allowed to go unattended during the next ten year period will have a great adverse effect on localized areas and negatively impact Florida in general.

Conversely, through concerted action by State government, industry, with the support of agriculture, the general public and environmental groups solutions to these conditions can be evolved to benefit the vast majority of Floridians.

These two conditions can be described as follows:

1. Continued inordinate extraction of fresh water from the Floridan Aquifer by municipalities, manufacturing, agriculture, mining and power generation to meet the tremendous demands of Florida growth.

For example all segments of society combined in the Southwest Florida Water Management District to draw 86 percent of the fresh water requirement from groundwater, as opposed to merely 14 percent from surface water sources.

Considering there are 40 billion gallons of fresh water lost daily, emanating from 16 major Florida rivers and reporting to salt water in the Gulf of Mexico and Atlantic, it is apparent the problem is not lack of water, but one of water control and management.

Florida is blessed with a vast water source, which with continued indiscriminate use, may prove inadequate

for the needs in the next century, unless steps are taken to make greater utilization of surface water, particularly in agriculture, manufacturing, mining and power generation segments. These activities consume 70 percent of Florida fresh water usage.

2. Lands disturbed by the activity of a vital, but declining, Florida phosphate mining industry can and will be a problem in counties within the State where this business is conducted. The recent practice of one company of donating mined-out land, unreclaimed to the State of Florida, rather than assume the financially debilitating burden of land reclamation points out the severity of the mined land reclamation problem. Such mined phosphate lands will approach or exceed 300,000 acres, State-wide by the year 2000. This continued loss of natural resource cannot be tolerated.

However, through proper planning, participation and cooperation of the government, phosphate industry, responsible citizens and environmental groups, benefits will be derived for the Florida public through utilizing man-made fresh water reservoirs created by phosphate mining activity.

II. OVERVIEW

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1. Florida Phosphate Industry

Florida phosphate mining had a beginning in the 1880's upon discovery of river pebble phosphate in the Peace River, near Arcadia in Desoto County. Mining was conducted by means of steam driven, wooden dredges operating within Peace River, on a relatively low scale, with phosphate pebble mostly exported via vessel loading at Boca Grande.

Prior to 1900 prospectors moved northward along the Peace River basin discovering rich phosphate deposits within a 250,000 acre area comprising West Polk and East Hillsborough counties. Actual mining near Mulberry commenced about 1900 in turn creating the world's largest phosphate center to this day. However, phosphate production reached a peak of 42 million metric tons in 1980 and has fallen to less than 29 million metric tons in 1986.

It is expected Florida will lose its position as largest producer, world-wide, by 1995 or shortly thereafter. Presently, there exists 23 phosphate mine plants in all of Florida, with 2 located in Hamilton County, 19 in Polk and Hillsborough counties and 1 each in Hardee and Manatee counties. Approximately 60 percent or more of existing phosphate mines located in Polk and Hillsborough will be closed by 1995 due to orebody depletion or economic considerations.

The fact is, many company net revenues from remaining phosphate rock production will be less than reclamation costs

required for acreage owned under the Mandatory Reclamation Act of 1975.

Consequently, the Florida phosphate industry will require relief, which could come about through cooperation toward solving fresh water storage problems, within a given area, along with other beneficial land use.

Based on a report by the Florida Department of Natural Resources (DNR), the phosphate industry has reclaimed less than 15 percent of lands mined since passage of mandatory reclamation laws in 1975. Should this practice continue until the year 2000 there will be 300,000 or more acres of disturbed lands in Polk, Hillsborough, Hardee, Hamilton and Manatee counties. This figure does not include reserves yet to be opened in Polk, Hardee, Manatee, Desoto, Columbia, Union and Bradford counties. Within these counties exist the last remaining major, economically mineable, phosphate mine sites, in Florida. These areas represent six mine sites and the best potential for the vital storage of fresh surface water with proper planning and design (see Exhibit I).

A major detrimental factor plaguing the Florida phosphate industry over the past ten years, is the exorbitant capital investment cost for plant construction imposed upon the industry. This cost has escalated over 100 fold, whereas, other costs, viz.a.viz, power, labor and reagents have increased 2 to 4 fold. Equipment costs used in such plants have increased commensurately.

Fortunately, only a few companies accepted these exorbitant capital costs which resulted in bankruptcy in at least one case and some others have mines operating with little hope of profitability.

Consequently, unless the industry turns to those in Florida with an inclination and capability to construct the plants on a realistic and cost effective basis, such mines and projects discussed herein will not occur.

Site Specific Examples

1.1. Tenoroc State Park

Borden Chemical Company, former owner of the Tenoroc Mine, located adjacent to Lakeland, Florida donated the 6,000 acre, largely unreclaimed tract, to the State of Florida in 1985 following repeated attempts to sell the property on an "as-is" basis.

These partially mined out lands containing water filled pits were passed to the State park system under DNR and named Tenoroc State Park allowing a few dozen fishermen access weekly for recreational pursuit in the various pits over the 6,000 acres. This tract extends from a point north of Lakeland near I-4 eastward toward Auburndale for a distance of 5 1/2 miles.

Even though over 4 million tons of high-quality phosphate rock remained on the property at time of mine closure in the 1970's, it is obvious Borden realized that revenues from remaining reserves would not be sufficient for required reclamation. They

departed the business by selling other assets to Amax Chemical Corporation. Amax refused to accept the apparent liability of Tenoroc Mine and Borden subsequently donated the tract to the State.

This scenario represents a gross mismanagement of our natural resources, due to the following facts:

1. Over 4 million tons of high-grade phosphate located within the Tenoroc site can be supplemented by an additional 3 - 4 million tons of similar quality phosphate from adjacent private lands. The estimated value of this product during a ten-year mine life would be $30.00 per ton average, possibly higher, or $210 to $240 million. The State of Florida's portion of this amount could be $105 to $120 million, which would net $51 million. These monies in turn could be utilized in reclaiming other mined land, water conservation projects on for the purchase of truly pristine sites for posterity to enjoy.
2. The resultant reclaimed land would afford the State a tremendous real estate value and allow sufficient land to be used as a State park in an upgraded form. Mined out land is usually appraised at $350 to $500 per acre, while reclaimed lands have sold recently in Polk county from $25,000 to $40,000 per acre for residential, commercial and industrial purposes.

3. The potential water storage capacity on this site would evolve to at least 1,800 acres at an average depth of 20 feet which would yield fresh water storage capacity, in excess of 11 billion gallons.

1.2. Lake Hancock Project

Recently there has been considerable activity toward restoring the contaminated, 4,500 acre Lake Hancock located between Lakeland and Bartow in Polk county as contemplated in Chapter 86-307 F.A.C.. The writer performed core drilling of phosphate reserves and conducted a preliminary evaluation over 25 years ago.

Mining of phosphate for the proper restoration of Lake Hancock will be the only logical and economical means of returning this valuable natural resource to a maximum, environmentally acceptable, condition.

The writer generally agrees with the phosphate reserve estimate of a recent Lake Hancock study which indicates an in-situ tonnage of 12.97 million with 5.88 million recoverable tons.

However, the proposition of mining the relatively thin matrix section (average 8.6 feet) with large 40 to 60 yard draglines by attempted dry methods would not be practical. Additional problems with this method are due to the lack of suitable material within the lake for dike construction, dewatering costs and problems due to dike permeability and live springs on lake bottom. The resultant over burden allowed to be left within the lake would defeat the restoration aspect for

maximum utilization of the resource.

The need for restoration of Lake Hancock, which was polluted by human and industrial waste from two nearby municipalities, over a long period of years is evidenced by the State Law. Benefits would include fresh water storage capacity up to 20 billion gallons, enhanced recreational use, commercial fishing and perhaps provide the only logical power plant site for rapidly growing Polk county. Also, included in less obvious attributes of this project, could be the stabilization of an existing 1,200 acre clay slimes settling area situated precariously on the southeast edge of Lake Hancock, at the headwaters of Peace River.

Since no major phosphate company will be interested to execute this project for many reasons, it will only be accomplished by the State of Florida creating a quasi-government corporation, logically under DNR which in turn would contract with a management group to physically execute the project at the lowest possible cost yet in an environmentally safe and acceptable manner.

The program is clear-cut and straight forward, where three 18 inch suction dredges would be utilized in removing combined waste sediments and over burden and mining the phosphate matrix. Waste sediment and over burden would be used as landfill in reclaiming mined out pits on private land on the east bank of Lake Hancock and other mined out areas. All dredges would be used for this purpose for an initial 1 year period, while a 1 million ton per year (TPY) washer and flotation plant was being erected on the

former phosphate plant site near the east bank of the lake. Subsequent to this, one of the dredges would be used to produce and pump matrix to the beneficiation plant at the rate of 700 cubic yards per hour, which on a 24 hour, five day basis would produce 1 million TPY of product for a mining life of 5 years and 9 months. Upon commencement of mining operations two of the suction dredges would be placed in tandem for sediment and over burden removal. During mining the life the two stripping dredges would continue environmental restoration activity, on a 7 day basis of pumping waste sediment and over burden to reclaim existing mined out land.

Following the mining period of less than 6 years, all three dredges would continue waste sediment and over burden removal in the non-minable portions of the lake for continued land reclamation and lake restoration for a period of 1 1/2 to 2 years. This method would not interfere to any great degree with commercial and recreational fishing presently conducted in Lake Hancock.

A cost estimate in a recent report of $120 million for a 1.5 million TPY phosphate beneficiation is considered ex orbitant. Applying that high capital investment cost of plant construction, the project could be considered economically unfeasible. However, a more efficient and cost conscious 1 million TPY unit can be constructed, battery limits for a cost of $12 million. This figure could be reduced by utilizing certain, suitable used equipment from phosphate plants scheduled to close over the next 5 years.

Phosphate product from the project would gross revenues, over a 6 year period of $129 million to $147 million with the output sold to domestic phosphate chemical producers or through Phosphate Rock Export Association, a Webb-Pomerone Act Corportion serving the phosphate export trade.

Net revenue from this project, could in turn, provide DNR with funding for reclamation of mined-out phosphate lands, water conservation projects and purchase of environmentally fragile, pristine lands.

2. Florida Water Resources

2.1 Supply

According to the Water Resource Atlas of Florida, 1984, the State receives an average of 54 inches of rainfall annually, which equates to 150 billion gallons of fresh water daily. The same source indicates an additional 25 billion gallons per day of fresh water moving into Florida from the adjoining states of Alabama and Georgia. This would indicate a total input of 175 billion gallons of water daily to Florida's water budget.

The same source indicates 107 billion gallons per day are taken by evapotranspiration or percolation and 68 billion gallons per day are lost by stream outflow to the sea.

Thus, the embodiment of this report is in emphasising the need for control and storage of a portion of the daily outflow of fresh water rated at 68 billion gallons per day permitting increased usage from fresh surface water sources, in turn reducing

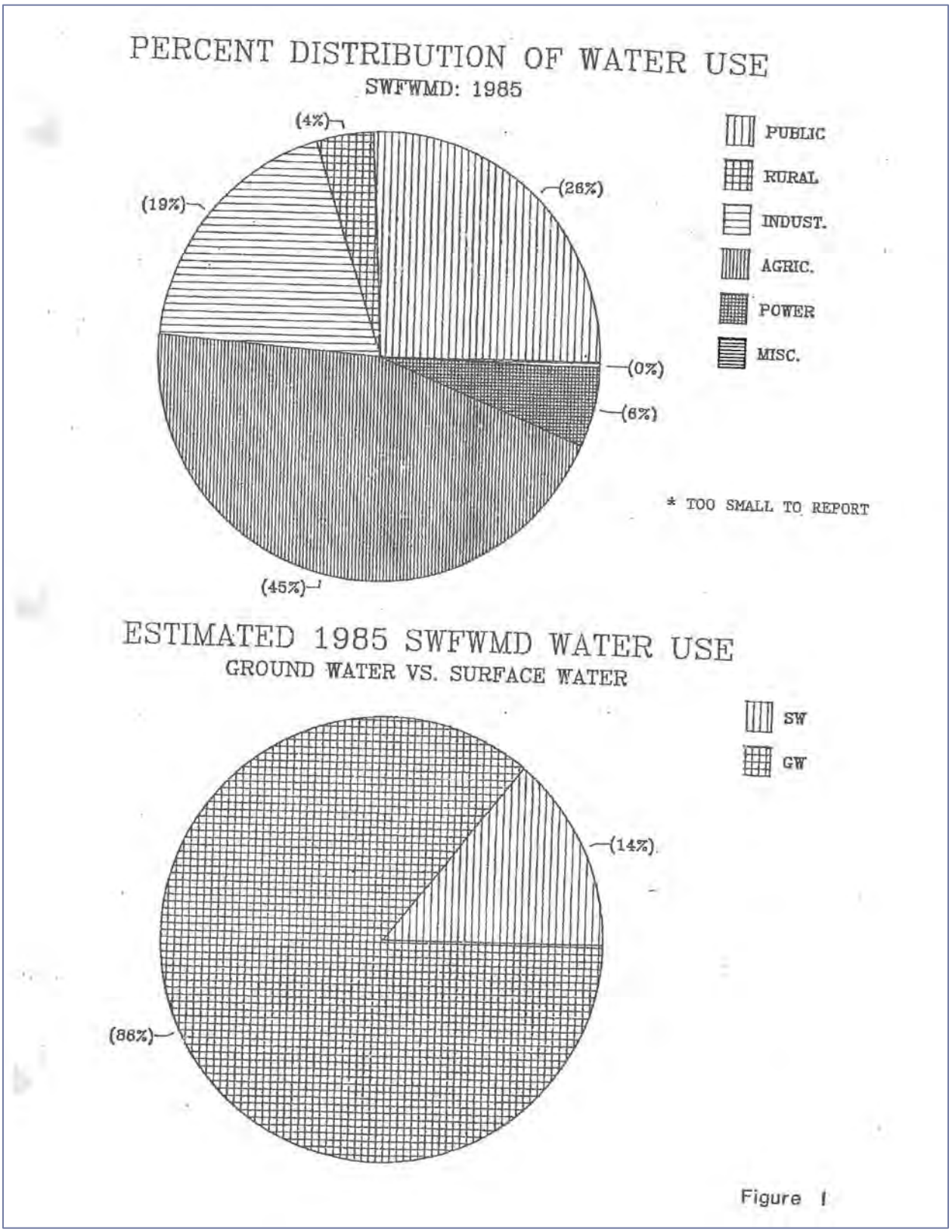
demand on the Floridan Aquifer.

2.2 Demand

Population growth in Florida has been phenomenal, increasing from less than 3 million in 1950 and expected to approach 20 million in the year 2000. This nearly seven fold growth has and will create severe demand on fresh water supply for all segments of society, including public, industrial, agriculture and generation.

For example, in 1950 with the Florida population slightly below 3 million, daily withdrawal, largely from groundwater was estimated at 2 billion gallons per day. This withdrawal rate grew to 7.3 billion gallons per day by 1980 with the population just under 10 million.

Based on an estimated water consumption of 1,800 gallons per day, per capita, for all uses, Florida could withdraw nearly 30 billion gallons daily by year 2000. Using water distribution graphs of the Southwest Florida Water Management District as typical (see Figures 1 and 2), 86 percent of demand evolves from groundwater sources while a mere 14 percent is derived from surface water sources. Since agriculture, industry and power generation accounts for nearly 70 percent, it should be obvious that surface water should be used to a greater extent in order to protect Florida's major asset, the Floridan Aquifer.


PERCENT DISTRIBUTION OF WATER USE
SWFWMD: 1985
(4%)
(26%)
(19%)
(0%)
(6%)
(45%)
PUBLIC
RURAL
INDUST.
AGRIC.
POWER
MISC.
* TOO SMALL TO REPORT
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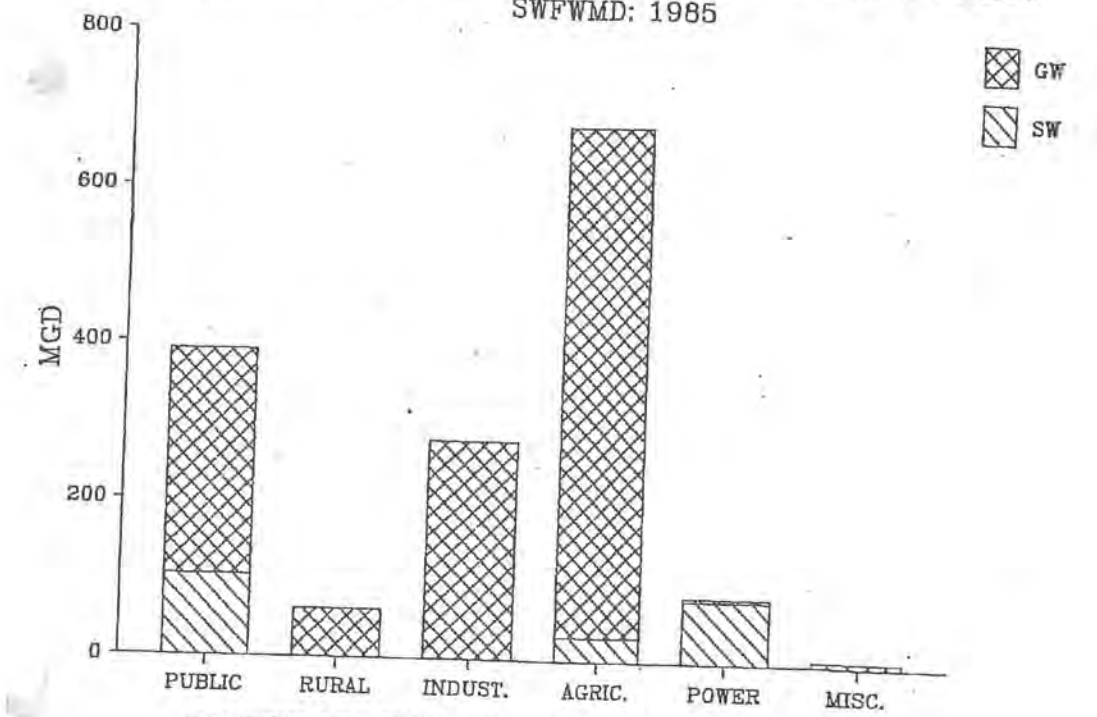
GROUND WATER VS. SURFACE WATER
SW
GW
(14%)
(86%)
Figure 1


ESTIMATED WATER USE FOR ALL CATEGORIES
SWFWMD: 1985
GW
SW
MGD
800
600
400
200
0
PUBLIC
RURAL
INDUST.
AGRIC.
POWER
MISC.

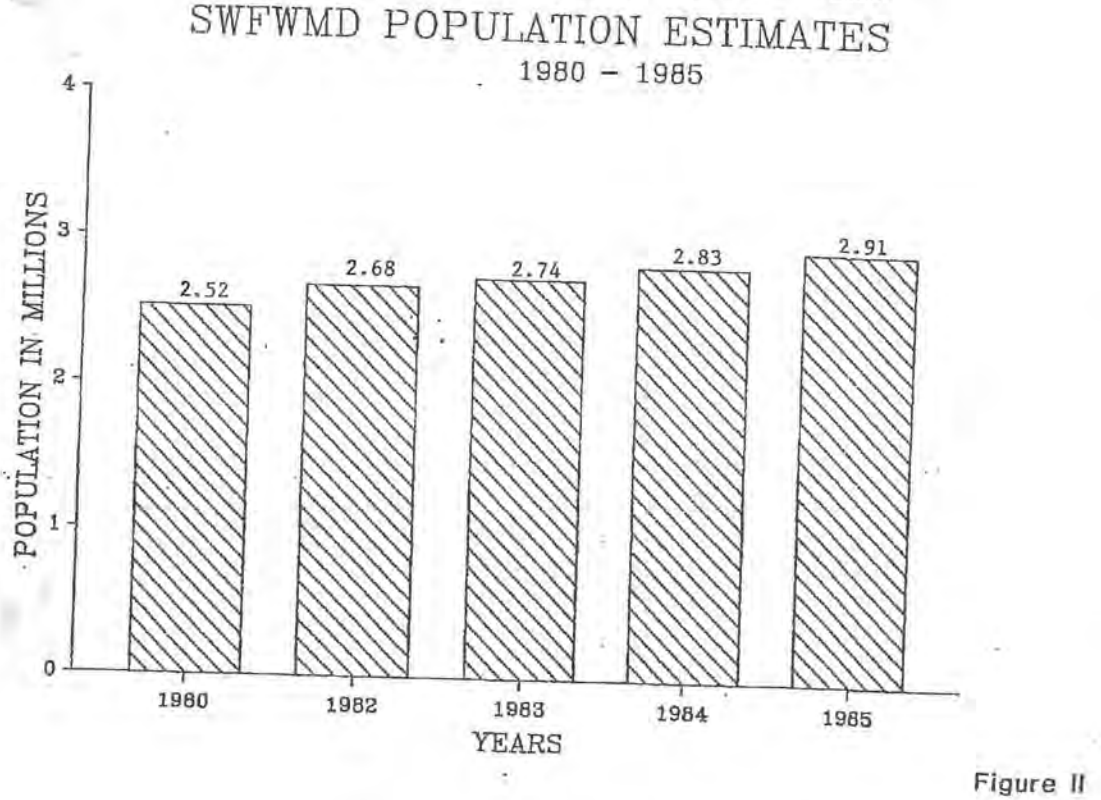

SWFWMD POPULATION ESTIMATES
1980 – 1985
POPULATION IN MILLIONS
4
3
2
1
0
2.52
2.68
2.74
2.83
2.91
1980
1982
1983
1984
1985
YEARS

Figure II

III. SUMMARY AND RECOMMENDATION

SUMMARY

The dual loss of continued outflow from the State of Florida Florida of 68 billon gallons per day of fresh surface water, and the failure to positively utilize remaining phosphate mine sites, reclaimed in part to water storage reservoirs, will undoubtedly create conditions for crisis management, on or before the year 2000.

Remaining major phosphate mine sites have been identified as Sites A, B, C, D and E and shown in Exhibit I of this report.

It should be noted all sites are situated in relative proximity to major population centers, as well as, major river systems with high daily outflows of fresh water. The main objective of creating these proposed reservoirs is to reduce pumping directly from the Floridan Aquifer and concurrently recharge that system, provided it is done in an environmentally acceptable manner, with water of suitable quality.

These sites are all located with the boundaries of Southwest and Suwannee Water Management District and positive action here could benefit other districts, particularly St. Johns and South Florida Water Management Districts.

Sites under consideration and water storage potential are reviewed and defined (see Exhibit I) as follows:

Site A

This site is located in Columbia county with a mining area of approximately 28,000 acres affording an estimated 5,000 acres of fresh water storage totalling 20 billon gallons.

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Site B

Location of this site is near the apex of the Santa Fe and New Rivers involving one or more mine sites totalling approximately 18,000 acres creating an estimated 3,500 acres of fresh water storage of 13.7 billon gallons.

Site C

This mine site is situated in two counties, namely Polk and Hardee containing approximately 13,000 mineable acres with fresh water storage area of 3,500 acres with a capacity of 14.8 billion gallons.

Site D

This site located in central Hardee County comprises approximately 28,000 acres of contiguous lands resulting in fresh water storage area of 5,000 acres with a capacity of 26 billion gallons.

Site E

Location of this site begins in northwest DeSoto County and extends west into Manatee County. Total acreage mined could reach in excess of 30,000 with fresh water storage area of 5,000 acres and capacity of 22.9 billion gallons.

Combined potential of all sites would total 97.4 billion gallons.

Site Specific Examples

These sites, located in Polk County having State of Florida ownership, namely Lake Hancock and Tenoroc State Park, are prime

examples of income producing projects which could be applied toward State purchase of pristine lands endangered by development. Additionally both of these sites would be upgraded from an environmental and utilization standpoint over a period of 10 years or less if moved forward on a concurrent basis. It should be emphasized this environmental restoration activity could proceed without interference to present recreational and commercial fishing uses.

Recommendation

Since the success of this conceptual environmentally oriented program would rest largely on progressive support of the Governor, State Cabinet, State Legislators, DNR, DER and Water Management Districts involved, proper reviews should be conducted for this assessment.

Based on an assumption of positive reaction, land-owners, mainly phosphate companies, private individuals, including owners of mined-out lands, involved in certain project sites viz.a.viz Lake Hancock would be contacted to determine their level of support. Since all of the projects would depend on cooperation of these groups, any advancement of a specific site would rise or fall at this juncture. The State should be prepared to outline incentives for participation by the phosphate companies on given sites according to ownership.

Detailed studies should commence on a site specific basis upon securing support from the aforementioned entities. Such studies should include hard dollar estimates of project costs.

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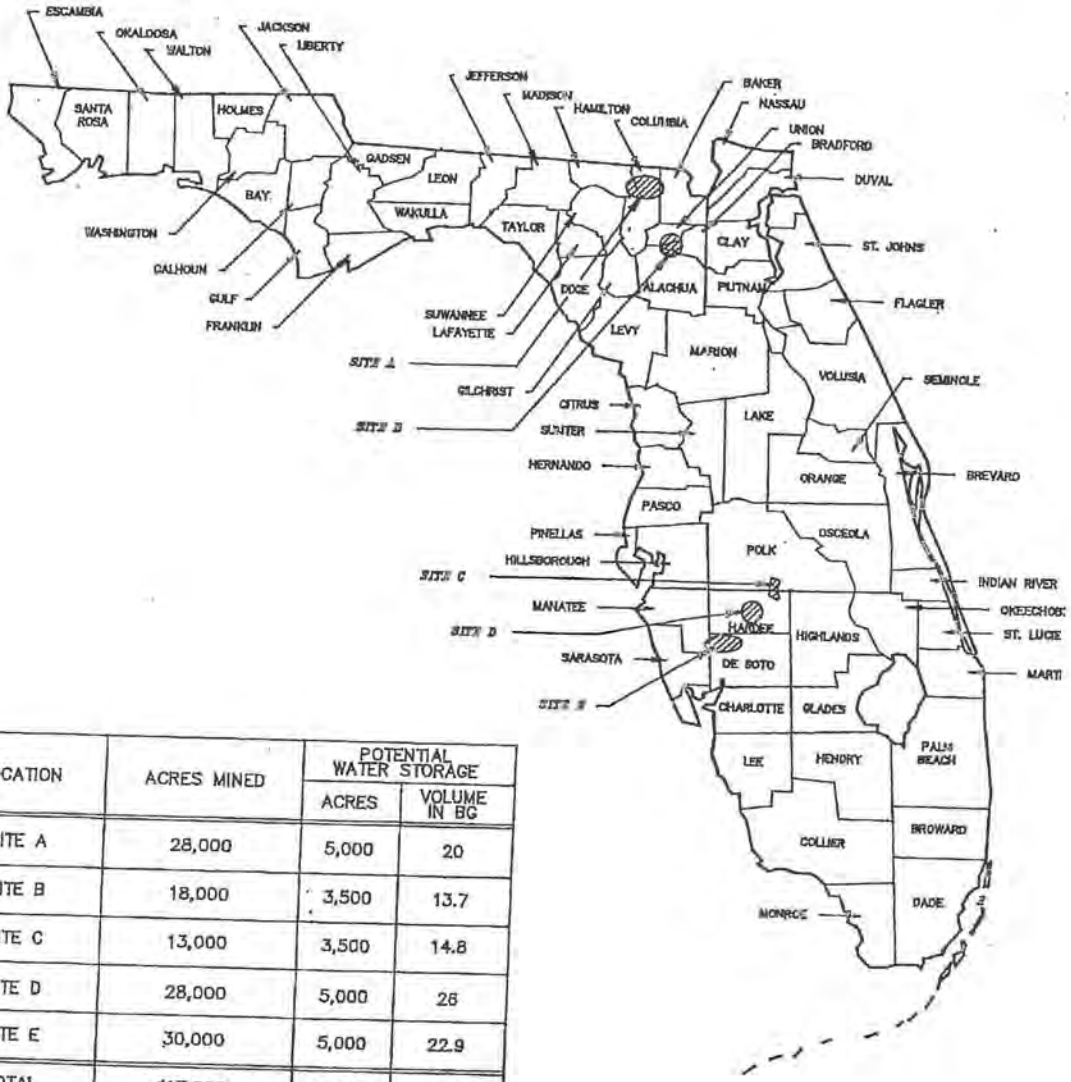
None of these projects will take place under the ex orbitant capital investment costs, accepted by some, within the phosphate industry over recent years. Needless to say, should the projects outlined herein, fail to evolve for whatever reason, industry, the work force and the people of the State of Florida will feel the effect of mismanagment of our natural resources.

EXHIBIT I



LOCATION	ACRES MINED	POTENTIAL WATER STORAGE	
		ACRES	VOLUME IN BG
SITE A	28,000	5,000	20
SITE B	18,000	3,500	13.7
SITE C	13,000	3,500	14.8
SITE D	28,000	5,000	26
SITE E	30,000	5,000	22.9
TOTAL	117,000	22,000	97.4

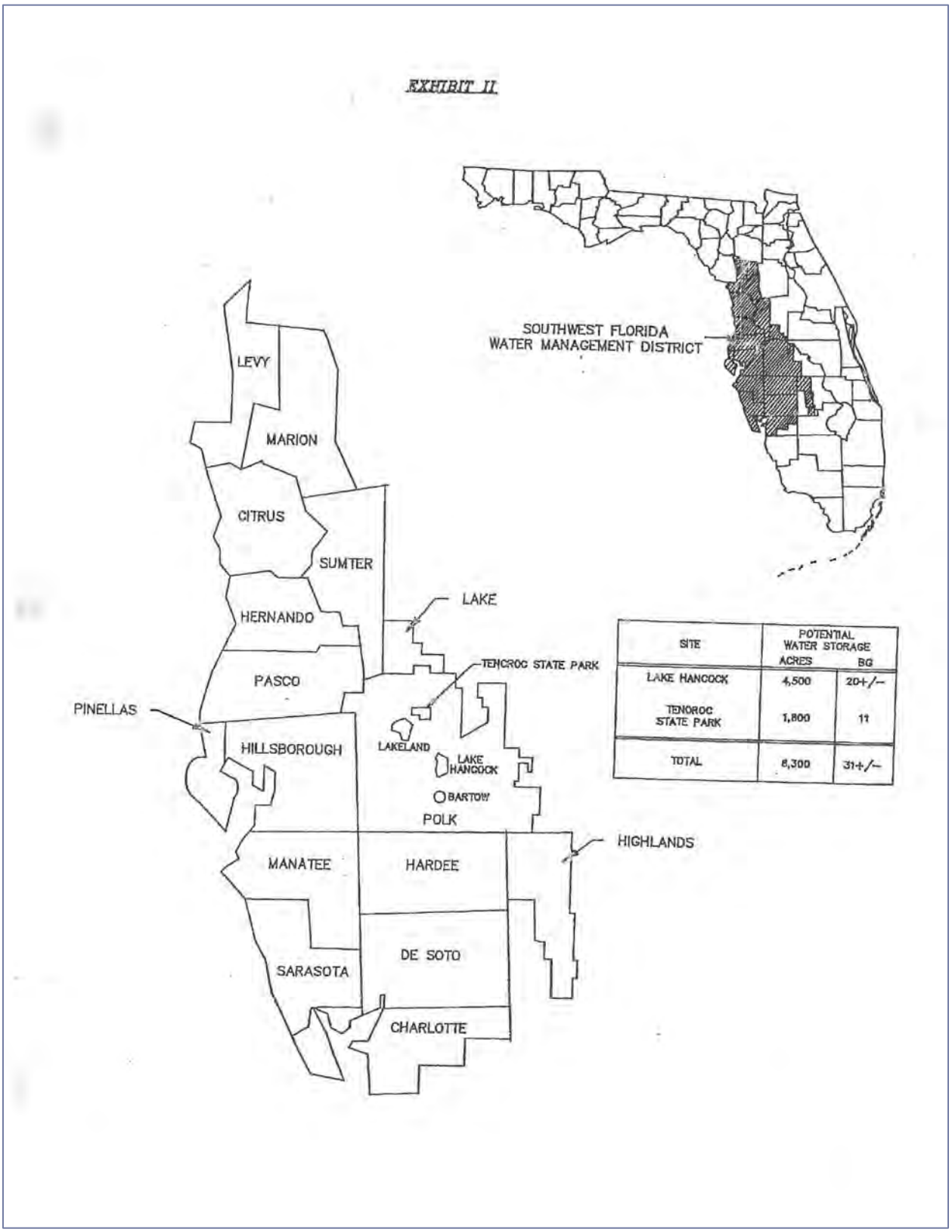


EXHIBIT II
SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT
LEVY
MARION
CITRUS
SUMTER
HERNANDO
LAKE
PASCO
TENOROC STATE PARK
PINELLAS
HILLSBOROUGH
LAKELAND
LAKE HANCOCK
BARTOW
POLK
HIGHLANDS
MANATEE
HARDEE
DE SOTO
SARASOTA
CHARLOTTE
SITE
POTENTIAL WATER STORAGE
ACRES
BG
LAKE HANCOCK
4,500
20+/-
TENOROC STATE PARK
1,800
11
TOTAL
6,300
31+/-

BIBLIOGRAPHY

Information contained in this report has been derived from the following sources through publications and direct communication.

