July 17, 2015

#### Submitted via email to: cfwiwater@sfwmd.gov

South Florida Water Management District ATTN: Mr. Dean Powell Water Supply Bureau 3301 Gun Club Road West Palm Beach, Florida 33406

# SUBJECT:Proposed CFWI Water Supply Planning Documents<br/>STOPR+2 Comments on Draft 2035 Water Resources Protection and Water Supply<br/>Strategies Plan and Draft Regional Water Supply Plan

Dear Mr. Powell:

Please accept this letter and the attached consolidated comments from the regional utility partnership informally referred to as "STOPR+2" which includes the City of St. Cloud, Tohopekaliga Water Authority (TWA), Orange County, Polk County, Reedy Creek Improvement District (RCID), Seminole County, and Orlando Utilities Commission (OUC)—on the draft Central Florida Water Initiative (CFWI) water supply planning documents.

Each of our organizations has actively participated in and contributed significant resources to the CFWI process. Our staff and consultants worked alongside District staff and other stakeholders during the development of the 2035 Water Resources Protection and Water Supply Strategies Plan (referred to as the "Solutions Plan") and the Regional Water Supply Plan (RWSP). As participants and contributors to the CFWI process, we have previously provided comments on the draft Solutions Plan on January 29, 2015 and March 14, 2015. In the spirit of continued collaboration, we have reviewed and generated comments on the May 2015 Public Draft versions of the RWSP and the Solutions Plan. These comments are provided as a series of four attachments, as listed below.

Attachment 1:	Copy of a letter submitted separately on behalf of the STOPR+2 utilities related to
	the conjoining of the RWSP and Solutions Plan.
Attachment 2:	Comments on the May 2015 Draft RWSP.
Attachment 3:	New comments on the May 2015 Draft Solutions Plan.

Attachment 4: Comments submitted on previous drafts of the Solutions Plan that the STOPR+2 Group is resubmitting for further consideration.



Bringing You Life's Most Precious Resource

Office of the Executive Director 951 Martin Luther King Boulevard, Kissimmee FL 34741 407.944.5131 Fax 407.343.4371 · www.tohowater.com Mr. Dean Powell July 17, 2015 Page 2 of 4

We commend the Districts for achieving the difficult and complicated task of consolidating the input of so many parties into documents that are intended to lead the region toward a sustainable future condition in which our communities' water supply needs are met, while protecting the environment. Nevertheless, we do have significant comments on some aspects of the draft CFWI documents and summarize those key concerns below.

- 1. The role of the Solutions Plan as an integral component of the RWSP should be better defined. The importance of this issue is that the RWSP has a distinct place in the law and a stand-alone Solutions Plan does not. The Solutions Plan should be expressly recognized as an integral part of the RWSP and identified as such in both documents. Specific comments provided to address this concept have been submitted on behalf of the STOPR+2 Group in a separate letter from Silvia Alderman dated June 24, 2015, which is provided as Attachment 1.
- 2. An explanation of known differences in the information presented between the RWSP and the Solutions Plan should be added for clarity. Compared to the RWSP, some information presented in the Solutions Plan is the result of different, refined, or updated evaluations. For example, some sections of the RWSP were updated with the results of such Solutions Plan evaluations (e.g., the Water Supply Project Options). In other cases (e.g., potential future conservation projections), the RWSP document was not updated to reflect the results of the Solutions Plan analyses, making various sections of the overall series of CFWI documents appear inconsistent—though they are not. It is suggested that supplemental text be added to better explain this linkage between evaluations performed as part of the RWSP and the Solutions Plan. A specific comment addressing this concern (Comment #2) is included in Attachment 2.
- 3. Certain definitions used in the documents for planning purposes are inconsistent with existing water management district rules. Of particular concern to the STOPR+2 utilities are the stated definitions of key concepts such as "brackish water", "fresh water", "traditional sources", and "non-traditional sources". We believe that the definitions expressed in the CFWI planning documents should be carefully restated to properly characterize the intent of how these terms were used in the RWSP and Solutions Plan. We provide various suggestions of how this might be accomplished in the detailed comments of Attachments 2 and 3.
- 4. Input previously provided on STOPR+2 related projects was not incorporated into the updated May 2015 version of the Solutions Plan document. As stated above, we provided comments on earlier draft versions of the Solutions Plan document, and some of the comments on projects that identified STOPR+2 utilities as stakeholders were not addressed. As the entities responsible for implementing these projects, it is important that these proposed changes be made. Such comments are resubmitted for consideration in Attachment 4.
- 5. The Solutions Plan does not adequately emphasize DMIT recommendations. The significance of implementing the recommendations of the Data, Monitoring and Investigations Team (DMIT) are not given adequate priority. For example, in the sections of the Solutions Plan discussing modifications and improvements to the ECFT model, there is no mention of incorporating the additional data points recommended within the DMIT plan. Adding these data points has the potential to significantly improve the accuracy of the model results, and therefore the future assessment of withdrawal impacts on the aquifer. We therefore request that the DMIT

recommendations for additional monitoring be more specifically detailed in the Solutions Plan, as suggested by various comments provided in Attachment 3.

- 6. As discussed in the plan documents, "consistency" should focus on general consistency amongst the Districts, and not only on consistent rules and regulations. We feel the Districts should continually strive for consistency with regard to all programs. While a consistent set of rules is certainly one tool that should be applied to the CFWI region, the process of developing consistency in the region should be open to other potential tools that may provide additional support for the Districts' and stakeholders' ability to implement the strategies developed in the CFWI process. Therefore, we request the text in the RWSP and Solutions Plan documents be modified to emphasize consistency amongst the Districts, in addition to developing a consistent set of rules, as a goal of this plan. Specific comments regarding this concern have been provided in Attachments 2, 3 and 4.
- 7. The consensus-driven work performed by the Water Conservation Subteam should be more strongly reflected in the Solutions Plan. Central Florida has experienced significant water savings through conservation over the past decade. The Water Conservation Subteam worked diligently to characterize potential conservation practices that could be implemented in the future to further augment the already significant water conservation programs of the region. Through the documentation of the Water Conservation Subteam's efforts, the significance of historical water conservation practices and resulting water savings has not been given due acknowledgment. In addition, some of the consensus-driven work performed by the Water Conservation Subteam has not been accurately reflected in the Solutions Plan. In our attached proposed comments for Chapter 2 of the Solutions Plan (in Attachment 3), we have indicated where the significance of historical conservation practices should be more strongly reflected and where the water conservation work effort and results should be more strongly reflect the consensus of the Water Conservation Subteam.
- 8. The discussion of water conservation alternatives should better emphasize and promote further development of the Conserve Florida Water Clearinghouse. An existing statewide clearinghouse, the Conserve Florida Water Clearinghouse, was established at the University of Florida but has not received significant funding in recent years. Chapter 2 of the Solutions Plan discusses various conservation BMPs but does not emphasize the existing Clearinghouse. Although not a 'project' to which a potential demand reduction volume can be attributed, the Clearinghouse nonetheless is a fundamental component of a comprehensive CFWI water conservation strategy. Additional data on the performance of various conservation measures will help with the selection and implementation of BMPs, and the Clearinghouse is a primary source of such data. We recommend that more emphasis be placed in the Solutions Plan document on additional development of the Conserve Florida Water Clearinghouse, as suggested by specific comments offered in Attachment 3.
- 9. Cost estimates for some projects do not reflect more accurate estimates developed and provided by utilities. We recognize the need to utilize the CFWI Cost Estimating (CE) Tool to produce consistent planning-level cost estimates for the water supply projects named in the Solutions Plan document. However, the utilities tasked with implementing the projects have more detailed and therefore more accurate information on the project costs, and also are accountable

for funding them. We therefore request that utilities' costs also be included for reference within the project descriptions, as noted in various comments of Attachment 3.

We appreciate the opportunity to review and provide comments on the Draft CFWI documents. We look forward to continuing to work with the Districts to implement programs that meet the water supply needs of the region. We are available to meet with the Districts to discuss any questions you may have on our comments.

Sincerely,

Bria 2 Milhele

Brian L. Wheeler, P.E. Executive Director, Tohopekaliga Water Authority On behalf of the "STOPR+2" Group

BLW/ncd

Enclosures: Attachments 1-4

# Attachment 1 Alderman Letter re: SP & RWSP

·

.



Silvia Morell Alderman

Akerman

Akerman LLP Suite 1200 106 East College Avenue Tallahassee, FL 32301 Tel: 850.224.9634 Fax: 850.222.0103

Dir: 850.425.1627 silvia.alderman@akerman.com

June 24, 2015

Janet Llewellyn Florida Department of Environmental Protection 3900 Commonwealth Blvd., MS 46 Tallahassee, FL 32399-3000

Mary Ellen Winkler St. Johns River Water Management District 4049 Reid Street Palatka, FL 32177-2529 Elizabeth D. Ross South Florida Water Management District 3301 Gun Club Road, 1410 West Palm Beach, FL 33406-3007

Amy Wells Brennan Southwest Florida Water Management District 7601 US Highway 301 N Tampa, FL 33637-6758

# Re: CFWI Regional Water Supply Plan ("RWSP")

Dear All:

The Water Cooperative of Central Florida and the entities informally referred to as "STOPR+2," (City of St. Cloud, Tohopekaliga Water Authority, Orange County, Polk County, Reedy Creek Improvement District, Orlando Utilities Commission and Seminole County) will be providing independent comments on the RWSP and Solution Strategies Plan through the assigned process. However, they asked me to write to you and highlight a particular concern, which was, coincidentally, also addressed in general terms during the last Regulatory Team conference call.

While there seems to be no disagreement among participants that the Solutions Plan ("SP") is part of the RWSP, we do not believe the drafters have adequately conjoined the two documents. The importance of this issue, as you are well aware, is that the RWSP has a distinct place in the law and a stand-alone SP does not. This makes it of paramount importance that there never be any doubt about the status of the SP as an element of the RWSP. The SP should be expressly recognized as an integral part of the RWSP and identified as such in both documents. We note that the documents as drafted make reference to an intent to make the SP 'one of the CFWI documents;' however, it is more than that. It should be prominently identified as an element of

akerman.com

June 24, 2015 Page 2

the RWSP. Regrettably the volumes lack a consistent, unambiguous statement to that effect. The fact that the SP is called a 'Plan' in itself implies a separate document.

Both the RWSP and the SP should clearly express the intent that they are *one* document in multiple volumes, with associated appendices. The SP should not be called a 'plan' at all, which separates it from the RWSP; a better short name for the SP would be the "Solutions Strategies" or 'SS' for short. Something as simple as labeling the RWSP documents as consecutively numbered volumes (i.e., Volumes I, II, III and IV instead of a two-volume set with appendices) would help create a better unity. To facilitate understanding our suggestion, we provide an example of how these two documents might be joined. See Attachment 1. The most important changes are to the beginning of the document (the unnumbered first page and pages i, ii, and v) in the SP sample provided. Similar changes should be made to the RWSP. Naturally, there would need to be global edits to carry this forward. However, this should be possible with limited effort. If you agree, we would appreciate your assistance in carrying this message to your respective agencies.

Sincerely yours,

Silvia Morell Alderman

Enclosure

cc: STOPR+2

This document is the Public Draft of the 2035 Water Resources Protection and Water Supply Strategies Plan document (Solutions Plan Strategies) of the Central Florida Water Initiative (CFWI) Regional Water Supply Plan (RWSP). Staff from the South Florida Water Management District (SFWMD), St. Johns River Water Management District (SJRWMD), and Southwest Florida Water Management District (SWFWMD) worked together and in conjunction with members of various Central Florida Water Initiative technical teams to generate this Solutions Plan Strategies document.

# Preface

# **CENTRAL FLORIDA WATER INITIATIVE**

In Florida, the water management districts develop regional water supply plans to ensure the protection of the water resources and related natural systems and to identify sustainable water supply for all water uses. Through the Central Florida Water Initiative (CFWI), three water management districts — the St. Johns River Water Management District, South Florida Water Management District, and Southwest Florida Water Management District — are working collaboratively with other agencies and stakeholders to implement effective water resource planning, along with development and management procedures to protect, conserve and restore our water resources. The CFWI Planning Area includes all of Orange, Osceola, Seminole, and Polk counties and southern Lake County. This effort used a unified process to address central Florida's current and long-term water supply needs. The guiding principles of the CFWI as contained in the CFWI Guiding Document are:

- 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 systems.
- Develop strategies to meet water demands that are in excess of the sustainable yield of existing traditional groundwater sources. Strategies include optimizing the use of existing groundwater sources, implementing demand management, and identifying alternative water supplies that can be permitted and will be implemented as demands approach the sustainable yield of existing sources.
- Establish consistent rules and regulations for the three water management districts that meet their collective goals, and implement the results of the Central Florida Water Initiative.

