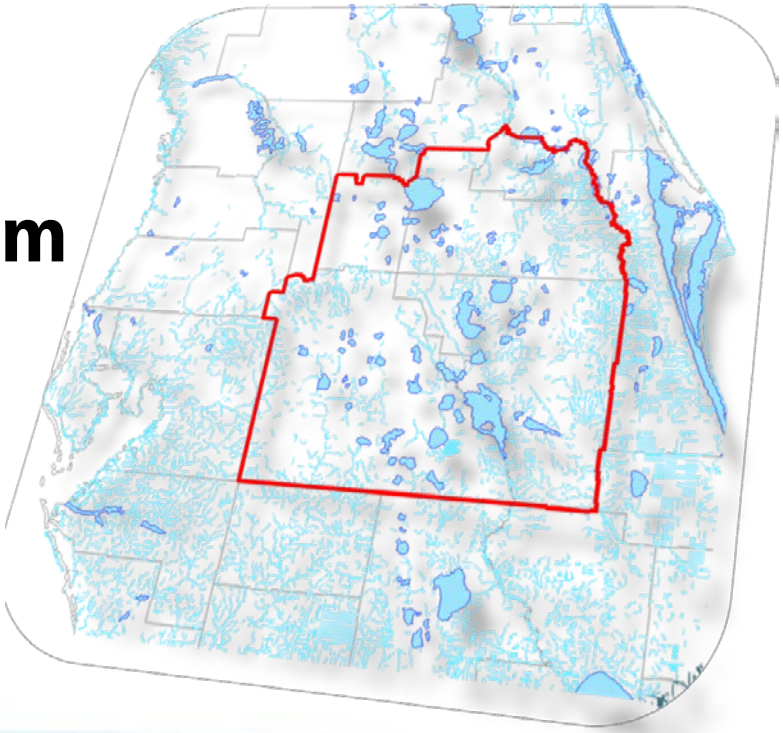
Sub-Team Project Evaluation Update

Solutions Planning Team
August 21, 2014



Solutions Sub-team Leads

- Conservation & other management strategies - Jim Fletcher, UF
- Groundwater – Jerry Mallams, SWFWMD
- Reclaimed water – Jo Ann Jackson, Altamonte Springs
- Stormwater, etc – Rob Teegarden, OUC
- Surface water – Joanne Chamberlain, SJRWMD
- Recovery/Prevention – Dean Powell, SFWMD

Solutions Team Sub-teams
Basic Project Evaluation Questions

1. Identify regional water supply project
2. Cost-benefit analysis of yield
3. Cost estimates (Capital & Annual O&M)
4. Identify water resource constraints
5. Identify potential partners and governance options
6. Pumping, storage and transmission configurations

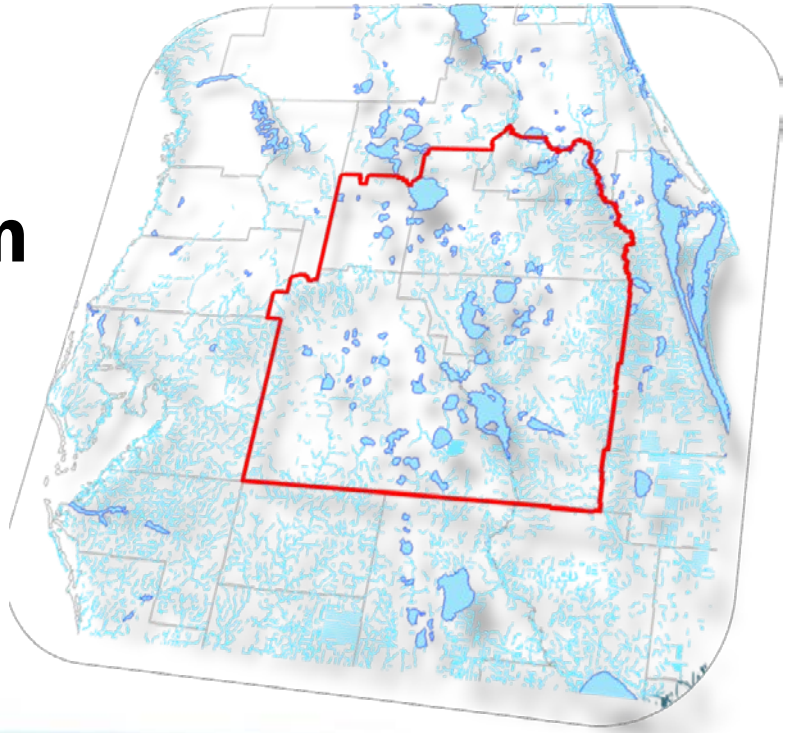
Solutions Team Sub-teams
Basic Project Questions