Southwest Florida Water Management District

U.S. Environmental Protection Agency

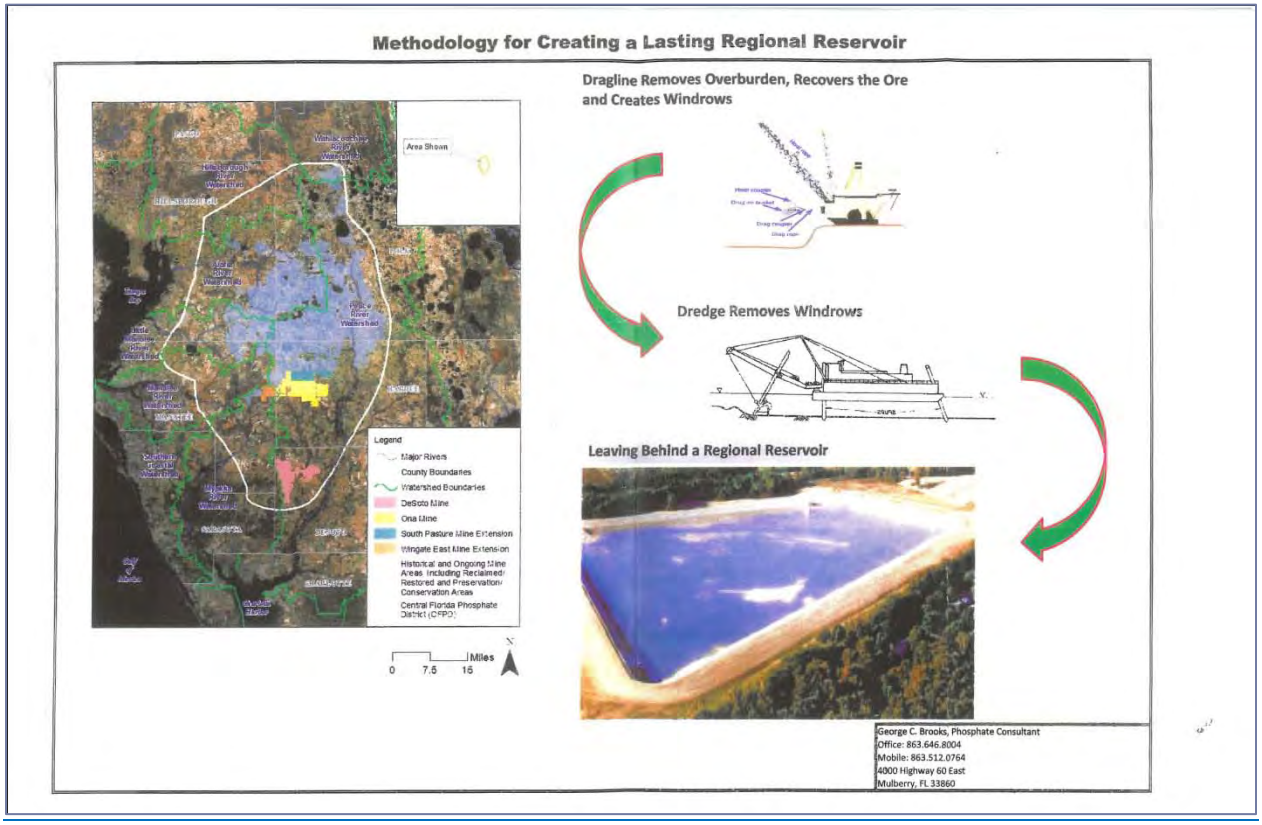
U.S. Army Corps of Engineers

U.S. Geological Survey, Water Resource Division

Water Resource Atlas of Florida, 1984

Industry Contacts

Writer files and knowledge compiled over 34 years in the Florida phosphate industry.


Methodology for Creating a Lasting Regional Reservoir
Area Shown
Legend
Major Rivers
County Boundaries
Watershed Boundaries
DeSoto Mine
Ona Mine
South Pasture Mine Extension
Wingate East Mine Extension
Historical and Ongoing Mine Areas Including Reclaimed/ Restored and Preservation/ Conservation Areas
Central Florida Phosphate District (CFPD)
0 7.5 15 Miles
Dragline Removes Overburden, Recovers the Ore and Creates Windrows
Dredge Removes Windrows
Leaving Behind a Regional Reservoir
George C. Brooks, Phosphate Consultant
Office: 863.646.8004
Mobile: 863.512.0764
4000 Highway 60 East
Mulberry, FL 33860

George C. Brooks
Consultancy
4000 State Road 60 East
Mulberry, FL 33860 USA

July 26, 2012

Mr. John Fellows
USACE AEIS Project Manager
U.S. Army Corps of Engineers
10117 Princess Palm Avenue, Suite 120
Tampa, FL 33610-8302

Re: Restoration of Mined Phosphate Land for Water Storage

Dear Mr. Fellows:

Pursuant to your request, I am pleased to submit, herewith, an Addendum to my 1987 report concerning the above-referenced subject for your review.

Please advise me should additional information or clarification be required.

Very truly yours,

George C. Brooks, Sr.

GCB/ls

Enclosure

Tel•FAX (863)646-8004
Cell (863)512-0764
E-Mail: lsuggett@pennpro.net

ADDENDUM

TO

THE BROOKS REPORT

UTILIZATION OF MINED FLORIDA PHOSPHATE LANDS FOR FRESH WATER STORAGE AND NATURAL RESOURCE RECOVERY

Prepared By:

GEORGE C. BROOKS
PHOSPHATE CONSULTANT
P. O. BOX 800
LAKELAND, FLORIDA 33802

Prepared For:

FLORIDA DEPARTMENT OF NATURAL RESOURCES

July 27, 2012

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I. INTRODUCTION

INTRODUCTION

Today there exists two sets of conditions in Florida which, if allowed to go unattended during the next ten year period, will have a great adverse effect on localized areas and negatively impact Florida in general.

Conversely, through concerted action by State government and industry, and with the support of agriculture, the general public and environmental groups, solutions to these conditions can be evolved to benefit the vast majority of Floridians.

These two conditions can be described as follows:

1. Continued inordinate extraction of fresh water from the Floridan Aquifer by municipalities, manufacturing, agriculture, mining and power generation to meet the tremendous demands of Florida growth.

For example all segments of society combined in the Southwest Florida Water Management District to draw 86 percent of the fresh water requirement from groundwater, as opposed to merely 14 percent from surface water sources.

Considering there are 40 billion gallons of fresh water lost daily, emanating from 16 major Florida rivers and reporting to salt water in the Gulf of Mexico and Atlantic, it is apparent the problem is not lack of water but one of water control and management.

Florida is blessed with a vast water source which, with continued indiscriminate use, may prove inadequate for the needs in the next century unless steps are taken to make greater utilization of surface water particularly in agriculture, manufacturing, mining and power generation segments. These activities consume 70 percent of Florida fresh water usage.

2. Lands disturbed by the activity of a vital, but declining, Florida phosphate mining industry can and will be a problem in counties within the State where this business is conducted. The recent practice of one company donating mined-out unreclaimed land to the State of Florida, rather than assuming the financially debilitating burden of land reclamation points out the severity of the mined land reclamation problem. Such mined phosphate lands will approach or exceed 300,000 acres, statewide by the year 2000. This continued loss of natural resource cannot be tolerated.

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2. Florida Water Resources

2.1 Supply

According to the Water Resource Atlas of Florida, 1984, the State receives an average of 54 inches of rainfall annually, which equates to 150 billion gallons of fresh water daily. The same source indicates an additional 25 billion gallons per day of fresh water moving into Florida from the adjoining states of Alabama and Georgia. This would indicate a total input of 175 billion gallons of water daily to Florida's water budget.

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Thus, the embodiment of this report is in emphasizing the need for control and storage of a portion of the daily outflow of fresh water rated at 68 billion gallons per day permitting increased usage from fresh surface water sources, in turn reducing demand on the Floridan Aquifer.

2.2 Demand

Population growth in Florida has been phenomenal, increasing from less than 3 million in 1950 and expected to approach 20 million in the year 2000. This nearly seven fold growth has and will create severe demand on fresh water supply for all segments of society, including public, industrial, agriculture and generation.

For example in 1950, with the Florida population slightly below 3 million, daily withdrawal, largely from groundwater was estimated at 2 billion gallons per day. This withdrawal rate grew to 7.3 billion gallons per day by 1980 with the population just under 10 million.

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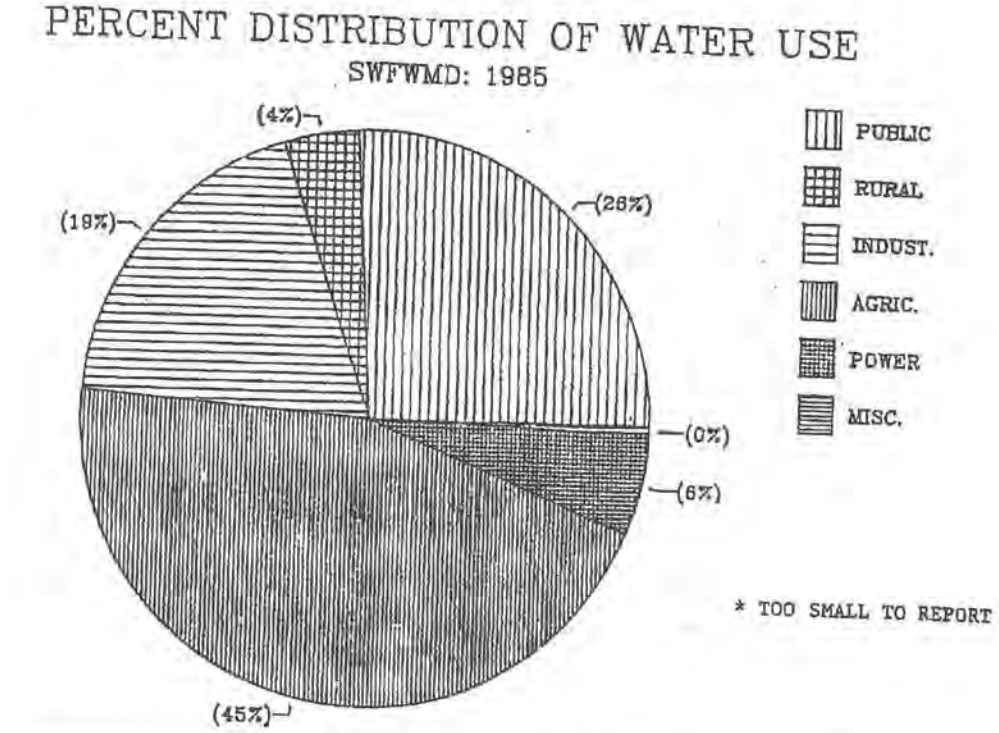
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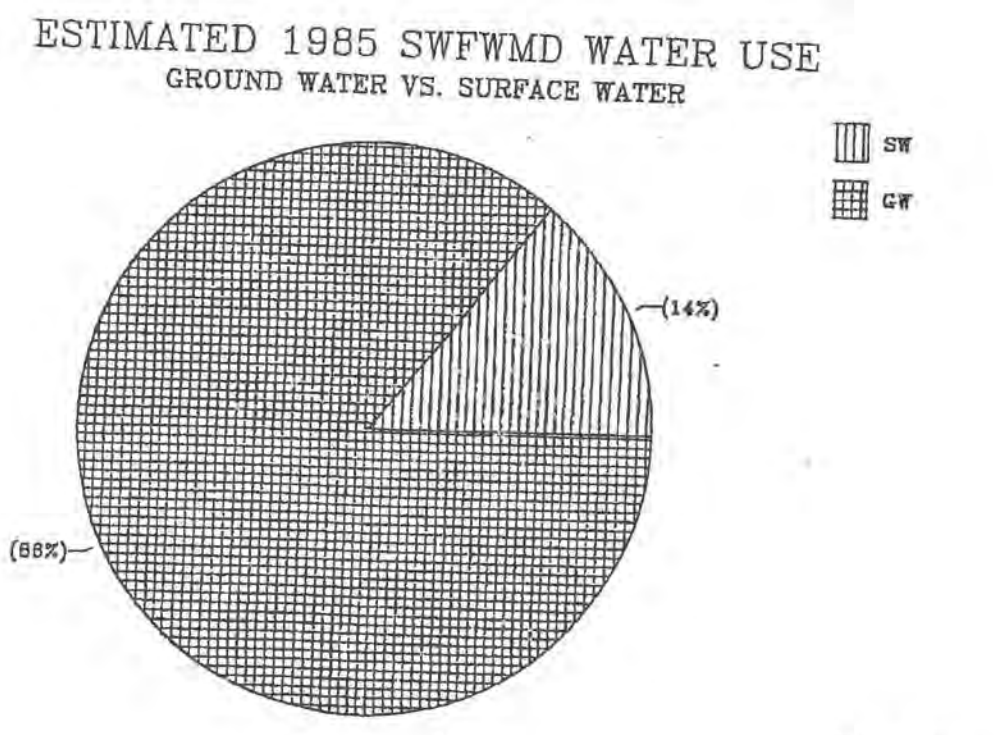
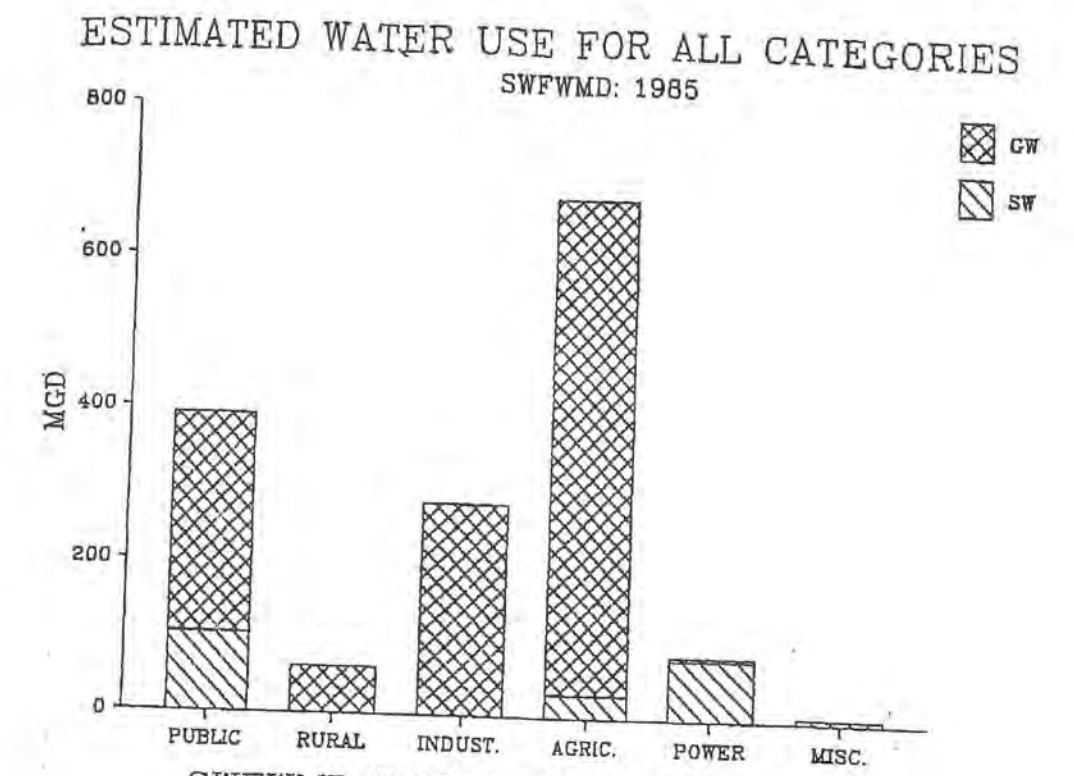

ESTIMATED 1985 SWFWMD WATER USE
GROUND WATER VS. SURFACE WATER
SW
GW
(14%)
(86%)

10

Figure 1


ESTIMATED WATER USE FOR ALL CATEGORIES
SWFWMD: 1985
GW
SW
MGD
800
600
400
200
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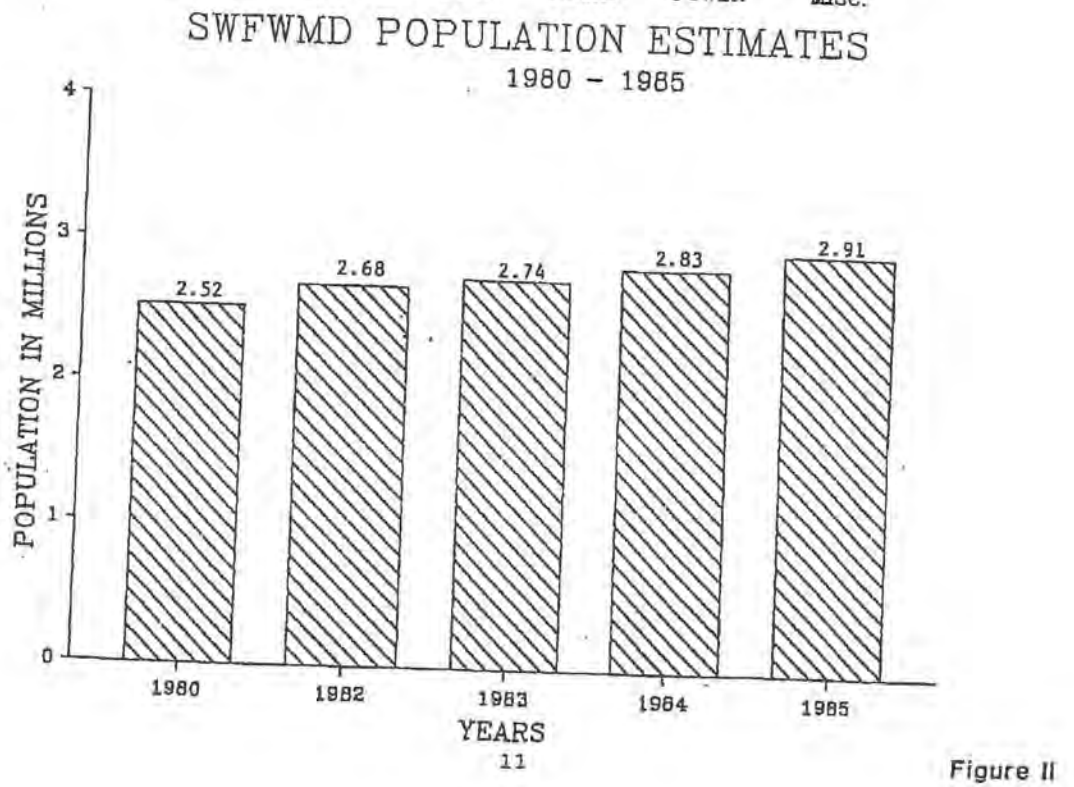

SWFWMD POPULATION ESTIMATES
1980 - 1985
POPULATION IN MILLIONS
4
3
2
1
0
2.52
2.68
2.74
2.83
2.91
1980
1982
1983
1984
1985
YEARS

11

Figure II

III. SUMMARY AND RECOMMENDATION

SUMMARY

The dual loss of continued outflow from the State of Florida of 68 billion gallons per day of fresh surface water and the failure to positively utilize remaining phosphate mine sites reclaimed, in part to water storage reservoirs, will undoubtedly create conditions for crisis management on or before the year 2000.

Remaining major phosphate mine sites have been identified as Sites A, B, C, D and E and shown in Exhibit I of this report.

It should be noted that all sites are situated in relative proximity to major population centers, as well as, major river systems with high daily outflows of fresh water. The main objective of creating these proposed reservoirs is to reduce pumping directly from the Floridan Aquifer and, concurrently, recharge that system provided it is done in an environmentally acceptable manner with water of suitable quality.

These sites are all located with the boundaries of Southwest and Suwannee Water Management Districts and positive action here could benefit other districts, particularly, St. Johns and South Florida Water Management Districts.

Sites under consideration and water storage potential are reviewed and defined (see Exhibit I) as follows:

Site A

This site is located in Columbia County with a mining area of approximately 28,000 acres affording an estimated 5,000 acres of fresh water storage totaling 20 billion gallons.

Site B

Location of this site is near the apex of the Santa Fe and New Rivers involving one or more mine sites totaling approximately 18,000 acres creating an estimated 3,500 acres of fresh water storage of 13.7 billion gallons.

Site C

This mine site is situated in two counties, namely Polk and Hardee, and containing approximately 13,000 mineable acres with fresh water storage area of 3,500 acres with a capacity of 14.8 billion gallons.

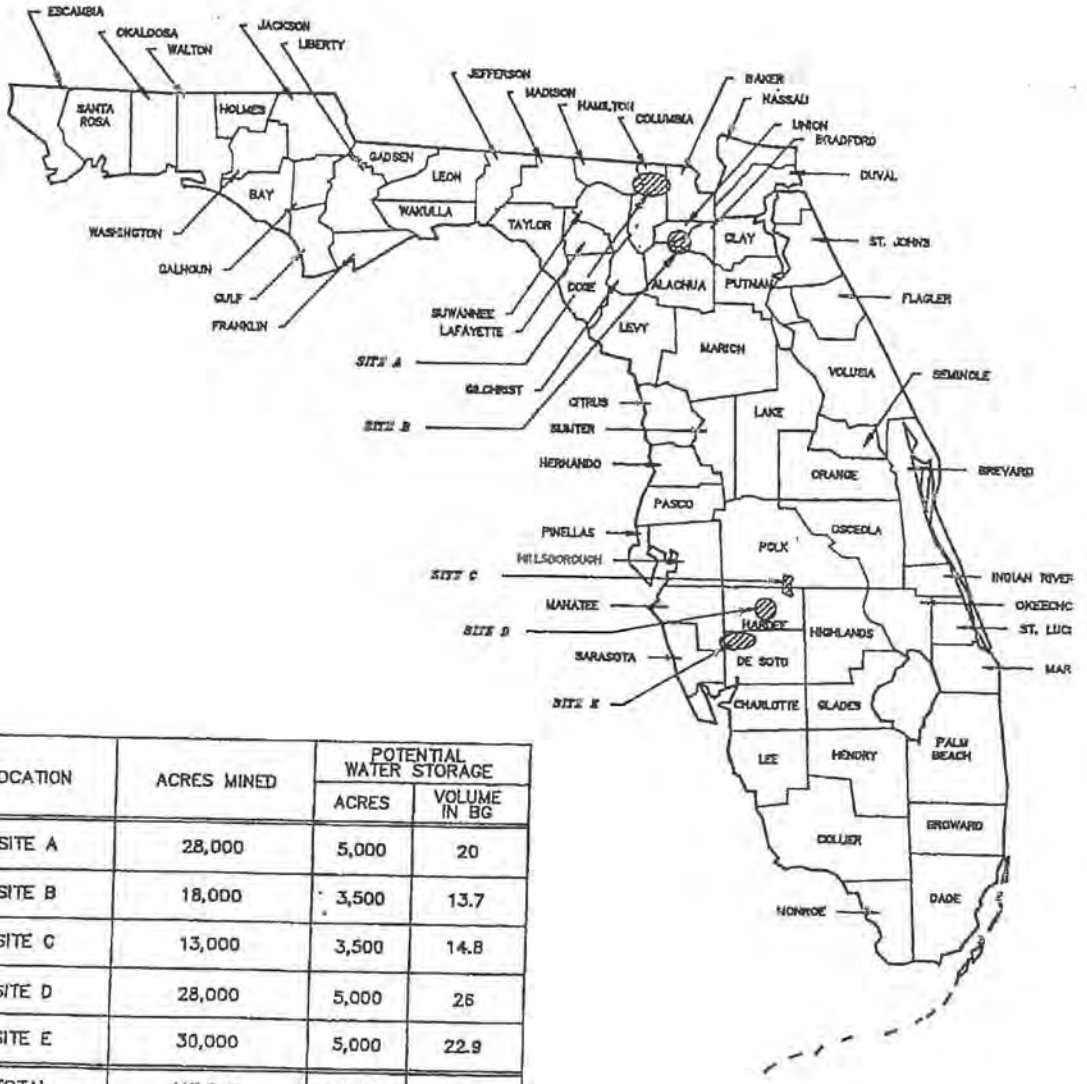
Site D

This site located in central Hardee County comprises approximately 28,000 acres of contiguous lands resulting in fresh water storage area of 5,000 acres with a capacity of 26 billion gallons.

Site E

Location of this site begins in northwest DeSoto County and extends west into Manatee County. Total acreage mined could reach in excess of 30,000 with fresh water storage area of 5,000 acres and capacity of 22.9 billion gallons.

EXHIBIT I



LOCATION	ACRES MINED	POTENTIAL WATER STORAGE	
		ACRES	VOLUME IN BG
SITE A	28,000	5,000	20
SITE B	18,000	3,500	13.7
SITE C	13,000	3,500	14.8
SITE D	28,000	5,000	26
SITE E	30,000	5,000	22.9
TOTAL	117,000	22,000	97.4

NOTE: Wingate and Wingate East Mine Extension not shown.

Combined potential of all sites would total 97.4 billion gallons.

Site Specific Examples

These sites, located in Polk County and having State of Florida ownership, namely Lake Hancock and Tenoroc State Park, are prime examples of income producing projects which could be applied toward State purchase of pristine lands endangered by development. Additionally, both of these sites would be upgraded from an environmental and utilization standpoint over a period of ten years or less if moved forward on a concurrent basis. It should be emphasized that this environmental restoration activity could proceed without interference to present recreational and commercial fishing uses.

RECOMMENDATION

Since the success of this conceptual environmentally oriented program would rest largely on progressive support of the Governor, State Cabinet, State Legislators, DNR, DER and Water Management Districts involved, proper reviews should be conducted for this assessment.

Based on an assumption of positive reaction, landowners, mainly phosphate companies, private individuals including owners of mined-out lands, involved in certain project sites vis-à-vis Lake Hancock would be contacted to determine their level of support. Since all of the projects would depend on cooperation of these groups, any advancement of a specific site would rise or fall at this juncture. The State should be prepared to outline incentives for participation by the phosphate companies on given sites according to ownership.

Detailed studies should commence on a site specific basis upon securing support from the aforementioned entities. Such studies should include hard dollar estimates of project costs.

None of these projects will take place under the exorbitant capital investment costs accepted by some within the phosphate industry over recent years. Needless to say, should the projects outlined herein fail to evolve, for whatever reason, industry, the workforce and the people of the State of Florida will feel the effect of mismanagement of our natural resources.

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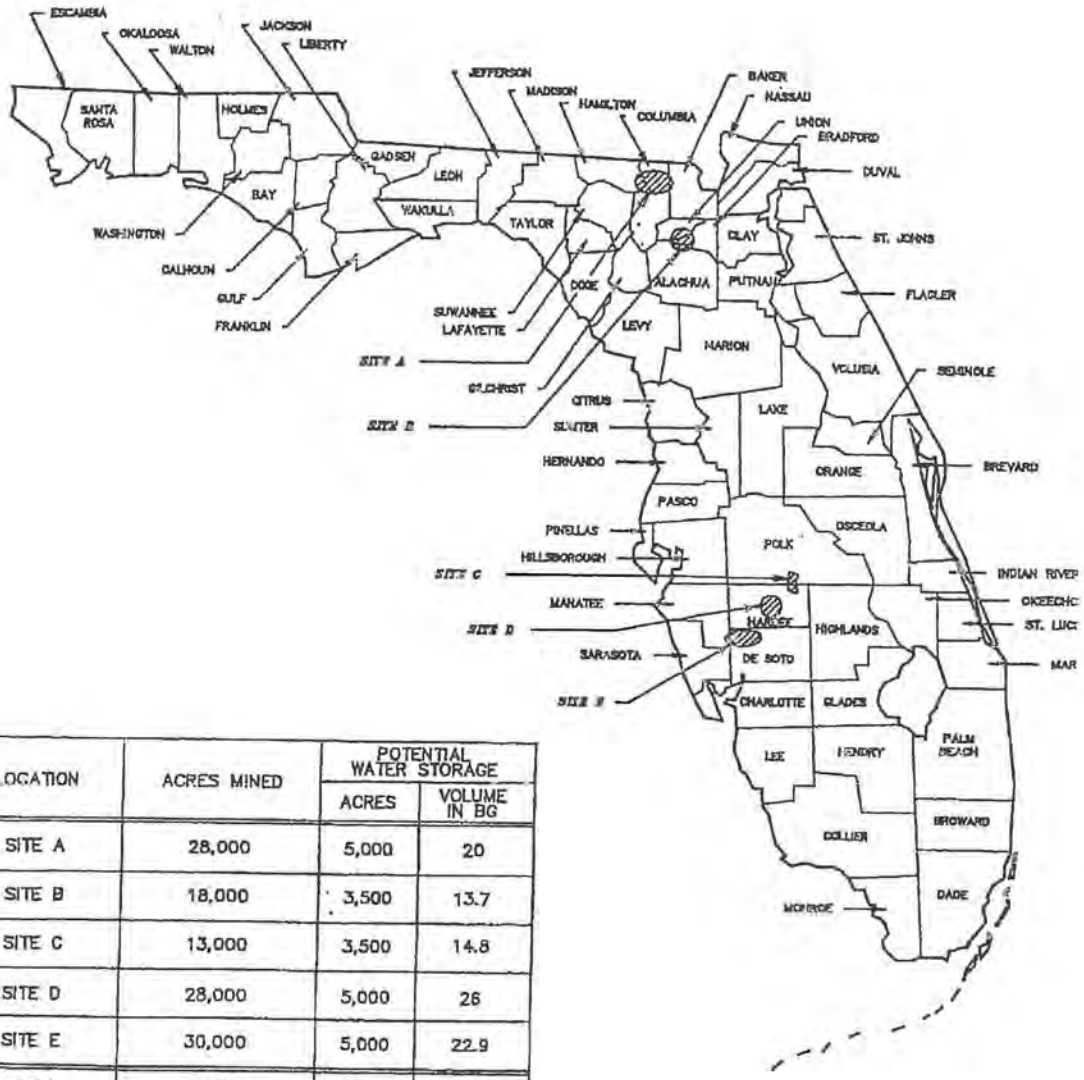
APPENDICES

Exhibit I
(From Original 1987 Report)

Exhibit II
Methodology

EXHIBIT I



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TOTAL	117,000	22,000	97.4

NOTE: Wingate and Wingate East Mine Extension not shown.