The work of the CFWI is captured in a <u>the</u> series of documents that <u>include make up</u> the Regional Water Supply Plan, the Regional Water Supply Plan Appendices, the 2035 Water Resources Protection and Water Supply Strategies Plan, and the 2035 Water Resources Protection and Water Supply Strategies Plan Appendices. The following table summarizes the main types of information found in each document of the CFWI Document Series <u>RWSP</u> Each of these documents is available from cfwiwater.com.

Volume I Regional Water Supply Plan	Volume <del>I-B-<u>III</u> Regional Water Supply Plan Appendices <u>to Volume I</u></del>	Volume-II-A- <u>II</u> <u>Regional Water Supply Plan</u> 2035 Water Resources Protection and Water Supply Strategies <del>Plan</del>	Volume II-B-IV 2035 Water Resources Protection and Regional Water Supply Strategies Plan Appendices <u>to</u> Volume II
<ul> <li>Introduction</li> <li>Population and Water Demands</li> <li>Resource Protection and</li> <li>Assessment Criteria</li> <li>Evaluation of Water Resources</li> <li>Water Conservation</li> <li>Water Source Options</li> <li>Water Supply Development</li> <li>Water Resource Development</li> <li>Funding for Water Supply and</li> <li>Water Resource Development</li> <li>Projects</li> <li>Conclusion</li> <li>Recommendations/Future</li> <li>Direction</li> </ul>	<ul> <li>Appendix A: Population and Water Demand Estimates</li> <li>Appendix B: Proposed MFLs for Evaluating Groundwater Availability</li> <li>Appendix C: Overview and Use of the ECFT Groundwater Model</li> <li>Appendix C-I: Evaluation of Water Quality Degradation Potential in the CFWI Planning Area</li> <li>Appendix D: Agricultural Best Management Practices (BMPs)</li> <li>Appendix E: Reclaimed Water Use Inventory</li> <li>Appendix F: Water Supply Project Options</li> </ul>	<ul> <li>Introduction</li> <li>Water Conservation</li> <li>Solutions Projects</li> <li>Environmental Evaluation</li> <li>Regulation</li> <li>Financial Assessment</li> <li>Conclusions and Implementation Strategies</li> </ul>	<ul> <li>Appendix A: Water Conservation</li> <li>Appendix B: Cost Estimating Tool</li> <li>Appendix C: Solutions Plan</li> <li>Projects</li> <li>Appendix D: Updated Water</li> <li>Supply Development Projects</li> <li>Appendix E: Solutions Plan</li> <li>Modeling</li> <li>Appendix F: Environmental</li> <li>Evaluations</li> <li>Appendix G: Regulatory</li> </ul>

.

۰.

CFWI Document Series: Summary of Volume Contents

(flip former columns IB and II-A)

# **Executive Summary**

This Central Florida Water Initiative (CFWI) 2035 Water Resources Protection and Water Supply Strategies Plan (Solutions <u>Strategies Plan</u>) addresses future steps toward meeting the water supply needs of the CFWI Planning Area. <u>This The</u> Solutions <u>Strategies Plan</u>, in <u>combination with the updated document together with its appendices completes the</u> CFWI Regional Water Supply Plan (RWSP). and associated Appendices, make up the 2015 CFWI Document Series. In May 2014, the governing boards of the St. Johns River Water Management District (SJRWMD), South Florida Water Management District (SFWMD), and Southwest Florida Water Management District (SWFWMD) (Districts) acknowledged delivery of the 2014 Final Draft CFWI RWSP (CFWI RWSP). The governing boards of the three Districts chose to delay final agency action on the CFWI RWSP until the completion of the Solutions <u>Strategies Plan</u> and any <u>other</u> resulting changes or refinements to the CFWI RWSP.

The CFWI RWSP <u>including the and</u> Solutions <u>Strategies Plan</u> were jointly developed by the Districts in coordination with the Florida Department of Environmental Protection (FDEP), the Florida Department of Agricultural and Consumer Services (FDACS), water utilities and other stakeholders. These documents identify programs, projects and strategies to ensure that adequate and sustainable water supplies are available to meet future water supply needs while protecting the environment and water resources. The CFWI Planning effort was based on a planning horizon extending through 2035 and identifies water conservation measures, water supply development project options, and water resource development project options.

The CFWI Planning Area is located in central Florida and consists of all of Orange, Osceola, Seminole, and Polk counties and southern Lake County. This region's population is expected to increase by 49 percent to more than 4.1 million by 2035. Average total water use is projected to increase from approximately 800 million gallons per day (mgd) to about 1,100 mgd in 2035. Based on the CFWI RWSP work, it was estimated that approximately 50 mgd of additional, traditional groundwater could be available for water supply on a regional basis through the implementation of local management activities (e.g., wellfield optimization, aquifer recharge, and augmentation) to avoid or mitigate impacts to the region's water resources. Based on the 2035 demands, the resulting deficit is approximately 250 mgd. Additional groundwater may be available, but environmental constraints and economic realities, along with regionally appropriate management and operational controls including additional mitigation, will need to be carefully considered as part of implementing additional groundwater development.

Minimum flows and levels (MFLs) have been established for 46 water bodies in the CFWI Planning Area. All of these water bodies are located in the SJRWMD and SWFWMD portions of the CFWI Planning Area. In addition, there are more than 150,000 acres of non-MFL lakes and wetlands within the CFWI Planning Area. The status assessment of MFLs as part of the CFWI 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

# Attachment 2 STOPR + 2 RWSP Comments

. . . . . .

v .

.

١

N N

# Attachment 2

# Central Florida Water Initiative Draft Regional Water Supply Plan (RWSP)

#### STOPR+2 Group Comments on May 8, 2015 Public Draft

- General Comment: Remove Hiawassee, Searcy, and other non-applicable lakes from the MFL discussions and figures. After removing references to Hiawassee, Searcy, etc. from proposed MFL references, tables, and diagrams, check to make sure the counts of MFLs, constraints, etc. are current throughout the RWSP, the Solutions Plan, appendices, text, tables, and graphics.
- 2) General Comment, Preface and Executive Summary: Some information presented in the draft RWSP does not precisely match information in the draft Solutions Plan. This is not necessarily a problem, but it warrants explanation in the RWSP. Some of the analyses supporting the two documents were performed at different times, for different purposes. For example, some information presented in the Solutions Plan Appendices is the result of different, refined, or updated evaluations. In some cases, sections of the RWSP were updated with such Solutions Plan results (e.g., the Water Supply Project Options). In other cases (e.g., potential future conservation projections), the RWSP was not updated to reflect the results of the Solutions Plan, making the various sections of the overall series of documents appear inconsistent—though they are not.

Consistent with the June 24, 2015 letter from Silvia Alderman (see Attachment 1), it is recommended that the Solutions Plan be more clearly identified as an integral component of the RWSP. Furthermore, to address any apparent inconsistency of information in the different document volumes, it is suggested that supplemental text be added as the last paragraph of the RWSP Preface and the second to last paragraph on Page xi of the RWSP Executive Summary to better explain the linkage between the RWSP and the Solutions Plan Appendices. The following paragraph is suggested: "Some of the evaluations described in the Solutions Strategies Plan Appendices represent different, refined, or expanded evaluations of certain aspects of the Regional Water Supply Plan. These evaluations were based on specific assumptions developed by the water management districts and CFWI stakeholders to generate a potential implementation and funding plan for a specific set of Water Supply Project Options identified for the region. As a result, some of the results presented in the Solutions Strategies Plan Appendices (e.g., projections for future potential conservation) are not the same as the results presented in other sections of the RWSP. These results are not inconsistent, but rather represent the results of two different evaluations performed for varying purposes. Only updates to the Water Supply Project Options were integrated into other sections of the RWSP." A similar text addition may also be appropriate for other sections of the RWSP.

3) Preface, Page i, Third Bullet: Change bullet text as follows, "Establish <u>consistency among</u> <u>consistent rules and regulations for</u> the three water management districts, <u>including but not</u> <u>limited to developing consistent rules and regulations, to meet the collaborative process goals</u> that meet their collective goals, and implement the results of the Central Florida Water Initiative."

4) Preface, Page i: Suggest adding the following text after the bullet list:

#### "CENTRAL FLORIDA WATER INITIATIVE GOALS

- 1. One model.
- 2. One uniform definition of harm.
- 3. <u>One reference condition.</u>
- 4. One process for permit reviews.
- 5. One consistent process, where appropriate, to set MFLs and reservations.
- 6. <u>One coordinated regional water supply plan, including any needed recovery and prevention strategies.</u>"
- 5) Executive Summary, Page viii, First Full Paragraph, First Sentence: The regulatory definition of "brackish" groundwater is not consistent among the three water management districts. For this reason, throughout the RWSP document, we suggest making reference to "traditional" and "nontraditional" sources of groundwater in lieu of distinguishing groundwater sources by water quality. Suggest changing this first sentence as follows, "The CFWI Planning Area traditionally has relied on fresh-groundwater from the <u>SAS, IAS, UFA, and some areas of the LFA Floridan aquifer system</u> (FAS) as a primary water source for urban, agricultural, and industrial uses."
- 6) Executive Summary, Page viii, Fourth Paragraph, First Sentence: Suggest changing this sentence as follows, "Based on modeling results and the assessment of groundwater availability, it was concluded that fresh traditional 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."
- 7) Executive Summary, Page x, First Paragraph, First through Fourth Sentences: Suggest changing these sentences as follows, "There are several sources of water and storage options that were considered to address future water needs. <u>Historically utilized groundwater from the SAS, IAS, UFA, and some portions of the LFA</u> Fresh groundwater sources (i.e., surficial, intermediate, and Floridan aquifers) are considered traditional sources of water while portions of the LFA that have not been historically utilized brackish groundwater, surface water, seawater, reclaimed water, reservoirs and aquifer storage and recovery are considered non\_traditional or alternative water sources. The CFWI RWSP identifies 142 potential water supply development project options, consisting of 37 brackish-non-traditional LFA groundwater, 15 surface water, 87 reclaimed water, and three management strategy projects that could produce up to a total of 455 mgd in additional water supply by 2035. The 37 brackish-non-traditional LFA 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 284 mgd of water.
- 8) Executive Summary, Page xi, Last Paragraph: Change this sentence as follows, "In addition, a Regulatory Team will promote consistency amongst the water management districts, including but not limited to establishing consistent rules and regulations for the three Districts, that meet the collaborative process goals and implement the results of this CFWI planning effort."
- 9) Introduction, Page 7, South Florida Water Management District Paragraph, Fourth through Sixth Sentences: Suggest changing sentences as follows, "Fresh gGroundwater from the SAS, UFA and portions of the LFAFloridan aquifer system and groundwater from the surficial aquifer system served the Kissimmee Basin (KB) Planning Area as traditional water sources (SFWMD 2006a). The 2005-2006 KB Plan Update concluded that increased conservation and the development of non-traditional sources or alternative water supplies were needed to meet water needs, as further development of traditional supplies becomes increasingly limited. The non-traditional or

alternative water supply source options identified for the KB Planning Area included brackish groundwater from some portions of the LFA; fresh-surface water from the Kissimmee River and Chain of Lakes and associated tributaries; stormwater runoff collection and storage; and reclaimed water."