7. Project feasibility
8. Funding sources
9. Project limitations or constraints resulting from rule inconsistency
10. Other considerations – public concerns or non-technical obstacles
11. Estimated implementation schedule

Conservation Sub-Team Project Evaluation Update

Solution Planning Team
August 21, 2014

Presented by: Jim Fletcher



Conservation Sub-Team Major Findings

- Quantifiable vs Unquantifiable
- Education and Outreach
- Regulatory Options
- New Agricultural Estimates
- Other Self Supply

Summary of Public Water Supply BMPs

Name of Measure	# Implements.	Total Cost ($M)	Savings (mgd)	Cost $/Kgal	Analysis Tool
Facility Water Use Assessment/Audit	169	$0.5M	0.1	$2.41	EZGUIDE
High Efficiency Showerhead Replacement	527,728	$11.3M	8.6	$0.09	EZGUIDE
High Efficiency Toilet Replacement	373,215	$74.7M	7.4	$0.74	EZGUIDE
High-Efficiency Faucet Aerator Replacement	1,057,602	$16.3M	7.3	$0.40	EZGUIDE
High-Efficiency Pre-rinse Spray Valve Replacement	307	$0.02M	0.2	$0.04	EZGUIDE
High-Efficiency Urinal Replacement	3,808	$1.4M	0.3	$0.52	EZGUIDE
Irrigation system evaluation (or survey)	99,605	$6.0M	1.2	$2.65	EZGUIDE
Soil Moisture Shut-off Device	28,617	$2.9M	1.5	$1.07	EZGUIDE
High-Efficiency Dishwasher Replacement	28,691	$15.8	0.02	$129.57	FAWCET
Smart Irrigation Controller (ET etc.)	2,845	$1.1M	0.3	$0.86	FAWCET
Water-wise Florida Landscaping (turf buyback)	3,956	$7.9M	0.8	$1.77	FAWCET

High-Efficiency Toilet Replacement for Public Water Supply Users

Toilet Replacement Program– 7.4 mgd

Purpose: Conserve 7.4 mgd by replacing inefficient toilets used in accounts served by public water suppliers with high-efficiency models.

Cost Estimates:

- Total capital: $74.7M
- Unit production cost: $0.74 / 1,000 gallons

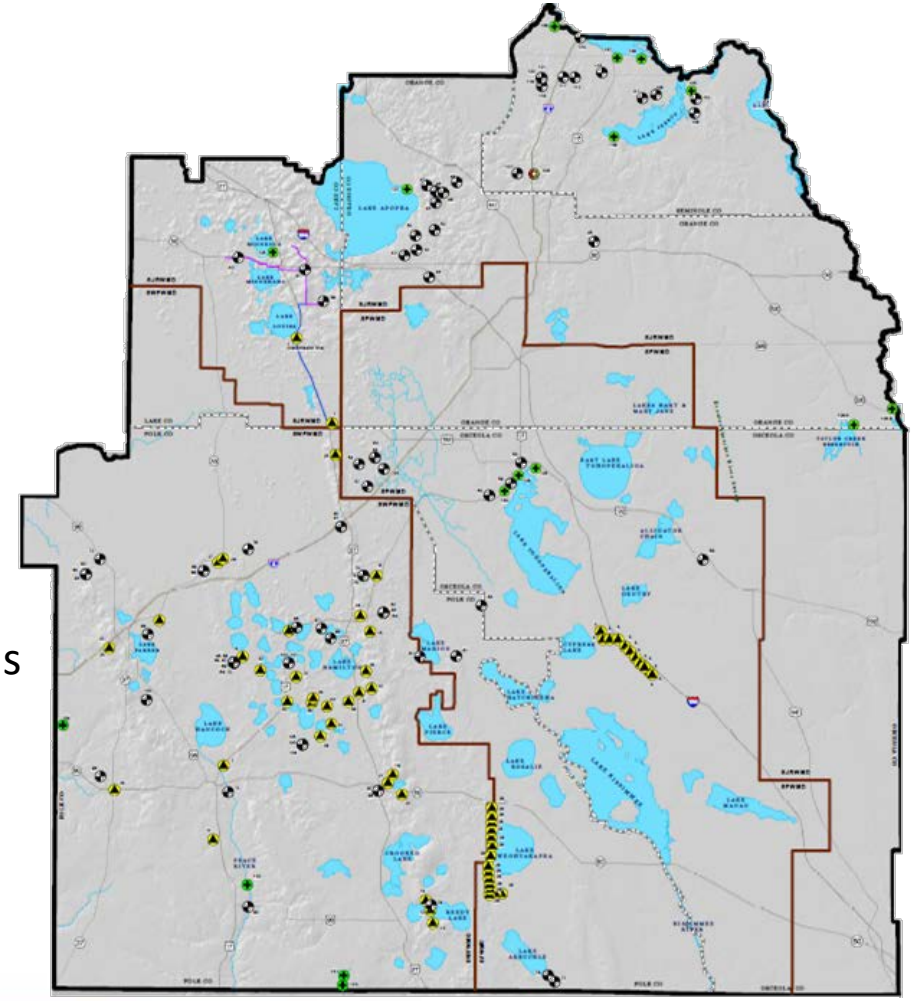
Partners & Governance:

Public Water Suppliers

Water Management Districts

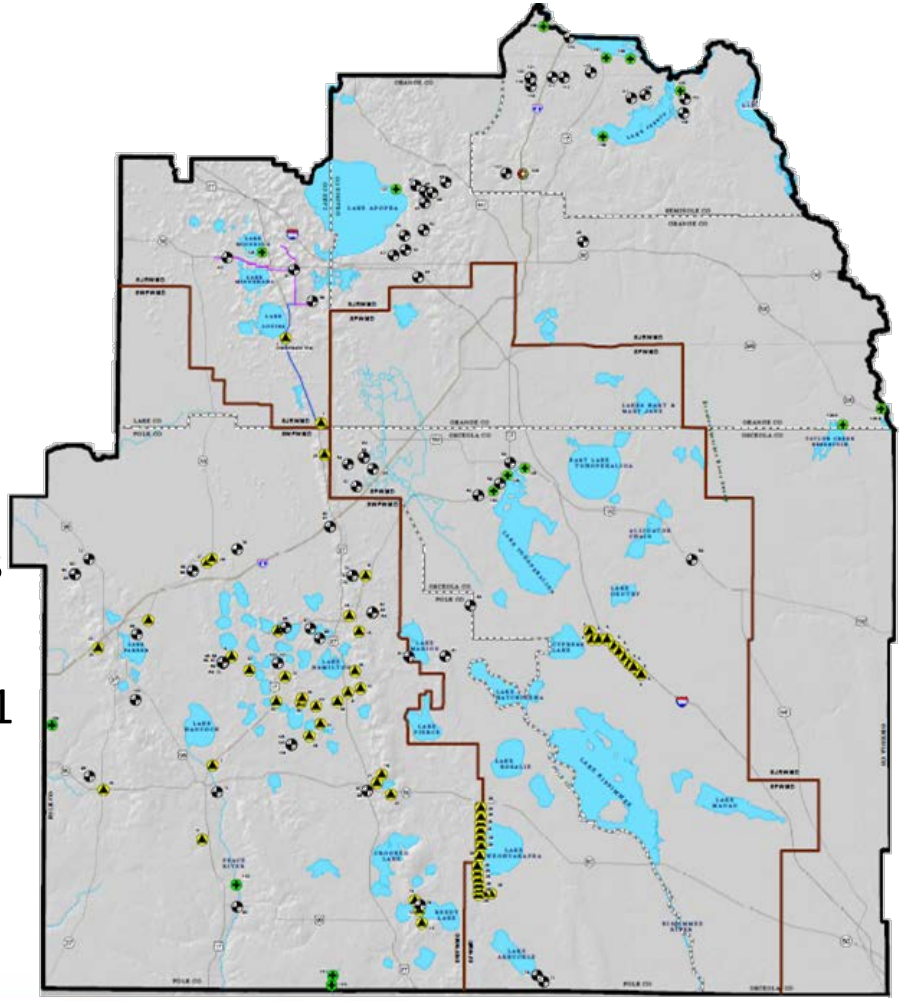
Local Government Entities

Possibly a region consortium the above



High-Efficiency Toilet Replacement for Public Water Supply Users

Toilet Replacement Program– 7.4 mgd



Feasibility: This project is frequently and successfully implemented by Public Water Suppliers

Funding Options: Public Water Suppliers, State of Florida, Water Management Districts

Implementation Schedule: This is a flexible practice and can be initiated fairly quickly (< 1 year from present) by individual Suppliers or local government entities

