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# **PROJECT DEFINITION REPORT**

## **CENTRAL FLORIDA WATER INITIATIVE**

PS ID 100795

JULY 21, 2017

REVISION 1



**[sfwmd.gov](http://sfwmd.gov)**

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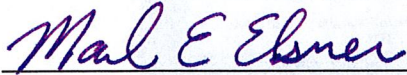
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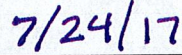
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## Approvals

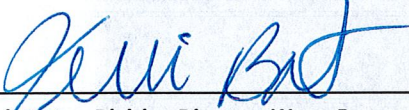
The signatures in this section of the project definition report should be revised to represent the various areas providing significant resources to the project.



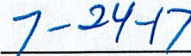
Mark Elsner, Bureau Chief, Water Supply Bureau



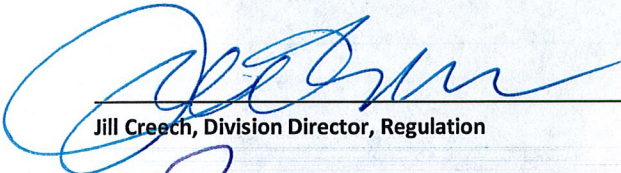
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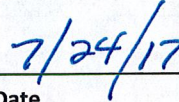
Terrie Bates, Division Director, Water Resources



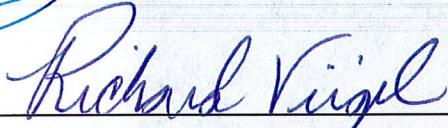
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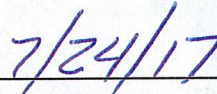
Jill Creech, Division Director, Regulation



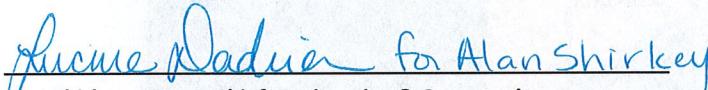
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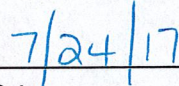
Richard Virgil, Bureau Chief, Infrastructure Management



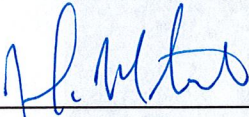
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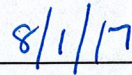
Alan Shirkey, Bureau Chief, Engineering & Construction