- 10) Introduction, Page 7, St. Johns River Water Management District Section, Second Paragraph, Second Sentence: Not all the AWS surface water projects identified in the SJRWMD plan include surface water storage in reservoirs. Suggest changing this sentence as follows, "These included increased use of reclaimed water, development of brackish-non-traditional LFA groundwater sources, surface water, storage through reservoirs, and conservation (SJRWMD 2006a)."
- 11) Introduction, Page 8, Southwest Florida Water Management District Section, First paragraph, Last Sentence: Because this section discusses projects identified in the 2010 Heartland Plan, there should be some reference to additional non-traditional AWS sources identified in that plan—such as the Polk Southeast Wellfield, Northeast LFA Wellfield, and Kissimmee River Reservoir projects. Please modify the final sentence as follows, "Polk County may also be able to meet future demands from non-traditional sources such as surface water and LFA groundwater supplies within Polk County, or from importation of water from supplies developed in cooperation with other regional entities outside of Polk County-by Tampa Bay Water in the Tampa Bay Planning Region and/or from surface and groundwater supplies in the SWFWMD portion of Polk Couty.
- 12) Introduction, Page 9, Groundwater Subsection, First Paragraph, Last Sentence: Suggest changing this sentence as follows, "<u>The SAS, IAS, UFA, and portions of the LFAupper portion of the Floridan aquifer has have historically been the primarytraditional source of water supply throughout the region."</u>
- 13) Introduction, Page 10, First Full Paragraph, Second and Third Sentences: Suggest changing these sentences as follows, "Therefore, alternatives to fresh-traditional groundwater sources need to be developed and implemented to meet the region's growing demands. AWS sources are presented and described in Chapter 6. AWS sources include reclaimed water, brackishnon-traditional groundwater such as groundwater from some portions of the LFA within the CFWI region, surface water, seawater, and stormwater."
- 14) Introduction, Page 10, Second Paragraph, Second Sentence: Suggest changing this sentence as follows, "However, limited water quality data exists within the LFA and our understanding of the potential local and regional impacts that could result from LFA pumping in areas of the region that have not historically utilized this source other areas such as southern Osceola County is limited as well."
- 15) Chapter 2, Page 29, Summary Second Paragraph, Last Sentence (continued on Page 30): The CFWI RWSP is intended to be the current or in-progress regional water supply plan for all three Districts. As such, suggest changing this sentence as follows, "These changes make it inappropriate to compare the planning demand projections in this CFWI RWSP with current or in-progress <del>District RWSPs, DWSPs, or</del>-projections produced by individual Districts for use in <u>other planning efforts or</u> consumptive use permitting."
- 16) Chapter 3, Page 32, Second paragraph: The statement referring to the use of Rule 62-40, FAC, is only true for SFWMD, which specifically references 62-40 in terms of considering what constitutes a reasonable-beneficial use. The other two Districts have established their own standards without

reference to 62-40 in determining reasonable-beneficial use. This either needs to be clarified or the sentence should be deleted.

- 17) Chapter 3, Page 32, Last Bullet under CUP Issues: "Restricted allocation areas" is a term that is only used in SFWMD's rules. This implies that all the Districts have rules relating to restricted allocation areas, which is incorrect. Suggest deleting this bullet or adjusting the text accordingly.
- 18) Chapter 3, Page 33, First Paragraph, Last Sentence: This sentence is incorrect. SWFWMD and SJRWMD have only established the 2-in-10-year drought condition requirement for irrigation type uses. Public water supply permits are evaluated based on average rainfall or drought conditions. Suggest changing this sentence as follows, "Permit applicants for irrigation uses in SWFWMD and SJRWMD must demonstrate the conditions for permit issuance are satisfied during a 2-in-10 year drought condition, except within the SWFWMD's Southern Water Use Caution Area (which includes most of Polk County) where a 5-in-10 year drought condition is used for crops that receive effective rainfall. Permit applicants for PWS uses in the SWFWMD are based on a 5-in-20 year drought condition."
- 19) Chapter 3, Page 34, First Paragraph, First and Second Sentences: Based on the latest amendment to Rule 62-40, FAC, WMDs are required to "simultaneously" prepare a Recovery and Prevention Strategy, when adopting an MFL that will not be met within 20 years. This language does not reflect this requirement. Please update this sentence accordingly. "If the water body is below or projected to fall below<u>the existing</u> MFL criteria, the District shall expeditiously <u>develop and</u> implement a recovery or prevention strategy. If the water body is below or projected to fall below proposed MFL criteria, the District shall simultaneously develop and adopt a recovery or prevention strategy with the MFL. A recovery strategy must be developed and implemented when the water body currently fails to meet MFL criteria."
- 20) Chapter 3, Page 34, Second Paragraph, First Sentence: According to Rule 62-40, a prevention strategy must be implemented concurrently with the adoption of an MFL, where the water body is not projected to meet the MFL within 20 years. Please update this sentence as follows, "A prevention strategy is developed concurrently with the adoption of the MFL-or-subsequent to adoption-when the MFL's criteria are currently met, but are projected not to be met within the next 20 years."
- 21) Chapter 3, Page 35, First Paragraph, Second Sentence: This statement is inconsistent with Rule 62-40.473(2), FAC. Please update this text as follows, "However, a minimum flow or level need not be expressed as multiple flows or levels if other resource protection tools, such as reservations, are implemented in coordination with the MFLs to protect fish and wildlife or public health and safety, which and provide equivalent or greater protection of the hydrologic regime of the water body, are developed and adopted in coordination with the minimum flow or level."
- 22) Chapter 3, Page 35, Second Paragraph, First Sentence: Reference should be made to the fact that SWFWMD Rule 40D-80 contains the regulatory portion of MFL Recovery and Prevention Strategies for certain MFLs. Suggest changing this sentence as follows, "Chapters 40C-8, 40D-8, and 40E-8, F.A.C., contain the adopted MFLs as well as definitions and the policy and purpose considerations used in the establishment of MFLs-, and Chapter 40D-80 contains the regulatory portion of MFL <u>Recovery and Prevention Strategies for certain MFLs</u>."
- 23) Chapter 3, Page 40, Second Paragraph, Last Sentence: New Rule 62-40 requires Recovery and Prevention Strategies to be implemented simultaneously with adoption of MFLs. Suggest updating

this sentence as follows, "An important part of the water supply planning process is the assessment of MFL water bodies to determine if existing flows and levels are below the MFL or projected to fall below, the MFL within 20 years. For existing MFLs such cases, the Districts shall expeditiously develop and implement a recovery or prevention strategy. For proposed MFLs, the District shall simultaneously develop and adopt a recovery or prevention strategy with the MFL."

- 24) Chapter 4, Page 51, Second Paragraph, First Bullet: Proposed MFLs should not be used as a measuring stick, unless they are re-evaluations of existing MFLs. Change this bullet as follows, "Adopted and proposed MFL water bodies within the CFWI Planning Area."
- 25) Chapter 6, Page 101, First Paragraph, First and Second Sentences: Suggest modifying these sentences as follows, "The CFWI Planning Area has primarily relied on water derived from the Floridan aquifer system (FAS) SAS, IAS and UFA, and the LFA in some areas of the CFWI (e.g., traditional sources) with minor uses from the Surficial-aquifer system (SAS) and Intermediate aquifer system (IAS) and contributions of surface water from rivers, streams, and lakes to meet water supply needs, as well as non-traditional sources such as reclaimed water and some minor surface water uses. As demands increase, and withdrawals approach sustainable limits of traditional water supply resources, it is important to identify options for diversifying water supply sources. The sources of water potentially available to meet projected water demand in the CFWI Planning Area include freshtraditional groundwater sources, brackish-non-traditional groundwater sources such as groundwater from the LFA in some areas of the CFWI where this source has not been historically used, surface water, seawater, and additional reclaimed water."
- 26) Chapter 6, Page 101, Third Paragraph, First Sentence: Suggest changing this sentence as follows, "Fresh groundwater sources (i.e., surficial, intermediate, and Floridan aquifersSAS, IAS, UFA, and the LFA in some areas of the CFWI region) are considered traditional water sources whereas nontraditional or alternative water sources include brackish-LFA groundwater from some areas of the CFWI region, surface water, seawater, reclaimed water, and water stored in ASRs and reservoirs."
- 27) Chapter 6, Page 102, Second Paragraph, Second Sentence: Suggest modifying the text as follows, "Fresh gGroundwater from the Upper Floridan aquifer (UFA) and some select zones in the Lower Floridan aquifer (LFA) is the principal traditional source of water supply for all water use categories in the CFWI Planning Area."
- 28) Chapter 6, Page 106, Brackish Groundwater Section, First Paragraph: The final two sentences of this paragraph reference different definitions for brackish groundwater depending on the WMD. In addition, from a practical perspective these definitions are not adequately encompassing. For example, a source of water may have sulfate concentrations above drinking water standards that require a utility to use advanced treatment. In this example, that source would be considered a brackish AWS source for that utility. We suggest these two sentences be modified as follows to adequately capture a practical definition of brackish water for planning purposes, "Brackish water, for alternative water supply planning purposes in the CFWI Planning Area-for SJRWMD-and SWFWMD, is generally defined as water requiring advanced treatment technologies such as membranes to treat the water source to appropriate regulatory standards or to appropriate concentrations for the intended water use. 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."

- 29) Chapter 6, Page 106, Brackish Groundwater Section, Fourth Paragraph: Please modify the beginning of this paragraph as follows, "Currently, the Water Cooperative of Central Florida (WCCF) (a cooperative that includes Orange County Utilities, TWA, City of St. Cloud, and Polk County Utilities) and Reedy Creek Improvement District (RCID) are implementing the development of a <u>non-traditional groundwater brackish</u> 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. In addition, Polk County Utilities is implementing the Southeast Wellfield Project and was recently granted a water use permit to withdraw 37.5 mgd (30 mgd finished and 7.5 mgd treatment process reject) of non-traditional LFA groundwater in southeast Polk County."
- 30) Chapter 6, Page 116, Seawater Section, Second Paragraph on page: Modify paragraph as follows to more accurately represent the concepts discussed between Polk County and Tampa Bay Water: "Polk County Utilities and TBW have previously discussed the potential for the county to partner in an expansion of the 25 mgd Tampa Bay Desalination Facility. In exchange for a funding commitment, TBW could also supply a quantity of water to Polk County\_through a future interconnect from the Lithia area of Hillsborough County to utilities in western Polk County or by a net-benefit relocation of groundwater withdrawals within the Most Impacted Area of the SWUCA.
- 31) Chapter 7, Page 125, Last Paragraph, First and Second Sentences: Suggest changing these sentences as follows, "The majority of the 2010 public supply water demand was met by fresh groundwater from the FAS. The UFA and portions of the LFAfreshwater portions of the upper and lower Floridan aquifer are considered the traditional sources for most water users within the CFWI Planning Area. Where the water quality in the upper and lower portions of the FAS is brackish, thesource-Some portions of the LFA within the CFWI region areis considered non-traditional."
- 32) Chapter 7, Page 126, Last Paragraph, Title: Change "Brackish Groundwater Projects" to "<u>Non-</u> <u>Traditional</u> Groundwater Projects".
- Chapter 7, Page 126, Last Paragraph: Brackish groundwater, for alternative water supply planning 33) purposes in the CFWI Planning Area-for SJRWMD and SWFWMD, is generally defined as water requiring advanced treatment technologies such as membranes to treat the water source to appropriate regulatory standards or to appropriate concentrations for the intended water use. with a total dissolved solids (TDS) concentration greater than 500 mg/L. SFWMD-defines saline water, which includes brackish water, as water with chloride concentrations greater than 250 mg/L can be found in the Lower Floridan aquifer (LFA) within portions of the CFWI Planning Area. Additionally, brackish groundwater has been identified at depths below the FAS in most areas of the CFWI Planning Area. Brackish groundwater is a non-traditional supply source for the CFWI area. However, some portions of the LFA within the CFWI area are also non-traditional regardless of the quality of the groundwater. Thirty-seven potential brackish-non-traditional groundwater supply projects, mostly in Polk County, have been identified to generate water within portions of the CFWI Planning Area. As currently described, these alternative water supply (AWS) projects could generate an estimated 45 mgd of new groundwater. Projects are still being evaluated and could increase the amount of potential new brackish non-traditional groundwater by an additional 30 mgd.
- 34) Chapter 7, Page 127, BrackishNon-traditional Groundwater Projects, Second Paragraph: Modify this paragraph as follows, "The Cypress Lake Wellfield project-and proposed-Southeast Polk County Wellfield projects (included in the AWS estimates above) have both been permitted by the SFWMD and are anticipated to provide new potable supply by tapping the LFA in areas not

<u>traditionally used for water supply</u>. The Cypress Lake Wellfield project in central Osceola County is being developed by the Water Cooperative of Central Florida (WCCF) and the Reedy Creek Improvement District (RCID). This project was permitted for construction in 2012. The Southeast Polk County Wellfield project is being pursued (including water quality analysis) developed by Polk County Utilities and is, which proposes development of a LFA wellfield at a facility located west of the Kissimmee River near SR 27 and SR 60. A number of additional brackishnon-traditional groundwater projects are relatively small in size and are designed as blending projects with existing fresh groundwater sources."