EXHIBIT II

METHODOLOGY

First, the methodology will be straight forward and relatively simple to USACE, since the Agency moves more solids annually by dredge method than any entity in the United States in addition to issuing more contracts for similar activity each year.

Since the mining company will have a cost in creating the fresh water storage reservoir, in turn, it should receive reimbursement from the State of Florida, vis-à-vis, a reduction in the severance tax which is presently $2.99 per ton of product.

Execution of the project is simple requiring a time span of 30 to 36 months following beginning of dragline mining and, only then, should dredging activity occur. Thus, there should be no conflict in conventional dragline mining activity.

The dredging activity would involve pumping overburden windrow material left in each mining cut by the dragline. The dredge, in turn, would pump windrow material 1,200 feet left, then right, thus leaving ½ mile wide connected lakes 30 – 35 feet in depth, over 6,000 acres storing up to 22.9 billion gallons of water.

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Additionally, inversion wells drilled inside the reservoir would provide recharge of the Floridan Aquifer during summer heavy rainfall.

Presently, the agriculture industry, which consumes 46% of withdrawal, has been forced to drill 1,500 foot wells for irrigation, increasing salt water intrusion from Florida coastlines inward.

An actual example of such a catastrophe has already occurred due to heavy pumping in Australia's Murray River vicinity where the headwaters have been contaminated by salt water.

BIBLIOGRAPHY

Information contained in this report has been derived from the following sources through publications and direct communication.

Southwest Florida Water Management District

U.S. Environmental Protection Agency

U.S. Army Corps of Engineers

U.S. Geological Survey, Water Resource Division

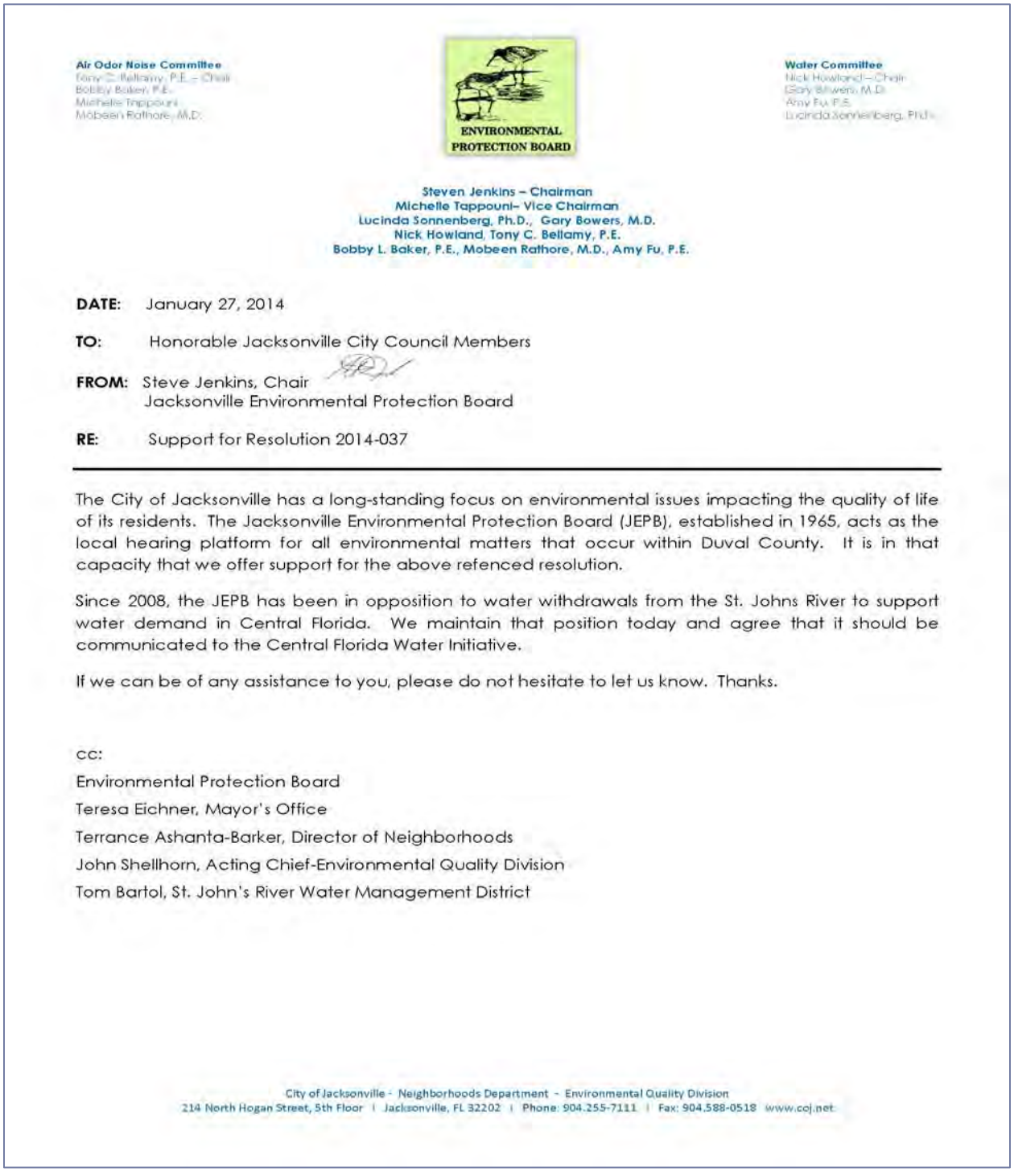
Water Resource Atlas of Florida, 1984

Industry Contacts

Writer files and knowledge compiled over 58 years in the Florida phosphate industry.

CFWI RWSP Team Response *- Reports have been forwarded to the CFWI Solutions Team stormwater/storage subgroup.*

James A Richardson, II, Environmental Protection Board Administrator, City of Jacksonville (02/11/14)



Air Odor Noise Committee
Tony C. Bellamy, P.E. – Chair
Bobby Baker, P.E.
Michelle Tappouni
Mobeen Rathore, M.D.

ENVIRONMENTAL PROTECTION BOARD

Water Committee
Nick Howland – Chair
Gary Bowers, M.D.
Amy Fu, P.E.
Lucinda Sonnenberg, Ph.D.

Steven Jenkins – Chairman
Michelle Tappouni– Vice Chairman
Lucinda Sonnenberg, Ph.D., Gary Bowers, M.D.
Nick Howland, Tony C. Bellamy, P.E.
Bobby L. Baker, P.E., Mobeen Rathore, M.D., Amy Fu, P.E.

DATE: January 27, 2014

TO: Honorable Jacksonville City Council Members

FROM: Steve Jenkins, Chair
Jacksonville Environmental Protection Board

RE: Support for Resolution 2014-037

The City of Jacksonville has a long-standing focus on environmental issues impacting the quality of life of its residents. The Jacksonville Environmental Protection Board (JEPB), established in 1965, acts as the local hearing platform for all environmental matters that occur within Duval County. It is in that capacity that we offer support for the above refenced resolution.

Since 2008, the JEPB has been in opposition to water withdrawals from the St. Johns River to support water demand in Central Florida. We maintain that position today and agree that it should be communicated to the Central Florida Water Initiative.

If we can be of any assistance to you, please do not hesitate to let us know. Thanks.

cc:
Environmental Protection Board
Teresa Eichner, Mayor's Office
Terrance Ashanta-Barker, Director of Neighborhoods
John Shellhorn, Acting Chief-Environmental Quality Division
Tom Bartol, St. John's River Water Management District

City of Jacksonville - Neighborhoods Department - Environmental Quality Division
214 North Hogan Street, 5th Floor | Jacksonville, FL 32202 | Phone: 904.255-7111 | Fax: 904.588-0518 www.coj.net

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water.*

Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

Kelsey Jennings, Staff Biologist, Save the Manatee Club (02/14/14)

Save the Manatee® Club

The Voice For Manatees Since 1981

February 14, 2014

Re: Central Florida Water Initiative Draft Regional Water Supply Plan

Submitted via email to: tbartol@sjrwmd.com

Dear Mr. Bartol:

Save the Manatee Club has reviewed the Central Florida Water Initiative (CFWI) Draft Regional Water Supply Plan. Due to the importance of finding sustainable water resources in Central Florida, we support the creation of a Regional Water Supply plan to address these issues. However, we noted many problems that need to be addressed in the plan moving forward.

We noted that there was no inclusion of seasonal or tourist populations in the consideration of the plan. Florida is a major tourist destination, and those tourists consume water while here. According to the Florida Department of Transportation, there was an 18% increase in the number of tourists in Florida between 2002 and 2011. Visit Florida declared 2012 a record breaking year of tourism with the number of visitors exceeding 91.5 million, 55 million of which were in the central Florida area. Our Governor proposes to increase tourists to 100 million per year. This could lead to as many as 5 million additional tourists per year in the CFWI region. With these tourism numbers on the rise, they need to be factored into water supply planning.

The withdrawal of surface waters is a large concern, since the plan proposed 189 surface water projects as alternative supply projects. Withdrawals from surface waters are not the solution. The plan even states that "further analysis should be conducted to ensure that hydrologic functions of lakes and downstream environmental needs are maintained when attempting to identify potentially available quantities of surface waters." However, the plan proposed to withdraw up to 150 mgd from the St. Johns River. These high levels of withdrawals will cause environmental damage to surface waters, and therefore are not a valid solution.

Conservation is another aspect of the plan that needs to be looked at more closely. The conservation of water is one of the cheapest ways to make up the difference in supply that is predicted to be necessary in the next 25 years. There need to be incentives created for the conservation of water, along with more direct and measurable goals. One example would be the requirement that all new developments have the most advanced water conservation technology. One particular aspect of water use, Landscape/Recreational/Aesthetic, should be looked at in greater detail for conservation potential. The plan projects an increase from 20.21 mgd in 2010 to 72.18 mgd in 2015. This 80% increase is enormous, and the bulk of it is not for essential uses. Over this same time period, this category is listed as having a conservation potential of only 2.02 mgd. There are many potential ways to conserve in regards to this category. If incentives were put in place, the water consumption for this category could be greatly decreased. We regard conservation as the most important tool, ahead of all other risky and costly additional water supply projects.

Thank you for the opportunity to provide comments on this draft regional water supply plan.

Sincerely,

Kelsey Jennings
Staff Biologist

500 N. Maitland Ave. • Maitland, FL 32751 • 407-539-0990 • Fax 407-539-0871 • 800-432-JOIN (5646) • www.savethemanatee.org

CFWI RWSP Team Response *- Thank you for your comments. As noted in Chapter 2, permanent population was used in conjunction with a gross per capita average. The five-year gross per capita average, respective to each utility, does take into account all uses within a utility, including those uses by tourists.*

As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

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The Districts agree that conservation is an important element in meeting future water demands. The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Jane Graham, Esq., Policy Manager, Everglades, Audubon Florida (02/14/14)

444 Brickell Avenue
Suite 850
Miami, FL 33131
Tel: 305-371-6399
Fax: 305-371-6398
www.audubon.org
www.audubonofflorida.org

February 14, 2014

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177
Via email: tbartol@sjrwmd.com

Dear Mr. Bartol:

The Central Florida Water Initiative is a key opportunity for the Central Florida region to become a national leader in water conservation, natural resource protection, and smart growth. Residents and visitors from across the world flock to the center of our state to enjoy its lush wetlands, lakes, rivers and springs, vibrant with birds and other wildlife. Orlando is a water rich area, receiving around 50 inches of rain annually - one of the wettest metropolitan areas in the United States. Through thoughtful planning, this region can become a model for sustainable water usage.

Below please find comments from Audubon Florida on the Central Florida Water Initiative (CFWI) Draft Regional Water Supply Plan (draft plan). As an environmental representative on the CFWI Regulatory team and Recovery and Prevention sub-team, I appreciate participating in the process and the opportunity for input. It is my understanding based on various meetings that the draft plan is still in its early stages. As the Solutions team narrows down the menu of proposals into a clear and coherent strategy over the coming months, there must be ample opportunities for Audubon, members of the environmental community, and the general public to provide meaningful input to the CFWI.

Moving forward, the CFWI draft plan will need to be significantly modified to foster a water ethic of conservation and to chart a course toward stewardship of our valuable water resources. The draft plan currently demonstrates an over-reliance on expensive and environmentally risky surface and groundwater projects coupled with nominal water conservation efforts. We urge the draft plan to be edited to reflect the following:

1

1. **Do not rely on surface water and groundwater as the main tools to meet projected needs.**

   The seven largest projects in the draft plan propose to further drain water resources: five surface water projects and two groundwater projects, generating up to an estimated 317 million gallons a day (mgd)[1], which exceed the reported future 2035 deficit of 250 mgd in the CFWI. The set of surface water projects propose to tap over 220 mgd from our rivers and lakes - including cumulatively over 150 mgd from the St. Johns River. The proposed surface water projects in total are projected to cost between $1.8 to $2 billion.[2] These projects are environmentally risky, expensive, and unreliable. Instead of considering large scale infrastructure projects that continue to exploit groundwater and surface water sources, this plan should focus on reducing demand through aggressive water conservation, reclaimed water projects, regulations, and other initiatives.

2. **Fully protect the ecological benefits of Kissimmee River Restoration. Proposals to withdraw water from the Kissimmee Basin should be abandoned.**

   The draft plan includes a proposal to withdraw up to 25 mgd from the Kissimmee River basin.[3] Since 1992, the State of Florida and federal government have invested over $650 million in Kissimmee River Restoration. Once complete and operational, the project will have restored more than 40 square miles of the River's floodplain ecosystem, including almost 20,000 acres of wetlands and 44 miles of historic river channel that benefits more than 320 fish and wildlife species. The South Florida Water Management District (SFWMD) is in the process of developing a water reservation to protect water for the Kissimmee River Restoration project. The public's investment in this project must be guarded to ensure its full benefits are realized. Any consideration of using water from the Kissimmee Basin that puts the benefits of the Kissimmee River Restoration Project at risk must be abandoned.

3. **Maximize the use of water conservation in the CFWI area through incentive programs, regulations, and innovative pricing structures.**

   Reductions in demand through water conservation must be greatly expanded in this plan to foster a region-wide water ethic. Water conservation must be mandatory, significant, and ubiquitous as the initial step to cope with the projected deficiency in water supplies by 2035. The draft plan currently only projects 3.9% or 42 mgd of the 2035 demand to be achieved through water conservation.[4] The draft plan states that the public supply water conservation number was based on "participation rates" of only 23% for retrofit based best management practices (BMPs) and 12.5% for BMPs that require another party to visit the

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[1] Solutions Team Meeting, November 21, 2013, slides 9 and 10, available at http://cfwiwater.com/pdfs/2013_11-21/presentation_subteamprojdist.pdf.
[2] CFWI Draft Regional Water Supply Plan 2014, Appendix F-39.
[3] Id., at Appendix F-37.
[4] CFWI Draft Regional Water Supply Plan, pg. 78. Breaking this down into the different demand categories, public water supply is projected to conserve 4%, agriculture 5% and landscape/recreational/aesthetic at 2. See Solutions team meeting, note 1 at slide 13.

site.[5] This should be scaled up to 100% participation throughout the CFWI region. In addition, the plan recognizes that additional savings could be achieved through the implementation of additional agricultural BMPs not analyzed in the plan.[6] These additional BMPs should be included in the plan's analysis and scaled up for 100% participation. To implement these water conservation savings, we recommend:

- **Increase funding to scale up incentive programs like the SFWMD Water Savings Incentive Program (WaterSIP) throughout the CFWI for 100% participation from public water supply.** This will fund noncapital water conservation projects such as rain and soil moisture sensors, low flow toilets and low flow showerheads, new water-conserving appliances, sod replacement, rain barrels and cisterns, and rain gardens, among other water saving devices to make them *fully implemented* throughout the CFWI region.[7]
- **Increase funding to scale up agricultural water conservation through programs like the SWFWMD Facilitating Agricultural Resource Management Systems program (FARMs) to reduce or hold the demand steady from 2010 till 2035.** FARMs is an incentive program that funds and assists the installation of agricultural BMPs such as tailwater recovery systems and reservoirs to capture runoff, precision irrigation systems with integrated weather stations, and frost/freeze protection alternatives to high volume withdrawals. In Polk County, $3.3 million was invested in FARMs programs to offset an estimated 1.2 million gallons per day (mgd) of groundwater withdrawals.[8] This equals $2.75 per gallon saved. CFWI Planning Area agricultural average demands are expected to increase by 30 mgd by 2035.[9] If it costs $2.75 to save 1 gallon a day through FARMs, $82.5 million invested in this program over the course of twenty years ($4.125 million a year) would conserve 30 mgd, negating the projected increase in agricultural demand by 2035.
- **Demand numbers for Landscape/recreational/aesthetic should decrease.** The draft plan says demand is expected to increase by 31.97 mgd or 80 percent by 2035 for this water usage, the largest percentage of increase of any water usage.[10] However, by 2035 only 2.7% is projected to be conserved.[11] These are non-essential uses of water that should decrease through water conservation techniques. While a sizable percentage of this water is prospectively from reuse water, reuse water is water regardless that should not be wasted.
- **Regulations to make water conservation measurable and mandatory, with demonstrable savings throughout the CFWI:** Regulations should be developed to require "Demonstrable savings", which should be defined as "a reduction in water usage through water conservation, requiring a reduction in average daily

[5] CFWI Draft Regional Water Supply Plan, Pg 80.
[6] Appendix D, pg. 82.
[7] Draft Plan, pg. 95.
[8] Draft Plan, pg. 142.
[9] Solutions team, note 1 at slide 2.
[10] Draft Plan, pg. 29.
[11] Solutions team, note 1 at slides 2 and 13.

3

per capita water usage of least 20%-30% from the "baseline", as verified through reporting and monitoring of water usage. As part of the CFWI regulatory effort, baselines for gross and residential per capita water usage should be established.[12] In addition, Florida Friendly Landscaping ordinances should apply to all areas, not just new development. Require the use of outcome-based conservation practices in consumptive use permits, and this should apply to all users without exception.

- ➔ **Explore and implement pricing and rate structures that reduce water consumption and incentivize conservation throughout the CFWI.** The Urban Land Institute in the Myregion.org discussion crafted a number of proposals to reduce water consumption in the region through economics and pricing.[13] The water conservation sub-team should evaluate these recommendations among others and decide how to proceed forward.

4. **The CFWI should enhance regulations to increase water sustainability and resource protection throughout the region.**

- ➔ CFWI should require water management districts to limit the duration of permits, sources, and modify allocations as needed throughout the region. A regional rule that caps quantities of consumptive uses at a certain number unless provided through Alternative Water Supply should be explored. Rules should require the consumptive use and management of water to incorporate conservation goals, metrics, and projects.
- ➔ Require cost-effective conservation practices for all water use categories.
- ➔ Ensure that supplementation of reclaimed water, by definition, does not include surface water and groundwater, the sources that reclaimed water practices are intended to protect. If water for supplementation is requested, as part of the permit application review, the District shall require that an applicant demonstrate that the quantity of water requested cannot be gained through water conservation. Applicants must show that there is a water conservation plan in operation that has goals with benchmarks, and progress is being made in achieving those goals.

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[12] The "baseline" number should be a bold goal. While the draft plan shows gross and residential per capita use has decreased over the last two decades (Draft Plan at pg. 85), more can still be done. The Circle of Blue reports that some cities have average daily residential per capita use as low as 41 gpd (Boston) and 47 pdg (Milwaukee). *See* Circle of Blue Urban Water Pricing Survey at http://www.circleofblue.org/waternews/wp-content/uploads/2010/04/allstats.pdf.

[13] Urban Land Central Florida Institute, Creating a Sustainable Water Supply for Central Florida: A Regional Strategy: Recommendations 4-5. (Dec. 10, 2010), *available at* http://cfwiwater.com/pdfs/Creating_A_Sustainable_Water_Supply_For_Central%20Florida.pdf.

5. **Protect and restore springs, lakes, rivers, and wetlands throughout the region.**

   Many natural areas throughout the CFWI are already stressed and require protection and restoration. The recent status assessment of Minimum Flows and Levels (MFLs) in the draft plan identified 10 water bodies within the CFWI Planning Area that are currently below their established MFLs and an additional 15 water bodies that are projected to fall below their established MFLs within the planning horizon if projected demands were to come from traditional sources.[14] The CFWI should create plans and programs to protect and restore its rivers, lakes, springs, and wetlands.

   - ➔ Craft MFL recovery and prevention strategies, water reservations, and other tools under Florida Water law to protect and restore ecosystems throughout the region.
   - ➔ Explore the ability of dispersed water management projects, aquifer recharge, and other projects to alleviate stressors on the ecosystem and to replenish the aquifer.

I look forward to continuing to participate in future discussions in this collaborative process. I urge there to be further opportunities for robust public involvement throughout the state as the draft plan transforms from a menu of options into a roadmap. Residents from Jacksonville to Tampa to Miami will be impacted by the course the CFWI takes.

People from every part of the world visit the metropolitan Orlando area for its attractions, gorgeous natural areas, and business friendly environment. Florida cannot forego this opportunity to make it a model metropolitan area for conservation, sustainability, and smart growth that the world can admire and emulate. The CFWI is the time to make this happen.

Sincerely,

Jane Graham, Esq.
Policy Manager, Everglades
Audubon Florida

[14] Draft plan, pg. v.

CFWI RWSP Team Response *- Thank you for your comments. As noted in Chapter 2, permanent population was used in conjunction with a gross per capita average. The five-year gross per capita average, respective to each utility, does take into account all uses within a utility, including those uses by tourists.*

As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The Districts agree that conservation is an important element in meeting future water demands. The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping. Water conservation requirements and standards can be found in the District's respective web sites and Applicants Handbooks.

The CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying viable conservation and other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.

Section 373.042, F.S. requires the Districts to set MFLs at which further withdrawals of water would be significantly harmful to the water resources of the area. As noted, the RWSP

identifies programs to ensure that an adequate supply of water exists to protect water resources and natural systems to meet existing and future reasonable beneficial uses, which will be further developed by the Solutions Planning Team.

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

As stated, in order to protect the public's interest and investment in the restoration of the Kissimmee River, the SFWMD will act to protect the enhanced hydrology associated from the restoration efforts. Accordingly, the SFWMD will be using a water reservation rule to protect the waters needed for the protection of fish and wildlife associated with the restoration efforts. A reservation will result in a high level of protection. As discussed on Page 38 of the RWSP, the SFWMD included the Kissimmee Basin water reservation, which includes 19 lakes in the Upper KCOL, the Kissimmee River and its floodplain, in its 2014 Priority Water Body List for future adoption by December of 2015. The effect of this type of rule is to withhold water needed for the protection of fish and wildlife from allocation water from the Upper Chain of Lakes and Kissimmee River. Water availability from the Kissimmee River and associated lakes will be determined following establishment of the Kissimmee basin water reservation.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Charles G. Pattison, FAICP, President, 1000 Friends of Florida (02/17/14)

1000 FRIENDS of FLORIDA

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Re: Comments on CFWI

Dear Mr. Bartol:

On behalf of the Board of Directors and the members of 1000 Friends of Florida, I am pleased to submit these comments on the Central Florida Water Initiative (CFWI). It has the potential to become a model for water use, conservation and smart growth throughout Florida and the nation.

A major consideration must involve the protection and restoration of springs, lakes, rivers, and wetlands throughout the region. Many natural areas throughout the CFWI are already stressed and require protection and restoration. MFL recovery and prevention strategies, water reservations, and other tools under Florida Water law must be utilized to protect and restore ecosystems throughout the region. We suggest further exploring the ability of dispersed water management projects, aquifer recharge, and other projects to alleviate stressors on the ecosystem and to replenish the aquifer.

There also does not appear to be an emphasis on fully protecting the ecological benefits of Kissimmee River Restoration. Proposals to withdraw water from the Kissimmee Basin should be abandoned as the draft plan includes a proposal to withdraw up to 25 mgd from the Kissimmee River basin. As you know, both the state and federal governments have spent millions of taxpayer dollars restoring this unique ecosystem, and it makes no sense to put the success of this project in jeopardy when improved water conservation programs could easily provide this amount of water.

Of particular note is a puzzling consideration not to maximize the use of water conservation in the CFWI area through incentive programs, regulations, and innovative pricing structures. Reductions in demand through water conservation must be greatly expanded to foster a region-wide water ethic. Water conservation must be mandatory, significant, and ubiquitous as the initial step to cope with the projected deficiency in water supplies by 2035. The draft plan currently only projects 3.9% or 42 mgd of the 2035 demand to be achieved through water conservation. We know a much higher number is not only feasible, but is more sustainable and provides significantly lower costs for water users.

We are concerned that there is a heavy reliance on surface water and groundwater as the main tools to meet projected needs. The seven largest projects in the draft plan propose to further drain existing water resources. Five surface water projects and two groundwater projects, generating up to an estimated 317 million gallons a day (mgd) are proposed. This exceeds the reported future 2035 deficit of 250 mgd.

The CFWI must enhance regulations to increase water sustainability and resource protection throughout the region. CFWI must require water management districts to limit the duration of permits, sources, and modify allocations as needed throughout the region. A regional rule that caps quantities of consumptive uses at a certain number unless provided through Alternative Water Supply should be comprehensively explored. Cost effective conservation practices for all water use categories needs immediate attention. The supplementation of reclaimed water, by definition, must not include surface water and groundwater, the very sources that reclaimed water practices are intended to protect.

We appreciate the opportunity to provide comments on the draft CFWI plan, and look forward to reviewing and commenting on future drafts.

Sincerely,

Charles G. Pattison, FAICP
President

CFWI RWSP Team Response *- The RWSP acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.*

As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

In order to protect the public's interest and investment in the restoration of the Kissimmee River, the SFWMD will act to protect the enhanced hydrology associated from the restoration efforts. Accordingly, the SFWMD will be using a water reservation rule to protect the waters needed for the protection of fish and wildlife associated with the restoration efforts. A reservation will result in a high level of protection. As discussed on Page 38 of the RWSP, the SFWMD included the Kissimmee Basin water reservation, which includes 19 lakes in the Upper KCOL, the Kissimmee River and its floodplain, in its 2014 Priority Water Body List for future adoption by December of 2015. The effect of this type of rule is to withhold water needed for the protection of fish and wildlife from allocation water from the Upper Chain of Lakes and Kissimmee River. Water availability from the Kissimmee River and associated lakes will be determined following establishment of the Kissimmee Basin water reservation.

The Districts agree that conservation is an important element in meeting future water demands. CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Jacob D. Varn, Fowler White Boggs, Representing City of Sanford (02/18/14)

FOWLER WHITE BOGGS
Attorneys at Law
Est 1943

February 18, 2014

Via Email and Federal Express

Mr. Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32177

Re: Central Florida Water Initiative (CFWI)
Draft Regional Water Supply Plan

Dear Mr. Bartol:

We represent the City of Sanford, Florida (Sanford) and have followed very closely the efforts of the Central Florida Water Initiative (CFWI) to develop a regional water supply plan for the CFWI Planning Area. Sanford strongly supports the purpose and goals of the CFWI process.

Before making some specific requests on matters directly affecting Sanford, we would like to make a couple of general comments and recommendations about the draft CFWI Regional Water Supply Plan. First, a couple of comments - Sanford is of the opinion that it has been a very conscientious water utility/provider in that it has expended considerable time and its money on its water conservation program, water reuse efforts and the adoption of a water conservation oriented rate structure in order to achieve its low per capita water use. The Southwest Florida Water Management District (SWFWMD) uses a projected per capita rate of no greater than 150 gpd in calculating projected permitted quantities for consumptive use permits (see Water Use Permit Information Manual, Part B, Basis Of Review, provision 3.6 beginning on page B3-20), so we assume that the 150 gpd per capita is a reasonable rate. In determining the projected water use for 2035 for the water service providers in the CFWI Planning Area, the projected per capita water use was based on the historical per capita water use. According to the per capita water use figures used in Table A-1 of Appendix A, there are about 36 water service providers out of about 82 water service providers (or 43.9% of the water service providers), whose per capita water is in excess of 150 gpd. Included in this group of 36 water service providers are 9 water service providers with a per capita rate in

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excess of 300 gpd. Since there are numerous water service providers that would appear to be able to lower their per capita water use, this would seem to be a good place to see improved water conservation.

Because the draft CFWI Regional Water Supply Plan projects water use over a twenty year period, we would like to see the draft CFWI Regional Water Supply Plan include a goal of having each water service provider strive to have a maximum per capita water use of 150 gpd. There is more than ample time for the vast majority of the water service providers to achieve a maximum per capita water use of 150 gpd. To illustrate the significance of such a goal, consider the following. If the water service providers of Lake County, whose per capita water use exceeds 150 gpd, were to met this goal by 2035, the projected total water demand for Lake County would be reduced by 34%, a significant reduction in the projected water demand for 2035.

The draft CFWI Regional Water Supply Plan indicates that the sustainable groundwater withdrawal limit is 850 mgd and CFWI's projected water demand of all water users in 2035 is 1,100 mgd, which means that 250 mgd of alternative water sources are needed. A goal of 150 gpd per capita for public water service providers should go a long way to achieving a reduction in demand of 250 mgd from the public water service providers alone.

It is our understanding that the CFWI Planning Area includes 5,268 square miles or 3.37 million acres and has a projected population in 2035 of 4.1 million people, including Sanford. The total water use for the CFWI Planning Area is projected to be 1,100 million gallons per day (mgd). Tables A-1, A-9 and A-16 in Appendix A of the draft CFWI Regional Water Supply Plan show the projected water use for Sanford in 2035 to be 8.70 mgd for a population of 71,318 with a per capita water use of 122 gallons per day. The foregoing per capita water use was based on Sanford's population in 2010 of 58,225. Sanford's 2035 projected water use of 8.70 mgd is less than 1% of the total projected 2035 water demand in the CFWI and is less than Sanford's current consumptive use permit allocation of 9.58 mgd, which is the projected water demand for 2025. Because the projected 2035

water use for Sanford is less than 1% of the total projected demand in the CFWI Planning Area, a change of less than two million gallons per day to Sanford's projected 2035 water demand is insignificant in the context of the CFWI Planning Area, however, a couple million gallons per day to Sanford's projected 2035 water demand represents an increase of around 23% of Sanford's projected water use, which is significant to Sanford.