Date



John Mitnik, Chief District Engineer  
Operations, Engineering, & Construction

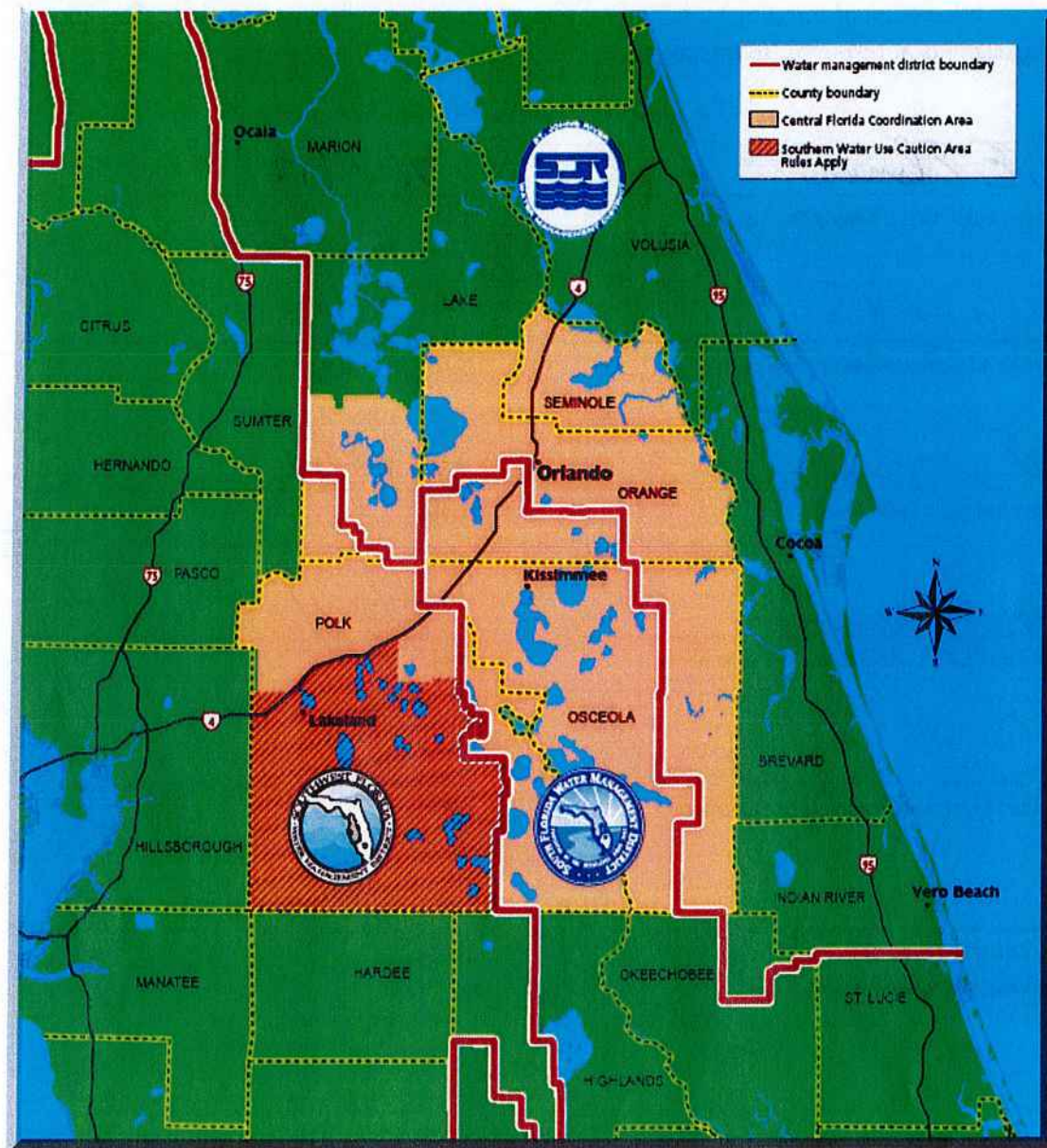


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Document prepared by: Stacey Adams, Extension: 2577



## Project Location



## Project Description

This project includes continued support and participation of the Central Florida Water Initiative (CFWI) Planning Area water supply planning effort. This effort includes implementation of the 2015 CFWI Regional Water Supply Plan (RWSP) approved in November 2015 and the development of the 2020 Update to this RWSP. The 2020 Update will incorporate the findings of the previous 2015 CFWI RWSP, provide progress updates on the implementation strategies and future direction of the 2015 CFWI RWSP, and address subsequent direction from the Florida Legislature, the Water Management District Governing

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Boards and the Steering Committee. The development of consistent rules, along with a timetable for rulemaking, will be undertaken to meet the directives.

## **Project Scope**

To continue the process of enhancing the strong technical foundation started in previous efforts that will be necessary to achieve the CFWI Guiding Principles and Collaborative Process Goals including implementation of the 2015 CFWI RWSP and completion of the 2020 CFWI RWSP Update, Technical Teams will work together collaboratively refining and developing the ongoing technical work. The Technical Teams will not operate as “Sunshine” committees, as their functions will be limited to fact finding and technical analysis. They will conduct fact-finding regarding the Guiding Principles and Collaborative Process Goals of the CFWI 2020 and provide options for implementation of the Guiding Principles and Collaborative Process Goals of the CFWI 2020. They will not make policy decisions or recommendations or prioritize options. The Technical Teams shall obtain instruction from the Steering Committee regarding any potential policy issues that may arise as a result of their investigations. The Technical Teams and their respective Goals are shown below. The membership of individuals assigned to each Technical Team including the Team Leader shall be proposed by the MOC with final approval by the Steering Committee.

Each Technical Collaborative Team will have a work plan and schedule to accomplish their effort and, when needed for timeliness and efficiency, the Technical teams may create Subteams. Subteam membership will not require Steering Committee approval. Each Technical Team will be expected to present their progress as needed in a Steering Committee meeting.

**1. Conservation**

Continue the effort to advance conservation beyond the estimates established in the RWSP.

**2. Regulatory**

Support CFWI 2020 Guiding Principle three to “establish 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” consistent with the statutory directive for the development of uniform rules for application within the CFWI in s. 373.0465(2)(d), F.S.

**3. CFWI Regional Water Supply Plan**

Update the water supply demand projections by December 2017. Update and implement the single multidistrict regional water supply plan, including incorporation of needed recovery or prevention strategies and the identification of sustainable water supply programs and projects. Monitor and report progress on the CFWI Programs and projects identified in the 2015 CFWI RWSP.