- 35) Chapter 7, Page 127, Surface Water Subsection, Second Paragraph, First Sentence: Suggest modifying this sentence as follows, "Fifteen potential <u>non-traditional</u> surface water supply projects have been identified to generate new water within the CFWI Planning Area and are shown in Table F-1 in Appendix F."
- 36) Chapter 7, Page 128, Seawater Section, First Paragraph, First Sentence: Suggest changing this sentence as follows, "Seawater is defined by the SJRWMD and SFWMD as water with a chloride concentration at or above 19,000 mg/L and by the SWFWMD as water with a chloride concentration at or above 10,000 mg/L." This suggestion is based on review of SJRWMD AH §1.1(r), SFWMD AH §1.1, and SWFWMD AH §1.1(oo).
- 37) Chapter 7, Page 131, Second Paragraph, Third Sentence: This sentence indicates that a CUP may be required if a withdrawal is within three miles of the coastline. This follows a sentence regarding the withdrawal of seawater and use of reclaimed water. This criterion is not included in SJRWMD's rules regarding withdrawals of seawater. Rule 40C-2.051 indicates that seawater withdrawals are exempt from permitting, except for withdrawals from estuaries, lagoons, rivers, streams and intracoastal waters. Also, SJRWMD exempt projects that use 100% reclaimed water. Regardless of whether it has a rule to that effect, Section 373.019(17), Florida Statutes states that reclaimed water "is not subject to regulation pursuant to s. 373.175 or part II of this chapter, until it has been discharged into waters as defined in s. 403.031(13)." Suggest changing this text as follows, "In SJRWMD, a consumptive use permit may be required for withdrawals from estuaries, lagoons, rivers, streams, and intracoastal waters is not required for the use of reclaimed water in the SJRWMD."
- 38) Chapter 7, Page 135, Impact of Political Boundaries on Water Supply Planning Subsection: This section only discusses transfers of groundwater across District boundaries and transfers of water across county boundaries. However, there is a third set of water transfers that should be mentioned. Suggest adding a brief section regarding surface water across District boundaries, which is governed by Rule 62-40.422(1) and (2), FAC.
- 39) Chapter 11, Page 161, Blue Text in Box after Second Paragraph: Change this sentence as follows, "As described in this CFWI RWSP, fresh traditional groundwater resources alone cannot meet..."
- 40) Chapter 11, Page 161, Last Full Paragraph, First Sentence: Change this sentence as follows, "In some areas, utilization of fresh-traditional groundwater has already reached, exceeded, or is near the sustainable limits."
- 41) Chapter 11, Page 168, Groundwater Subsection: Add the following bullet to the bullet list, "Support continuing efforts to refine and update the ECFT model so that it may be used as a permitting tool in the future."

- 42) Chapter 11, Page 169, First Paragraph, First Three Sentences: This sentence would benefit from including a definition of conjunctive use. Suggest changing this text as follows, "There are opportunities for the development of surface water supplies from the lakes and rivers in or near the CFWI Planning Area as non-traditional water supply sources. Smaller, local lakes are generally considered a limited resource and often provide the local landowners with water for irrigation purposes. However, Fthe capture and storage of water from river/creek systems during times of high flow-can supply significant quantities of water and could be a conjunctive use-component of many multi-source water supply development projects that integrate the use of other sources with surface water in a manner that minimizes any potential harmful effects to the sources (e.g., conjunctive use)."
- 43) Chapter 11, Page 170, Minimum Flows and Levels Last Bulleted Item: Suggest rewriting this bullet as follows, "Expeditiously develop and implement the recovery and prevention strategies identified in Chapter 3 and others for adopted MFLs projected to fall below their MFL criteria within the next 20 years, develop and adopt recovery and prevention strategies simultaneous to the adoption of new MFLs when the MFL is projected to fall below their MFL criteria within the next 20 year, as additional MFLs are developed, and continue to implement the strategies identified in the Southern Water Use Caution Area (SWUCA) Recovery Strategy."
- 44) Glossary, Page 180, Definition of "Brackish water": As no consistent regulatory definition exists among the water management districts, suggest a practical definition instead, as follows: "Brackish water, for alternative water supply planning purposes in the CFWI, is generally defined as water that requires advanced treatment technologies such as membranes to meet regulatory drinking water standards."
- 45) Glossary, Page 183, Definition of "Fresh water": This definition is not representative of the existing rules for the three water management districts. SWFWMD is the only District with a definition of fresh water. It is defined in AH §1.1(p) as "water that contains less than 3,000 mg/L of TDS." Suggest using the following practical definition, "For alternative water supply planning purposes in the CFWI Planning Area, fresh water is generally defined as water not requiring advanced treatment technologies such as membranes to treat the water source to appropriate regulatory standards or to appropriate concentrations for the intended water use."
- 46) Glossary, Page 184, Definition of "Harm": Suggest deleting this definition as there currently isn't any common definition of "harm" among the three Districts.
- 47) Glossary, Page 188, Definition of "Seawater or salt water": Suggest changing this definition as follows, "Seawater is defined by the SJRWMD and SFWMD as water with a chloride concentration at or above 19,000 mg/L and by the SWFWMD as water with a chloride concentration at or above 10,000 mg/L." This suggestion is based on review of SJRWMD AH §1.1(r), SFWMD AH §1.1, and SWFWMD AH §1.1(oo).
- 48) Appendix F: The details provided in Appendix F should be updated to match the details provided in Appendix D of the Solutions Plan document. For example, in Appendix D of the Solutions Plan document, the costs and phasing details of the three sub-projects associated with the overall Cypress Lake Project were removed and summarized as part of the overall cost and phasing for the combined project.
- 49) Appendix F, Page F-12, Table F-1, Embedded Title "Brackish/Non-traditional": Suggest deleting the last two sentences.

- 50) Appendix F, Page F-13, Table F-1, Projects 4 and 5: Change "Cypress Lake Brackish Groundwater Wellfield" to "Cypress Lake Wellfield" everywhere in these two project names and descriptions.
- 51) Appendix F, Page F-38, Table F-1, Project 126, Project Description: The source water for the St. Johns River/TCR Project is not "brackish". The 2009 PDR did not propose advanced treatment such as membranes. Suggest changing this text as follows, "Regional AWS project withdrawing <u>a non-traditional</u> surface water from the Taylor Creek Reservoir and the St. Johns River. Major components include intake structure, reservoir, treatment, storage and transmission facilities. <u>brackish"</u>

1

# Attachment 3 STOPR + 2 New SP Comments

í

# Attachment 3

# Central Florida Water Initiative Draft 2035 Water Resources Protection and Water Supply Strategies Plan ("Solutions Plan")

### New Comments from STOPR+2 Group on May 1, 2015 Public Draft

- 1) General Comment: The significance and importance of implementing the recommendations of the Data, Monitoring and Investigations Team (DMIT) are not given the high level of priority due such recommendations. For example, in the Solutions Plan discussions regarding future modifications and improvements to the ECFT model, there is no discussion of the significance that obtaining additional data from the implementation of the recommended DMIT plan could have on model outcomes and future assessment of the status of the Floridan aquifer relative to the withdrawals. The importance of implementing the DMIT recommendations needs to receive more emphasis throughout the Solutions Plan. Specific comments related to this general comment have been provided below.
- Executive Summary, Page viii, Assessment Section, First Bullet: Suggest changing "brackish" to "non-traditional" as follows, "BrackishNon-traditional groundwater project options from the LFA..."
- 3) Executive Summary, Page viii, Assessment Section, Second Bullet: Change the text of this bullet as follows: "A conceptual new LFA Centralized Wellfield (62.5 mgd withdrawal capacity; 50 mgd of finished water capacity) could be strategically located away from the areas susceptible to impacts in Osceola County such that there is little or no change in stressed non-MFL isolated wetlands acres, and no change in MFL considerations or constraints relative to the Baseline Condition."
- 4) Executive Summary, Page viii, Groundwater Section: Suggest changing this paragraph as follows, "Brackish-Non-traditional groundwater project options have the potential to meet some of the future demand while reducing the impact to water resource constraints when compared to the use of traditional groundwater sources. The <u>non-traditional groundwater</u> projects evaluated as <u>AWS sources</u> were all LFA projects, some of which are known to be in areas of brackish groundwater. For long-term management of the withdrawals, it will be necessary to expand current data collection and testing to ensure these quantities can be developed in a manner that minimizes environmental impacts and changes in aquifer water quality."
- 5) Executive Summary Page x: Change paragraph title to "Implementation <u>Costs and Categories of</u> <u>Funding</u>".
- 6) Executive Summary, Page xi, Reporting Section, First Paragraph: Add an additional sentence: "<u>CFWI RWSP updates should result in an iterative process that increases the certainty of environmental protection over time</u>."
- 7) Executive Summary, Page xii, Conclusions and Summary of Key Findings, Second Bullet on page: Change the text in this bullet as follows; "Conceptual management strategies evaluated during the Solutions Planning Phase can be developed into specific projects strategies to address protection and recovery of the regions environmental systems. The results of this evaluation and future plans

provide information needed to manage existing withdrawals and to develop new water supply options or other mitigation strategies (Chapter 4). Implementation of these strategies will continue to provide for the protection and recovery of the water resources."

- 8) Executive Summary, Page xiii, Bullet List, Second Bullet: Change the second bullet to, "Develop specific prevention and recovery projects strategies"; and add the following bullet to the bullet list: "Evaluate environmental risks through iteration and robust data gathering".
- 9) Executive Summary, Page xiii, Final Bullet List, Sixth Bullet: Change as follows: "Develop options for consistency amongst the water management districts, including but not limited to rules and regulations."
- 10) Chapter 1, Page 5, Third Bullet: The third bullet should not specify the quantity of groundwater potentially to be developed, as the quantity is currently a preliminary estimate. Suggest the bullet point be changed as follows, "Identify alternatives for potentially developing additional available groundwater projects-up to 925 mgd (with appropriate regional management and operational controls)."
- 11) Chapter 1, Page 6, Regulatory Team Goals and Objectives, Regulatory Team Goal Box: Suggest changing this text as follows, "...to establish <u>consistency amongst the water management districts, including but not limited to consistent rules and regulations for the three water management districts that meet the Collaborative Process Goals and implement the results of this Central Florida Water Initiative. <u>CFWI Guiding Document (CFWI 2014)</u>"</u>
- 12) Chapter 1, Page 6, Regulatory Team Goals and Objectives, Bullet: Suggest changing this text as follows, "Develop options for <u>consistency amongst the water management districts</u>, including but <u>not limited to developing</u> consistent regulations, as well as identify legislative changes, as needed, to implement the solution strategies identified in the CFWI process, to assist with resource recovery strategies, and to provide for equitable and predictable review of consumptive use permit applications among the Districts."
- 13) Chapter 1, Page 14, Groundwater Section: Suggest modifying these two paragraphs as follows, "The primary source of water supply in the region is fresh-traditional groundwater. Groundwater is supplied from the surficial, intermediate, and Floridan aquifer systems. The surficial aquifer system (SAS) is a shallow, unconfined aquifer that generally yields low quantities of water. The intermediate aquifer system (IAS) does not produce large quantities of water and acts as a semiconfining unit in most areas separating the overlying surficial aquifer from the underlying Floridan aquifer system (FAS). The FAS is subdivided into the Upper and Lower Floridan aquifers. The Upper Floridan aquifer (UFA) is a semi-confined aquifer, portions of which are capable of producing large amounts of water. The UFA has historically been the primary source of water supply throughout the region, though the Lower Floridan aquifer (LFA) in some areas of the CFWI has also been used as a traditional source.

The LFA has the potential to provide additional water in the CFWI Planning Area, <u>particularly in</u> <u>areas where the LFA has not historically been utilized as a traditional supply source</u>, and a number of studies are in progress to evaluate this potential water source. However, there is limited hydrogeologic information available for the LFA, so the potential local and regional effects of pumping from the LFA are not as well understood in some areas of the CFWI."