Now, we want to make comments that relate specifically to Sanford. Since the first drafts of the CFWI Regional Water Supply Plan projected the 2035 water use for Sanford to be the same or about the same as the final draft (8.70 mgd) and less than Sanford's current allocation for 2025, Sanford became concerned and began a detailed analysis of the CFWI methodology and data. In addition, representatives from Sanford met with you and members of your staff to review the District's methodology, shared its concern about the District's data and methodology and shared the data that Sanford was gathering. Sanford also employed CDM Smith to gather more detailed information, including consulting with GIS Associates, Inc., Conserve Florida Water Clearinghouse (CFWC) and various City departments, to get more accurate data as to Sanford's population, water use and per capita water use. Attached as Exhibit A is a copy of the CDM Smith report, dated October 3, 2013, which contains the more accurate and detailed data. The conclusion reached in the CDM Smith report is that the CFWI analysis projected Sanford's population in 2010 to be 58,225 (see Table A-1 and A-9 of Appendix A), whereas the more accurate and recent data shows Sanford's 2010 population to be 50,186. This lower population increases the per capita water use from 122 gpd to 137 gpd. Interestingly, Sanford's projected population in 2035 in the CDM Smith report is within 0.5% of the CFWI projection (CFWI – 71,318 vs. Sanford – 71,710), so there is no significant difference in the projected population for 2035. However, with a per capita water use of 137 gpd the projected water demand for Sanford in 2035 is 10.41 mgd as opposed to the CFWI projection of 8.70 mgd (an increase of 1.71 mgd or 19.7%). It is our opinion that correcting the projected 2035 water demand for Sanford does not affect the projections for any other public water system. This increase of 1.71 mgd would increase the projected water use in Seminole County and the CFWI planning area in 2035 by 1.71 mgd.

We want to make two significant points. First, it is important to note that Sanford's projected population in 2035 represents a build out of Sanford as it currently exists and there is agreement with the draft CFWI Regional Water Supply Plan as to what the ultimate population of Sanford will be. In our opinion and based on current development activities, it is very reasonable to expect Sanford to be built out before or by 2035. Secondly, the only differences that we have with the methodologies used and results in the draft CFWI Regional Water Supply Plan are in determining: (1) the correct population in Sanford in 2010, which is 50,186 as opposed to the CFWI projection of 58,225; (2) the per capita water use, which is directly related to the 2010 population; (3) Sanford's projected water use from 2010 to 2035; and (4) the correct numbers or figures in the tables and results that come about because of the foregoing. As discussed above, because the more accurate projection of Sanford's 2010 population is less than the CFWI's projection (50,186 vs. 58,225), Sanford's per capita water use increases from 122 gpd to 137 gpd. With this increase in per capita water use, Sanford's projected water use through 2035 should be 10.41 mgd, rather than 8.70 mgd.

We are respectfully submitting the CDM Smith report (Exhibit A) and requesting that its more accurate data and projections be utilized, rather than the projections by CFWI. More specifically, we know that the following pages of the draft CFWI Regional Water Supply Plan need to be revised to be consistent with Table 4 and 5 of the CDM Smith report:

1. Tables 1 and 2 in Chapter 2 on pages 16 and 17;
2. Appendix A, Table A-1, pages A-12 and A-13;
3. Appendix A, Table A-9, pages A-27 and A-28.
4. Appendix A, Table A-16, pages A-44 and A-45.

Please note that we have attached as Exhibit B copies of all of the above listed pages in Appendix A of the CFWI Draft Plan. On each of these pages we have corrected the columns, with handwritten figures that are identical to the figures contained in the CDM Smith report. Also, please note that there are some columns that we have deleted the numbers and have not inserted new numbers. We are unclear as to how CFWI determined these numbers, so we did not attempt to calculate the new numbers.

Tom Bartol
Page Five
February 18, 2014

There may be other tables and figures in the draft CFWI Regional Water Supply Plan that we have overlooked and if this is so, please revise all the other tables, figures and commentary to be consistent with the CDM Smith report.

We appreciate the opportunity to comment on the draft CFWI Regional Water Supply Plan and should you have any questions or care to discuss our comments and recommendations, please call.

Sincerely,

Jake

Jacob D. Varn

CDM Smith

Memorandum

To: *Bill Marcous, City of Sanford*

From: *Lee Wiseman, P.E., BCEE*

Date: *10/3/2013*

Subject: *Projected Water Use Estimates for Current Undeveloped Parcels in City of Sanford Water Service Area*

The City of Sanford requested that CDM Smith assist the utility department with preparing water use estimates for currently undeveloped City and Seminole County properties within their potable water service area. Estimation of build-out water demand using future land use data, utility connection data, historic water use data, detailed utility specific per capita use data and accurate population data is a more accurate method for projecting water demand than traditional methodologies such as population projections times current per capita water use alone; particularly when growth rates are uncertain and other variables affect a utility's consumption such as tourism and drought. The City provided the following data in support of this evaluation using land use data, historic water use and per capita use data, population data, and connection data:

- Total water use for the period 2007 through 2011 for the City of Sanford (see **Figure 1**)
- Residential and commercial water use data for the period 2007 through 2011 for the City of Sanford (see Figure 1)
- The total number of water connections for the period 2007 through 2011 for the City of Sanford (**Figure 2**)
- Conserve Florida Water Clearinghouse (CFWC) population, water use and per capita use data for the City of Sanford for 2010 (**Figure 3**)
- An inventory of the developments currently under construction, developments approved for construction, and developments pending approval and permitting (**Table 1**).
- An inventory of the undeveloped City and County properties within the City's Water Service Area by zoning classification, type of proposed development, associated land area, and minimum parcel size (see **Tables 2** and **3**, respectively).
- Central Florida Water Initiative (CFWI) population and demand data for the City of Sanford.

In the near-term (2013-2014), there are numerous developments planned with the City of Sanford as indicated in Table 1. From Tables 2 and 3, there are approximately 987 acres of undeveloped

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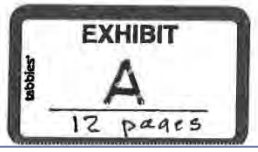

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City properties and 298 acres of undeveloped County properties within the City of Sanford Water Service Area, primarily located on the east side of the City near the Greenway (SR 417) interchange with the Wekiva Parkway and the Sanford International Airport. The total area of undeveloped properties in the City of Sanford Water Service Area is 1,285 acres. A confluence of transportation networks including Amtrak, SunRail, Interstate 4 as well as the Sanford International Airport and the SR 417 interchange with the Wekiva Parkway occurs within the City of Sanford and as such the City is expected to experience significant growth over the next 20 to 25 years.

Approach to Developing Water Use Estimates

Due to numerous concerns with the existing population models used by SJRWMD, the City of Sanford started the water use estimation process independently of District methodology. The process was initiated using the Conserve Florida Water Clearinghouse 2010 population for the City of Sanford of 50,186.

Conserve Florida was established to provide information and tools to improve water conservation through the development of utility-specific, goal-based water conservation programs. Through this effort, a water conservation Clearinghouse was established. A web-based conservation planning and reporting software application known as the "Guide" was also developed. The Department of Environmental Engineering Sciences at the University of Florida was selected to promote improved water conservation by hosting the Clearinghouse and associated online resources, such as the Guide. FDEP, the five Florida water management districts, Florida Section of the American Water Works Association, Florida Water Environment Association, the Florida Public Services Commission and the Florida Rural Water Association are all contributors to the CFWC. The City of Sanford provides water system data and funding to the University of Florida CFWC program to evaluate water use patterns, water conservation programs and goals for their utility.

As indicated in Table 3, there are 3,559 residential units/lots planned in the near-term within the City of Sanford water service area. Using a conversion factor of 2.72 persons per residential unit (Doty & Associates, April 28, 2013) multiplied by 3,559 residential units results in a population increase of 9,681 additional residents by 2015 and a population of 59,867. From Tables 1 and 2, there are 3,611 undeveloped City residential units and 743 undeveloped County residential units for a total of 4,354 undeveloped residential units that will be developed by 2035. Using the same 2.72 conversion factor adds 11,843 customers to the City of Sanford's water service area between 2015 and 2035. If the increase in population from 2010 to 2035 (9,681+11,843 = 21,524) is added to the 2010 population of 50,186 the 2035 population with the City's water service area will be 71,710. This is very close to the 2035 CFWI population estimate for the City of Sanford of 71,318 (+0.5%). For the purposes of this evaluation, the 2035 CFWI population (71,318) will be used for the build-out condition in 2035. Table 4 presents the population projection within the City of Sanford water service area between 2010 and 2035 in 5 year increments.

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Table 4. Population Estimates for the City of Sanford Water Service Area

Year	Population	Population Increase	Comment
2010	50,186	-	From CFWC
2015	59,867	9,681	From 3,559 new residential units constructed between 2010 and 2015, as described above
2020	62,730	12,544	Linear interpolation between 2015 and 2035 population estimates. Linear interpolation of demand between 2015 and 2035. Approximately 2,863 people for each 5 year increment.
2025	65,592	15,406	
2030	68,455	18,269	
2035	71,318	21,132	From CFWI

Water Use Estimates

From Figure 1, the annual average daily demand for the City of Sanford Potable Water Service Area for the period of 2007 through 2011 is 7.1 mgd and includes high and low growth years. There has been a steady decline in demand over this time period while the number of connections has increased (see **Figure 4**). Water conservation had a positive impact on reducing demand but there has been a reduction in occupancy rates due to the downturn in the U.S. and state economy of this time. For this reason, the 2007 demand (7.51 mgd) was used as the baseline demand for adding future water demands. The 7.51 mgd demand is higher than 2010 actual use of 6.87 mgd, but is believed to be representative of stabilized occupancy for existing housing and business infrastructure that occurred in 2007. The population increases for each 5 year planning period between 2010 and 2035 are multiplied by the 2010 CFWC per capita use of 137 gallons per capita per day (gpcd) to estimate demand. This per capita use estimate is believed to be reliable and reflective of recent water conservation measures that have implemented by the City of Sanford. **Table 5** shows the resulting demand projection compared to the City's existing CUP allocation and the CFWI demand estimates for the City of Sanford.

When the water use estimates for the undeveloped properties are added to the existing baseline flows, future demand is estimated to increase to 10.4 mgd, which will exceed the City's water supply allocation of 9.58 mgd sometime after 2025. Additionally, these revised water demand estimates are higher than the 2025 (8.46 mgd), 2030 (8.64 mgd) and 2035 (8.70 mgd) demand estimates developed by the Water Management Districts for the City of Sanford as part of the Central Florida Water Initiative program.

The vacant City and County parcels with the City of Sanford water service area are primarily in the east side of the City in the vicinity of the Sanford International Airport and the SR 417 and Wekiva Parkway interchange. This area is expected to be a relatively high growth area. . In the past couple of years, the City has experienced much redevelopment and new development both of which are occurring at a higher density than its historical growth. Since this factor wasn't utilized in these projections, these projections are very conservative.

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Table 5. City of Sanford Water Demand Estimates compared to Existing CUP Allocation and CFWI Demand Estimates

Year	CUP Allocation (mgd)	CFWI Projection (mgd)	Sanford Projection (mgd)	Comments
2010	9.58	7.25	7.51	Higher than 2010 actual use of 6.87 mgd, but representative of stabilized occupancy for existing housing and businesses that occurred in 2007.
2015	9.58	7.47	8.70	8,700 add. people x 137 gpcd = 1.19 mgd
2020	9.58	8.23	9.13	Linear interpolation of demand between 2015 and 2035. Approximately 0.43 mgd for each 5 year increment.
2025	9.58	8.46	9.56	
2030	PE	8.64	10.0	
2035	PE	8.70	10.41	21,132 add. people x 137 gpcd = 2.90 mgd

PE = Permit Expiration - existing CUP allocation expires on February 8, 2026

As shown graphically on **Figure 5** and in Table 5, the water demand projections using the demand analysis presented in this memo represent higher demands than projected by the CFWI. The demand projections are higher than for most growth corridors in central Florida and are more representative of conditions prior to the downturn to the U.S. economy. However, this part of Sanford is a transportation hub and is different than most other growth corridors. The difference between the CFWI projection and the City's projection is because of the CFWI's projected population of Sanford in 2010 of 58,225, when a more accurate population count was 50,186, which is the amount determined by CFWC. The smaller population results in a per capita usage of 137 gpcd for the City of Sanford, rather than 122 gpcd used by CFWI. Again, the per capita use estimate by CFWC is believed to be reliable because it is based on more detailed data from the City as described above as well as data provided by SJRWMD.

cc: Barika Poole

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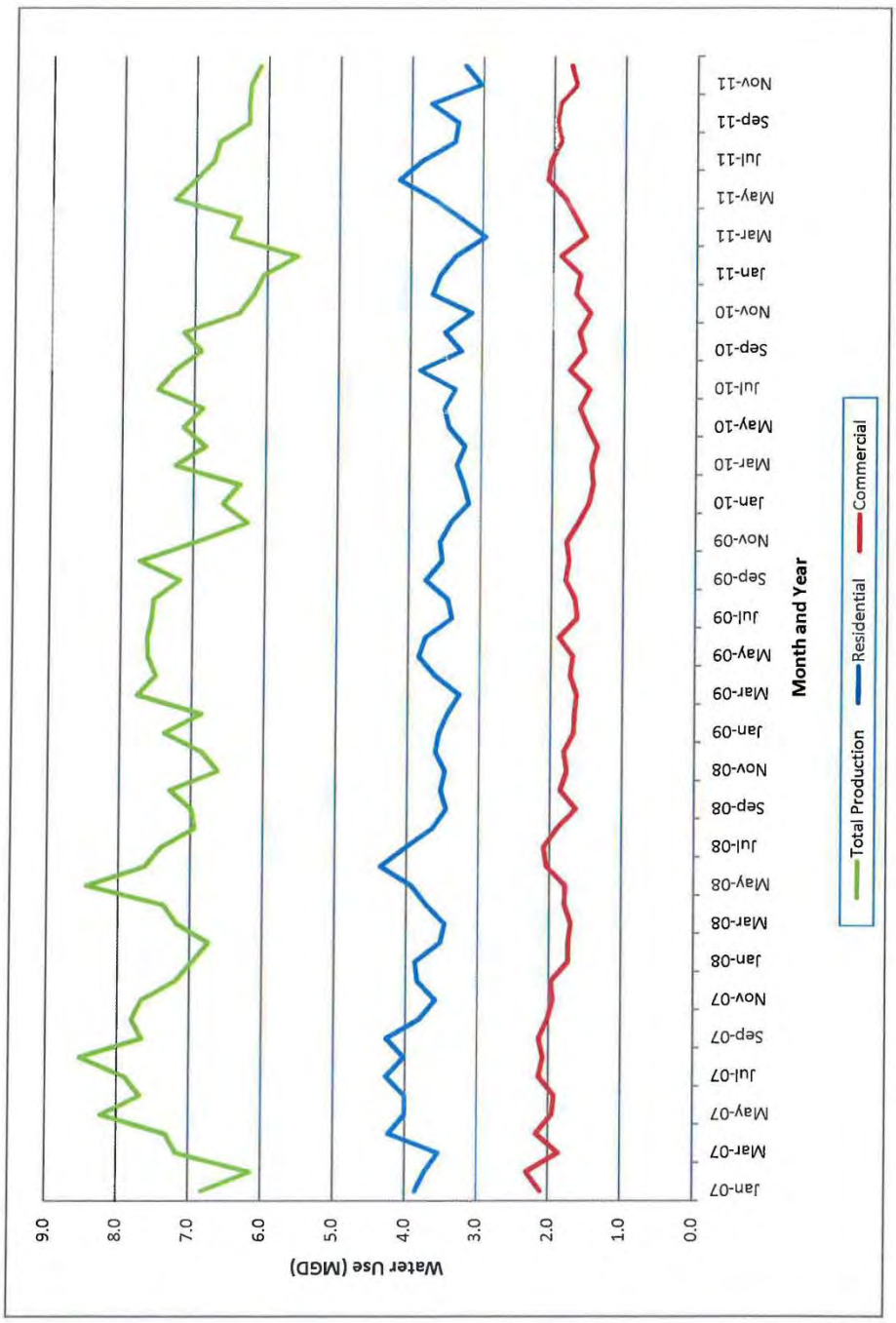

Figure 1
Sanford Total Water Use, 2007 - 2011

CDM Smith

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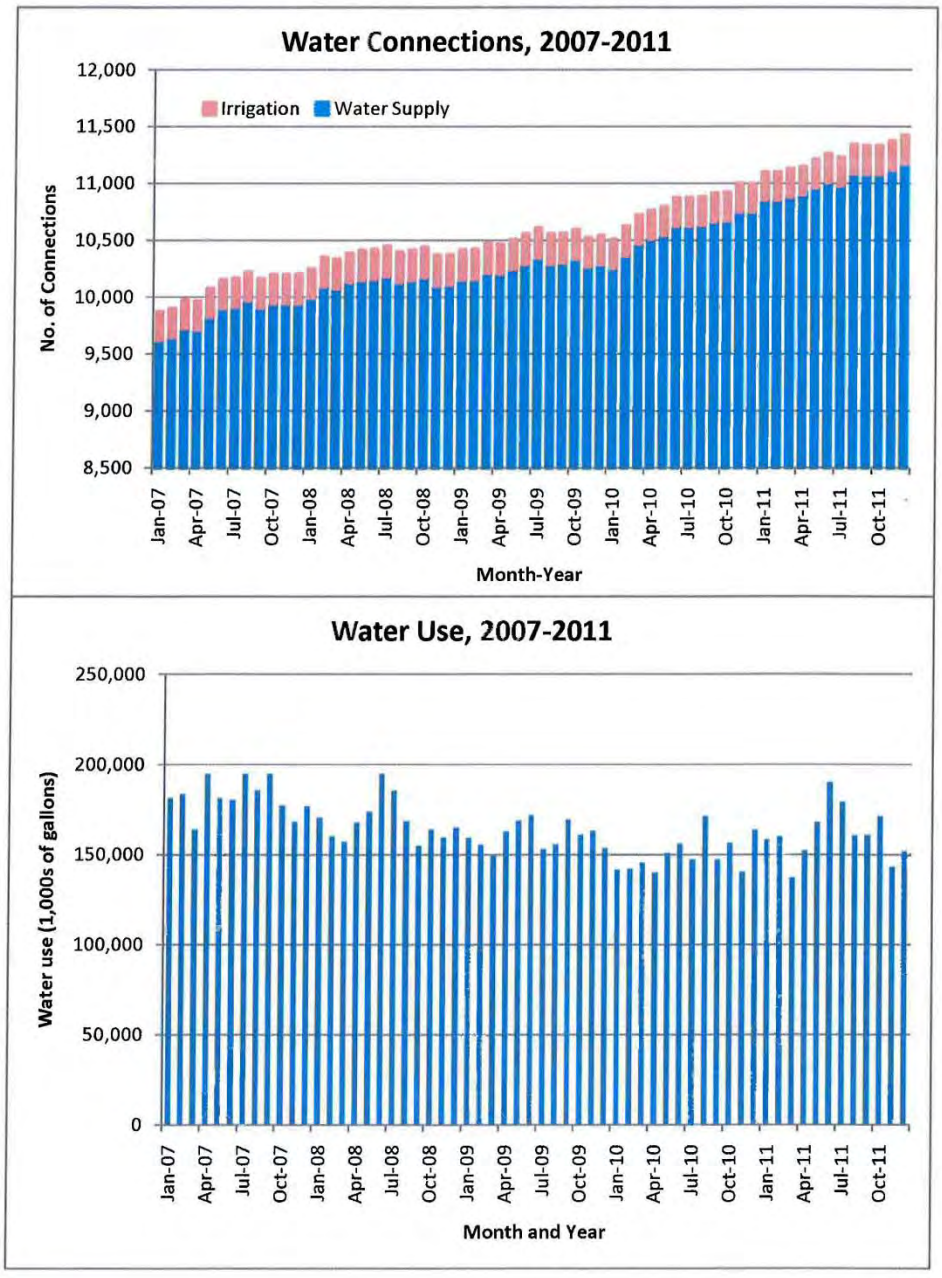
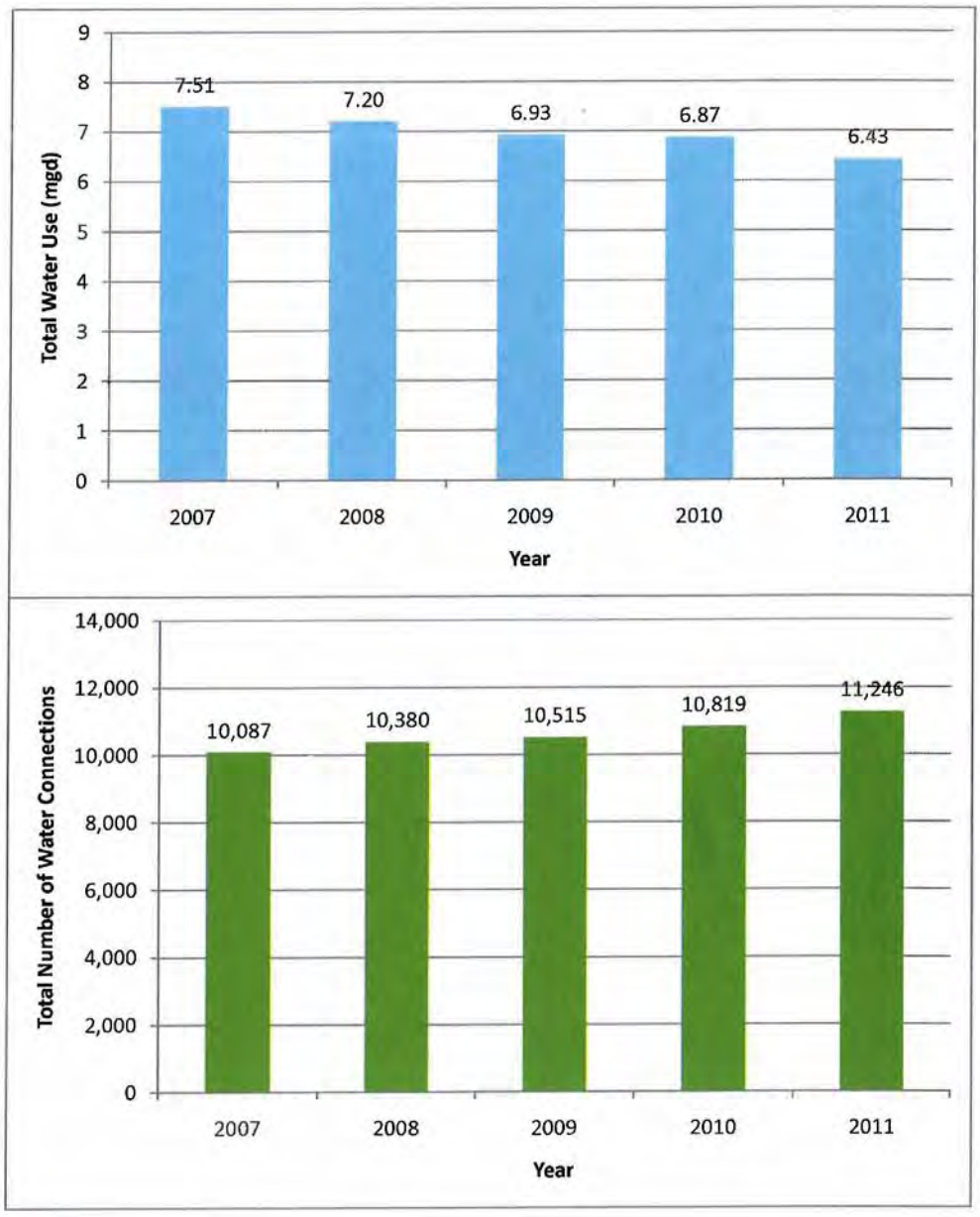


Figure 2
Monthly Water Use and Numbers of Connections for the City of Sanford

Figure 3
Conserve Florida Clearinghouse Evaluation
of 2010 City of Sanford Water Use



CDM Smith

Figure 4
Average Annual Water Use and Number of Connections, 2007-2011

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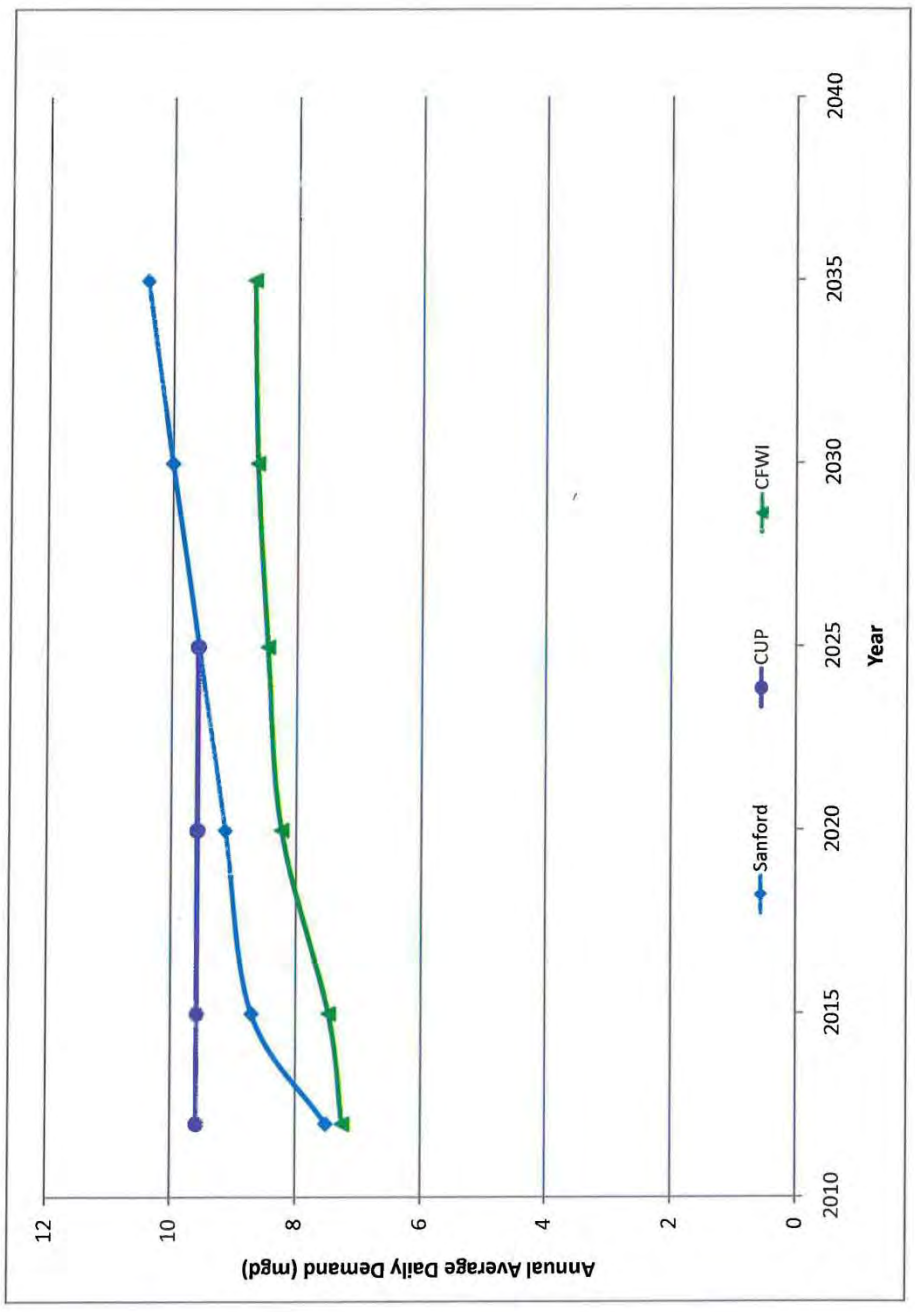


Figure 5
Comparison Between the City of Sanford's Water Demand Estimates, CFWI Estimates and the City's Existing CUP Allocation

Table 1. Near-Term Developments Planned within the City of Sanford Water Service Area

Project Name	No. of Units or Square Footage
Major Development Projects Currently under Construction	
Lockhart Subdivision	600+ units
Southgate	
apartments	360 units
Longhorn, Carrabba's, Cheddars, Buffalo Wild Wings and other retail space)	unknown
Windsor Lake Townhomes	318 units
Solara Apartments	272 units
Treviso Townhomes	200 units
Riverview Townhomes	195 units
Reserve at Loch Lake	113 units
Reel Tyme Marketing	40,000 SF
Army Reserve Center	36,736 SF
Bub Warehouse, Phase 2	35,900 SF
Sovran Self Storage	29,400 SF
Projects Approved for Construction	
Brisson East	246 lots
Brisson West	375 lots
Riverscape Towers	810 units
Ridgewood Townhomes	70 units
Lake Monroe Commerce Center	unknown
Rand Yard Commerce Center	unknown
Twin Lakes Center	unknown
Hotel Resort CR 46A PD	unknown
New Life Church	unknown
Developments Pending Approval and Permitting	
Town Center at White Cedar (aka Cedar Pointe)	unknown
Silver Lake Park	unknown
Silver Lake PD	unknown
Total Number of units/lots	**3,559**

CDM Smith

Vacant Parcels10.xlsx / Table 1

JV

Table 2. Undeveloped City Properties in the City of Sanford Water Service Area

City Zoning Classification	Min. Parcel Area	Land Area (acres)	% of Total	Yield	Land Use Description
AG	1 acre	12.2	1.2	12 Units	Agriculture
GC2	10,000 sf Lots	166.9	16.9	727 Commercial Units	General Commercial
MI2	10,000 sf Lots	82.6	8.4	360 Industrial Units	Medium Industrial
MR2	15 D.U./acre	76.8	7.8	1,152 Multi-fam. Units	Multifamily Residential 15 D.U./ac
MR3	20 D.U./acre	72.5	7.3	1,450 Multi-fam. Units	Multifamily Residential 20 D.U./ac
PD	Varies	306.8	31.1		Planned Development
RCI	10,000 sf Lots	14	1.4	61 Commercial Units	Restricted Commercial
RI1	10,000 sf Lots	71.3	7.2	310 Industrial Units	Restricted Industrial
RMOI	10,000 sf Lots	76.2	7.7	332 Lots	Multifamily Residential-Office-Institutional
SC3	None	9.8	1.0		Special Commercial
SR1	6,000 sf Lots	71.5	7.2	519 Single-fam. Units	Medium Density Single Family Residential
SR1A	7,500 sf Lots	20.4	2.1	118 Single-fam. Units	Low Density Single Family Residential
SR1AA	10,000 sf Lots	6.5	0.7	28 Single-fam. Units	Low Density Single Family Residential
	Total	**987.5**	**100.0**		

Undeveloped residential properties = 3,611 units

CDM Smith

Vacant Parcels10.xlsx / Table 2

JV

Table 3. Undeveloped County Properties in the City of Sanford Water Service Area

County Zoning Classification	Min. Parcel Area	Land Area (acres)	% of Total	Yield	Land Use Description
A1	1 acre	79.7	26.7	79 Single family homes	Agriculture
C1	10,000 sf Lots	10.3	3.4	44 Commercial Units	Retail Commercial
C2	10,000 sf Lots	37.8	12.7	164 Commercial Units	Retail Commercial
C3	10,000 sf Lots	11.2	3.7	48 Commercial Units	General Commercial & Wholesale
CN	10,000 sf Lots	4.2	1.4	18 Commercial Units	Restricted Neighborhood Commercial
CS	10,000 sf Lots	0.5	0.2	2 Commercial Units	Convenience Commercial
M1	10,000 sf Lots	14.3	4.8	62 Industrial lots	Medium Industrial
PCD	10,000 sf Lots	6.3	2.1	27 lots	Planned Commercial Development
PUD	10,000 sf Lots	9.4	3.2	41 lots	Planned Unit Development
R1	8,400 sf Lots	57.7	19.4	299 Single family lots	Single Family Dwelling
R1A	9,000 sf Lots	33.7	11.3	163 Single family lots	Single Family Dwelling
R1AA	11,700 sf Lots	25.4	8.5	94 Single family lots	Single Family Dwelling
R1AAAA	21,780 sf Lots	0.5	0.2	1 Single family lot	Single Family Dwelling
R2	9,000 sf Lots	6.3	2.1	30 Single family lots	One & Two Family Dwelling
R3	13 D.U./acre	0.7	0.2	8 Multi-family units	Multiple Family Dwelling 13 D.U./ac
RAH		0.1	0.0	1 dwelling unit	Affordable Housing
	Total	**298.0**	100.0		

Undeveloped residential properties = 743 units

CDM Smith

Vacant Parcels10.xlsx / Table 3

2

CFWI RWSP Public Draft

Table A-1. Continued.