**4. Water Resource Assessments**

Review any needed recovery or prevention strategies. Update the East Central Florida Transient model by December 2017. Continue the effort to implement the next steps



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from the 2015 CFWI RWSP not specifically assigned to one of the existing Collaborative Technical Teams. Ensure technical coordination between the teams.

#### **5. Communication & Outreach**

Develop programs to address the “next step” recommendations from the Phase 2 Community Outreach and Consensus Report.

SFWMD staff will participate on each of these teams.

### **Background**

The St. Johns River Water Management District, South Florida Water Management District, and Southwest Florida Water Management District worked collaboratively with other agencies and stakeholders to develop a framework to implement effective water resource planning, including water resource and supply development and management strategies to protect, conserve, and restore our water resources. This effort used a unified process to address central Florida’s current and long-term water supply needs. This process culminated with approval of the 2015 CFWI RWSP.

The CFWI 2015 identified measures to achieve water resource sustainability in the CFWI Planning Area that will require ongoing action by the Districts and stakeholders. The implementation process will require continued commitment and collaboration to initiate and realize the key findings and recommendations of the CFWI 2015 (RWSP & Solutions Plan).

The following recommendations of the 2015 CFWI RWSP will guide future water supply solutions and be addressed in the next phase of the effort the 2020 CFWI RWSP. When followed, the region will be on a path to ensure that future water demands are met while protecting water resources and related natural systems. Recommended actions for implementing the results of the 2015 CFWI RWSP planning effort include the following:

- Implement Water Conservation Programs
- Develop Specific Prevention and Recovery Strategies
- Support Development and Implementation of Regional Project Solutions
- Support Additional Alternative Water Supply (AWS) Projects
- Improve Water Resource Assessment Tools and Supporting Data
- Develop Options for Consistent Rules and Regulations
- Continue Communication and Outreach
- Identify Options for Future CFWI Framework to Support Implementation Strategies
- Enact the Data, Monitoring, and Investigating Team (DMIT) implementation plan

### **Permitting**

During the construction of new monitor wells, where surface water discharge is required, the District will work with FDEP to acquire appropriate permits for that work. The drilling contractors will be responsible for obtaining any other permits necessary to construct the monitor wells in accordance with local, state, and/or federal law.

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## **Right of Way**

Several of the lower Floridan aquifer (LFA) sites are planned to be located on District right-of-way's. These are either owned out-right by the District (e.g. 2<sup>nd</sup> planned LFA site near S65 structure), or perpetual easements for which our use of the land for CFWI testing and monitoring would fall within the allowable uses granted by the easement (1<sup>st</sup> planned LFA site on Deseret ranch, C-30 right-of-way).

## **Real Estate**

Many of the new wetland monitoring sites that will be established by the DMIT will be on lands not owned by the District. These sites may be on private land or lands owned by other public entities. Access agreements need to be arranged for each new location.

## **Public Use/ Outreach**

The Communications & Outreach Team will develop programs to address the "next step" recommendations from the Phase 2 Community Outreach and Consensus Report. Their team approach will be to develop and implement programs and activities to sustain stakeholder involvement with CFWI, including to generate support and funding for projects. This will include project-specific activities as well as continued communications support via the [www.cfwewater.com](http://www.cfwewater.com) website; presentations to citizen groups, technical groups and local governments, including stakeholders outside the CFWI boundary; and internal coordination with the technical teams for progress updates and targeted outreach as needed. Outside consulting may be required but will be approved by the SC.

## **Stakeholder Considerations**

Continuation of the collaborative process in the CFWI area among the state agencies, affected WMDs, regional public water supply utilities, and other stakeholders the CFWI process will continue through 2020.

## **Operations and Modeling**

N/A

## **Operations and Maintenance**

N/A

## **SCADA, Instrumentation, Telemetry, Information Technology**

Part of the CFWI effort includes the implementation of groundwater and wetland monitoring stations as part of a CFWI data development and management effort under the DMIT. The SFWMD is responsible for constructing and monitoring an estimated 40-60 wells and wetland sites within the CFWI Planning Area before the end of FY2020 per the DMIT plan. Due to limited budget, the current schedule includes an



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estimated 3-10 wells. Each station is proposed to be monitored long-term and may be connected to the SCADA system and will likely require instrumentation maintenance as part of the monitoring. One-time funding is budgeted for SCADA equipment and installation costs; long-term maintenance costs are not included.