- 14) Chapter 1, Page 14, Surface Water Section: Suggest adding the following text after the second sentence, "<u>Thus, surface water is considered a non-traditional supply source in this planning region.</u>"
- 15) Chapter 2, Page 17, First Sentence: The first sentence of this section sets a poor tone regarding water conservation. Suggesting changing this sentence as follows, "Water conservation (conservation) is the <u>efficient use of water as well as the prevention and</u>-reduction <u>or elimination</u> of <del>wasteful or unnecessary uses of water to improve efficiency of use</del>."
- 16) Chapter 2, Page 17, Second Paragraph: Change the text of this paragraph as follows: "Conservation opportunities exist across all water use sectors in the CFWI Planning Area. Individuals, businesses, the agricultural industry, water providers, and the natural environment will all benefit greatly from <u>additional</u> conservation. Implementing effective conservation throughout the CFWI Planning Area will <u>be challenging given the conservation already achieved</u> <u>and will</u> require coordinated efforts among stakeholder groups. As the cost of developing new water supplies increases, more costly water conservation projects will become more appealing."
- 17) Chapter 2, Page 17, Third Paragraph, First sentence: Change the text of this sentence as follows: "Many studies show that implementation of conservation programs is <u>initially</u> often among the lowest cost solutions <u>compared to Alternative Water Supplies</u> to meet future water needs...."
- 18) Chapter 2, Page 18, First Paragraph, Last Sentence: The data do not support the assertion in this sentence that the "recent economic downturn" contributed to the decrease of per capita water use. The economic downturn began in 2007 and lasted till about 2012. Observing the graph in Figure 4 shows that per capita water use for residential declined prior to 2007 and remained level from 2007 to 2012. Suggest modifying this sentence as follows: "The installation of private irrigation wells, the recent economic downturn, and other external factors may also contribute to this decrease."
- 19) Chapter 2, Page 23, Identifying Conservation BMPs and Programs Subsection: The BMPs discussed should be prefaced as "<u>potential</u>", as there were not data to establish which potential BMP is cost effective and provides significant water conservation.
- 20) Chapter 2, Page 25, Bullet 5: Provide more explanation on how greenroofs increase indoor efficiency, or remove this bullet.
- 21) Chapter 2 Page 36, Table 5: Add footnote 'f' for Advanced Irrigation ET Controllers as follows: "f) Savings are for the modeled service life. BMP replacements at additional costs will be required to sustain savings."
- 22) Chapter 2 Page 39, Third Paragraph, Agricultural Programmatic Approach Section: Modify this paragraph as follows; "The Conservation Subteam concluded that historical data from the FARMS Program and other existing cost-share BMP programs, as well as what is known about agriculture within the CFWI Planning Area, should be used to estimate potential water savings. This methodology is referred to as the agricultural programmatic approach. This approach considers several factors in the development of a conservation estimate including participation rate, water savings, BMPs, and project costs."
- 23) Chapter 2, Page 41, Last Paragraph: Change this paragraph as follows, "Adoption of conservation BMPs and actual water savings can be greatly enhanced with increased levels of education,

outreach efforts and funding. Furthermore, there are many additional BMPs, not quantified during these analyses that could be implemented to yield additional savings. <u>Funding of the Conserve Florida Water Clearinghouse and</u> Subsequent planning updates may be able to quantify some of these BMPs as well as estimate passive savings known to occur in the absence of program efforts."

- 24) Chapter 2, Page 43, Funding Subsection: Change this paragraph as follows, "Reducing current water demands using conservation BMPs is often less expensive than developing alternative water supplies, but can also require capital expenditures. Many water users have limited discretionary income that can be used for efficiency upgrades. <u>Furthermore, Uunlike costs associated with alternative water supply projects</u>, the costs to implement conservation projects are not generally financed by bonds and must be assumed by the party implementing the project. <u>making some types of conservation BMPs more costly to attain.</u> Financial incentives and assistance for end users are often necessary with a variety of funding mechanisms available, such as rebates, grants, and credits. Cost share programs at the state and water management districts, often provide annual reoccurring funding assistance to aid local partners with implementation. Continued <u>significant and recurring</u> funding of these programs will help ensure that these water use reductions are achieved."
- 25) Chapter 2, Page 43, Implementing BMPs Subsection, Partial Paragraph at Top of Page, Last Sentence: Change this sentence as follows, "Additional data and advances in tools <u>such as the Conserve Florida Water Clearinghouse</u> would be beneficial to improve these evaluations."
- 26) Chapter 3, Page 49, Groundwater Section, First Paragraph: Suggest this paragraph be rewritten as follows, "The traditional primary source of water supply in the CFWI Planning Area is fresh traditional groundwater from the SAS, IAS, UFA, and LFA in some portions of the CFWI. Nontraditional groundwater sources, such as groundwater from the LFA in portions of the CFWI area where the LFA has not been used as a traditional groundwater supply source, Brackish groundwater project options-have the potential to meet some of the future demand while reducing the impact to water resource constraints when compared to traditional-fresh groundwater sources. The non-traditional water supply projects evaluated by the Groundwater (GW) Subteam were all Lower Floridan aquifer (LFA) projects, some of which are known to be in areas with brackish groundwater. Brackish groundwater exists in the lower portion of some areas of the Floridan aquifer system in the CFWI Planning Area and adjacent areas. The location of brackish water within the LFA is not well defined in the CFWI Planning Area. In some areas, targeted withdrawals from the LFA may result in less distinctive, and possibly delayed, impacts to surface features such as lakes and wetlands compared to withdrawals from the Upper Florida aquifer (UFA). However, this deeper groundwater source has a higher unit cost of production than traditional groundwater sources due primarily to the cost to treat the water for consumption. For alternative or non-traditional water supply planning purposes in the CFWI Planning Area, groundwater from the LFA in some areas of the CFWI is considered a non-traditional or AWS source. for SJRWMD and SWFWMD, brackish water is generally defined as water with a-total dissolved solids (TDS) concentration of greater than 500 mg/L. The SFWMD defines saline water as water with chloride concentrations greater than 250 mg/L. Also for planning purposes in the CFWI Planning Area, brackish groundwater is defined as water requiring advanced treatment technologies such as membranes to treat the water source to appropriate regulatory standards or to appropriate concentrations for the intended water use. The treatment of brackish groundwater typically may be accomplished by using low pressure reverse osmosis (RO) or electrodialysis reversal (EDR): each method requires disposal of concentrate or reject water. Other technologies available to treat brackish water are typically more costly (e.g., ion exchange and distillation)."

- 27) Chapter 3, Page 50, Groundwater Project Options Subsection, First Sentence: Suggest changing this sentence as follows, "The GW Subteam began by reviewing the 35 brackish-non-traditional groundwater projects identified in the CFWI RWSP that have a total estimated water supply capacity of approximately 75 mgd (Appendix F, CFWI RWSP, 2014d)."
- 28) Chapter 3, Page 51, Cypress Lake Wellfield, Second Paragraph, First Sentence: Change this sentence as follows, "The project is the development of a <u>non-traditional</u> LFA <del>brackish</del> groundwater wellfield in central Osceola County.
- 29) Chapter 3, Page 52, Polk County Southeast Wellfield, Second Paragraph, First Sentence: Change this sentence as follows, "The project is the development of a centralized <u>non-traditional LFA</u> brackish-groundwater wellfield in southeast Polk County.
- 30) Chapter 3, Page 52, Polk County Southeast Wellfield, Fourth Paragraph: Add the following text at the end of this paragraph, "<u>The cost developed by the CE Tool does not include all aspects of the Polk County Southeast Wellfield Project, including all finished water distributions system infrastructure. In addition, the CE Tool developed for the CFWI solutions planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given these considerations, the results of the CFWI CE Tool provide a conceptual level estimate of cost that will need to be refined as each project progresses. In the case of the Polk County Southeast Wellfield project, Polk County Utilities independently estimates the capital cost of the project to be \$359 million."</u>
- 31) Chapter 3, Page 53, Polk County Blended LFA Distributed Wellfield, Third Paragraph: Delete the second sentence as follows, "Although the model does show impacts, producing a portion of the water from the LFA should reduce the potential impacts when compared to traditional Upper Floridan sources."
- 32) Chapter 3, Page 53, Polk County Blended LFA Distributed Wellfield, Fourth Paragraph: Add the following text at the end of this paragraph, "<u>The CE Tool developed for the CFWI solutions planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given the intended accuracy level of costs developed using the CFWI CE Tool, the costs developed as part of this plan will need to be refined as each project progresses."</u>
- 33) Chapter 3, Page 53, Challenges Section, First Sentence: Suggest modifying this sentence as follows, "The Solutions Planning Phase <u>non-traditional groundwater project options presented above have</u> the potential to supply up to 63.2 mgd (GW1, GW2, and GW3) of alternative water supply to the CFWI Planning Area."
- 34) Chapter 3, Page 67, Polk County Regional Alafia River Basin, Second Paragraph: Add the following text at the end of this paragraph, "<u>The CE Tool developed for the CFWI solutions planning phase</u> was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given the intended accuracy level of costs developed using the CFWI CE Tool, the costs developed as part of this plan will need to be refined as each project progresses. In the case of the Polk County Regional Alafia River Basin project, Polk County Utilities independently estimates the capital costs of the project to be \$399.7 million with a unit production cost of \$6.42 per 1,000 gallons."

- 35) Chapter 3, Page 59, 160-Acre Site Indirect Potable Reuse, Third Paragraph: Please add the following text after the second sentence, "<u>The CE Tool developed for the CFWI solutions planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given the intended accuracy level of costs developed using the CFWI CE Tool, the costs developed as part of this plan will need to be refined as each project progresses. In the case of the 160-Acre Indirect Potable Reuse project, TWA independently estimates the capital cost of the project to be \$14.3 million."</u>
- 36) Chapter 4, Page 82, Figure 7: This figure appears to present all existing MFLs in lieu of the MFLs considered as part of the RWSP and Solutions Planning Phase. Please update this figure to only present MFLs used as part of the analyses performed in support of the RWSP and Solutions Planning Phase.
- 37) Chapter 6, Page 121, Environmental Recovery Projects, First Paragraph, End of Second Sentence: Change as follows, "...most <u>technically, environmentally, and economically</u> effective options."
- 38) Chapter 6, Page 121, First Two Paragraphs: Change these two paragraphs as follows:

"These costs are based on the initial implementation of the BMP. Additional costs may be required depending on service life and date of implementation. Refer to Chapter 2, Table 5 for more information on BMP service lives. Potential Agricultural BMPs, based on past performance and implementation of various cost-shared FARMS Program BMPs. These would cost an estimated \$10.1 to \$19.9 million to achieve approximately 4.35 to 6.40 mgd reduction in groundwater use. Public education for conservation will be aligned annually with PS and OSS projects and activities. Activities may include: media outreach, including traditional and social media techniques; exhibits, demonstrations and events; support for schools and county extension efforts; and training for irrigation professionals."

"Research is needed to Continued development of a statewide clearinghouse, such as the Conserve Florida Water Clearinghouse developed by the University of Florida, that will serve as a repository for conservation data, publications and goal-based planning tools (e.g., EZ Guide, FAWCET) will benefit for PS entities."

In general, there should be a greater emphasis and promotion of the Clearinghouse throughout the document. This strategy is not a project that generates a specific quantity of water; however, it is a fundamental piece to a comprehensive Conservation Strategy. Gathering data and evaluating various proposed BMPs to provide a basis for selecting appropriate BMPs for a conservation program should be key to developing future conservation plans.

- 39) Chapter 6, Page 121, Environmental Recovery Projects Subsection: Change subsection title to "Environmental Recovery Plans and Projects".
- 40) Chapter 6, Page 121, Environmental Recovery Projects Subsection, Second Paragraph, First Sentence: Change this sentence as follows, "Once these analyses are complete, recovery strategies and projects can be developed and implemented to achieve MFL recovery or flows, where necessary."
- 41) Chapter 6, Page 122, Data, Monitoring, and Investigations Subsection: At the end of this section add text that emphasizes the importance of implementing the DMIT recommendations. Suggested text is as follows, "The implementation of the DMIT recommendations is a critical component to future water supply planning for the CFWI region. The additional data collected as a result of the

DMIT recommendations will facilitate the refinement and expansion of models and hydrologic and environmental analyses, the further development of water supply project options, and the assurance that environmental measures are being met."