Utility	Population Projections [1]						Demand Projections (5-in-10) (mgd)						GPCD Used [4]	2035 [5] 1-in-10 Demand (mgd)
	2010 [1]	2015	2020	2025	2030	2035	2010 [1]	2015	2020	2025	2030	2035		
Polk County (SFWMD & SWFWMD) continued														
City of Auburndale (WUP 7119) - SWFWMD	32,014	33,507	35,388	37,614	39,535	41,472	5.79	6.06	6.41	6.81	7.16	7.51	181	7.96
CHCVII Lake Henry MHP (WUP 7187) - SWFWMD	1,086	1,124	1,169	1,214	1,258	1,260	0.22	0.23	0.24	0.25	0.26	0.26	204	0.28
Aqua Utilities Florida, Inc. - Lake Gibson (WUP 7878) - SWFWMD	1,828	1,857	1,889	1,913	1,933	1,953	0.22	0.23	0.23	0.23	0.24	0.24	122	0.25
Polk County Utilities - ERSA (WUP 8054) [4] - SWFWMD	5,863	8,037	10,187	12,349	14,497	16,597	0.53	0.72	0.92	1.11	1.30	1.49	90	1.58
CHCIII Swift Village MHP (WUP 8344) - SWFWMD	900	900	900	900	900	900	0.13	0.13	0.13	0.13	0.13	0.13	144	0.14
City of Polk City (WUP 8468) - SWFWMD	7,177	7,676	8,305	9,024	9,791	10,577	0.66	0.71	0.76	0.83	0.90	0.97	92	1.03
City of Haines City (WUP 8522) - SWFWMD	26,207	29,462	32,952	36,624	40,314	43,153	3.98	4.48	5.01	5.57	6.13	6.56	152	6.95
Utilities, Inc - Cypress Lakes Utilities Inc. (WUP 13043) - SWFWMD	2,731	2,753	2,782	2,820	2,863	2,910	0.14	0.14	0.14	0.14	0.15	0.15	51	0.16
River Ranch (SFWMD)	1,433	1,433	1,433	1,433	1,433	1,433	0.11	0.11	0.11	0.11	0.11	0.11	70	0.12
Toho Water Authority (Poinciana) (SFWMD)	12,397	14,591	16,786	18,980	21,175	23,370	2.33	2.74	3.16	3.57	3.98	4.40	188	4.66
Total CFWI Planning Area Polk County	**547,344**	**592,082**	**644,124**	**695,952**	**744,727**	**789,760**	**80.65**	**87.20**	**94.75**	**102.24**	**109.28**	**115.71**	**NA**	**122.65**
Seminole County (SJRWMD)														
Sanlando Utilities Corp. (CUP 160)	33,507	34,445	35,268	35,455	36,699	37,176	10.49	10.78	11.04	11.10	11.49	11.64	313	12.34
City of Sanford (CUP 162)	~~58,225~~	~~66,230~~	~~67,456~~	~~66,352~~	~~70,815~~	71,318	~~7.16~~	~~7.47~~	~~8.23~~	~~8.46~~	~~8.64~~	~~8.70~~	~~332~~	~~9.32~~
Seminole County Environmental Services (CUPs 3766, 3769, 8213, 8356, 8359, 8361, 50281, 95581)	121,978	129,370	136,757	142,569	143,481	147,828	20.25	21.48	22.70	23.67	23.82	24.54	166	26.01

50,186 → 59,867 → 67,730 → 65,592 → 68,455 → 71,318 → 7.51 → 8.70 → 9.13 → 9.92 → 10.00 → 10.41 → 137

EXHIBIT B 6 pages

JV

Table A-1. Continued.

Utility	Population Projections[1]						Demand Projections (5-in-10) (mgd)						GPCD Used[4]	2035[5] 1-in-10 Demand (mgd)
	2010[1]	2015	2020	2025	2030	2035	2010[1]	2015	2020	2025	2030	2035		
Seminole County (SJRWMD) Continued														
City of Winter Springs (8238)	33,776	35,313	36,623	40,988	42,230	42,678	3.88	4.06	4.21	4.71	4.86	4.91	115	5.20
City of Oviedo (CUP 8252)	32,224	34,493	36,790	37,544	38,584	38,981	3.77	4.04	4.30	4.39	4.51	4.56	117	4.83
Palm Valley Manufactured Home Community (CUP 8266)	1,062	1,104	1,123	1,123	1,123	1,123	0.04	0.05	0.05	0.05	0.05	0.05	42	0.05
Mullet Lake Water Association Inc (CUP 8271)	692	709	791	1,498	2,022	2,213	0.05	0.05	0.06	0.12	0.16	0.17	77	0.18
City of Longwood (CUP 8274)	13,755	15,302	16,574	16,705	18,559	19,264	2.13	2.37	2.57	2.59	2.88	2.99	155	3.17
City of Lake Mary (CUP 8282)	14,548	15,350	16,180	18,125	18,491	18,624	3.49	3.68	3.88	4.35	4.44	4.47	240	4.74
City of Casselberry (CUP 8284)	45,457	46,793	48,024	48,168	49,324	49,758	4.45	4.59	4.71	4.72	4.83	4.88	98	5.17
Utilities Inc. of Florida (CUP 8345)	477	486	496	498	513	519	0.06	0.06	0.06	0.06	0.07	0.07	128	0.07
Utilities Inc. of Florida (CUP 8346)	3,200	3,252	3,299	3,307	3,409	3,447	0.30	0.30	0.31	0.31	0.32	0.32	93	0.34
Utilities Inc. of Florida (CUP 8352)	835	842	890	897	936	951	0.08	0.08	0.08	0.08	0.09	0.09	91	0.10
Aqua Utilities of Florida, Inc. (CUP 8362)	4,155	4,587	5,153	5,265	5,315	5,332	0.66	0.73	0.82	0.84	0.85	0.85	160	0.90
City of Altamonte Springs (CUP 8372)	46,896	49,170	51,692	52,064	53,569	54,121	5.02	5.26	5.53	5.57	5.73	5.79	107	6.14
Total CFWI Planning Area Seminole County	~~440,767~~	~~452,451~~	~~457,516~~	~~473,556~~	~~485,070~~	493,333	~~65.77~~	~~65.00~~	68.55	71.02	72.74	~~74.03~~	NA	~~78.46~~
Total CFWI Planning Area All Counties	~~2,591,101~~	~~2,846,407~~	~~3,134,739~~	~~3,408,327~~	~~3,687,729~~	3,906,225	~~435.15~~	~~476.36~~	524.56	~~571.39~~	~~614.88~~	~~653.27~~	NA	~~682.47~~

Source: Population projections - Doty 2009a, 2009b, 2011; Smith 2011 for BEBR Demand projections - WDPS 1998 a, b

Table A-9 Continued

Utility	Population Projections[1]					Demand Projections (5-in-10) (mgd)					GPCD Used[2]	2035[3] 1-in-10 Demand (mgd)
	2010[1]	2015	2020	2025	2030	2035	2010[1]	2015	2020	2025	2030	2035		
Polk County (SFWMD & SWFWMD) continued														
City of Auburndale (WUP 7119) - SWFWMD	32,014	35,007	38,354	42,279	46,113	50,223	5.79	6.34	6.94	7.65	8.35	9.09	181	9.64
CHCVII Lake Henry MHP (WUP 7187) - SWFWMD	1,086	1,174	1,260	1,260	1,260	1,260	0.22	0.24	0.26	0.26	0.26	0.26	204	0.28
Aqua Utilities Florida, Inc. - Lake Gibson (WUP 7878) - SWFWMD	1,828	1,939	1,966	1,966	1,966	1,966	0.22	0.24	0.24	0.24	0.24	0.24	122	0.25
Polk County Utilities - ERSA (WUP 8054) [4] - SWFWMD	5,863	8,397	11,042	13,882	16,910	20,098	0.53	0.76	0.99	1.25	1.52	1.81	90	1.92
CHCIII Swift Village MHP (WUP 8344) - SWFWMD	900	900	900	900	900	900	0.13	0.13	0.13	0.13	0.13	0.13	144	0.14
City of Polk City (WUP 8468) - SWFWMD	7,177	8,019	8,999	10,145	11,418	12,811	0.66	0.74	0.83	0.93	1.05	1.18	92	1.25
City of Haines City (WUP 8522) - SWFWMD	26,207	30,781	35,715	41,165	47,030	52,258	3.98	4.68	5.43	6.26	7.15	7.94	152	8.42
Utilities, Inc - Cypress Lakes Utilities Inc. (WUP 13043) - SWFWMD	2,731	2,876	3,015	3,174	3,346	3,524	0.14	0.15	0.15	0.16	0.17	0.18	51	0.19
River Ranch (SFWMD)	1,433	1,433	1,433	1,433	1,433	1,433	0.10	0.10	0.10	0.10	0.10	0.10	70	0.11
Toho Water Authority (Poinciana) (SFWMD)	12,397	15,244	18,191	21,337	24,705	28,304	2.33	2.87	3.42	4.01	4.64	5.32	188	5.64
Total CFWI Planning Area Polk County	547,344	618,234	697,256	780,828	866,544	950,510	80.66	91.11	102.62	114.73	127.12	139.32	NA	147.68
Seminole County (SJRWMD)														
Sanlando Utilities Corp. (CUP 160)	33,507	35,923	37,343	37,343	37,343	37,343	10.49	11.24	11.69	11.69	11.69	11.69	313	12.39
City of Sanford (CUP 162)	~~58,725~~	~~63,851~~	~~71,641~~	~~71,641~~	~~71,641~~	~~71,641~~	~~7.10~~	~~7.39~~	~~8.74~~	~~8.74~~	~~8.74~~	~~8.74~~	~~122~~	~~9.36~~
Seminole County Environmental Services (CUPs 3766, 3769, 8213, 8356, 8359, 8361, 50281, 95581)	121,978	134,919	148,051	148,485	148,485	148,485	20.25	22.40	24.58	24.65	24.65	24.65	166	26.13

Table A-9 Continued

Utility	Population Projections[1]						Demand Projections (5-in-10) (mgd)						GPCD Used[2]	2035[3] 1-in-10 Demand (mgd)
	2010[1]	2015	2020	2025	2030	2035	2010[1]	2015	2020	2025	2030	2035		
Seminole County (SJRWMD) Continued														
City of Winter Springs (8238)	33,776	36,828	39,649	42,870	42,870	42,870	3.88	4.24	4.56	4.93	4.93	4.93	115	5.23
City of Oviedo (CUP 8252)	32,224	35,973	39,158	39,158	39,158	39,158	3.77	4.21	4.58	4.58	4.58	4.58	117	4.85
Palm Valley Manufactured Home Community (CUP 8266)	1,062	1,152	1,128	1,128	1,128	1,128	0.04	0.05	0.05	0.05	0.05	0.05	42	0.05
Mullet Lake Water Association Inc (CUP 8271)	692	740	857	1,682	2,222	2,222	0.05	0.06	0.07	0.13	0.17	0.17	77	0.18
City of Longwood (CUP 8274)	13,755	15,959	17,943	18,755	19,350	19,350	2.13	2.47	2.78	2.91	3.00	3.00	155	3.18
City of Lake Mary (CUP 8282)	14,548	16,009	17,518	18,707	18,707	18,707	3.49	3.84	4.20	4.49	4.49	4.49	240	4.76
City of Casselberry (CUP 8284)	45,457	48,800	49,979	49,979	49,979	49,979	4.45	4.78	4.90	4.90	4.90	4.90	98	5.19
Utilities Inc. of Florida (CUP 8345)	477	507	521	521	521	521	0.06	0.06	0.07	0.07	0.07	0.07	128	0.07
Utilities Inc. of Florida (CUP 8346)	3,200	3,391	3,461	3,461	3,461	3,461	0.30	0.32	0.32	0.32	0.32	0.32	93	0.34
Utilities Inc. of Florida (CUP 8352)	835	878	955	955	955	955	0.08	0.08	0.09	0.09	0.09	0.09	91	0.10
Aqua Utilities of Florida, Inc. (CUP 8362)	4,155	4,784	5,355	5,355	5,355	5,355	0.66	0.77	0.86	0.86	0.86	0.86	160	0.91
City of Altamonte Springs (CUP 8372)	46,896	51,279	54,365	54,365	54,365	54,365	5.02	5.49	5.82	5.82	5.82	5.82	107	6.17
Total CFWI Planning Area Seminole County	~~410,787~~	~~451,003~~	~~487,924~~	~~494,105~~	~~495,548~~	~~495,548~~	~~61.77~~	~~67.88~~	~~73.31~~	~~74.23~~	~~74.36~~	~~74.36~~	NA	~~78.81~~
Total CFWI Planning Area All Counties	~~2,591,101~~	~~2,969,029~~	~~3,382,043~~	~~3,772,650~~	~~4,127,322~~	~~4,477,656~~	~~435.15~~	~~496.64~~	~~565.61~~	~~631.57~~	~~688.96~~	~~745.76~~	NA	~~790.49~~

Table A-16. Continued

Utility	BEBR Medium - 2035			BEBR High - 2035			Difference from BEBR Medium			Percent Difference from BEBR Medium		
	Population Projections	Demand Projections (mgd)	1-in-10 Demand (mgd)	Population Projections	Demand Projections (mgd)	1-in-10 Demand (mgd)	Population Projections	Demand Projections (mgd)	1-in-10 Demand (mgd)	Population Projections	Demand Projections	1-in-10 Demand
Seminole County (SJRWMD)												
Sanlando Utilities Corp. (CUP 160)	37,176	11.64	12.34	37,343	11.69	12.39	167	0.05	0.05	0.45%	0.43%	0.41%
City of Sanford (CUP 162)	71,318	~~8.70~~	~~9.32~~	71,641	~~8.74~~	~~9.26~~	323	~~0.04~~	~~0.04~~	0.45%	~~0.46%~~	~~0.43%~~
Seminole County Environmental Services (CUPs 3766, 3769, 8213, 8356, 8359, 8361, 50281, 95581)	147,828	24.54	26.01	148,485	24.65	26.13	657	0.11	0.12	0.44%	0.45%	0.46%
City of Winter Springs (8238)	42,678	4.91	5.20	42,870	4.93	5.23	192	0.02	0.03	0.45%	0.41%	0.58%
City of Oviedo (CUP 8252)	38,981	4.56	4.83	39,158	4.58	4.85	177	0.02	0.02	0.45%	0.44%	0.41%
Palm Valley Manufactured Home Community (CUP 8266)	1,123	0.05	0.05	1,128	0.05	0.05	5	0.00	0.00	0.45%	0.00%	0.00%
Mullet Lake Water Association Inc (CUP 8271)	2,213	0.17	0.18	2,222	0.17	0.18	9	0.00	0.00	0.41%	0.00%	0.00%
City of Longwood (CUP 8274)	19,264	2.99	3.17	19,350	3.00	3.18	86	0.01	0.01	0.45%	0.33%	0.32%
City of Lake Mary (CUP 8282)	18,624	4.47	4.74	18,707	4.49	4.76	83	0.02	0.02	0.45%	0.45%	0.42%
City of Casselberry (CUP 8284)	49,758	4.88	5.17	49,979	4.90	5.19	221	0.02	0.02	0.44%	0.41%	0.39%
Utilities Inc. of Florida (CUP 8345)	519	0.07	0.07	521	0.07	0.07	2	0.00	0.00	0.39%	0.00%	0.00%

Table A-16. Continued

Utility	BEBR Medium - 2035			BEBR High - 2035			Difference from BEBR Medium			Percent Difference from BEBR Medium		
	Population Projections	Demand Projections (mgd)	1-in-10 Demand (mgd)	Population Projections	Demand Projections (mgd)	1-in-10 Demand (mgd)	Population Projections	Demand Projections (mgd)	1-in-10 Demand (mgd)	Population Projections	Demand Projections	1-in-10 Demand
Seminole County (SJRWMD) continued												
Utilities Inc. of Florida (CUP 8346)	3,447	0.32	0.34	3,461	0.32	0.34	14	0.00	0.00	0.41%	0.00%	0.00%
Utilities Inc. of Florida (CUP 8352)	951	0.09	0.10	955	0.09	0.10	4	0.00	0.00	0.42%	0.00%	0.00%
Aqua Utilities of Florida, Inc. (CUP 8362)	5,332	0.85	0.90	5,355	0.86	0.91	23	0.01	0.01	0.43%	1.18%	1.11%
City of Altamonte Springs (CUP 8372)	54,121	5.79	6.14	54,365	5.82	6.17	244	0.03	0.03	0.45%	0.52%	0.49%
Total CFWI Planning Area Seminole County	493,333	~~71.93~~	~~78.05~~	495,540	~~74.36~~	~~78.81~~	2,207	~~0.32~~	~~0.35~~	0.45%	~~0.45%~~	~~0.45%~~
Total CFWI Planning Area All Counties	3,906,225	~~652.27~~	~~692.47~~	4,477,656	~~745.76~~	~~790.49~~	571,431	~~92.49~~	~~98.02~~	14.63%	~~14.16%~~	~~14.15%~~

2

CFWI RWSP Team Response *- The Districts agree that conservation is an important element in meeting future water demands. It should be clarified that for planning purposes, all Districts use a gross per capita average. The 150 per capita goal referenced above, is a compliance per capita used by SWFWMD for CUP purposes only. Additional information regarding the compliance per capita can be found at the SWFWMD's website.*

Viable conservation methods will be evaluated by the CFWI Solutions Planning Team. In addition, the CFWI Solutions Planning Team will develop alternatives to meet the water demands by optimizing the use of existing groundwater, and by identifying other management strategies, viable alternative and nontraditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

Thank you providing the historic data. The historic population and associated five-year per capita will be updated as requested (to reflect a gross per capita of 137) and as a result, the associated demand projections will be updated in the CFWI RWSP and associated Appendices.

Shannon A. Estenoz, Director, Office of Everglades Restoration Initiatives, U.S. Department of the Interior (02/19/14)

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

February 19, 2014

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Re: CFWI Regional Water Supply Plan

Dear Mr. Bartol:

The United States Department of the Interior (Department) appreciates the opportunity to comment on the Central Florida Water Initiatives (CFWI) Regional Water Supply Plan. The Department has recently learned that the South Florida Water Management District's Kissimmee Basin Water Supply Plan has been divided into the Upper Kissimmee Basin and the Lower Kissimmee Basin Planning Areas, with the CFWI Regional Water Supply Plan as the water supply plan for the Upper Kissimmee Basin Planning Area. The Upper Kissimmee Basin Planning Area of the CFWI includes the Upper Chain of Lakes which feed into the Kissimmee River as well as a portion of the Kissimmee River and its floodplain. The Upper Chain of Lakes include Lake Hart, Lake Mary Jane, Lakes Myrtle, Joel, and Preston, East Lake Tohopekaliga, Lake Tohopekaliga, Cypress lake, Lake Hatchineha, Alligator Lake, Lake Gentry, and Lake Kissimmee.

There has been considerable public investment in restoration of the Kissimmee River. The Kissimmee River Restoration Project is an $800 Million restoration project to restore 40 square miles of Kissimmee River and Floodplain ecosystem, including almost 25,000 acres of wetlands and 40 miles of historic river channel. Additionally, the Headwater Revitalization Project, which has been combined with the Kissimmee River Restoration Project, involves modifications to Lakes Kissimmee, Hatchineha, Cypress, and Tiger in the Upper Kissimmee Basin to provide the volume of water to the river restoration project necessary to achieve project success. Inflows to the Kissimmee will mimic the historic condition. The secondary purpose is to improve the condition of approximately 7,000 acres of lake littoral wetlands. A greater area of littoral zones of Lakes Kissimmee, Cypress, and Hatchineha will be inundated, creating a greater coverage of littoral wetlands. More than 100,000 acres of land acquisition needed for Kissimmee River Restoration and Headwaters Revitalization is substantially completed. More than $300 million have already been expended by both the federal government and state of Florida. This restoration project is considered a tremendous success. The river and its floodplain have already improved in remarkable ways, surpassing at times the anticipated environmental response.

The Kissimmee Basin is home to many species of concern (see attached listing) including federal endangered and threatened species and state species of special concern and threatened species. Some of these species are also found throughout the CFWI Planning Area.

Recognizing the need to prevent allocation of water needed for the protection of fish and wildlife, the South Florida Water Management District (SFWMD), on June 12, 2008, initiated Rule development for a water reservation for the Kissimmee River and Upper Chain of Lakes. Waters affected by this rulemaking effort are the surface waters needed for the protection of fish and wildlife as well as the surficial groundwater that affects that surface water. Included in the reservation are the Kissimmee Upper Chain of Lakes (Myrtle-Joel-Preston, Hart-Mary Jane, East Lake Tohopekaliga, and Tohopekaliga to the west;

Alligator Chain and Gentry to the east; and the Kissimmee Group including Kissimmee-Cypress-Hatchineha) and the Kissimmee River and Floodplain.

In 2008, the SFWMD staff anticipated that a final draft rule would be published in June of 2009. In the analysis done to support this reservation, as presented in March of 2009, it was determined that although surface water in excess of the defined fish and wildlife protection targets occurs in some of the lakes in the Upper Chain when looked at on an individual lake by lake scale, there is a lower potential for surface water in excess of the defined fish and wildlife protection targets when looked at on a system wide scale. It was also determined that the Kissimmee River has a low potential for surface water in excess of the defined fish and wildlife targets. A scientific peer review panel found that the modeling was sound, biologic linkages to hydrology were sound, and the approach to defining water for protection of fish and wildlife (performance measures) was sound. However, this reservation was never completed. It appears that work stopped in 2009.

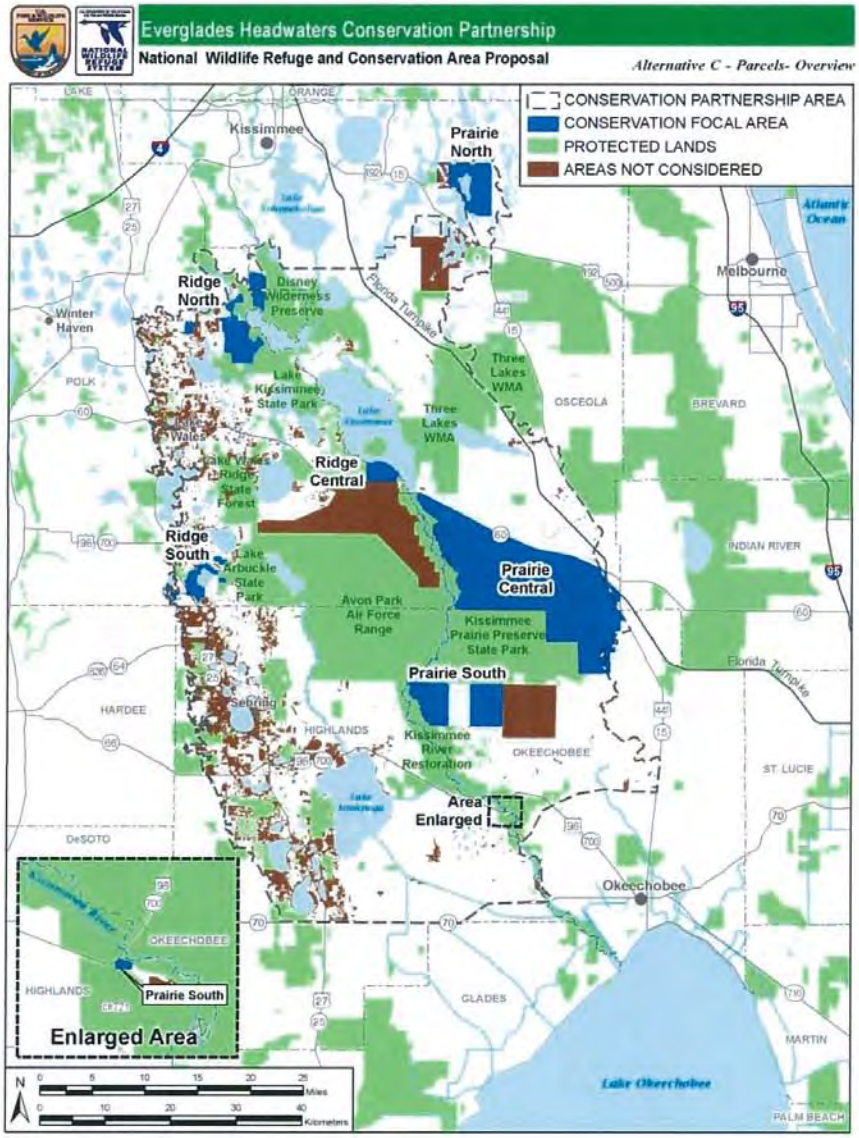
The Upper Kissimmee Basin Planning Area also includes the site of the Service's recently authorized Everglades Headwaters National Wildlife Refuge and Conservation Area (Refuge and Conservation Area) (See attached map). The Refuge and Conservation Area, a high priority for the Department, is an initiative to preserve the natural resources and rural way of life in the Kissimmee River Valley. The Refuge and Conservation Area was authorized to protect 150,000 acres in the threatened wetland, grassland and long-leaf pine savannah landscapes north of Lake Okeechobee, through fee title acquisition and permanent conservation easements on private lands, allowing continued cattle and agricultural production.

The CFWI Regional Water Supply Plan lists several surface water projects including one described in the Appendix as the *Kissimmee River Basin AWS Project* and as being located in the Kissimmee River Basin. The project capacity is listed as supplying up to 25 million gallons per day. The Department has scheduled a meeting with SFWMD staff to learn more about this and the other surface water projects.

The Department is concerned that the CFWI Regional Water Supply Plan Projects will erode the considerable federal and state investment in Kissimmee River Restoration, and further negatively impact the federally endangered and threatened Species located in the Upper Chain of Lakes and the Kissimmee River and Floodplain. Also, given the conclusions reached by the SFWMD reservations analysis, it is unlikely there is any substantial quantity of excess water in either the Upper Chain of Lakes or the Kissimmee River and Floodplain above that required for the protection of fish and wildlife. The Department believes that the SFWMD should adopt a reservation for the Upper Chain of Lakes and the Kissimmee River and its Floodplain before implementing any surface water projects in the Upper Kissimmee Basin. The Department may provide supplemental comments after meeting with the SFWMD staff regarding the surface water projects.

Sincerely,

Shannon A. Estenoz
Director, Office of Everglades Restoration Initiatives
United States Department of the Interior


Everglades Headwaters Conservation Partnership
National Wildlife Refuge and Conservation Area Proposal
Alternative C - Parcels- Overview
CONSERVATION PARTNERSHIP AREA
CONSERVATION FOCAL AREA
PROTECTED LANDS
AREAS NOT CONSIDERED
Kissimmee
Prairie North
Ridge North
Disney Wilderness Preserve
Florida Turnpike
Winter Haven
Melbourne
Atlantic Ocean
Lake Kissimmee State Park
Three Lakes WMA
Ridge Central
Ridge South
Lake Arbuckle State Park
Avon Park Air Force Range
Prairie Central
Kissimmee Prairie Preserve State Park
Prairie South
Sebring
Kissimmee River Restoration
Area Enlarged
Okeechobee
Lake Okeechobee
Enlarged Area
POLK
OSCEOLA
BREVARD
INDIAN RIVER
ST. LUCIE
HARDEE
HIGHLANDS
OKEECHOBEE
DeSOTO
GLADES
MARTIN
PALM BEACH

Species of Concern within the Kissimmee basin.