## **Security and Safety**

N/A

## **Environmental**

Adverse impacts to wetland systems and MFL lakes are believed to be occurring from the current cumulative withdrawals within the CFWI Planning Area. Environmental research, data collection, and modeling are tools proposed for use in verifying, quantifying and identifying solutions to meet the existing and projected water demands, and the water needs of the water resources, including natural systems. Identifying and developing water resource alternatives, conservation and regulation are the primary means to address this issue. No action will put at risk established MFL's and diminish the quality of wetlands in and around central Florida.

## **Monitoring**

Part of the CFWI effort includes the implementation of groundwater and wetland monitoring stations as part of a CFWI data development and management effort under DMIT. The SFWMD is responsible for constructing and monitoring an estimated 40-60 wells and wetland sites within the CFWI Planning Area before the end of FY2020. Each station is proposed for long-term monitoring. Data downloading, processing and station maintenance are all part of this effort. The SFWMD will coordinate with SJRWMD and SWFWMD to store monitoring data in shared databases.

## **Commissioning**

N/A

## **Lessons Learned**

Continuous assessment and improvements to the CFWI process are ongoing using past experience to produce increasing efficiencies to accomplish the goal and objectives of this project.

## **Conceptual Alternative Options**

N/A



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## **Cost Estimates**

The 2016 DMIT Work Plan documents the funding necessary for SFWMD implementation of an estimated 40-60 wells and wetland sites. The first two years of funding is \$3.1 million and the remaining three years is \$4.9 million ending by FY2020. Additional funding is needed for staff time and approximately \$3 million is needed for subsequent monitoring of sites through 2035. Other costs include, but not limited to, funding for CFWI Facilitation, Technical Editing, and Communications and Outreach services.

## **Recommendations**

This unified process to address central Florida's current and long-term water supply needs is the preferred alternative. Prior to the coordinated effort between the three water management districts working collaboratively with other agencies and stakeholders to address central Florida's current and long-term water supply needs, each water management district previously developed water supply plans for their respective areas of the CFWI Planning Area. The water resources in the CFWI, primarily the Floridan Aquifer, underlies the entire CFWI Planning Area crossing District boundaries, making a coordinated approach more appropriate to address water supply in this area.

## **Project Milestones**

- FY17 CFWI RWSP Master Schedule development
- FY18 CFWI RWSP Master Schedule status
- FY19 CFWI RWSP Master Schedule status
- FY20 CFWI RWSP Governing Board approvals (3 Districts)

## Resource Requirements

List Functions (Resource Area)	Skill of Functional Employees	Identify Employees	Total FTEs Required for Complete Project (5 years)
Coastal Ecosystem Sciences	MFLs, Reservations	D Medellin	0.2
Water Supply Bureau	Policy Direction	M Elsner	0.4
Water Supply Development	Planning, Project Management, AWS, Conservation	T Colios, Kris Esterson, S Adams, J Harmon, R Nevulis, K Mills, H Moody, N Kennedy, N Kraft	6.3
Resource Evaluation	Modeling, Hydrogeology	K Rodberg, J Giddings, P Kwiatkowski, U Bandara, S Krupa, E Richardson, B Collins, J Janzen, E Geddes, L Lindstrom, Ke Smith, A Obeysekera, Y Assegid, M Billah	12.3
Regional Representative	Outreach	B Graf	0.2
Regulatory Offices and Service Centers	Wetlands Regulatory	N Vitani, L Prather	0.7
Water Use	Regulatory	S Memberg, M Clemente	0.5
Public Information	Communication	Jan Loftin	0.05
Compliance Assessment	Analysis	S Hill	0.05
Engineering & Construction Bureau	Design, Construction, Project Management	M Fox, K Snell, H Tripp, J Ismalon, M Milares, E Hickson, N Pandya	0.6
Infrastructure Management Bureau	Survey, Mapping, SCADA design & installation, Hydro data processing	E Ehmke, N Strickland, M Wise, M Horan, R Hudson, A Giammarco, R Kett, F Berger, G Ritchie, A Sosa, A Bokor	0.3
Real Estate	Right-of-way, Easements	S Pry	0.01
Office of Counsel	Legal	J Brown	0.50
<b>Total Resource Requirements</b>			<b>22.1</b>