- 42) Chapter 6, Page 123: After the last sentence add the following text, "<u>The funding plan should be</u> <u>amended as updated project specific costs are developed.</u>"
- 43) Chapter 6, Page 124, Table 17: Add footnote 'e' as follows, "<u>e) The CFWI cost-estimating tool is considered a "Conceptual Screening" tool and was designed to produce Class 5 cost estimates, with an expected accuracy of -50% to +100%."</u>
- 44) Chapter 6, Page 124, Table 17: Table should include funding for the Conserve Florida Water Clearinghouse to put forth the need and funding requirement. If it is not on the funding lists, it is unlikely to receive funding. In addition, change the Potential Benefits for the DMIT as follows, "Provides necessary information for the region to better assess the environmental systems for the protection and the recovery of those systems and to improve models and the associated future assessment of environmental system relative to withdrawals."
- 45) Chapter 6, Page 125, Table 18: Add footnote 'e' as follows, "<u>e) The CFWI cost-estimating tool is considered a "Conceptual Screening" tool and was designed to produce Class 5 cost estimates, with an expected accuracy of -50% to +100%."</u>
- 46) Chapter 7, General Comment: The significance and potential benefits from the implementation of the DMIT recommendations does not really come out in this chapter. There are several implementation strategies discussed in the chapter where DMIT could and should play a role and could have an impact; under the titles Support Development & Implementation of Regional Project Solutions subtitle Groundwater, Water Resource Development Priorities, and Improve Water Resource Assessment Tools and Supporting Data subtitle Update the ECFT Model. Add a bullet that says, "Implement the recommendations of the DMIT to increase the data available for analyses and modeling related to characterizing the water resources of the region and in support of the development of Water Supply Project Options." to each of these sections.
- 47) Chapter 7, Page 129, Implementation Strategy Subsection, Second Bullet: Change this bullet as follows, "Develop Specific Prevention and Recovery <u>Strategies and Projects</u>"
- 48) Chapter 7, Pages 130 and 131, Implement Conservation Programs Subsection, Bullet List:
  - First Bullet: Change text as follows, "Identify and secure <u>significant and recurring</u> funding to implement Conservation Programs."
  - Sixth Bullet, Sub-bullet: Change text as follows, "Determine the appropriate means to participate in the Florida Building/<u>Plumbing</u> Code modification process to improve water conservation statewide by evaluating the current code provisions and Florida Statutes affecting water conservation and identify potential amendments to improve water conservation including:..."
  - Eleventh Bullet: Change text as follows, "Expand water use accounting for Agriculture to improve water use efficiency and provide improved data <u>and metering</u> for groundwater modeling."
  - Last bullet: Move this bullet up as it gets lost in the surrounding subject matter.
- 49) Chapter 7, Page 132, Develop Specific Prevention and Recovery Projects Subsection: Change title as follows, "Develop Specific Prevention and Recovery <u>Strategies and Projects</u>".

50) Chapter 7, Page 132, Second to Last Bullet: Change the text as follows, "Before moving forward in implementing any specific WSPO or management strategy, it should be confirmed that it would not conflict with any MFL prevention or recovery strategy, <u>it will produce the desired CFWI benefit, and the timing is appropriate."</u>

J

- 51) Chapter 7, Page 134, Bullet List: Add bullet after third bullet that states the following, "<u>Funding</u> <u>dollars should reflect updated project specific costs rather than planning level costs as they</u> <u>become available.</u>"
- 52) Glossary, Page 142, Definition of "Brackish water": As no consistent regulatory definition exists among the water management districts, suggest a practical definition instead, as follows: "<u>Brackish water, for alternative water supply planning purposes in the CFWI, is generally defined</u> as water that requires advanced treatment technologies such as membranes to meet regulatory <u>drinking water standards.</u>"
- 53) Glossary, Page 144, Definition of "Fresh water": This definition is not representative of the existing rules for the three water management districts. SWFWMD is the only district with a definition of fresh water. It is defined in AH §1.1(p) as "water that contains less than 3,000 mg/L of TDS." Suggest using the following practical definition instead, "For alternative water supply planning purposes in the CFWI Planning Area, fresh water is generally defined as water not requiring advanced treatment technologies such as membranes to treat the water source to appropriate regulatory standards or to appropriate concentrations for the intended water use."
- 54) Glossary, Page 149, Definition of "Seawater or salt water": Suggest changing this definition as follows, "<u>Seawater is defined by the SJRWMD and SFWMD as water with a chloride concentration at or above 19,000 mg/L and by the SWFWMD as water with a chloride concentration at or above 10,000 mg/L." This suggestion is based on review of SJRWMD AH §1.1(r), SFWMD AH §1.1, and SWFWMD AH §1.1(oo).</u>
- 55) Appendix C, Page C-15, Cypress Lake Wellfield Project, Second Paragraph, First Sentence: Change this sentence as follows, "This proposed project will develop a <u>non-traditional</u> LFA-brackish groundwater wellfield in central Osceola County."
- 56) Appendix C, Page C-20, Southeast Polk County Wellfield Project, Second Paragraph, First Sentence: Change this sentence as follows, "The proposed project will develop a <u>non-traditional</u> LFA-brackish water public supply wellfield in southeast Polk County."
- 57) Appendix C, Page C-22, Southeast Polk County Wellfield Project, Estimated Planning-level Costs: Add the following text at the end of this section, "<u>The cost developed by the CE Tool does not</u> include all aspects of the Polk County Southeast Wellfield Project, including all finished water distributions system infrastructure. In addition, the CE Tool developed for the CFWI solutions planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given these considerations, the results of the CFWI CE Tool provide a conceptual level estimate of cost that will need to be refined as each project progresses. In the case of the Polk County Southeast Wellfield project, Polk County Utilities estimates the capital cost of the project to be \$359 million."
- 58) Appendix C, Page C-29, Polk County Blended LFA Distributed Wellfield Project, Estimated Planninglevel Costs: Add the following text at the end of this section, "<u>The CE Tool developed for the CFWI</u>

solutions planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given the intended accuracy level of costs developed using the CFWI CE Tool, the costs developed as part of this plan will need to be refined as each project progresses."

- 59) Appendix C, Page C-29, Polk County Blended LFA Distributed Wellfield Project, Estimated Implementation Schedule: Please make the following changes to the Implementation Schedule for this project:
  - Change the title of Phase 2 as follows, "Phase 2: 10 mgd Finished Water from this\_the Southeast Polk County Wellfield project (2023-2032)"
  - Change the title of Phase 3 as follows, "Phase 3: <u>2010</u> mgd Finished Water from <u>this\_the</u> <u>Southeast Polk County Wellfield</u> project (2023-2032)"
  - Change the last bullet under Phase 3 as follows, "Construct additional treatment facilities, expanding <u>production</u> capacity to 20 mgd<u>total finished water from Southeast Polk County</u> <u>Wellfield"</u>.
- 60) Appendix C, Page C-37, Project RENEW, Estimated Implementation Schedule: "Change Orlando Utility Commission" to "Orlando Utilities Commission".
- 61) Appendix C, Page C-38, Project RENEW, Potential Partners and Governance Options: Please delete the reference to Orange County. Though it is true that Orange County and the City of Orlando have a contract with the City of Winter Garden through the Water Conserv II project, Orange County is not a partner in OUC's Project RENEW.
- 62) Appendix C, Page C-48, 160-Acre Site Indirect Potable Reuse, Estimated Planning-level Costs: Add the following text at the end of this section, "<u>The CE Tool developed for the CFWI solutions</u> planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given the intended accuracy level of costs developed using the CFWI CE Tool, the costs developed as part of this plan will need to be refined as each project progresses. In the case of the 160-Acre Indirect Potable Reuse project, TWA estimates the capital cost of the project to be \$14.3 million."
- 63) Appendix C, Page C-87, Polk County Regional Alafia River Basin Project, Estimated Planning-level Costs: Add the following text at the end of this paragraph, "<u>The CE Tool developed for the CFWI</u> solutions planning phase was designed to achieve a Class 5 Estimate level (AACE, 2005), which is considered a "Conceptual Screening" level, with an expected accuracy range of -50% to +100%. Given the intended accuracy level of costs developed using the CFWI CE Tool, the costs developed as part of this plan will need to be refined as each project progresses. In the case of the Polk County Regional Alafia River Basin project, Polk County Utilities estimates the capital cost of the project to be \$399.7 million."

# Attachevious SP STOPR + 2 Previous SP

.

comments

r

# Attachment 4

# Central Florida Water Initiative Draft 2035 Water Resources Protection and Water Supply Strategies Plan ("Solutions Plan")

# Resubmitted Comments from STOPR+2 Group on May 1, 2015 Public Draft (also previously submitted on Final Internal Draft)

- Preface, Page i, Third Bullet: Suggest changing bullet to state "Establish <u>consistency among</u> <u>consistent rules and regulations for</u> the three water management districts, <u>including but not</u> <u>limited to developing consistent rules and regulations</u>, to meet the collaborative process goals that meet their collective goals, and implement the results of the Central Florida Water Initiative."
- 2) Preface, Page i: Suggest adding the following text after the bullet list:

#### "CENTRAL FLORIDA WATER INITIATIVE GOALS

- 1. One model.
- 2. <u>One uniform definition of harm.</u>
- 3. <u>One reference condition.</u>
- 4. One process for permit reviews.
- 5. One consistent process, where appropriate, to set MFLs and reservations.
- 6. <u>One coordinated regional water supply plan, including any needed recovery and prevention strategies.</u>"
- 3) Executive Summary, Page vi, Solutions Planning Phase Section, Last Sentence: Delete the last sentence of this paragraph, as follows: "The estimated 850 mgd total water use condition was used as a starting point or Baseline Condition for the Solutions Planning Phase, which evaluated projects and conceptual management strategies to meet the estimated 250 mgd future demand deficit."
- 4) Executive Summary, Page viii, Assessment Section, Third and Fourth Bullets: Remove the specifics regarding the number of acres discussed in these bullets. Those acreages were a function of the specific conditions simulated under a hypothetical simulation and should not be misconstrued as representing an "answer".
- 5) Executive Summary, Page ix, Reclaimed Water Section, Last Sentence: This sentence says, "Going forward, it is recommended an integrated approach between wastewater management and water supply...." This could be misconstrued to mean that integrated water resource planning is currently not occurring in central Florida, which is not the case. Suggest modifying this sentence as follows: "Going forward, it is recommended an integrated approach between wastewater management and water management and water supply continues to be implemented...."
- 6) Executive Summary, Page x, Water Conservation Section, First Paragraph, Fourth Sentence: As written, this sentence does not accurately reflect the work completed by the Water Conservation Subteam to quantify potential water conservation savings. Therefore, we request modification as follows, "Based on Solutions Planning Phase analysis, the CFWI RWSP water savings goal estimate was reduced from 42 mgd to 37 mgd and is considered a starting point for potential savings

through implementing a select implementation of a number of conservation BMPs in the CFWI Planning Area. Additional savings could be available might be possible through higher participation rates of BMPs or the implementation of other conservation measures."

- 7) Executive Summary, Page xi, Conclusion and Summary of Key Findings, First Bullet: As written, this bullet does not accurately reflect the work completed by the Water Conservation Subteam to quantify potential water conservation savings. We request modification as follows, "Water conservation is an important element in meeting future water needs. The conservation estimate of 37 mgd, determined during the Solutions Planning Phase, represents a starting point of savings that could be achieved by implementing a limited set implementation of the PS and OSS conservation BMPs and the agricultural programmatic efforts evaluated in this Plan (Chapter 2). Of this 37 mgd, it was estimated that 76 percent could be conserved by PS utilities, 12 percent by OSS users, and 12 percent by agricultural operations. Additional savings could be available might be possible through higher participation rates of BMPs or the implementation of other conservation measures."
- 8) Chapter 1, Page 10, Updates to Minimum Flows and Levels, First Paragraph, Fifth Sentence: This section is about changes made to the MFL analyses performed in support of the RWSP process as part of the Solutions Planning Phase process. The MFLs listed in this sentence were not included in either the RWSP or Solutions Planning Phase processes, and therefore do not constitute a change in the analysis. Reference to these lakes should be removed. Delete the fifth sentence as follows, "The following water bodies located inside the CFWI Planning Area are on SJRWMD's and SWFWMD's priority lists are scheduled for rule development in 2015: Lake Apopka, Lake Hancock, and St. Johns River at State Road 520 Lake Poinsett."
- 9) Chapter 2, Page 18, Last Complete Sentence: To better reflect the actual gpcd rate trends and for consistency with the recommended language from the Water Conservation Subteam, we recommend modification as follows, "However, as can be seen in Figure 4, the gross gpcd rate appears to be declining while the residential gpcd rate reduction remained relatively level has moderated over the past decade."
- 10) Chapter 2, Page 19, Starting with the Last Complete Sentence: As written, this section does not accurately reflect the work completed by the Water Conservation Subteam to quantify potential water conservation savings. We request modification as follows, "Based on the subteam's preliminary findings and SC guidance the original water savings goal estimate was reduced to 37 mgd (Table 3). This is considered a starting point for an estimate of the potential savings possible through conservation BMPs with additional savings available possible through higher participation rates of evaluated BMPs and/or the implementation of other measures not evaluated but recognized as being applicable within the CFWI Planning Area (Table 3)."
- 11) Chapter 2, Page 35, Penultimate Sentence: To clarify the fact that different BMPs have different service lives, we request modification as follows, "The amounts shown in Table 5 include the entire cost of the BMP for its estimated life (though some service lives are less than 20 years) and, which includes costs potentially borne by third parties that would include non-rebate portions."

In addition, the indication that portions of the costs will be paid by others could be said for the costs of any of the water supply strategies. Suggest indicating this as a general statement applicable to all water supply strategies.