(E: Endangered, T: Threatened, SC: Species of Special Concern, SA: Similarity of Appearance, Candidate: C, State Threatened: ST)

Common Name	Scientific Name	Status	Agency
Amphibians			
Striped newt	*Notophthalmus perstriatus*	C	Federal
Gopher frog	*Lithobates capito*	SC	State
Birds			
Black skimmer	*Rynchops niger*	SC	State
Burrowing owl	*Athene cunicularia*	SC	State
Florida grasshopper sparrow	*Ammodramus savannarum floridanus*	E	Federal
Florida sandhill crane	*Grus canadensis pratensis*	ST	
Florida scrub-jay	*Aphelocoma coerulescens*	T	Federal
Everglade snail kite	*Rostrhamus sociabilis plumbeus*	E	Federal
Audubon's crested caracara	*Polyborus plancus audubonii*	T	Federal
Limpkin	*Aramus guarauna*	SC	State
Little blue heron	*Egretta caerulea*	SC	State
Red-cockaded woodpecker	*Picoides borealis*	E	Federal
Snowy egret	*Egretta thula*	SC	State
Southeastern American kestrel	*Falco sparverius paulus*	ST	State
Tricolored heron	*Egretta tricolor*	SC	State
White ibis	*Eudocimus albus*	SC	State
Whooping crane	*Grus americana*	Experimental Population non-essential	Federal, State
Wood stork	*Mycteria americana*	E	Federal
Fish			
Lake Eustis pupfish	*Cyprinodon hubbsi*	SC	State
Insects			
Highlands tiger beetle	*Cicindela highlandensis*	C	Federal
Lichens			
Florida perforate cladonia	*Cladonia perforata*	E	Federal
Mammals			
Florida panther	*Puma concolor coryi*	E	Federal
Florida manatee	*Trichechus manatus*	E	Federal
Puma	(=mountain lion) (Puma (=Felis) concolor (all subsp. except coryi))	T/SA	Federal
Florida bonneted bat	*Eumops floridanus*	ST, Proposed Endangered	State, Federal
Florida mouse	*Podomys floridanus*	ST	State
Homosassa shrew	*Sorex longirostris eonis*	SC	State
Sherman's fox squirrel	*Sciurus niger shermani*	SC	State
Reptiles			
American alligator	*Alligator mississippiensis*	T/SA	Federal
Bluetail mole skink	*Eumeces egregius lividus*	T	Federal
Eastern indigo snake	*Drymarchon corais couperi*	T	Federal
Florida pine snake	*Pituophis melanoleucus mugitus*	SC	State

Gopher tortoise	*Gopherus polyphemus*	C, ST	Federal, State
Sand skink	*Neoseps reynoldsi*	T	Federal
Short-tailed snake	*Stilosoma extenuatum*	ST	State
Plants			
Short-leaved rosemary	*Conradina brevifolia*	E	Federal
Scrub mint	*Dicerandra frutescens*	E	Federal
Highlands scrub hypericum	*Hypericum cumulicola*	E	Federal
Scrub blazingstar	*Liatris ohlingerae*	E	
Papery whitlow-wort	*Paronychia chartacea*	T	Federal
Lewton's polygala	*Polygala lewtonii*	E	Federal
Wireweed	*Polygonella basiramia*	E	Federal
Sandlace	*Polygonella myriophylla*	E	Federal
Scrub plum	*Prunus geniculata*	E	Federal
Florida bonamia	*Bonamia grandiflora*	T	Federal
Pygmy fringe-tree	*Chionanthus pygmaeus*	E	Federal
Pigeon wings	*Clitoria fragrans*	T	Federal
Beautiful pawpaw	*Deeringothamnus pulchellus*	E	Federal
Scrub buckwheat	*Eriogonum longifolium var. gnaphalifolium*	T	Federal
Snakeroot	*Eryngium cuneifolium*	E	Federal
Britton's beargrass	*Nolina brittoniana*	E	Federal
Wide-leaf warea	*Warea amplexifolia*	E	Federal
Carter's mustard	*Warea carteri*	E	Federal
Scrub lupine	*Lupinus aridorum*	E	Federal
Garrett's mint	*Dicerandra christmanii*	E	Federal
Florida ziziphus	*Ziziphus celata*	E	Federal
Avon Park harebells	*Crotalaria avonensis*	E	Federal

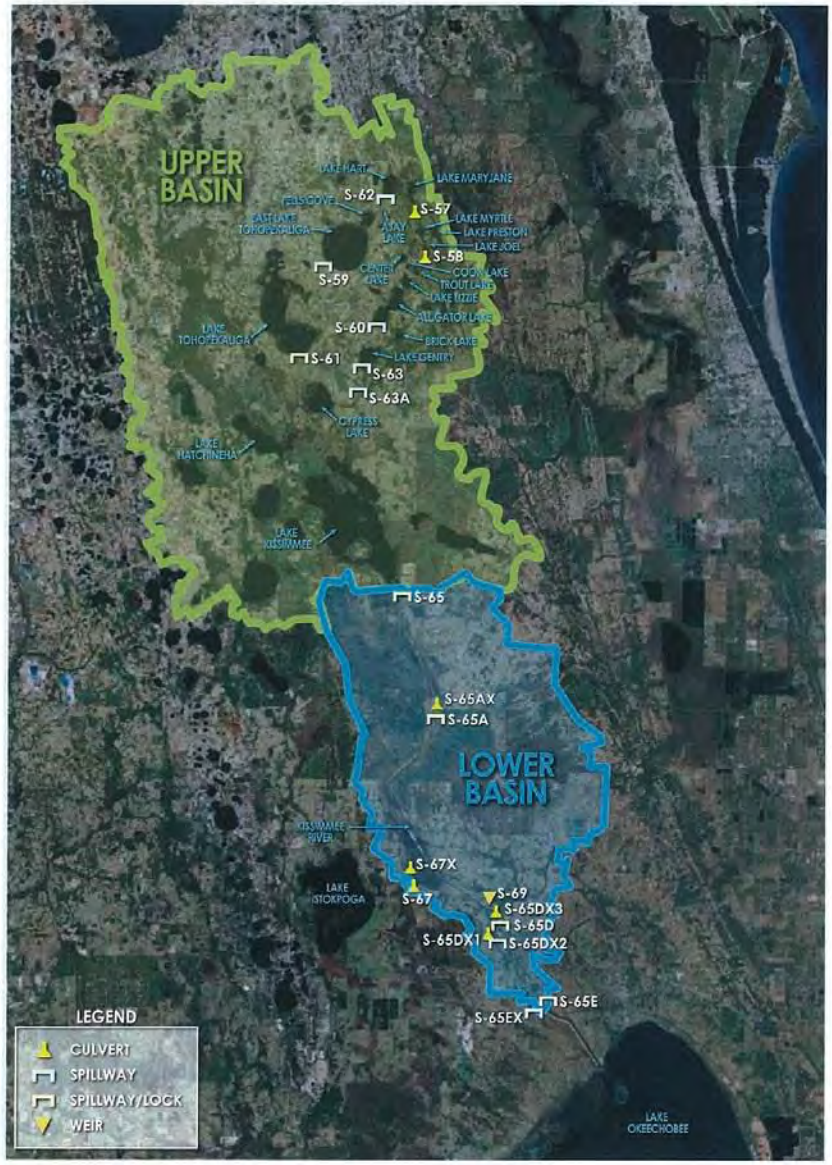


Figure 1 – Kissimmee Basin.

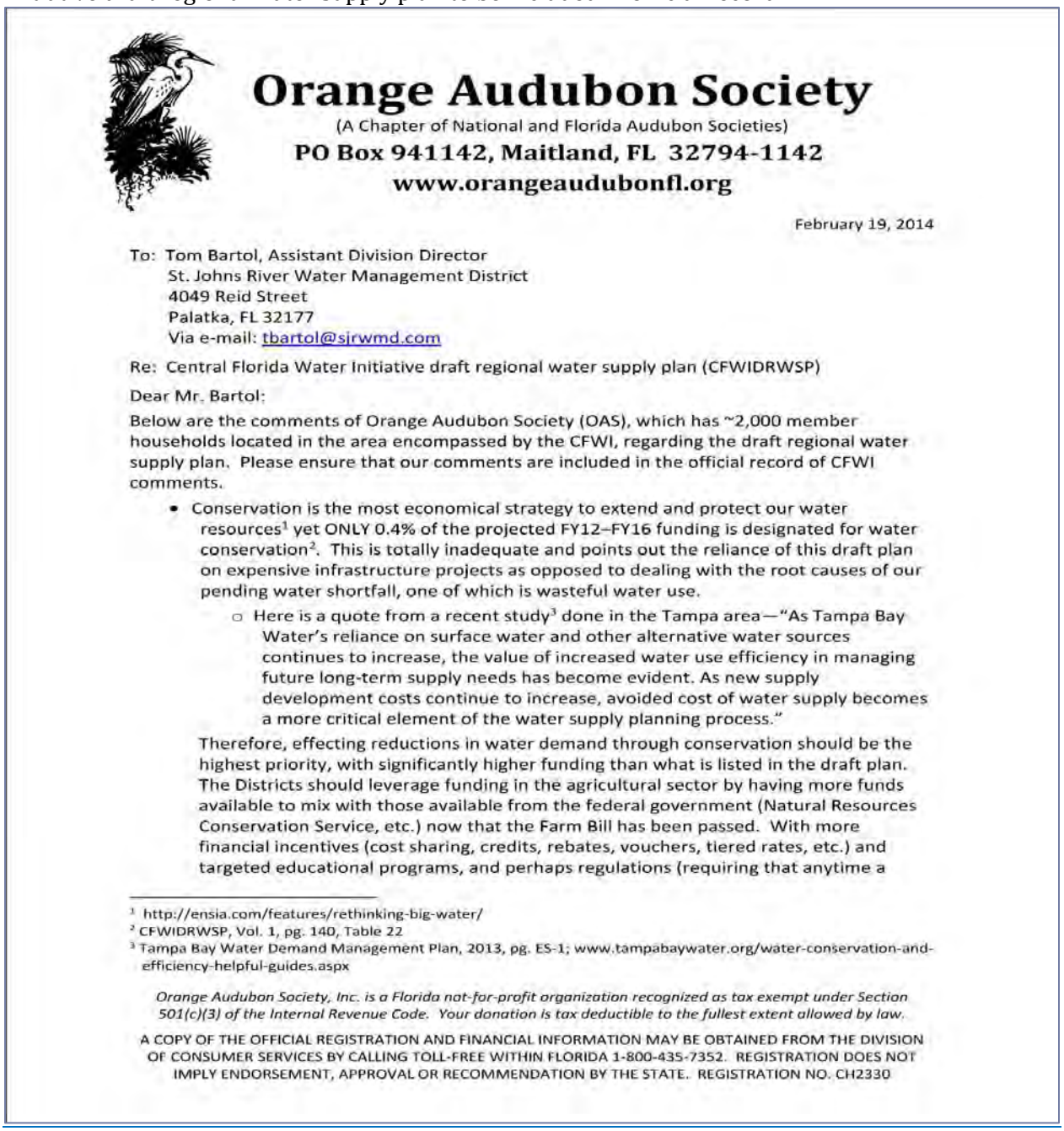
CFWI RWSP Team Response *- CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed.*

The final work product of the Solutions Planning Team will be a CFWI 2035 Water Resources Protection and Water Supply Strategies document, which will be incorporated into the CFWI RWSP. The Solutions Planning Team results will provide relevant project information to further develop specific water supply projects through partnerships with water users. The information will include the necessary financing, cost estimates, potential sources, feasibility and permitability analysis, identification of governance structure options and any potential recovery needs.

In order to protect the public's interest and investment in the restoration of the Kissimmee River, the SFWMD will act to protect the enhanced hydrology associated from the restoration efforts. Accordingly, the SFWMD will be using a water reservation rule to protect the waters needed for the protection of fish and wildlife associated with the restoration efforts. A reservation will result in a high level of protection. As discussed on Page 38 of the RWSP, the SFWMD included the Kissimmee Basin water reservation, which includes 19 lakes in the Upper KCOL, the Kissimmee River and its floodplain, in its 2014 Priority Water Body List for future adoption by December of 2015. The effect of this type of rule is to withhold water needed for the protection of fish and wildlife from allocation water from the Upper Chain of Lakes and Kissimmee River. Water availability from the Kissimmee River and associated lakes will be determined following establishment of the Kissimmee Basin water reservation.

Deborah Green, President, Orange Audubon Society (02/19/14)

Attached are comments from Orange Audubon Society on the Central Florida Water Initiative draft regional water supply plan to be included in official record.



Orange Audubon Society

(A Chapter of National and Florida Audubon Societies)
PO Box 941142, Maitland, FL 32794-1142
www.orangeaudubonfl.org

February 19, 2014

To: Tom Bartol, Assistant Division Director
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177
Via e-mail: tbartol@sjrwmd.com

Re: Central Florida Water Initiative draft regional water supply plan (CFWIDRWSP)

Dear Mr. Bartol:

Below are the comments of Orange Audubon Society (OAS), which has ~2,000 member households located in the area encompassed by the CFWI, regarding the draft regional water supply plan. Please ensure that our comments are included in the official record of CFWI comments.

- Conservation is the most economical strategy to extend and protect our water resources[1] yet ONLY 0.4% of the projected FY12–FY16 funding is designated for water conservation[2]. This is totally inadequate and points out the reliance of this draft plan on expensive infrastructure projects as opposed to dealing with the root causes of our pending water shortfall, one of which is wasteful water use.
  - Here is a quote from a recent study[3] done in the Tampa area—"As Tampa Bay Water's reliance on surface water and other alternative water sources continues to increase, the value of increased water use efficiency in managing future long-term supply needs has become evident. As new supply development costs continue to increase, avoided cost of water supply becomes a more critical element of the water supply planning process."

  Therefore, effecting reductions in water demand through conservation should be the highest priority, with significantly higher funding than what is listed in the draft plan. The Districts should leverage funding in the agricultural sector by having more funds available to mix with those available from the federal government (Natural Resources Conservation Service, etc.) now that the Farm Bill has been passed. With more financial incentives (cost sharing, credits, rebates, vouchers, tiered rates, etc.) and targeted educational programs, and perhaps regulations (requiring that anytime a

[1] http://ensia.com/features/rethinking-big-water/
[2] CFWIDRWSP, Vol. 1, pg. 140, Table 22
[3] Tampa Bay Water Demand Management Plan, 2013, pg. ES-1; www.tampabaywater.org/water-conservation-and-efficiency-helpful-guides.aspx

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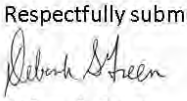
home is sold legacy plumbing fixtures must be retrofitted, water saving landscape codes, others), a much greater than 42 mgd goal can be met. Appropriate water conservation practices should apply to all water use categories and outcomes should be measurable and documented.

- Avoid implementing any of the five environmentally risky and expensive surface water withdrawal projects[4] until "realistic demand projections" can be determined. The demand projection tables for public supply[5] and domestic self-supply[6] assume no reduction in per capita water use at any time through the year 2035. That is unrealistic and contrary to the documented trends water use[7]. Although the historical rate of reduction has declined, there is good reason to think that the trend can continue downward with implementation of comprehensive and aggressive conservation programs, adoption of new technologies and likely water cost increases. Many other cities around the United States have per capita water use rates significantly lower than those in the CFWI region[8]. Additionally, have all the effects of changes in water salinity and temperatures been adequately addressed (manatee winter protection, fishery impacts, etc.)?
- Reassess possible negative effects of aquifer recharge and aquifer recharge and storage technology. Are current water treatment systems capable of adequately removing synthetic chemicals that can disrupt animal—including human—hormonal systems before the water is injected back into the ground? Can the synthetic chemicals, released poisonous metalloids (e.g., arsenic) and other toxins be removed economically and successfully from stored water prior to distribution?
- Assure that the final plan both restores and protects our springs, lakes, rivers and wetlands. They are very important both ecologically and economically.

OAS supports this region-wide planning process and appreciates the opportunity to participate in the process. Regarding the draft plan, our observation is that the plan is clearly too heavily weighted on engineering and not as heavily focused on economics and the environment. The teams and sub-teams would benefit from more representation from the latter two disciplines and the final product would be better.

Respectfully submitted,



Deborah Green
President, Orange Audubon Society

[4] CFWI Steering Committee Meeting, 13 Dec., 2013, slide 13
[5] CFWIDRWSP, Vol. 2, pg. A-8–A-15, Tables A-1 and A-2
[6] CFWIDRWSP, Vol. 2, pg. A-16, Tables A-3
[7] CFWIDRWSP, Vol. 1, pg. 85, Figure 11
[8] Circle of Blue's Urban Water Pricing Survey; www.circleofblue.org/waternews/wp-content/uploads/2010/04/allstats.pdf

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established minimum MFLs, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.*

The plan acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.

Conservation is an important element to meeting future water demands and CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Marian Ryan, Conservation Chair, Sierra Club Florida (02/19/14)

SIERRA CLUB
FOUNDED 1892

February 19, 2014

Mr. Tom Bartol
St. Johns River Water Management District
Via email: tbartol@sjrwmd.com

RE: Central Florida Water Initiative Draft Regional Water Supply Plan

The Sierra Club Florida has grave reservations about the direction that Central Florida Water Initiative Draft Regional Water Supply Plan is taking. The plan proposes to withdraw more than 220 mgd of surface water from Florida's rivers, lakes and other waters. We believe that many of the plan proposals are risky, unreliable, unsustainable, very expensive, and will further degrade the environment and our water resources.

Proposed surface water projects include withdrawals of 150 mgd or more from the St. Johns River, over 30 mgd from the Ocklawaha and 25 mgd from the Kissimmee River. The State of Florida and federal government have invested over $650 million in the restoration of the Kissimmee River floodplain including an estimated 20,000 acres of wetlands and 44 miles of historic river channels. This public investment must be protected to ensure its full benefits are realized. Proposals to withdraw water from these three rivers should be abandoned until all water conservation efforts have been exhausted.

The document makes it clear that some areas are suffering from unsustainable pumping and that damage is already occurring, water bodies are not meeting MFLs and water quality is deteriorating. The plan states that the current problems are being addressed but with no mention of any success stories, we have to assume that these conditions still exist and will only get worse. In addition, acknowledgement that over pumping is already causing damage apparently doesn't slow down the issuance of additional well permits.

Sierra Club Florida • 111 Second Ave. NE, Suite 1001 • St. Petersburg, FL 33701
floridasierraclub.org

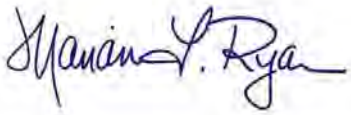
Nature works best, therefore green infrastructure solutions and practices should be prioritized, i.e. restoration of historic wetlands and floodplains to store and treat water. Springs, lakes and rivers throughout the region should also be restored and protected. Emphasis needs to be placed on the relationship between water quantity and water quality. MFLs define the threshold hydrologic regime that would allow for water withdrawals while protecting the water resources and ecology from significant harm. MFLs represent minimum acceptable rather than historic or optimal hydrologic conditions. How will Florida repair springs and TMDL water bodies if District permits allocate up to the MFL threshold of "not to exceed significant harm"?

The CFWI should mandate the most efficient use of water including reuse water. Water conservation programs should be maximized via tiered pricing structures, regulations and incentive programs. Funding should be increased to help users upgrade to low-flow toilets, shower heads and faucets, water saving appliances, provide assistance in conversion to Florida Friendly landscaping and properly install rain gauges, soil moisture sensors and irrigation timers. Agricultural BMPs and ecosystem service incentive programs should be utilized to encourage farmers to protect wetlands and conserve and store water on their land. Agricultural water conservation programs like SWFWMD's FARMS program should be targeted for increased funding and participation.

The CFWI should require water management districts to limit the duration of permits, sources, and modify allocations as needed throughout the region. Landscape, recreational and aesthetic water usages are non-essential uses that should decrease through conservation techniques and alternatives such as artificial turf.

Thank you for the opportunity to provide comments on the draft plan. We hope that you will take them into consideration.

Regards,



Marian L. Ryan, Conservation Chair
863-293-6961

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CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.*

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

As noted in Chapter 373.223, F.S., "to obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water: is a reasonable-beneficial use as defined in s. 373.019; will not interfere with any presently existing legal use of water; and is consistent with the public interest.

The Districts agree that conservation is an important element in meeting future water demands. The Districts support FFL principles and water conservation. However, the Districts do not have any regulatory authority to restrict the type of grass used for landscaping.

CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Kim Hansell, Utility Services Department Director, City of Winter Haven (02/20/14)

Please find attached comments provided by the City of Winter Haven on the Central Florida Water Initiative 2014 Regional Water Supply Plan. We look forward to an opportunity to better understand this comprehensive groundwater modeling effort and the potential impacts to the City of Winter Haven. At your earliest convenience, please provide the contact information for the individual who may best assist us. We may have additional comments once we've had an opportunity to review the model details.

WINTER HAVEN
The Chain of Lakes City
Office of Utility Services

February 20, 2014

Mr. Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Subject: Central Florida Water Initiative
Regional Water Supply Plan 2014

Dear Mr. Bartol:

Winter Haven staff has completed a review of the Regional Water Supply Plan and offer the attached comments. Of great concern is the first paragraph of page 67, which names the City of Winter Haven as an area identified by modeling where resource concerns are predicted to be most severe. We request that this area be described by its physiographic location and not by using the entity "City of Winter Haven" to describe the area of potential impacts.

Modeling results contained in this document, and the solutions resulting from the plan, have the potential to have a substantial financial impact on Winter Haven. Due to the complexity of the model and limitations detailed for the SWUCA region, which Winter Haven lies entirely within, we request adequate time to review model results and fully evaluate the potential environmental and financial impacts to the City of Winter Haven.

Do not hesitate to contact me directly with any future questions or concerns at (863) 298-5470 or khansell@mywinterhaven.com.

Sincerely,

Kim Hansell
Utility Services Department Director

cc: Deric C. Feacher, City Manager
Merle Bishop, Growth Management Department Director
T. Michael Stavres, Community Services Department Director
Mike Britt, Natural Resources Division Director

401 6th Street, SW • Winter Haven, FL • 33880

Comments Provided by the City of Winter Haven on the 2014 Central Florida Water Initiative Regional Water Supply Plan

February 20, 2014

This document provides comments on the 2014 Central Florida Water Initiative (CFWI) Regional Water Supply Plan (RWSP). The comments are provided in the context of understanding the unique hydrologic location of Winter Haven.

General Comments

1. **Population and demand projections for Winter Haven-** We concur with population and demand projections presented in the CFWI RWSP. Several comments by others listed in Appendix A (Pages 59,69,87,111 and 112) suggest that projections for Winter Haven are too low. Winter Haven was not consulted regarding those comments and does not support the requests noted in Appendix A to modify projections for Winter Haven so that they are with the same as the projected demand presented in the application for the Polk County Southeast Wellfield Consumptive Use Permit.

2. **Lower Floridan Aquifer (LFA)-** Winter Haven supports statements in the Introduction regarding concerns with LFA pumping and the need for studies to address potential environmental impacts prior to the LFA becoming a major source of additional public water supply. It should be noted that this statement appears to conflict with the presentation within the CFWI RWSP of LFA projects as solutions to meet long-term water supply demands.

3. **Limitations of ECFT Model-** In discussing MFLs in the SWFWMD, limitations associated with the ECFT model were presented in Appendix B. Winter Haven has concerns with apparent inconsistencies in the ECFT modeling and the model's limitations within the SWFWMD. Significant impacts in the vicinity of Winter Haven are shown in the CFWI RWSP. We request that this area be described by its physiographic location and not by using the entity "City of Winter Haven" to describe, on page 67, the area of potential impacts. Further, the City of Winter Haven requests detailed model results that support statement on page 67.

4. **The CFWI RWSP should consider all sustainable solutions** –Restoration of wetlands and aquifer recharge would result in water supply for both people and natural systems. Natural systems, if functioning properly, can furnish many water supply needs at a fraction of the cost of structural solutions (less construction costs, energy and maintenance). Increased storage in the headwaters regions of the aquifer and surface water systems will benefit all downstream users.

   The CFWI RSWP should identify lost water storage opportunities and develop projects to restore lost storage, including wetland restoration and aquifer recharge throughout the CFWI.

   a. Restore a minimum of 6300 acres of lost wetlands within the Peace Creek Watershed to increase recharge, mitigate flooding, restore micro climate rainfall patterns, and protect natural systems;
   b. Create numerous raingardens and stormwater infiltration projects in the sandy ridge areas to restore lost groundwater storage;

c. Create RIB projects to percolate treated effluent in the proper locations within the watershed to support aquifers and lakes (it is estimated that up to 600 acres of sandy ridge soils will be needed to recharge treated effluent in the Winter Haven area alone to properly manage the water budget).

5. **The SWUCA Recovery Strategy** Winter Haven has concerns with the timing of the recovery strategy for the SWUCA and the adoption of the CFWI RWSP. The SWUCA Recovery Strategy should receive a detailed evaluation prior to making long term decisions on future water supply within the CFWI.

   The CFWI, as a coordinated long-term water supply planning effort meant to supply water for future growth and natural systems, should evaluate the SWUCA Recovery Strategy to ensure that it is adequate to meet existing MFLs, and to ensure that existing MFLs are adequate for recovery.

6. **Consider comprehensive financial impacts of water supply decisions to local communities** – Because the City of Winter Haven was identified in the CFWI RWSP as an area of potential severe environmental impacts resulting from groundwater withdrawals, there are incredible implications for financial impacts to our community. Funding for impacts not caused by local government should not be the sole responsibility of local communities. In the Polk County area, historical impacts have been caused primarily though land use changes associated with agriculture and mining – and their associated aquifer pumpage. Solutions to address regional impacts to the City of Winter Haven should be funded on a regional level.

   Many of the recommendations target local utilities as funding future water supply projects, but local governments will also be expected to spend money for the problems caused by the resulting future development, including flooding, aquifer recharge and water quality. The long term implications of water supply decisions need to be communicated to local governments so that there is realization that the expense for water supply is only a portion of the water resource needs generated by decisions for water supply. An integrated funding strategy to meet all water resource needs for the future needs to be developed so that communities understand the full financial impact of decisions made in this process.

   Specific Comments:

7. **Page 23: Reservations for future agriculture use** – The amount of water allocated for future agriculture in Polk County appears to be overestimated. Currently, agriculture pumpage is proposed to remain constant, while public supply is anticipated to increase by 35 MGD. Using general assumptions, the public supply increase translates to approximately 25,000 acres of new development in Polk County, much of which exists as agriculture lands. Even assuming that agriculture acreage is reduced by half, agriculture pumpage would decrease by approximately 13 MGD. Water quantities currently used for agriculture should be retired when urban development changes the land use and allocated for the most reasonable/beneficial use or aquifer recovery, not reserved for future agriculture use. The approach between water supply for urban uses and agriculture uses should be equitable.

8. **Page 31: MFLs not established to achieve sustainability** – The plan states that "CH. 373 directs water resources shall be managed to ensure their sustainability." The MFLs are established primarily to" prevent significant harm" - not to achieve sustainability. Please remove the 2nd bullet from the list of tools to accomplish sustainable water resources.

9. **Page 37: Reservations for Lake Wales Ridge and Upper Peace River need to be shown on Figure 2** – Page 38 indicates that the SWFWMD anticipates reserving water for the Lake Wales Ridge and Upper Peace River systems. These areas should be included in Figure 2 as receiving future reservations for water resources.

10. **Page 42: The Environmental Measures Team** Representatives of local and non-profit environmental interests should also be included in the review of long-term impacts and the restoration measures required to account for less water in the system and the impacts from more urban growth.

11. **Page 65-67: Impacts to Winter Haven shown** – Figure 8 shows what looks like additional impacts just south of the Winter Haven Chain of Lakes. The plan states "...as groundwater withdrawals increase in the region, the ECFT groundwater model shows that potential impacts to MFLs water bodies and other resource concerned will occur and increase in severity. Areas where this is projected to occur include physiographic ridges along US 27 and near Lake Apopka and the City of Winter Haven." The City of Winter Haven would like to have an explanation why the Winter Haven area is so vulnerable to aquifer withdrawals and become involved in determining what needs to happen long term to protect lakes in Winter Haven. We also recommend not referring to this area as "the City of Winter Haven" since much of the impacted area is outside our City limits. We request that this area be described by its physiographic location and not by using the entity "City of Winter Haven" to describe the area of potential impacts.

12. **Page 70: Impacts to water quality are undervalued** - The last sentence states that "additional drawdown would not likely lead to unacceptable additional water quality degradation." The science leading to this assumption should be referenced. It is very likely that additional groundwater pumpage will lead to hydrologic impacts for lakes, rivers and streams and that there will be a resulting decline in water quality. Local governments who are responsible for implementing BMAPs and TMDLs will need to spend additional funds to improve water quality as a result of less water in the system. As we plan for one aspect of water, the other aspects will be impacted.

13. **Page 74: Include Upper Peace River in susceptible areas list** – Even though projects have been completed for the upper Peace River (Lake Hancock), only about 50% of the existing MFL is being addressed. The existing MFL of 17cfs needs to be evaluated with the understanding that the river loses approximately 30cfs from lowered aquifer levels as indicated by the USGS. Low aquifer levels will continue to impact the upper Peace River and this system should be included in the most susceptible areas of concern.

14. **Page 125, Water Supply Development: Include wetland restoration projects as viable water storage proposals** – Restoring the natural system while storing water for future supply is a viable option for meeting future water resource needs. Restoring the natural system wherever possible may be the lowest cost, highest benefit option especially when water quality and flood mitigation benefits are included.

15. **Page 145, Watershed Investigations** — Each sub watershed area within the CFWI probably has numerous opportunities for wetland restoration and aquifer recharge. The CFWI should encourage local governments to work cooperatively with the CFWI partners to identify opportunities for "natural infrastructure" improvements. The Sustainable Water Resource Management Plan for the Peace Creek Watershed is a good example of the types of efforts that would be beneficial.

16. **Chapter 11: Recommendations**
    a. In the Water Conservation Section, include a recommendation that water be conserved in the natural landscape wherever possible, including the restoration of natural wetland systems.
    b. In the New Storage Capacity section, include a recommendation that historical wetland areas should be identified that can store water.
    c. In the MFL section, include a recommendation that the SWUCA rules and policies be evaluated to ensure they are intended to meet MFLs.
    d. Under Intergovernmental Coordination, include a recommendation that future land use planning should incorporate land for aquifer recharge and wetland storage in the right locations.

17. **Appendix B**
    a. The Minimum Flows and Levels and Reservations Team should consider a standard that exceeds the "preventing significant harm" criteria to natural systems as indicated by regulations concerning MFLs
    b. Table B-1 and B-2 imply that the implementation of the CFWI would result in some lakes and rivers not meeting MFLs. A plan should be developed that allows each lake, river and spring to recover to at least the MFL. In many communities such as Winter Haven where healthy lakes are a significant factor in future economic growth, the "prevention of significant harm" standard is not adequate to meet the needs of the future.

18. **Table F-1**
    a. The surface water section should include projects to restore at least 6300 acres of lost wetlands within the Peace Creek Watershed to provide for water storage for future water supply for lakes, the Peace River and additional aquifer recharge to one of the most impacted areas within the SWUCA and CFWI.

CFWI RWSP Team Response to Comment 1 *- Thank you for your comment.*

CFWI RWSP Team Response to Comment 2 *- The LFA is generally considered to be more productive and have fewer impacts to lakes and wetlands resulting from withdrawals in comparison to the upper sections of this aquifer. Potential future projects may consider moving withdrawals from the UFA to the LFA in an effort to minimize future impacts or as a measure to address existing concerns. In addition, portions of the LFA may be brackish and might be developed as an alternative water source; studies are in progress.*

CFWI RWSP Team Response to Comment 3 *- Thank you for your comment. Page 67, language has been updated to read as follows:* Areas where this is projected to occur include the physiographic ridges along US 27~~ and near Lake Apopka and the City of Winter Haven~~.

CFWI RWSP Team Response to Comment 4 *- The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.*

CFWI RWSP Team Response to Comment 5 *- The RWSP acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.*

As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

CFWI RWSP Team Response to Comment 6 *- Thank you for your comment, Chapter 9 discusses options for funding.*

CFWI RWSP Team Response to Comment 7 *- Thank you for your comments. As part of the efforts to prepare a single RWSP and to achieve consistency for the CFWI Planning Area, a Demand Subgroup was formed to review and update population and water demand*

projections for the CFWI Planning Area. The Demand Subgroup review began in late 2011 and was completed in early 2013. The Demand Subgroup consisted of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area. In addition, the Demand Subgroup held a special meeting with area agricultural representatives during the CFWI process and as a result, initial projections were updated. It should be noted that these projections were made using a snapshot in time and the projections are intended solely for regional planning purposes to determine what WSO are necessary in the future. The Demand Subgroup will continue to work with utilities and engage stakeholders during the next CFWI RWSP update, to ensure that the best available information is being used to estimate regional demands.

CFWI RWSP Team Response to Comment 8 *- The language was taken directly from Chapter 373 F.S., and is representative of a regulatory tool.*

CFWI RWSP Team Response to Comment 9 *- Page 38 indicates that lowered aquifer levels have contributed to reduced flows in the upper Peace River and lowered lake levels in portions of Polk and Highlands counties. Reservations for the upper Peace River or Lake Wales Ridge were not discussed. SWFWMD anticipates adopting a reservation for Lake Hancock, which is on Figure 2, to support recovery of minimum flows in the Peace River. Future reservations in the SWUCA will be established on a case-by-case basis.*

CFWI RWSP Team Response to Comment 10 *- See response to your Comment 4, which addresses members of the Solutions Planning Team.*

CFWI RWSP Team Response to Comment 11 *- See response to your Comment 3 above.*

CFWI RWSP Team Response to Comment 12 *- As noted in Chapter 4, monitoring and management plans have been implemented through the CUPs and are expected to continue, which help to prevent water quality degradation.*

CFWI RWSP Team Response to Comment 13 *- Please note that Upper Peace River is located in SWUCA, which is captured with the current language.*

CFWI RWSP Team Response to Comment 14 *- See response to your Comment 4.*

CFWI RWSP Team Response to Comment 15 *- See response to your Comment 4.*

CFWI RWSP Team Response to Comment 16 *- See response to your Comment 4.*

CFWI RWSP Team Response to Comment 17 *- A Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery.*

CFWI RWSP Team Response to Comment 18 *- See response to your Comment 4.*

John R. Thomas, P.A., Representing PCEC (02/20/14)

Greetings. Please consider, place the attached comments with attachment in the comment file for the two Regional Water Supply Planning initiatives, and proceed according to the law as indicated in these comments. Thank you. John R. Thomas on behalf of Putnam County Environmental Council.