## Project Deliverable and Schedule

Quarters to Complete	Deliverable	Schedule Notes
10/01/2016 – 09/30/2020	CFWI Facilitator	Recurring Funding – SJRWMD is the contract administrator and we will provide our portion at the beginning of each FY - <b>\$25k per year</b>
08/01/2016 – 09/30/2018	CFWI Springs Project	Working with DEP on CFWI Springs Funding contract & revised timeline - <b>\$35K one-time funding pass through from DEP</b>
10/01/2017 – 01/31/2021	Technical Editing	SFWMD will be the contract administrator – schedule is dependent upon the ECCTX model and Subteam schedule – final approval of the 2020 CFWI RWSP anticipated October – December 2020 – <b>TBD ~\$100-200K</b>
10/01/2016 – 09/30/2018	BEER	One-time funding – SFWMD will be the contract administrator and we will provide our portion at the beginning of FY17 – <b>\$45K (SFWMD portion)</b>
10/01/2016 – 09/30/2017	CFWI TBD	TBD ( <b>Total R/B ~\$89K</b> )
10/01/2016 – 09/3/2020	CFWI Outreach	One-time funding for FY17-20 – <b>TBD \$0-100K</b>
07/13/2017 – 11/30/2017	S-61 Lock: Wells OSF-53 & OSF-112	DMIT Funding – UFA well installation (capital) – <b>\$180k</b>
07/13/2017 – 11/30/2017	FY17-18 USGS OBI Log OSF-53 & OSF-112	DMIT Funding – USGS Consulting Services OSF-53 & OSF-112 - <b>~\$13k</b>
10/01/2016 – 09/30/2019	FY17-18 Consulting Services #2 Plchldr	DMIT Funding – Wetlands, Soil Transects, etc. - <b>\$48.7k</b>
10/01/2016 – 12/31/2017	CFWI Monitoring Peer Review	Model Peer Review of the ECCTX Model – <b>~\$27K</b>
10/01/2016 – 09/3/2017	FY17 CFWI Communications	One-time funding for Conservation Video – <b>\$2K</b>
05/01/2017 – 08/31/2017	UFA Deseret Site Monitoring Well	DMIT Funding – UFA well installation (capital) – <b>\$70.5k</b>
10/01/2016 – 09/30/2017	FY17 Travel	FY17 Travel expenses – Deseret & S-61 sites - <b>~\$7k</b>
10/01/2017 – 09/30/2018	FY18 Travel	FY18 Travel expenses – C-30 LFA & S-61 sites - <b>\$20K</b>
10/01/2017 – 09/30/2019	FY18-20 LFA Drilling & Test at C-30 Site	DMIT Funding – LFA well installation C-30 – TBD ( <b>Total R/B ~\$1.3M</b> )
10/01/2017 – 09/30/2019	External Capital Project Placeholder	DMIT Funding – Surficial, UFA, & LFA well installation, SCADA – TBD ( <b>Total R/B ~\$700k</b> )
10/01/2017 – 09/30/2020	FY18-20 Consulting Services #1	DMIT Funding – wetlands monitoring, lab services, USGS services, etc. – TBD ( <b>~\$724.5K</b> )
10/01/2017 – 09/30/2020	FY18-20 Consulting Services #2	DMIT Funding – TBD
06/01/2017 – 07/31/2017	FY17-18 DEP Permit for LFA Well C-30	DMIT Funding – DEP discharge permit - <b>\$100</b>

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## Project Funding Sources

DA03 – Reserves, Fund Balance, and/or Recurring.

## References

[www.cfwiwater.com](http://www.cfwiwater.com)

# Appendix A - Cost Estimate – see table above





# Document Routing and Coordination

**DEADLINE**All reviews must be  
completed by this date.

7/26/17

Attach this form to the exterior cover of the routing folder. See additional instructions on page 2.

Originator Stacey Adams	Div/Dept 4222	Phone/Extension 2577	Preparer Stacey Adams	Phone/Extension 2577
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## Document Routing Justification:

Central Florida Water Initiative PDR Update to include the Data, Monitoring, and Investigations Team implementation plan.

Routed to:	Phone/Extension	Mail Code	Action Code(s)*	Initials	Date
1 Mark Elsner	6156	4220	S, F	MEE	7/24/17
2 Terrie Bates	6952	4110	S, F	JB	7/24/17
3 Jill Creech	6814	9110	S, F	JC	7/24/17
4 Richard Virgil	6759	5810	S, F	RV	7/24/17
5 Alan Shirkey	2579	5910	S, F	AS	7/24/17
6 John Mitnik	2679	5110	S, R	JM	8/1/17
7					

## Comments:

## \*Action Codes:

A = Approve

C = Review &amp; Comment

F = Forward to next on list

I = Initial

O = Other

P = Proofread

R = Return to originator

S = Signature