12) Chapter 2, Page 36, Table 5: To provide for an additional cost effectiveness metric, please add a column showing cost in dollars per gallon per day of water conserved (e.g., "Total Cost" for each

BMP divided by the estimated savings to generate a cost per gallon conserved). A copy of the revised Table 5 is provided below. The proposed additional column of data is presented in red.

Use Sector	Conservation Practice	Modeled Participation Rate	Total Number of Implementations	Cost (\$/kgal) <sup>b</sup>	Cost (\$/gpd)	Total Cost (\$ million)	Estimated Savings (mgd)
	Advanced ET Irrigation Controllers <sup>a</sup>	23%	2,845	\$0.86	\$3.67	\$1.14	0.26
	CII Facility Water Assessment/Audit	12.50%	169	\$2.41	\$5.00	\$0.50	0.10
	Irrigation System Audits	12.50%	99,605	\$2.65	\$4.96	\$6.00	1.21
	High-Efficiency Toilets	23%	373,215	\$0.74	\$10.03	\$74.70	7.45
PS	High-Efficiency Faucet Aerators	23%	1,057,602	\$0.40	\$2.22	\$16.30	7.35
	High-Efficiency Showerheads	23%	527,728	\$0.09	\$1.30	\$11.30	8.66
	High-Efficiency Urinals	23%	3,808	\$0.52	\$4.67	\$1.40	0.30
	Pre Rinse Spray Valves	23%	307	\$0.04	\$0.10	\$0.02	0.20
	Soil Moisture Sensors	23%	28,617	\$1.07	\$1.92	\$2.90	1.51
	Waterwise Florida Landscaping <sup>a</sup>	0.10%	3,956	\$1.77	\$10.26	\$7.91	0.87
	PS Subtotal		· · · · ·	· · ·	\$4.95	\$122.17	27.91
	CII Facility Water Assessment/Audit	12.50%	8	\$2.41	\$4.00	\$0.02	0.005
	Irrigation System Audits	12.50%	TBD <sup>c</sup>	\$2.65	TBD	\$4.80	0.95
	High-Efficiency Toilets	23%	39,275	\$0.74	\$10.08	\$7.86	0.78
Other Self-	High-Efficiency Faucet Aerators	23%	111,292	\$0.40	\$2.23	\$1.72	0.77
Supplied	High-Efficiency Showerheads	23%	55,533	\$0.09	\$1.32	\$1.19	0.9
	High-Efficiency Urinals	23%	226	\$0.52	\$4.00	\$0.08	0.02
	Pre Rinse Spray Valves	23%	18	\$0.04	\$0.00	\$0.00	0.01
	Soil Moisture Sensors	23%	TBD <sup>d</sup>	\$1.07	TBD	\$2.30	1.19
• • • •	Other Self-Supply subtota	1	<u>.</u>		\$3.87	\$17.97	4.63
	Total		· · · · · · · · · · · · · · · · · · ·		\$4.80	\$140.14	32.54

Table 5. Summary of conservation potential estimates for PS and OSS conservation practices.

- 13) Chapter 2, Page 37, Participation Rates Section: Because of the importance of the term "Participation Rates", we suggest the addition of a sentence that defines participation rate as it was used in this study. Please add the following text, "<u>The participation rate of a conservation</u> <u>BMP is defined as the percentage of users who adopt a conservation measure from the total pool</u> <u>of potential adopters.</u>"
- 14) Chapter 2, Page 38, Participation Rates Section: We suggest the addition of a penultimate sentence that provides additional context on participation rates. Please add the following text, "In practice, however, the relationship is not linear and increases in participation rates will require increased expenditures."
- 15) Chapter 2, Page 41, Summary of Potential Water Savings Subsection, 5th, 6th and 7th Sentences: As written, this section is inaccurate and does not reflect the work completed by the Water Conservation Subteam to quantify potential water conservation savings. We request modification as follows, "The savings <u>estimates</u> are based on <u>historic assumed</u> participation rates, which <u>were</u> <u>based on historical participation rates of actual conservation projects</u> are the result of past levels of education, outreach and incentive funding. The conservation estimates determined during the Solutions Planning Phase represent <u>savings a starting point of savings</u> that could be achieved using best available information on BMPs, modeling tools, and current levels of agricultural program implementation. Adoption of conservation BMPs and actual water savings <del>can be greatly <u>could</u> possibly be enhanced with increased levels of education, outreach efforts and funding."</del>
- 16) Chapter 3, Page 51, South Lake County Wellfield, Second Paragraph: Add "However, the projected increases in groundwater use represented by this project are currently not permitted to utilize either the Upper or Lower Floridan aquifers" as the third sentence in this paragraph.
- 17) Chapter 3, Page 51, Cypress Lake Wellfield, Last Paragraph: Replace the second and third sentence with "The water use permit issued by the SFWMD includes an environmental monitoring program."
- 18) Chapter 3, Page 52, Polk County Southeast Wellfield, Third Paragraph: Please change the third paragraph of this section to read as follows, "Impacts to wetlands and lakes near the wellfield are expected to be minimal due to extensive confining units above the LFA where water is being withdrawn. Producing water from the LFA should minimize the potential for impacts along the ridges within Polk County. The water use permit issued by the SFWMD includes an environmental monitoring program, an environmental harm contingency plan, and annual project status verification reports of wetlands monitoring plan. **Chapter 4** discusses the environmental evaluations for this project in more detail. "
- 19) Chapter 3, Page 52, Polk County Southeast Wellfield, Fourth Paragraph: Delete the first sentence as follows: "The Southeast Polk County Wellfield Project has a water use permit and has conducted exploratory drilling, testing, and permitting activities."
- 20) Chapter 3, Page 53, Polk County Blended LFA Distributed Wellfield, Third Paragraph: Delete the second sentence.
- 21) Chapter 3, Page 67, Polk County Regional Alafia River Basin, Second Paragraph: Change "one or more raw water" to "two river water" and delete the "treatment" between "preliminary treatment of raw water" and "storage".

22) Chapter 3, Page 73, Reedy Creek Stormwater Mitigation/Recharge: In past drafts of the Solutions Plan document, the STOPR+2 Group has provided comments on this project. Some of these comments have not been implemented and are reiterated below. In addition, the capital costs presented do not appear to adequately consider the infrastructure and land that would be required to implement this project.

"The Reedy Creek Stormwater Mitigation/Recharge project is a stormwater project that will capture and develop 4 mgd of stormwater to recharge the surficial aquifer in strategic locations that are currently stressed or projected to worsen in the future. <u>This project does not directly provide a new supply of water, but may indirectly make additional fresh groundwater supplies available as a result of increased recharge. The quantity of water that could be made available has not been determined. In addition to water supply benefits, the proposed project will also improve flood protection, water quality, and natural systems.</u>

The Reedy Creek Basin, located in Orange and Osceola counties, would be the source of stormwater for this project. Project construction elements include a water level control weir, low head pumping unit and intake structure, piping systems, and receiving storage areas. It is important to note that the construction of a new water control structure within the Reedy Creek Basin would have to be designed and implemented to not cause any adverse flooding impacts upstream or adverse changes in flow downstream of the new weir. At this time, it is unknown if a new water control structure could feasibly be implemented within the Reedy Creek Basin. For example, a significant portion of the Reedy Creek and Bonnet Creek Basins in this area are under the control of the Reedy Creek Improvement District (RCID). This project could not adversely impact RCID's stormwater management system. No land purchases will be required.

Planning level capital costs are estimated to be \$1.56 million. Operation and maintenance costs are estimated at \$50,000 annually, which results in a unit production cost of \$0.09 per 1,000 gallons. This assumes a 4-mgd stormwater capture system is developed. However, as previously noted the quantity of additional water supplies (if any) that could be made available by this project is unknown. In addition, these costs do not include the infrastructure potentially associated with any water supply aspects of this proposed project. As such, the capital and O&M costs provided herein are only for the stormwater recovery aspects of this project. Construction is estimated for years 2019-2020. Funding sources for this potential project still need to be identified.  $\frac{1}{77}$ 

Project monitoring <u>and groundwater flow modeling</u> will be required to determine if this project may be used for groundwater offsets potentially allowing increased groundwater withdrawals in the area. <u>Surface water and stormwater modeling will likely be required to determine the feasibility of capturing and reapplying stormwater within the Reedy Creek basin. The surface water and groundwater flow modeling will also be required to assure the project does not cause adverse flooding impacts. Water quality modeling may be required.</u>

Stormwater treatment areas and other natural low lying areas may be used for water quality treatment prior to being use for surficial aquifer recharge. <u>Existing treatment ponds are designed for specific hydrologic conditions and to accommodate specific design storm events.</u> Discharges to existing stormwater systems, if permittable based on ERP regulations, will need to be implemented as to not adversely affect the functionality of the ponds, or the ponds will require modification to accommodate the additional flow. Coordination with the owners of the ponds, and possibly land acquisition, will also be required. The use of existing low-lying area cannot result in adverse flooding impacts or impacts to adjacent land uses and will also

require coordination with land owners and possibly land acquisition. Acquisition of land may be challenging due to the extensive development in the Reedy Creek Basin.

Potential project partners include, but are not limited to, Town of Celebration, RCID, Town of Windermere, Orange County, Central Florida Expressway Authority, FDOT, and other private property interests. There may be interest from other potential partners that hold groundwater permits in the region as the benefits to the surficial aquifer may also improve groundwater availability."

- 23) Chapter 4, Page 108, Targeted Recharge for MFL Water Bodies Conceptual Scenario, First Paragraph: Add a sentence after the first sentence that says, "<u>An alternate targeted recharge</u> <u>scenario estimated that 22 mgd of recharge could be needed if RIBs are used to recharge MFL</u> <u>lakes in lieu of direct injection</u>."
- 24) Chapter 6, Page 123, Other Investigations Section: ECFT Model Improvements: Add "In addition, modifications to the model may be required for the model to be suitable for a permitting process" as the second sentence in this paragraph.
- 25) Chapter 7, Pages 128 and 129, List of Key Findings: Multiple comments:
  - First Bullet: As written, this section is inaccurate and does not reflect the work completed by the Water Conservation Subteam to quantify potential water conservation savings. We request modification as follows, "Water conservation is an important element in meeting future water needs. The conservation estimate of 37 mgd, determined during the Solutions Planning Phase, represents a starting point of savings that could be achieved by implementing the PS and OSS conservation BMPs and the agricultural programmatic efforts evaluated (Chapter 2). If achieved, tThe 37 mgd would reduces the projected 250 mgd deficit to 213 mgd. Of this 37 mgd, 76 percent could be conserved by public supply utilities, 12 percent from other self-supply users, and 12 percent by agricultural operations. Additional savings could be available might be possible through higher participation rates of evaluated BMPs and/or the implementation of other measures not evaluated but recognized as being applicable in the CFWI.
  - The sentence before the text "Sixteen regional..." should be deleted as it is unknown if higher participation rates can be achieved.
  - In the current second bullet suggest adding, "However, some of these projects have not been fully evaluated or developed to know which ones will actually be constructed. Based on past experience with regional water supply plans a portion of the proposed projects will not be constructed for a variety of reasons." as a sentence in this bullet.
    - Change the current sixth bullet to, "The establishment of consistency among the water management districts, including but not limited to the development of consistent rules and regulations, will continue to be needed to meet the collaborative process goals and implement the results of the CFWI Planning effort (**Chapter 5**)."
- 26) Chapter 7, Page 133, Develop Specific Prevention and Recovery Projects Section, First Bullet at Top of Page: This bullet says to complete an evaluation of wetland systems identified as having existing stress and those deemed to be at risk from future withdrawals. However, the statistical method developed to evaluate non-MFL wetlands cannot be used to evaluate individual wetlands. This bullet should be modified to accurately reflect this. Suggest changing the text as follows, "Formulate a process to Complete an evaluate evaluate of wetland systems identified as having existing stress..."