JOHN R. THOMAS, ESQ
LAW OFFICE OF JOHN R. THOMAS, P.A.
233 THIRD STREET NORTH, SUITE 101
ST. PETERSBURG, FLORIDA 33701
PHONE NO.: (727) 550-9072
jrthomasesq@earthlink.net

February 20, 2014

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Jim Gross
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Re: St. Johns River Water Management District Proposed Regional Water Supply Plan;
Central Florida Water Initiative Proposed Regional Water Supply Plan;

Dear Sirs:

I write on behalf of the Putnam County Environmental Council (**PCEC**) with respect to the above-referenced matters. PCEC is committed to the restoration and recovery of the Ocklawaha River and the protection of the riverine resources of the Ocklawaha and St Johns Rivers generally. PCEC has consistently participated in assessment, planning and resource regulation affecting the Ocklawaha River and St. Johns River. Consistent with such efforts, PCEC has reviewed the above-referenced Proposed Regional Water Supply Plans (**RWSPs**) and submits the comments below.[1]

PCEC is a Florida incorporated non-profit founded in 1998 to promote the conservation, protection and restoration of the natural resources of Putnam County and Florida. PCEC's address is P.O. Box 1836, Interlachen, FL 32148. A substantial number of PCEC's members use and enjoy the waters of the Ocklawaha and St. Johns rivers for fishing, swimming, boating, and wildlife observation. These fresh and estuarine fish and wildlife depend upon the presence of a healthy flow of fresh water. The District's designation of large river water withdrawal projects as "alternative water supplies" in the Proposed Regional Plans provides huge incentives for the development such projects. The potential further reduction of fresh water flow associated with the proposed surface water projects will adversely affect water quality and result in reduction of native habitats and the value of functions provided by such habitats, which results in reduced fish and wildlife utilization of the area and will reduce Petitioners' use and enjoyment of fishing, swimming, boating and wildlife observation in the area.

SJRWMD'S PROPOSED RWSPS PERPETUATE A MISINTERPRETATION OF LAW THAT HAS BEEN CHALLENGED AND IS SUBJECT TO ACTIVE LITIGATION

PCEC's June 17, 2008 Request for Review requested the Florida Land and Water Adjudicatory Commission (**Commission**) to determine that the St. Johns River Water Management District, District Water Supply Plan 2005, Third Addendum, Technical Publication SJ2006-2C improperly identifies surface water withdrawals from the St. Johns River and the Ocklawaha River as "alternative water

[1] PCEC asks that these comments be placed in the record of the above-referenced matters.

supplies" under Section 373.019(1), Florida Statutes, and to take appropriate action pursuant to such determination. The Third Addendum was a district-wide Regional Water Supply Plan adopted pursuant to Section 373.0361(2), Florida Statutes. PCEC's June 17, 2008 Request for Review prevented the Third Addendum from becoming final.[2] The surface water projects PCEC questioned were very large river withdrawals that were not limited to capture during wet weather flow.

PCEC's June 9, 2009 Request for Review requested the Commission to determine that the St. Johns River Water Management District, District Water Supply Plan 2005, Fourth Addendum May 12, 2009," Technical Publication SJ2006-2D improperly identifies surface water withdrawals from the St. Johns River and the Ocklawaha River as "alternative water supplies" under Section 373.019(1), Florida Statutes, and to order that such designations be stricken and/or specifically limited to capture during wet weather flows. The Fourth Addendum is also a district-wide "Regional Water Supply Plan" adopted pursuant to statute. PCEC's Request for Review prevented the Fourth Addendum from becoming final.[3]

PCEC's Requests for Review of the Third and Fourth Addendum were consolidated by the Commission. Finally, after pending for 5 years, by letter dated May 6, 2013, the Commission Secretary dismissed PCEC's Requests for Review. PCEC timely appealed. The St. Johns Riverkeeper along with the Public Trust for the Environment, Audubon Florida, and the Defenders of the Environment submitted an Amicus Brief supporting PCEC's appeal.

The appeal briefs have all been filed, oral argument has been requested and denied, and the parties await the First District Court's decision. The issues raised in PCEC's Requests for Review have not been adjudicated yet because the Commission Secretary improperly dismissed the Requests for Review without a hearing before the Governor and Cabinet. If the Court agrees the Secretary lacked authority to dismiss PCEC's Requests for Review, PCEC's substantive questions may be remanded to the Commission for final determination. According to the *Griffin* Court's reasoning, the Fourth Addendum is not final agency action at this time.

PCEC's Requests for Review seek a determination that in order for a surface water project to qualify as an "Alternative Water Supply Project," it must be limited to "capture during wet weather flow," as delimited in Section 373.019(1), Florida Statutes. Senator Paula Dockery, a sponsor of the 2005 Alternative Water Supply Law, explained in the **attached** letter to the editors of the St. Petersburg Times and Orlando Sentinel that:

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[2] *See, Griffin v. St. Johns River Water Management Dist.*, 409 So.2d 208, 210 (Fla. 5th DCA 1982)("Since the Commission may modify or rescind the action of the Water Management District, it cannot be considered (as yet) 'final' agency action. See *School Board v. Noble*, 372 So.2d 1111 (Fla.1979).")

[3] *See, Id.*

> The definition that we created in the 2005 legislation restricted the use of surface water to only those captured during wet-weather flows. This definition refers to water that has been captured and stored specifically as an alternative source for use within the regional planning area.

Senator Dockery's contention is supported by our legislative analysis and the interpretation indicated by appropriate cannons of statutory construction.

PCEC sought review of SJRWMD's Plans because of the consequences of a WMD designating rivers as "Nontraditional" water supply sources, i.e., Alternative Water Supplies (**AWS**), in a RWSP:

> 1. When considering a water use permit application for an AWS, a WMD must presume use of the AWS is "consistent with the public interest," one of the 3 permitting criteria. §373.223(3) and (5), Fla. Stat. When considering a water use permit application for an AWS, the SJRWMD will not further objectively consider whether the proposed use "is beneficial or detrimental to the overall collective well-being of the people or to the water resources in the area, the District and the State," they will presume that it is.
>
> 2. A WMD must give the funding of AWS "priority funding attention."
>
> 3. A WMD can legally pay up to 40% of the cost to construct the facilities needed to tap the non-traditional source, even if the applicant is a private for profit company.
>
> 4. Any local government subject to SJRWMD's Plans, that expects growth, must develop the AWS assigned to it in the Plan, or the WMD will not approve the local government's comprehensive plan water supply element and may impede such growth.
>
> 5. A WMD must cooperate in the development of AWS projects.

The Fourth Addendum and now the proposed CFWI and proposed new district-wide RWSPs represent a clear misinterpretation of the Alternative Water Supply Law, and more critically, a series of horrendous policy decisions that are not consistent with the public interest, including: 1) incentivizing massive withdrawals from the special, historic, essential St. Johns and Ocklawaha rivers, rivers unconscionably allowed to be degraded already; 2) not limiting such withdrawals to capture during wet weather flow as the AWS Law requires; 3) discouraging and downplaying conservation; and 4) failing to give conservation priority, as shown by SJRWMD's failure to improve conservation rules SJRWMD admitted are inadequate five years ago!

The Proposed RWSPs are the same as SJRWMD's Third and Fourth Addenda, and suffer the same shortcomings. Although the CFWI RWSP appears to be the product of a robust public participation process, informal communications with interested parties suggest the location, timing, complexity, time-commitment required, and other factors defeated such participation. PCEC's Requests for Review of the Third and Fourth Addenda RWSPs must be resolved before SJRWMD can include surface water withdrawals that are not limited to capture during wet weather flow in a RWSP.

Although the CFWI RWSP appears to pay great attention to potential conservation as a water supply source, on closer scrutiny, no substantial sacrifice is demanded of the water user. The obvious truth is that a lot of the AWS money from the Sustainability Trust Fund will be spent on huge and harmful river withdrawal projects, not limited to capture during wet weather flow. While we know this from many indicators, the Amicus Briefs filed by OUC and Seminole County in the above-described appeal lay this fact bare for all the world to see. These Proposed Regional Water Supply Plans must not be approved without correcting these failures, including limiting the surface water withdrawals to "capture during wet weather flow."

THE LOWER FLORIDAN AQUIFER IS NOT AN ALTERNATIVE WATER SUPPLY, IT IS THE SAME SOURCE AND WITHDRAWALS WILL CAUSE FURTHER HARM

The CFWI is necessitated by lowered Floridan Aquifer levels. Saltwater intrusion is one consequence of groundwater withdrawals that exceed the level at which further withdrawals are significantly harmful to water resources. Though the excessive withdrawals have been known to be occurring for a score of years, it is not clear that resource management activities have stopped the landward progression of saline water. The East Central Florida Model Report indicates: 1) there is scarce data regarding confinement between the Upper and Lower Floridan in the CFWI Area; 2) the investigations that have taken place indicate confinement between the Upper and Lower Floridan is inconsistent (not consistently present and/or not consistently providing much of an aquatard/aquaclude); 3) there is migration between the Upper and Lower Floridan in the CFWI Area; and 4) withdrawals from the Upper Floridan Aquifer affect water levels and flow in the Lower Floridan, and vice-versa. There is not sufficient evidence to treat the Lower Floridan as an Alternative Water Supply Source for the Upper Floridan Aquifer, they are the same source.

The proposed reliance on the Lower Floridan Aquifer and funding for development of this source will cause further saltwater intrusion and further harm to the Upper Floridan Aquifer and the sources recharging the Upper Floridan.

For the forgoing reasons, the proposed surface water and Lower Floridan withdrawals are not consistent with Chapter 373, Florida Statutes and Chapter 62-40, Florida Administrative Code and must not be approved as Alternative Water Supplies.

Sincerely,

LAW OFFICE OF JOHN R. THOMAS, P.A.

John R. Thomas

Attachment

'05 water bill was meant to promote alternatives

By SEN. PAULA DOCKERY

St. Petersburg Times
Published October 15, 2007

A recent Times article, "Law lets thirsty areas look far," and subsequent editorial, "Water grab would be theft, pure and simple," brought to my attention what I see as a misunderstanding of the applicability of "local sources first" laws.

As prime sponsor of Senate Bill 444 during the 2005 legislative session, my objective was to confront the water wars that we were experiencing between water-rich and water-poor areas of the state. The bill addressed the necessity of increasing the "water pie" through the development of "alternative water supply" projects.

In addition to providing the necessary mechanisms and matching funds for local governments to develop alternative water supply projects within their jurisdictions, the legislation encouraged partnerships, planning and coordination to avoid these types of battles over this vital resource. The potential for such occurrences, as outlined in the Times editorial, highlights the need to continue the current funding of $60-million, at a minimum, to meet the needs of agriculture, natural systems and public use.

In order to undertake such an endeavor, I encouraged all interested parties to come to the table. What started as a working group of a dozen or so individuals quickly grew to steady participation of 120 members representing public and private interests. Participants included environmental organizations, agriculture interests, water management districts, cities and counties, public utilities, developers and state and federal agencies. This process took almost a year and was publicly noticed and covered by the media. It was my belief that water policy is so fundamental to the quality of life in our great state, that all interested parties needed to be involved in crafting this legislation.

Again, it is important to remember that the point of the legislation was to avoid the adverse effects of competition for the use of traditional water supplies. To that end, the legislation specifically states that alternative water supply projects would not be conducted in a manner that would adversely impact the areas where the water was withdrawn. The clear intent was to offer incentives for the creation of "alternative water supply" to alleviate the temptation to transport water from distant sources. Universally within the work group, the existing "local sources first" policy was our guiding principle.

After reading the recent media coverage, I am concerned about the assertions that the St. Johns River Water Management District may be interpreting the definition of alternative water supply differently than what was

legislatively intended. The definition that we created in the 2005 legislation restricted the use of surface water to only those captured during wet-weather flows. This definition refers to water that has been captured and stored specifically as an alternative source for use within the regional planning area.

As a longtime and consistent advocate of the "local sources first" policy, I, along with Sen. Charlie Dean, R-Inverness, have asked the chairman of the Senate Committee on Environmental Preservation and Conservation to request that the St. Johns River Water Management District appear before the committee, of which I am a member, to discuss this issue of pumping water from the Withlacoochee and Lower Ocklawaha rivers.

I welcome the attention and support that the "local sources first" policy is receiving, and I will continue to support that policy as we investigate and review the actions of the St. Johns River Water Management District.

Paula Dockery represents Florida Senate District 15, which includes the eastern half of Hernando County as well as parts of Sumter, Lake, Osceola and Polk counties. Guest columnists write their own views on subjects they choose, which do not necessarily reflect the opinions of this newspaper.

CFWI RWSP Team Response *- As PCEC's letter indicates, the interpretation of the term AWS as defined in 373.019(1), F.S., is the subject of continuing litigation between SJRWMD and PCEC. SJRWMD continues to interpret the term as set forth in the Fourth Addendum to its existing water supply plan (DWSP 2005) and in draft 2013 DWSP, meaning it recognizes fresh groundwater as the only traditional water supply source and has designated other water resources in the SJRWMD to be nontraditional (i.e. AWS) under 373.019(1), F.S.*

Given SJRWMD's interpretation of AWS and the designation of water resources other than fresh groundwater as non-traditional in its planning regions, the determination of whether a project option listed in DWSP 2013 would use an AWS source (i.e., AWS) would depend on the quality of the water to be withdrawn. Region 3 of the draft SJRWMD DWSP 2013 covers the portion of the CFWI located within the CFWI Planning Area. At this time, none of the project options listed for Region 3 have the Lower Floridan as a water supply source.

Robert A. Williams, Center for Earth Jurisprudence (02/20/14)

Center for Earth Jurisprudence

6441 E. Colonial Drive, Orlando, FL 32807
ph 321.206.5788 | fax 321.206.5662

2425 Torreya Drive, Tallahassee, FL 32303
ph 850.694.3118 | fax 850.385.9998

Please reply to:
Tallahassee

February 20, 2014

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177
Via email: tbartol@sjrwmd.com

Re: CFWI RWSP Public Draft

Dear Mr. Bartol:

We have carefully reviewed both the draft Regional Plan and the Appendices. We believe that draft plan falls far short of what is necessary to address the water crisis in Central Florida, and there are many things in the plan which are cause for concern. We think that the points raised in the comments submitted by Florida Audubon deserve your careful consideration. We will confine our comments to a single issue – does the plan meet the statutory requirements set forth in s. 373.709(2)(c), Florida Statutes, and specifically does it contain a recovery or prevention strategy for the Wekiva River Basin as described in s. 373.0421(2)? Unfortunately, it does not.

This is matter of great public importance. For the last two years in numerous letters and e-mails we have tried to point out to the district that the springs of the Wekiva and the Wekiva River itself are in serious decline. Four of the springs, including the two largest, have been below their minimum flows for the past three years. The Wekiva River no longer meets the multiple minimum flow regime established under 40C-8, F.A.C. We have repeatedly requested that the district implement a recovery strategy as required by the statute. The response has been denial and inaction.

Among other things, we were told by Director Tanzler in a letter dated September 19, 2012 that

the delay in developing a recovery plan was "due to work on the Central Florida Water Initiative":

> "An important part of the CFWI is development of new and improved technical tools to evaluate the sustainability of the Floridan aquifer – the primary drinking source for the central Florida utilities. Another part of the CFWI is the development for the first time, of a joint Regional water Supply Plan (RWSP) in central Florida by the three water management districts in the area. Work on the technical tools for the CFWI is being completed now and the joint RWSP is underway. *This work will culminate in MFLs prevention and recovery strategy for the area if the analyses indicate that MFLs are either not being met or would not be met in the planning horizon.*" (emphasis added).

The analyses *do* conclude that the MFLs are not being met, but there is still no recovery plan. Meanwhile it is clear from the Board's vote last week to permit Niagara Bottling to withdraw another half million gallons of water per day that the district intends to go on issuing permits, even though it knows that the MFLs would be further violated if just the existing permits were fully utilized.

What the Statute Requires

The statute could not be more clear; s. 373.709 provides as follows:

> (2) Each regional water supply plan shall be based on at least a 20-year planning period and *shall include*, but need not be limited to:
>
> (c) The recovery and prevention strategy described in s. 373.0421(2).

Section 373.0421(2) provides:

> (2) If the existing flow or level in a water body is below, or is projected to fall within 20 years below the applicable minimum flow or level established pursuant to s. 373.042, the department or governing board, as part of the regional water supply plan described in s. 373.709, shall expeditiously implement a recovery or prevention strategy, which includes the development of additional water supplies and other actions, consistent with the authority granted by this chapter, to:
>
> (a) Achieve recovery to the established minimum flow or level as soon as practicable; or
>
> (b) Prevent the existing flow or level from falling below the established minimum flow or level.
>
> The recovery or prevention strategy shall include phasing or a timetable which will allow for the provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation

of conservation measures concurrent with, to the extent practical, and to offset, reductions in permitted withdrawals, consistent with the provisions of this chapter.

The Findings of the CFWI with Respect to Minimum Flows in the Wekiva Basin

The findings of the Central Florida Water Initiative should be ringing the alarm bells at district headquarters that the Wekiva is in serious trouble. According to the draft plan, by next year, four of the eight springs which provide 70% of the flow of the Wekiva River will be below their established minimum flows, including the two largest springs, Wekiwa and Rock Springs. The underlying analysis shows that together Rock and Wekiwa have lost 25 million gallons of water per day from their historical flows. The draft plan also indicates that one spring, Palm Spring, has been under the minimum flow since 2005. Since the minimum flows for the springs were set so as to maintain the minimum flow regime established for the Wekiva River, it is not surprising that the draft plan also finds that by next year the Wekiva River will also be under its minimum flow.

The draft plan says that the minimum flows will be violated by 2015. It does not say whether or not the springs and river are *already* below their minimum flows. It is clear, however, that the modeling shows that the springs and river will have fallen below the minimum flow at some point between 2005 and next year.

The analysis prepared for the draft plan shows that as early as 2006, the median of annual median flows for the period of record for Wekiwa Springs was under the minimum flow and was only 1 cfs above the established minimum flow for Rock and Starbuck Springs. The median of annual median flows for Palm Springs appears to have fallen below the established minimum flow around 1995.

Besides the analysis which was prepared for the draft plan, there is a great deal of empirical evidence that the springs and river are below their MFLs which we have previously provided to the district, including the fact that the actual flow data collected by the district shows that the annual median flows for four of the springs have been below the minimum for the last three years:

SPRING	Minimum Flow	Median Flow 2011	Median Flow 2012	Median Flow 2013
Wekiwa	62 cfs	57.2 cfs	54.7 cfs	60.2 cfs
Rock	53 cfs	51.8 cfs	50.1 cfs	52.1 cfs
Starbuck	13 cfs	11.3 cfs	11.6 cfs	11.7 cfds
Palm	7 cfs	5.4 cfs	5.1 cfs	5.3 cfs

Moreover we believe that the CWFI modeling underestimates how serious the situation actually is. We find it deeply troubling that the modeling results were not calculated using the projected demands for water use to be found in Chapter 2 of the draft plan, but instead use estimates of water demand which are considerably lower. For example, while the draft plan reports projected 2015 use at 850 mgd, the model run to assess minimum flows for 2015, used an estimated demand of 804 mgd. Projected demand for 2025 was estimated at 970 mgd; the model used an estimate of 897 mgd. And for 2035, when the demand is projected to reach 1083 mgd, the modeling is based on an estimate of 1018 mgd. Use of lower estimates of demand obviously results in the impacts on the springs, lakes, and rivers being understated. Why go through the exercise of projecting the demand, if the plan does not use the results to assess the effect on the minimum flows?

The Draft Plan Fails to Include a Recovery Strategy for the Wekiva Basin

The finding that the springs and river are below their minimum flows should trigger implementation of a recovery strategy but the draft plan contains no such strategy.

On page 167, the draft plan acknowledges that while "current Southwest Florida Water Management District recovery and prevention strategies are included in the CFWI RWSP, development of MFL recovery and prevention strategies for the springs in the St. Johns River Water Management District are only "planned." (*See also* page 146 of the draft plan: "In the CFWI Planning Area, *only* the SWFWMD has water bodies with MFL recovery/prevention strategies.") With respect to the one spring which the draft plan finds is currently under the minimum flow, Palm Spring, the plan states at page 61, that "a strategy for the single spring MFL that is not being met has yet to be developed."

Past experience gives us little confidence that the district will in fact implement a prevention or recovery strategy for the springs as required by statute. For example, as the draft plan notes, in 2005 the district determined that Starbuck Spring would likely not meet the adopted MFL if all projected 2025 water demands were realized, necessitating the development of a prevention strategy. Nine years later, no such prevention strategy has ever been implemented for Starbuck. Today, Starbuck's annual median flow has been under the minimum flow for the last three years.

Simply indicating that the district intends to comply with the law and implement recovery or prevention strategies at some unspecified time in the future obviously does not meet the statute's requirement that such strategies be specifically included as part of the regional water supply plan.

The Big Picture—How Much Water is Left?

The answer, which one must infer from the draft plan is "None." According to the draft plan, fresh groundwater resources cannot meet future water demands *or current permitted allocations* without resulting in unacceptable impacts to water resources and related natural systems. (emphasis added). In other words, the districts have already permitted more water pumping than can be sustained without endangering the springs and lakes—just as the environmental advocates and other concerned citizens have said all along. The draft plan says that "[o]verall, the results of the modeling estimate that the sustainable groundwater withdrawal is 850 mgd."

According to the draft plan, total average water use in the CFWI planning area is projected to increase "from an estimated current use of 800 million gallons per day (mgd) to almost 1100 million gallons per day in 2035." But current use is not 800 mgd as the public has been led to believe; 800 mgd is what was being used in 2010. By next year, the draft plan estimates that the projected use will be 849.54 million gallons per day. In other words, according to the draft plan, we are going to reach the level at which significant negative impacts to our rivers, lakes and springs will occur, not at some distant point in the future, but *next* year.

There is nothing in the plan which indicates that this environmental tragedy can be averted. Perhaps the most important fact revealed by the draft plan is tucked away on page C-16 of the Appendix in the discussion of modeling of future impacts. There it is disclosed that the total of all withdrawals allowed under current permits is 990 million gallons per day. The districts have already issued consumptive use permits for ***140 million gallons per day*** more than the level which the draft report says is sustainable. What an indictment of how the water management districts have failed to follow their statutory mandate to protect Florida's springs, lakes and rivers!

It is time for the water management districts, and particularly the St. Johns River Water Management District, to admit that they "got the water wrong," and take corrective action. The first step would be to adopt a comprehensive, meaningful, recovery plan for the Wekiva Basin including significant water conservation measures to be implemented as soon as possible. We are strongly opposed to the Regional Water Supply Plan going forward without such a recovery plan being included.

Sincerely,

Patricia Siemen

Patricia Siemen, OP, Esq.
Director

Robert A. Williams, Esq.
Of Counsel

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CFWI RWSP Team Response *- The RWSP acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.*

As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

As noted in Chapter 373.223, F.S., "to obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water: is a reasonable-beneficial use as defined in s. 373.019; will not interfere with any presently existing legal use of water; and is consistent with the public interest.

CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com.

Kerry B. Kates, P.E. Director of Water and Natural Resources, Florida Fruit & Vegetable Association (02/20/14)

FFVA
FLORIDA FRUIT & VEGETABLE ASSOCIATION

February 20, 2014

St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

RE: Comments: Central Florida Water Initiative – Draft Regional Water Supply Plan

To Whom It May Concern:

The Florida Fruit & Vegetable Association (FFVA), a non-profit, agricultural trade organization whose mission is to enhance the competitive and business environment for producing and marketing fruits, vegetables and other crops, greatly appreciates the opportunity to comment on the draft Central Florida Water Initiative (CFWI) Regional Water Supply Plan (RWSP). The following comments are respectfully being provided to the group by FFVA on behalf of our agricultural grower and producer members whose properties and operations are located within the boundaries of the CFWI planning area.

Acreage Projections Based on Antiquated Data

The RWSP makes clear reference to the fact that much of the source data utilized in the calculation of agricultural acreages was predicated on obsolete information and statistics (i.e. 2005 aerial photography, 2005 GIS land-use layers, historical FASS data, etc. . .). Much of the agricultural land that was either fallow or slated for sale in 2005 during the height of the construction boom has been put back into production. Because of this, as we move forward with the planning process it is imperative that we recognize that the agricultural acreages and their relative water demands could change significantly.

Orange County Citrus Acreage and CONSERV II

Although the RWSP anticipates an overall decline in citrus acreage within Orange County through the 20 year planning horizon, many growers that are currently involved in and utilizing reclaimed water through the CONSERV II program are either in the process of transitioning or are expected to transition back to groundwater as their primary water source for both irrigation and frost/freeze protection. The CONSERV II program supplies reclaimed water to approximately 2,737 acres of citrus groves; however, since the end of the original agreement in 2006 between the growers and the City of Orlando and Orange County, continuous rate increases have incited many growers to consider obtaining consumptive use permits.

P.O. Box 948153, Maitland, FL 32794-8153 • 800 Trafalgar Court, Suite 200, Maitland, FL 32751
321.214.5200 • fax 321.214.0210 • www.ffva.com

Sod Production is Directly Correlated to the Construction Industry

As the construction sector continues to recover within Florida, we can anticipate seeing a correlated increase in overall sod production. In Appendix A, pgs. A-50 thru A-51, Table A-18, sod acreage is static from 2010 to 2030. Given the growth in population we are anticipating within the Central Florida area over the planning horizon, it is logical that sod production and acreage will be trending upwards, keeping pace with new construction.

Blueberry Acreage Within Polk County/SWFWMD

Within Appendix A, page A-53, Table A-19, blueberries do not appear to be accounted for as a crop type grown within that portion of Polk County residing within the boundaries of the Southwest Florida Water Management District. FFVA has numerous grower members that have substantial blueberry operations in Winter Haven, Bartow, Auburndale and Lake Wales. Additionally, overall acreage devoted to this commodity has steadily increased over the last decade; we anticipate this trend to continue.

FFVA greatly appreciates the opportunity to provide comments and to be directly involved during this process.

Sincerely,

Florida Fruit & Vegetable Association

K B. Kates, P.E.

Kerry B. Kates, P.E.
Director of Water and Natural Resources

P.O. Box 948153, Maitland, FL 32794-8153 • 800 Trafalgar Court, Suite 200, Maitland, FL 32751
321.214.5200 • fax 321.214.0210 • www.ffva.com

CFWI RWSP Team Response *- Thank you for your comments. As part of the efforts to prepare a single RWSP and to achieve consistency for the CFWI Planning Area, a Demand Subgroup was formed to review and update population and water demand projections for the CFWI Planning Area. The Demand Subgroup review began in late 2011 and was completed in early 2013. The Demand Subgroup consisted of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area. In addition, the Demand Subgroup held a special meeting with area agricultural representatives during the CFWI process and as a result, initial projections were updated. It should be noted that these projections were made using a snapshot in time and the projections are intended solely for regional planning purposes to determine what WSO are necessary in the future. The Demand Subgroup will continue to work with utilities and engage stakeholders during the next CFWI RWSP update, to ensure that the best available information is being used to estimate regional demands.*

CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

Nancy Prine, Board Member, Friends of the Wekiva River, Inc. (02/20/14)

FRIENDS OF THE WEKIVA RIVER, INC.

February 20, 2014

Mr. Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177
Via email: tbartol@sjrwmd.com

Dear Mr. Bartol:

The *Friends of the Wekiva River* offer these comments on the Central Florida Water Initiative (CFWI) Draft Regional Water Supply Plan.

The natural environment of Central Florida is one of the driving forces for the continued economic growth of our region. For over 30 years the Friends have worked to assure the protection of the Wekiva River, the more than 30 springs supporting the river, the lands of the springshed, and the watershed. Over the years we have monitored the water flow of the springs and the river and have become increasingly concerned about the reduction in flow and water quality. We are optimistic that we may once again see a restoration of the flow that will sustain the natural environment as the result of work that will be accomplished through the plan.

The fact that the CFWI covers parts of three water management districts is encouraging in that area wide conditions can be approached in a coordinated manner and innovative solutions to water supply may be developed to provide water for all in the region. It is important to remember that one of the beneficial uses of water is to sustain the natural systems, including plants, wildlife and habitat.

The Friends are concerned about the quality, as well as quantity, of water flowing from our springs, particularly related to the unique flora and fauna of each individual spring. The report states that there is still a limited amount of groundwater available, and water of lower quality than that of the Upper Floridan might be withdrawn from the Lower Floridan Aquifer as a source to supplement waters of the Upper Aquifer, or mixing with the higher quality water. In the discussion of Water Source Options, Chapter 6, it has been noted that the aquifer systems are "sufficiently connected that pumping in one aquifer affects the adjacent aquifers" and it has been noted that the confining layer separating the layers is leaky and inconsistent. These factors pose a concern of a potential threat to the character and well-being of the springs that are significant to the environment and economic importance of the Wekiva basin by introducing waters that might cause damage to the spring system.

We believe, as do other environmental organizations to which we have spoken, that the Water Supply Plan is not placing enough emphasis on conservation measures that could reduce demands on the groundwater and anticipated surface water withdrawn from our rivers and lakes. Considerable savings have been realized from programs previously instituted by the water management districts. We call for additional incentives, emphasis on conservation practices and regulation to increase conservation of water. Though there are many devices available on the market to conserve water use in all water use applications, one area that stands out is the waste of water for irrigation. By using recently developed equipment and systems for residential, commercial and agricultural purposes substantial water, up to as much as one-half the amount can be saved.

Groundwater and surface water should never be used to supplement reclaimed water. Instead additional reclaimed water must be developed from non-potable water sources.

Minimum Flow and Levels (MFL) have been established for lakes, springs and rivers to establish conditions within those water bodies, as detailed in Appendix B of the report. The Wekiva River, Wekiwa Springs, and Rock Springs and other springs in the Wekiva basin have MFLs assigned. However, there are no protection and restoration plans for them. We have followed the monitoring reports for some time and have found numerous occasions where the levels have not been met, though the CFWI report has no mention of the low readings. It is imperative that all MFLs are updated for current conditions and prevention and restoration plans are in place before water supply measures are put in place. We trust that plans developed under those plans may restore flows in the Wekiva River, Wekiwa Springs and Rock Spring.

We have had the opportunity to attend CFWI Steering Committee meetings and be a part of the CFWI Solutions Team. We are impressed with the work that has been accomplished by DEP, the water management district's staff, the water utilities and local governments, their extensive knowledge and their devotion to the task of finding solutions to the water needs of the region. The Friends of the Wekiva River will continue to be a part of the effort to assure that water will be available from sources acceptable for Central Florida and all who live and play in our environment.