- 27) Chapter 7, Page 137, Update the ECFT Model Section, Second and Third Bullets: Suggest indicating that these two potential updates will be implemented as a later phase of the model improvements due to the time and cost associated with making these changes.
- 28) Chapter 7, Page 137/138, Update the ECFT Model Section, Updated Water Use Bullet: Add "Expanded metering for agricultural water uses will provide improved data for groundwater flow modeling."
- 29) Chapter 7, Page 138, Update the ECFT Model Section, Overall Approach Bullet: Change the text of this bullet as follows, "Overall Approach <u>Aalthough the model has been and will be used for planning purposes, it is envisioned and desired to have the model available for the regulated community to apply for specific consumptive use permit applications. It is important to note that the above list of model improvements is a significant undertaking with regard to both cost and level of effort and tasks should be prioritized. Some tasks may not be achieved in the near future. It is also desired to have a model that is accessible to and easy to utilize for a wide-range of potential model users. Though some of the improvements listed above serve to achieve these goals, others (such as expanding the model boundaries), could serve to make the model more difficult to use to some potential users."</u>
- 30) Chapter 7, Page 138, Develop Options for Consistent Rules and Regulations Section: Change the title of this subsection to "Develop Options for Consistency".
- 31) Chapter 7, Page 138, Develop Options for Consistent Rules and Regulations Section, First Paragraph, First Sentence: Change this sentence as follows, "Now that the Solutions Planning Phase has identified strategies to achieve water resource sustainability in the CFWI Planning Area, the Regulatory Team (RT) is better positioned to continue its work to develop consistency amongoptions for consistent rules and regulations for the Districts, including but not limited to the development of consistent rules and regulations, that meet CFWI collaborative process goals and implement the results of the CFWI. "
- 32) Chapter 7, Page 140, Develop Options for Consistent Rules and Regulations Section, Last Sentence: Change this sentence as follows, "As options for consistencyt-rules and regulations among the <u>Districts, including but not limited to developing consistent rules and regulations</u>, are developed, it is anticipated to be presented to the Steering Committee for consideration.
- 33) Appendix C, Page C-11, South Lake County Wellfield Project, Water Resource Constraints, First Paragraph: Delete the fifth sentence as follows, "Although the model does show impacts, producing water from the LFA should minimize the potential for impacts when compared to traditional UFA sources."
- 34) Appendix C, Page C-11, South Lake County Wellfield Project, Cost-benefit Analysis of Yield: Add the following sentence to the end of the paragraph, "<u>However, given uncertainties regarding the permittability of the project and the ultimate yield of the wellfield, the project may prove to be less cost-effective than other potential projects under consideration.</u>"
- 35) Appendix C, Page C-11, South Lake County Wellfield Project, Other Considerations: Replace "None" with "Given uncertainties regarding the permittability of the project and the ultimate yield of the wellfield, the project may prove to be less cost-effective than other potential projects under consideration."

- 36) Appendix C, Page C-13, South Lake County Wellfield Project, Regulatory Review, Fifth Paragraph: Delete third sentence as follows, "Although the model does show impacts, producing water from the LFA should minimize the potential for impacts when compared to traditional UFA sources.""
- 37) Appendix C, Page C-59, St. Johns River/Taylor Creek Reservoir, Other Considerations: Delete the second paragraph regarding water quality considerations. The paragraph discusses a straightforward design issue that does not warrant being discussed in this section.
- 38) Appendix C, Page C-61, St. Johns River/Taylor Creek Reservoir, Figure C-4: Please delete the figure, as it is outdated. In addition, most project descriptions do not include a figure.
- 39) Appendix C, Page C-86, Polk County Regional Alafia River Basin Project, Description of Project, Second Paragraph, Third Sentence: Modify start of sentence as follows, "The project components include one or more water intakes two river water intakes, raw water transmission mains...."
- 40) Appendix C, Pages C-102 through C-106, Reedy Creek Stormwater Mitigation/Recharge Project: In past drafts of the Solutions Plan document, the STOPR+2 Group has provided comments on this project. Some of these comments have not been implemented and are reiterated below. Any specific reference to any member of the STOPR+2 Group should be removed from this project description. In addition, the capital costs presented do not appear to adequately consider the infrastructure and land that would be required to implement this project.

# "Project Description

The Reedy Creek Stormwater Mitigation/Recharge <u>conceptual</u> project includes several components, including stormwater compensatory treatment, flood protection, and surficial aquifer recharge. This effort potentially\_meets multiple outcomes in flood protection, water quality, natural systems and water supply.

The project is a stormwater treatment project that initially focuses 4 mgd of recharge to areas that are shown in the regional groundwater model to have lower surficial aquifer water-table conditions now that are projected to worsen in the future. will develop protect existing groundwater withdraws in the vicinity of the enhanced recharge while providing This project could also provide a quantifiable water quality compensatory treatment alternative for future or instead of existing stormwater treatment. This project does not provide finished potable water, it is a source water project for recharge to extend and protect existing and possibly future increases in groundwater withdrawals. The quantity of water that could be made available has not been determined.

The project components include a water elevation control weir to protect the area from flooding; an intake structure and low-head pump; and receiving wetlands/ surface water storage areas where the recharge can take place. It is important to note that the construction of a new water control structure within the Reedy Creek Basin would have to be designed and implemented to not cause any adverse flooding impacts upstream or adverse changes in flow downstream of the new weir. At this time, it is unknown a new water control structure could feasibly be implemented within the Reedy Creek Basin. For example, a significant portion of the Reedy Creek and Bonnet Creek Basins in this area are under the control of the Reedy Creek improvement District (RCID). This project could not adversely impact RCID's stormwater management system.

Permit authorization will be sought through the Environmental Resource Permitting (ERP) process, though other permits may be required. Further, an applicant may pursue options to modify existing groundwater withdraw permits in the area to recognize the resulting enhanced recharge conditions that become apparent with the operation of the system. As currently configured, this project may be used toward a pollutant load reduction strategy and included in a future Lake Okeechobee Basin Management Action Plan.

### **Planning-Level Project Details**

The project includes the following systems and components.

#### Added Surface Water Storage Capacity

Increase surface/stormwater water storage capacity will be accomplished by pumping water back up into the contributing drainage area. The <u>receiving</u> sites selected will be based on an optimum cost/benefit basis. In general, the locations could be: existing wetlands, stormwater treatment ponds or other water features that would enhance recharge in to this area predicted to be and verified by field reconnoiter to have depressed surficial aquifer conditions. Existing treatment ponds are designed to specific hydrologic conditions and to accommodate specific design storm events. Discharges to existing stormwater systems, if permittable based on ERP regulations, will need to be implemented as to not adversely affect the functionality of the ponds, or the ponds will require modification to accommodate the additional flow. Coordination with the owners of the pond, and possibly land acquisition, will also be required. The use of existing low-lying areas cannot result in adverse flooding impacts or impacts to adjacent land uses and will also require coordination with land owners and possibly land acquisition. Acquisition of land may be challenging due to the extensive development in the Reedy Creek Basin. There will not be a need for property acquisition and will likely enhance existing property value.

#### Water Treatment

This project is, by its nature, a water quality treatment system. The design principal develops operating protocols for intake structures on ditch <u>and canal</u> systems that were constructed <del>below historic seasonal high groundwater elevation</del> for flood control. In the Orange County area, these drainage conveyance ditches bleed off the surficial aquifer nearly year round (typically 330-360 days a year). The design approach removes the water from the canalsthat flows in an unnatural condition and pumps it upstream to stormwater treatment areas or other low-lying areas where the surficial aquifer has increased storage capacity due to the dewatering effects of the bleed down conditionto recharge the SAS. The owner applicant of the system gains a water quality compensatory treatment consideration within its watershed and the surficial aquifer receives increased recharge in <u>potential</u> areas of stress (potential wetland ecosystem impacts).

#### **Raw Water Mains**

Raw water is pumped upstream relatively short distances into the watershed under low pressure (head) conditions. Water is allowed to return to the surficial aquifer in a manner that more closely mimics the natural condition compared to the developed condition where the Directly Connected Impervious Area (DCIA) has increased discharge rates and volumes over various temporal scales. Getting the system back to a natural condition also requires increased monitoring and management actions likely through the use of Supervisory Control And Data Acquisitions (SCADA) systems to protect the area from flood conditions.

# **Project Yield**

The <u>RCR Reedy Creek Stormwater Mitigation/Recharge</u> project <u>willcould</u> yield water and value for the <u>ownerapplicant</u> in water quality compensatory treatment and possibly through enhanced groundwater withdrawal performance. The <u>ownerapplicant</u> will make the determination on these combined resource values at a later date. Preliminary project evaluations of the altered annual hydrographs in the area have shown that approximately 4 mgd of water may be available <u>for redistribution</u> with this approach at this location, at this time. This project does not directly yield water for water supply. The quantity of groundwater that may be protected for withdrawal or additional withdrawals was not <u>determined as part</u> of the project conceptualization <del>constraints</del>.

# **Estimated Planning-level Costs**

<u>It was assumed that a potential</u> The applicant will not be pursuing external funding for the Reedy Creek <u>Recharge</u> project. **Table C-22** summarizes the preliminary estimated planning-level costs.

Planning Level Estimate	Millions			
Construction costs	\$1.3			
Non-construction costs	\$0.3			
Land costs				
Total Capital Costs	\$1.6			
Equivalent Annual Costs	\$0.1			
Annual Operation and Maintenance				
Total Annual Costs	\$0.1			
Unit Cost of Production (\$/kgal)	0.09			

 Table C-22. Summary of estimated planning-level costs for the Reedy Creek

 Stormwater Mitigation/Recharge Project.

#### **Estimated Implementation Schedule**

Design, permitting and construction based on financial resources of the potential partners.

#### Water Resource Constraints

The final evaluation of the watershed hydrographs and resulting operating protocols will be developed by the design team. This will include a consideration of the altered downstream ecosystems. These considerations will include evaluating the enhanced wetland system performance upstream as well as a view of any potential effects to the altered ecosystems downstream.

The watershed has an upper limit on yield that can be used for these restorative efforts so that the downstream conditions can be maintained at a level consistent with a historic condition. This approach could be considered as an entrepreneurial effort; the first applicant that evaluates the watershed and implements a project through the permitting process will create a new paradigm in the hydrograph. Any subsequent property owners in the watershed will use this as a new "baseline" condition.

At this time, it is unknown if a new water control structure could feasibly be implemented within the Reedy Creek Basin. For example, a significant portion of the Reedy Creek and Bonnet Creek Basins in this area are under the control of the Reedy Creek Improvement District (RCID). This project could not adversely impact RCID's stormwater management system. In addition, this project could not adversely impact other existing stormwater management systems or result in adversely flooding to off-site uses. This project may also require a consumptive use permit, depending on how the project is configured.

# **Project Feasibility**

This project <u>may be</u>is feasible and is in consideration by the project partners. No project limitations due to rule inconsistencies have been identified.

### **Cost-Benefit Analysis of Yield**

This project does not provide a direct source of water supply, but could indirectly provide water supply through groundwater recharge. The potential yield and cost of this project are unknown. As an alternative water supply (AWS) project, the Reedy Creek Stormwater Mitigation/ Recharge Project is intended to extend the usefulness of the existing groundwater withdraws in the area.

## **Other Considerations**

The project when implemented may limit other applicants from being able to do similar efforts in this particular watershed. Please note that the use of compensatory treatment mechanisms in this approach is limited by the total runoff volumes and the need to maintain some flow at the right times of the year to the downstream ecosystems. Therefore, there is a natural limit to the number of parties that could pursue this compensatory design alternative.

This approach increases recharge in a stressed ecosystem environment. It is well suited to protecting wetlands at this location. This approach is under consideration in areas of the CFWI where the enhanced recharge could have other water resource benefits like enhanced recharge for springs protection (Wekiwa Spring) and oligohaline ecosystem enhancement and restoration (Indian River Lagoon).

Other considerations include water quality impacts, flooding impacts, impacts to stormwater systems, and cost feasibility.

# **Potential Partners and Governance Options**

The project is under consideration by some of the entities that have enough land ownership to have value for the compensatory treatment option. These <u>Potential project partners</u> include but are not limited to Town of Celebration (CDD), Reedy Creek Improvement District (298 District), Town of Windermere, Orange County, Celebration Central Florida Expressway Authority, FDOT, and other private property interests. With the powers afforded to the RCID, they would have initial review of ERP permit applications for the areas within their jurisdiction. After their review, it would go to the SFWMD for consideration. Areas in the Reedy Creek watershed outside of the RCID, would be reviewed by the SFWMD.

There may be interest in seeking other partnerships with groundwater permit holders in the region as the benefits to the surficial aquifer may enhance their respective ability to withdraw water. This would likely be one of the partners in STOPR (St. Cloud, TWA, Orange County, Polk County, RCID).

# Funding Sources

Implementation of the approach will be conducted by an entity that has an appropriate financial interest in the outcome. The result will be a financially sustainable approach with beneficial outcomes in water quality, flood protection, natural systems and water supply."

41) Appendix D, Page D-1, Introduction, Last Sentence: This sentence indicates that District assumes the projects listed in the Appendix have a likelihood of being permittable; however, the individual project descriptions do not always indicate this. Suggest rewording as follows, "However, the WSPOs included in this Appendix have been screened for feasibility and the Districts <u>have indicated if projects assume that they</u> have a likelihood of being permittable."