Sincerely,

Nancy Prine
Board Member, Friends of the Wekiva River, Inc.
655 Terrace Boulevard
Orlando, FL 32803
407 898-9200
npla@aol.com

CFWI RWSP Team Response *- The RWSP acknowledges that some resources in the area are currently impacted by existing withdrawals. Recovery strategies, such as for the SWUCA, have been or will be implemented to ensure recovery to adopted MFLs can be achieved.*

As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.

The Districts agree that conservation is an important element in meeting future water demands. CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

Nicholas Porter, Esq., on behalf of STOPR+2 (02/20/14)

February 20, 2014

VIA Email and U.S. Mail

Mr. Carlos Beruff
Governing Board Chair
Southwest Fla. Water Management District
2379 Broad Street
Brooksville, FL 34604-6899

Mr. John Miklos
Governing Board Chair
St. Johns River Water Management District
P.O. Box 1429
Palatka, FL 32178-1429

Mr. Daniel O'Keefe
Governing Board Chair
South Fla. Water Management District
3301 Gun Club Road
West Palm Beach, FL 33416

Mr. Andrew Bartlett
Deputy Secretary
Water Policy and Ecological Restoration
Florida Dept. of Environmental Protection
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: **STOPR+2 Comments on the CFWI Water Management District Water Supply Plan Development Process**

Dear Messrs. Beruff, Miklos, O'Keefe, and Bartlett,

On behalf of the City of St. Cloud, Toho Water Authority, Orange County Utilities, Polk County Utilities, Reedy Creek Improvement District, Orlando Utilities Commission, and Seminole County Environmental Services (STOPR+2), we would like to take this opportunity to provide our comments and concerns regarding water supply planning issues among the three districts and the CFWI process.

The CFWI Guiding Document approved by the three water management districts and other participating stakeholders identifies six primary goals for the CFWI process. One of those goals is the development of a single, coordinated regional water supply plan (RWSP) applicable to the entire CFWI region. Under the previous approach taken by SJRWMD, SFWMD, and SWFWMD regarding water supply planning, each water management district adopted a separate water supply plan that was applicable within its district. This process created uncertainty and inconsistency between the water management districts and for the utilities regarding population and water demand projections, resource protection criteria, available groundwater, and water supply project planning.

In the CFWI process, a Regional Water Supply Plan Team was formed to develop the single RWSP applicable throughout the CFWI area that was expected to be adopted by the three water WMD governing boards. The STOPR+2 members worked closely with the CFWI Water Supply Plan Team to advance the goals specified in the CFWI Guiding Document. A draft plan was released to the public in late 2013, and it is currently scheduled for approval by each of the water management district's governing board in April 2014. We understand that when each water

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management district's governing board approves this CFWI RWSP, it will be with the commitment that the CFWI RWSP will be revised and updated to incorporate the consensus solutions and projects that are currently being identified in the solutions phase of the CFWI process.

We believe that the water management districts should continue to adhere to the commitment articulated in the CFWI Guiding Document to develop and adopt a single water supply plan applicable to the CFWI region and commit to approve it in April as scheduled.

Since completion of the draft CFWI RWSP, the SJRWMD released its draft District Water Supply Plan (DWSP), applicable to the entirety of its district, including the CFWI. SJRWMD's draft DWSP designates its portion of the CFWI as Region 3, and includes a chapter applicable to Region 3 estimating water demands, identifying conservation elements, quantifying ground and surface water availability, and identifying potential water supply and resource development projects that were not developed by and coordinated with the CFWI Regional Water Supply Plan Team. Significant parts of the CFWI Regional Water Supply Plan cannot be separated into three separate water management district water supply plans because much of the data analysis, water availability analysis, and water supply projects were developed and applied on a regional basis and not by water management districts.

We are concerned that SJRWMD's proposed adoption of its DWSP applicable to a portion of the CFWI will result in conflicting water supply plans between SJRWMD and the other two CFWI water management districts. The adoption of multiple water supply plans applicable to the same region also creates uncertainty and potential conflicts for local governments with regard to their own water supply planning obligations. Under Section 163.3177(6)(c)3, Florida Statutes, within 18 months of adoption of a water supply plan by a water management district, local governments are required to update their comprehensive plans to incorporate a work plan for the construction of alternative water supply projects necessary to serve existing and new development. If multiple, conflicting plans are adopted in short succession, it will create uncertainty regarding the timeframes for adoption of the facilities work plan, and likely result in conflicting plan requirements. Instead, we believe that SJRWMD, the SFWMD and the SWFWMD should not adopt their own individual water supply plans applicable to the CFWI area but should adopt the CFWI RWSP as originally intended.

To demonstrate the duplication and potential for conflicts of the process initiated by the SJRWMD in publishing the Region 3 DWSP, we have attached a letter sent to the SJRWMD addressing the group's comments on the DWSP. This letter was sent separately to the SJRWMD in order to meet the established timeframe for comments.

In summary, we support the efforts to adopt, in a timely manner, the CFWI RWSP that was developed in collaboration with stakeholders and which identifies clear solutions to address water resource and water supply issues in our region. We also discourage the development of data outside the CFWI process and the pursuit of individual DWSPs for this area.

Thank you in advance for your consideration of these comments.

Sincerely,

Nicolas Porter, Esq.
On Behalf of STOPR+2

cc: SJRWMD Governing Board Members (via email only)
SFWMD Governing Board Members (via email only)
SWFWMD Governing Board Members (via email only)
Mr. Rich Budell, Fla. Department of Agriculture and Consumer Services (via email only)

Attachment

STOPR+2 GROUP COMMENTS ON SJRWMD 2013 DWSP
February 20, 2014

The following comments on the St. Johns River Water Management District (SJRWMD) 2013 District Water Supply Plan (DWSP) represent the collective comments from the STOPR+2 utility group:

City of St. Cloud
Toho Water Authority
Orange County Utilities
Polk County Utilities
Reedy Creek Improvement District
Orlando Utilities Commission
Seminole County Utilities

We appreciate the opportunity to provide these comments on the water supply planning process.

Comments Related to a Parallel DWSP and a CFWI RWSP

The FDEP, the WMDs and utilities in the central Florida area have dedicated a significant amount of time, money and taxpayer resources in the last few years to reach consistency in central Florida and to develop a single regional water supply plan (RWSP) for the area. As a part of that collaborative group effort, it was agreed that CFWI data and analyses would be regional and not be disaggregated across District lines.

However, upon review of the draft SJRWMD DWSP, it is clear that a significant effort has been undertaken to disaggregate the portions of the SJRWMD from the remainder of the CFWI. We are concerned that this effort has introduced the unnecessary redundancy and significant potential for conflicting information that the CFWI effort was chartered to eliminate. Furthermore, a DWSP parallel to the CFWI RWSP, can lead to duplicative or inconsistent requirements by dividing portions of utilities service areas under different water supply plans, therefore, the Region 3 portion of the DWSP should not be approved as proposed. Several examples of inconsistencies are provided below in our comments.

The following are some questions regarding this process:

- Do all three three water management districts intend to develop overlapping water supply plans for their respective portions of the CFWI? And if so, are the three Water Management Districts coordinating the breakdown of the data by District to ensure consistency with the CFWI RWSP?
- How does the SJRWMD propose to integrate future CFWI efforts, such as the Solutions Planning Phase, into the DWSP?
- How does the SJRWMD intend to address public comments on the DWSP that could affect Region 3 results?
- Does the SJRWMD intend to coordinate comment resolution on the DWSP with the CFWI RWSP team and the CFWI Steering Committee?
- If either the DWSP or the CFWI RWSP is legally challenged, are there any consequences to the other plan?

Page 1

- How will the three WMDs ensure that the CFWI RWSP goes through the statutory 5-year update process instead of being abandoned and going back to their individual DWSPs?

Comments Related to Inconsistencies Between the DWSP and the CFWI RWSP

Page 1-7. Under the section for the St. Johns River, it states, *"The water is generally fresh south of DeLand and brackish to saline north of DeLand."* In the CFWI RWSP the description states that some reaches upstream (south) of DeLand experience *"slightly to moderately brackish"* conditions. Therefore, we recommend rewording this statement consistent with the CFWI RWSP.

Page 9-2. In the Introduction section, it states, *"Portions of this chapter may be updated after the CFWI regional plan is approved."* Please provide an explanation of how this chapter of the DWSP would be updated. Would a change of this chapter after adoption of the DWSP require a new public process to re-adopt all or part of the plan? Would an update trigger the re-initiation of statutory timeframes for compliance by water suppliers?

Page 9-2. In the green inset box, it states, *"When approved, the CFWI regional plan will be incorporated into this Plan to ensure consistency."* Please provide additional information on how the CFWI plan will be incorporated and by what process.

Page 9-4. In the Potable Reuse section, it states, *"Potable reuse is likely to be used in the District during the planning period."* However, no conclusion regarding the likelihood of potable reuse occurring in this area was developed as part of the CFWI RWSP effort or included in the CFWI RWSP. We recommend rewording this statement to be consistent with the conclusions of the CFWI RWSP.

Page 9-7. It states, *"Evaluations indicate that 350 mgd of fresh groundwater is available for sustainable withdrawals in Region 3."* As part of the CFWI, total groundwater availability in the CFWI region was determined to be between 850 and 925 mgd. These values were not segregated by water management district because it was agreed that withdrawals within the CFWI were interrelated and such a segregation was not possible. Therefore, we question the validity of the groundwater availability estimate included in the DWSP and request an explanation of how groundwater availability in the SJRWMD portion (Region 3) of the CFWI was determined.

Page 9-8 and page 11-4. The DWSP concludes that, *"The greater Orlando area has many water supply utilities that are close enough to potentially optimize groundwater resources through interconnections and coordinated management."* While the CFWI RWSP generally states that source management techniques may be tools to maximize future supplies, there is no reference to this statement. We recommend rewording this statement consistent with the CFWI RWSP.

Page 9-8 and page 11-4. The DWSP concludes that, *"Hydration of wetlands near some wellfields may help maintain the groundwater withdrawal capacity."* However, the CFWI RWSP does not contain this recommendation, but recommends, *"Evaluate local and regional wellfield management options that minimize or reduce existing and projected impacts on the water resources, wetlands, water quality and MFLs. Where existing environmental impacts are deemed unavoidable, explore the use of other mitigation options to offset impacts."* The recommended evaluation is being conducted as part of the CFWI Solutions Phase, so the

conclusion in the DWSP is premature at this time. Therefore, we recommend rewording this statement consistent with the CFWI RWSP.

Page 11-4. The DWSP concludes that, *"Utilities in Region 3 have implemented the most reuse in the District. There is still considerable potential for increased reuse (70 mgd), and numerous reuse projects have been proposed by utilities."* This should be re-worded as follows to more accurately represent the analyses conducted for the CFWI RWSP, *"Utilities in Region 3 have implemented the most reuse in the District. There is potential for increased reuse (70 mgd) associated with future water use, and numerous reuse projects have been proposed by utilities."*

Page 11-4. The DWSP conclusions for Region 3 are incomplete and inconsistent with the conclusions of the CFWI RWSP. We request that the conclusions of the DWSP be modified to reflect the CFWI RWSP conclusions.

Page 9-8. To be consistent with the CFWI RWSP, source management and reclaimed water substitution credits and impact offsets should be added to the table titled, "Water Resources Can be Enhanced by Management Techniques."

Page 9-9. Table 9-2 lists "Orange County Project RENEW" under reclaimed water projects. As noted in the CFWI RWSP, the correct title should be "Orlando Utilities Commission Project RENEW". The same correction should be made to Appendix F, page F-25.

Page 9-9. Table 9-2 lists a project entitled "Apopka North West Reclamation Facility (NWRF) to Reclaimed Main Extension". However, as noted in the CFWI RWSP, this is an Orange County Utilities project and is entitled, "NWRF to Apopka Reclaimed Main Extension". Please correct this information in Table 9-2 and also in Appendix F, page F-20.

Appendix A, Table 3: Demand and population for utilities located in more than one water management district, such as OUC, OCU, and ECFS, are only presented for the SJRWMD. As part of the CFWI process, it was agreed to provide total demands for utilities and not have them disaggregated by District. To be consistent with the CFWI RWSP, we recommend presenting the CFWI-agreed demands in the SJRWMD DWSP.

Appendix A, Table A-1 and Table 5a. The historic water use, historic population, historic gross per capita, projected demand and projected population presented for OUC's SJRWMD service area are incorrect. To be consistent with the CFWI RWSP and address this error, we recommend presenting the CFWI-agreed demands in the SJRWMD DWSP.

Appendix E: In the DWSP, reclaimed water information is presented by facility for utilities in Region 3. However, as part of the CFWI process, it was agreed that the reclaimed water data collected from utilities would only be used at the utility level. We recommend presenting the CFWI-agreed reclaimed water information in the SJRWMD DWSP. Also, the reuse quantities for the City of Orlando on page E-4 are incorrect.

Again, we appreciate the opportunity to provide these comments and look forward to continuing to work with the SJRWMD on its water supply planning efforts.

CFWI RWSP Team Response *- Thank you for your collaboration throughout the CFWI RWSP process and thank you for the comments regarding the CFWI RWSP. The information in the SJRWMD DWSP for Region 3 was taken directly from the CFWI RWSP. In the event there are any unanticipated inconsistencies between the information and conclusions contained within the CFWI RWSP and the SJRWMD DWSP for Region 3, the information and conclusions applicable to the SJRWMD contained in the CFWI RWSP will control. Responses to Comments regarding the SJRWMD DWSP will be addressed in a separate SJRWMD DWSP Comments / Responses document and efforts to achieve consistency with the CFWI RWSP are underway.*

SJRWMD staff will recommend that the Governing Board: (1) endorse the CFWI RWSP and approve the information and conclusions of the CFWI RWSP that apply within the jurisdictional boundaries of the SJRWMD; and (2) approve the SJRWMD DWSP 2013, which for Region 3 includes the incorporation of the information and conclusions of the CFWI RWSP that apply within the jurisdictional boundaries of the SJRWMD. The SJRWMD DWSP 2013 will then serve to meet the SJRWMD's water supply planning obligations pursuant to section 373.709, F.S.

Ryan Smart for Senator Bob Graham, Florida Conservation Coalition (02/21/14)

Attached are the Florida Conservation Coalition's (FCC) comments on the Central Florida Water Initiative's Draft Regional Water Supply Plan. I apologize that the comments come a day late.

We hope to have more opportunities to comment on, and contribute to, this important initiative in the future.

February 20, 2014

Tom Bartol
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32177

Dear Mr. Bartol,

Below are comments from the Florida Conservation Coalition (FCC) on the Central Florida Water Initiative (CFWI) Draft Regional Water Supply Plan. The FCC is composed of more than 50 conservation organizations and thousands of individuals dedicated to protecting and conserving Florida's water, land and wildlife.

Based on the finding that "fresh groundwater resources alone cannot meet future water demands in the CFWI planning area without resulting in unacceptable impacts to water resources and related natural systems," the Central Florida Water Initiative's primary focus has been to identify alternative water supply projects to satisfy the 250 million gallon per day (mgd) deficit projected in 2035. However, both the draft supply plan's recommendations and assumptions for water demand fail to capitalize on the potential of water conservation and efficiency policies and programs to reduce the demand for water. Relying on surface waters and the transmission of water from one area to another have environmental and economic drawbacks that should lead to a greater consideration of the benefits of water conservation and efficiency to meet the water needs of the future by reducing water demand across all sectors.

As a recent paper presented at the UF Water Institute by the environmental engineering firm Hazen and Sawyer contends, water conservation should be considered as an alternative water supply option and water supply planners should begin to pay more attention to the demand side

1

of the water equation relative to the traditional focus on the supply side. This same view is promoted in a 2010 report released by the Florida Department of Environmental Protection which states in part,

> "In many parts of the state, inexpensive groundwater is reaching its limit as a source of supply to meet human needs without causing environmental harm. Meeting the state's increasing demand for water will require development of alternative sources such as reclaimed water, brackish groundwater, surface water, and seawater. However, these sources can be expensive to develop. Conservation is a "source" that is both inexpensive and plentiful."

When compared with other alternative water supply proposals, a growing body of research shows that water conservation has numerous advantages for Florida. These advantages include lower capital and incremental costs; reduced energy consumption which minimizes greenhouse gas emissions; improved water quality from reduced runoff; increased flow and levels in springs, rivers, lakes, and aquifers; and greater predictability and sustainability for water resource users.

Given the advantages of water conservation and efficiency policies and programs it is disappointing that the draft supply plan concludes that less than 4% of 2035 demand can be met through water conservation.

We recommend the CFWI draft regional water supply plan be amended to reflect the following concerns:

- Currently, the CFWI water supply plan focuses on projects to further drawdown Florida's surface waters and groundwater, including over 150 mgd from the St. Johns River, to meet future projected water demand. These projects pose serious threats to Florida's water resources and related ecosystems and are economically inefficient and largely unreliable. The cost of only the proposed surface water projects for the 5 county area is nearly $2 billion, yet there is still no guarantee that surface water will be available for consumptive users during times of drought or decreased rainfall when both the waterways and water users are most in need of additional water. Instead of focusing on supplying additional water, the water supply plan should fully consider the cost savings and environmental benefits that accrue from water conservation and focus on ways to reduce the demand for freshwater through policies, projects, and incentives that require and promote aggressive water conservation by all water use sectors.

- For meaningful progress to be achieved through water conservation all consumptive use permit holders should be required to meet water conservation goals through the implementation of best management practices (BMPs) as a condition of receiving a new or renewed consumptive use permit. The current draft supply plan assumes conservation participation rates of only 23% in public water supply BMPs, like retrofitting inefficient water appliances, which do not require a visit by another party and only 12.5% for BMPs that do require a site visit. Instead of assuming low participation rates the CFWI should suggest regulations requiring 100% BMPs participation for public water supply users. Consequently, the supply plan should be updated reflecting a 100% public supply participation rate in conservation BMPs, significantly reducing the projected water deficit.

- For a fraction of the cost of draining and pumping surface waters significant gains could be made in water conservation through incentives and direct payments for conservation projects that result in demonstrable waters savings. Such projects could include the installation of water efficient appliances and toilets, soil moisture sensors, rain barrels and cisterns, and sod replacement. Funding to offset the costs of such projects should be recommended.

- The draft water supply plan assumes only a 12.5% participation rate in water conservation best management practices for agricultural operations in calculating 2035 demand. A combination of regulations and funding should be recommended in the draft plan to attain100% participation by agricultural operations in BMPs that result in demonstrable water savings without placing excessive financial hardship on the operator. The draft plan also mentions that greater water savings (on top of 100% participation) could be achieved through the implementation of additional BMPs for agricultural operations, yet fails to include or analyze these as part of the plan. Additional BMPs for agricultural operations should be required as part of the draft supply plan, including the creation and implementation of irrigation management plans, the use of soil moisture measuring devices, and audits by mobile irrigation labs to assure that irrigation equipment is in proper working order to maximize conservation. Funding should be provided to offset a portion of the cost of implementation and the draft supply plan demand

projection should be updated to include water savings gained from 100% participation in the newly included BMPs.

- The draft supply plan fails to consider economic and pricing tools which could reduce water demand, incentivize conservation, and move water towards higher value uses. The CFWI's water conservation sub-group should examine which economic tools are within the Districts' purview that would send appropriate signals about the value of water and the cost-effectiveness of conservation.

- Considering the opportunities for conserving water and lessening demand through reasonable conservation measures the CFWI should examine the use of regulatory tools, including the modification of consumptive use permits for inefficient water users or those who fail to meet conservation goals, in order to make more water available for protecting water resources and efficient water users during times of water shortage.

Thank you for the opportunity to comment on the draft water supply water plan. Besides the comments and recommendations above, we also encourage the CFWI to increase its efforts to facilitate public involvement in this process for residents in all the areas Florida that will be effected by the outcomes of this plan.

Sincerely,

Senator Bob Graham
The Florida Conservation Coalition

Individual organizations may submit additional comments

CFWI RWSP Team Response *- As described in the CFWI RWSP, fresh groundwater resources alone cannot meet future water demands or current permitted allocations without resulting in unacceptable impacts to water resources and related natural systems. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include fresh groundwater, brackish groundwater, surface water, seawater and reclaimed water. Improvements in water storage capacity (via ASR and reservoirs) and water conservation provide significant opportunities to manage or reduce water demands. The CFWI RWSP provides an overview of the potential water source options available to water users within the CFWI Planning Area. Where possible, planning-level estimates of the potential available yield for each source is characterized. These planning-level estimates address a number of factors including consideration of any established MFL, potential impacts to water and environmental resources, the results of previous water resource evaluations, permitability, water source quality, consideration of existing legal users, and known engineering limitations.*

Potential projects identified along the St. Johns River and included in the CFWI RWSP were derived from an AWS strategies investigation (CH2M HILL 1996) , SJRWMD 2005 DWSP Fourth Addendum dated May 12, 2009, MFLs for the St. Johns River (SJRWMD Technical Publication SJ2007-1, SJRWMD Technical Publication SJ2006-5, SR 520 report is in draft form) and 2012 St. Johns River WSIS (WSIS; SJRWMD 2012). These will be further investigated by the Solutions Planning Team. Of importance, the goal of the 2012 St. Johns River WSIS was to provide a comprehensive and scientifically rigorous analysis of the potential environmental effects to the St. Johns River associated with annual average surface water withdrawals as high as 262 mgd (155 mgd from the middle and upper St. Johns River and 107 mgd from the Ocklawaha River). The four-year study, which was peer-reviewed by the NRC, resulted in the development of tools to help guide future decision-making regarding the increased use of surface water from the St. Johns River (SJRWMD 2012). The study confirms the findings of earlier investigations indicating that the St. Johns River can be used as an AWS source with minimal to negligible environmental effects. Goals of the WSIS included identification of AWS that protect both groundwater and surface water resources.

The RWSP only provides an estimate of the probable amount of water conservation that can be achieved under an example set of circumstances. It does not attempt to measure the economic feasibility of specific projects or the implementation of practices by individual entities. The economic feasibility of specific water conservation projects is determined by who will implement them, usually water providers or end users.

The Districts agree that conservation is an important element in meeting future water demands and CFWI work will continue with two groups. The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

In addition, a Regulatory Team has been established to develop options for consistent regulations, implementing solution strategies and assisting with resource recovery. Additional information regarding the Solutions and Regulatory Teams can be found at cfwiwater.com. Also, currently underway is the CUP consistency process, a statewide cooperative effort between all five Districts and FDEP to achieve CUP consistency, including water conservation.

James S. Alves for Eric Olsen, Attorneys for Florida Electric Power Coordinating Group, Inc. (02/21/14)

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)
3000 Bayport Drive, Suite 600
Tampa, Florida 33607-8411
(813) 289-5644•Fax (813) 289-5646

February 21, 2014

VIA ELECTRONIC MAIL: tbartol@sjrwmd.com

Tom Bartol
SJRWMD
4049 Reid Street
Palatka, FL 32177

Re: Florida Electric Power Coordinating Group Comments on Central Florida Water Initiative Draft Regional Water Supply Plan

Dear Mr. Bartol,

The Florida Electric Power Coordinating Group, Inc. – Environmental Committee (FCG-EC) submits the following comments to the draft Central Florida Water Initiative (CFWI) regional water supply plan (RWSP). As background, the FCG-EC is an electric industry group representing electric power generating entities in Florida. Members of the FCG-EC own and operate electric power generating facilities within the CFWI area that use water. Members of the FCG plan on expanding power generation within the CFWI in the future to meet electric generation needs. As such, a substantial number of the FCG-EC's members are substantially affected by the draft CFWI RWSP.

According to the draft CFWI RWSP, power generation water needs are projected to increase from 17.20 MGD in the year 2010 to 22.41 MGD in the year 2035. (Table 8) Based upon the background documentation for the draft CFWI RWSP, these projections were based partially upon site plans on file with the Florida Public Service Commission in 2006. The FCG-EC notes that these site plans are routinely updated and requests that the draft CFWI RWSP be updated to reflect the current site plans.

Electric power generation plants provide a majority of their own water supply needs and are thus self suppliers. For power generation self suppliers, the draft CFWI RWSP appears to fail to comply with the mandate of subsection 373.709(2)(a)2., F.S., which requires that all regional water supply plans contain a list of water supply project options, including traditional and alternative water supply project options, from which self suppliers may choose for water supply development. Almost all of the water supply project options set forth in the draft CFWI RWSP are identified to meet the needs of public water suppliers and no options are identified for power generation.

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)
3000 Bayport Drive, Suite 600
Tampa, Florida 33607-8411
(813) 289-5644•Fax (813) 289-5646

Appendix E, Table E-2 identifies significant quantities of reclaimed water for unidentified "industrial" uses through the 2035 planning horizon. However, it is unclear whether some or all of the power generation projected demands set forth in Table 8 are intended to be met by this "industrial" reclaimed water. If this is the case, specific reclaimed water supply project options should be set forth to meet specific power generation demands set forth in the RWSP.

In summary, the FCG-EC requests that the electric power generation water supply demands set forth in the draft CFWI RWSP be updated to reflect current power generation information and that specific sustainable water supply project options be identified to meet these demands.

Thank you for considering these comments. If you have any questions, please do not hesitate to contact Eric Olsen at (850) 222-7500.

Sincerely,

James S. Alves for
Eric Olsen
Attorneys for Florida Electric Power
Coordinating Group, Inc.

CFWI RWSP Team Response *- As part of the efforts to prepare a single RWSP and to achieve consistency for the CFWI Planning Area, a Demand Subgroup was formed to review and update population and water demand projections for the CFWI Planning Area. The Demand Subgroup review began in late 2011 and was completed in early 2013. The Demand Subgroup consisted of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area. It should be noted that these projections were made using a snapshot in time and the projections are intended solely for regional planning purposes to determine if WSO are needed in the future. The Demand Subgroup will continue to work with stakeholders during the next CFWI RWSP update to ensure that the best available information is being used to estimate regional demands.*

The WSO Subgroup, consisting of SFWMD, SJRWMD, SWFWMD, FDEP, and FDACS staff, as well as utility and agricultural industry representatives from the CFWI Planning Area worked with utility representatives, as well as FDACS staff, to solicit and prepare a draft list of potential water source options available to all water users within the CFWI Planning Area. The projects listed in Appendix F of the RWSP were submitted by public supply utilities and local governments. In addition, SWFWMD solicited their respective advisory committees to submit projects for inclusion. During the WSO Subgroup process, no project options were submitted by other user stakeholders. Projected additional reclaimed water flows, exceed the project options identified or submitted. Therefore, there may be additional projects that could be implemented.

The CFWI Solutions Planning Team, consisting of representatives from the SJRWMD, SFWMD, SWFWMD, FDEP, FDACS, public supply utilities, agriculture, environmental groups, regional leaders, and business representatives, has been established and will develop alternatives to meet water demands by optimizing the use of existing groundwater and by identifying viable conservation and other management strategies, viable alternative and non- traditional water supplies, areas that may require recovery or resource protection and areas where regulatory and water resource protection strategy consistency may be needed. Results will be included in the CFWI 2035 Water Resources Protection and Water Supply Strategy document, with a draft currently slated for completion by December 2014.

Stakeholders are encouraged to work with the CFWI RWSP Teams to provide specific values and project options for future updates and inclusion.

Dana Farris, Chief, Legislative Services Division, Jacksonville City Council (02/27/14)

As directed by the Jacksonville City Council and pursuant to Section 2 of the above listed resolution, I am forwarding this bill to you for your review/comments. Please forward any comments or concerns to the email listed below and include the bill number for reference. Thank you and have a great day!

Amended & Adopted 2/11/14

Introduced by Council President Gulliford and Council Member Carter & Co-Sponsored by Council Members Anderson, Bishop, Boyer, Clark, Crescimbeni, Jones, Love, Lumb, Redman, Schellenberg, Holt, Daniels & Yarborough and Amended on the floor of Council:

RESOLUTION 2014-37-A

A RESOLUTION OPPOSING ANY PROPOSAL TO WITHDRAW UP TO 155 MGD OF ADDITIONAL WATER FROM THE ST. JOHNS RIVER AND ITS ORIGINS TO HELP MEET THE WATER SUPPLY NEEDS OF CENTRAL FLORIDA OR ANY OTHER PART OF THE STATE; ENCOURAGING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT TO SEEK ALTERNATIVES TO THESE WATER WITHDRAWALS AND THE POTENTIAL DEGRADATION OF THE RIVER AND SIGNIFICANT ADVERSE IMPACTS THAT COULD OCCUR TO ALL DOWNSTREAM COMMUNITIES; PROVIDING FOR TRANSMITTAL OF COPIES OF THE RESOLUTION; PROVIDING FOR ONE CYCLE EMERGENCY PASSAGE; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the St. Johns River is our community's greatest natural resource; and

WHEREAS, the St. Johns River Water Management District (SJRWMD), has concluded in their St. Johns River Water Supply Impact Study (WSIS) that UP TO 155 million gallons of additional water daily could be removed from the St. Johns River to provide drinking water; and

WHEREAS, a group of independent scientists and experts from the National Research Council (NRC) conducted a peer review of the WSIS; and

WHEREAS, according to the SJRWMD Regional Water Supply Plan

and the Central Florida Water Initiative Water Supply Plan, the total proposed project withdrawal options from the St. Johns and the Ocklawaha Rivers exceed 300 million gallons daily; and

WHEREAS, SJRWMD cannot require any local governments to adopt mandatory conservation program ordinances; and

WHEREAS, the withdrawal of the water could reduce the river's flow and cause the St. Johns River salinity line to shift upstream, if allowed during drought and low flow conditions; and

WHEREAS, no one, including the SJRWMD, fully understands and can anticipate all of the potential impacts to the River's health and fisheries from the proposed withdrawals; and

WHEREAS, once the removal of the water has begun and the impacts, whatever they may be, propounded, the reversal of such water withdrawal will be difficult; now therefore

BE IT RESOLVED by the Council of the City of Jacksonville:

Section 1. The City of Jacksonville does hereby express its opposition to the withdrawal of millions of gallons of water daily from the St. Johns and Ocklawaha Rivers, without first requiring mandatory conservation programs by water suppliers prior to tapping a natural resource. The City Council further opposes any withdrawal of millions of gallons of water daily without fully understanding the ecological, silting and other impacts that such removal could have on the Rivers on a whole and the people, property, health and welfare of the other impacted lands on the River. Finally the City of Jacksonville fully supports the SJRWMD in any and all efforts to study and establish aggressive water conservation and efficiency programs as a means to providing water needs for today and well into the future.

Section 2. Direction to Circulate. The Council Secretary is authorized and directed to send copies of this Resolution to members of the St. Johns River Water Management District, the

Central Florida Water Initiative and Governor Rick Scott.

Section 3. Requesting One Cycle Emergency Passage, Pursuant to Council Rules 4.901 Emergency. One cycle Emergency passage of this Resolution is requested because the public comment deadline for the Central Florida Water Initiative Water Supply Plan is January 31, 2014, and a Resolution would need to be adopted and transmitted to St. Johns Water Management District by that deadline.

Section 4. Effective Date. This resolution shall become effective upon signature by the Mayor or upon becoming effective without the Mayor's signature.

Form Approved:

/s/ *Margaret M. Sidman*

Office of General Counsel

Legislation Prepared by: Lisa Rinaman

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CFWI RWSP Team Response *- Thank you for your submission.*