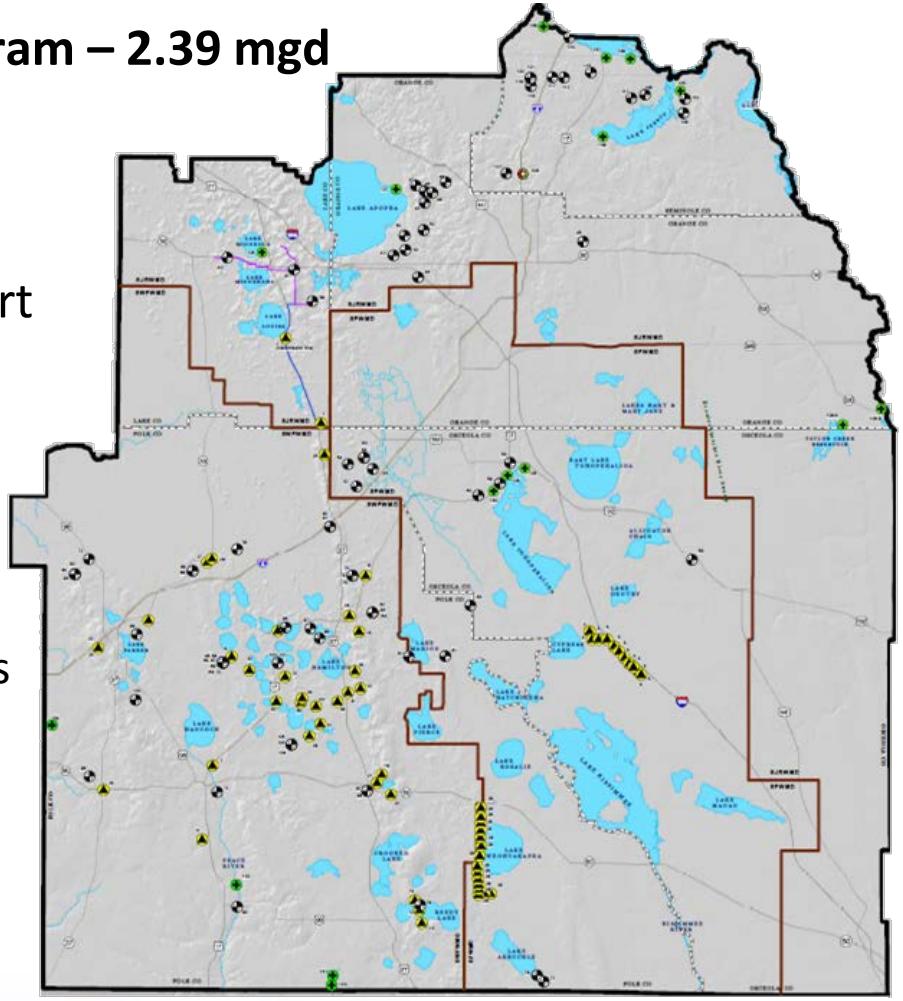
Project Evaluation Status: 0% Complete

Summary of Agricultural BMPs

Name of Measure	# Implements.	Total Cost ($M/yr)	Savings (mgd)	Cost $/Kgal	Analysis Tool
Center Pivot / Linear System Conversion (from a less efficient irrigation system)	58	$0.15	0.50	$0.79	FAARM
Volumetric Measurement of Irrigation Water Use (improved water accounting)	1,260	$0.49	1.24	$1.08	FAARM
Irrigation Scheduling Improvement (enhanced with soilmoisture sensors or wt observation wells)	1,359	$0.37	3.61	$0.28	FAARM
ET Stations (onsite)	220	$0.36	1.20	$0.83	FAARM
Improved Irrigation Management Skills (training and increased wage)	515	$0.18	0.50	$0.98	FAARM
Improved Irrigation Management – Automatic Decision Support Systems	251	$0.76	2.39	$0.87	FAARM
Tailwater Recovery and Reuse System	8	$0.37	1.49	$0.67	FAARM
Laser Leveling	10	$0.06	0.09	$1.62	FAARM
	Total	**$2.74**	**11.02**	**$0.68**	

Automatic Decision Support Systems

Irrigation Management Improvement Program – 2.39 mgd



Purpose: Conserve 2.39 mgd with implementation of automatic decision support systems

Cost Estimates:

- Total capital: $6.3
- Project Term: 10 years
- Unit production cost: $0.87 / 1,000 gallons

Partners & Governance:

Farmers

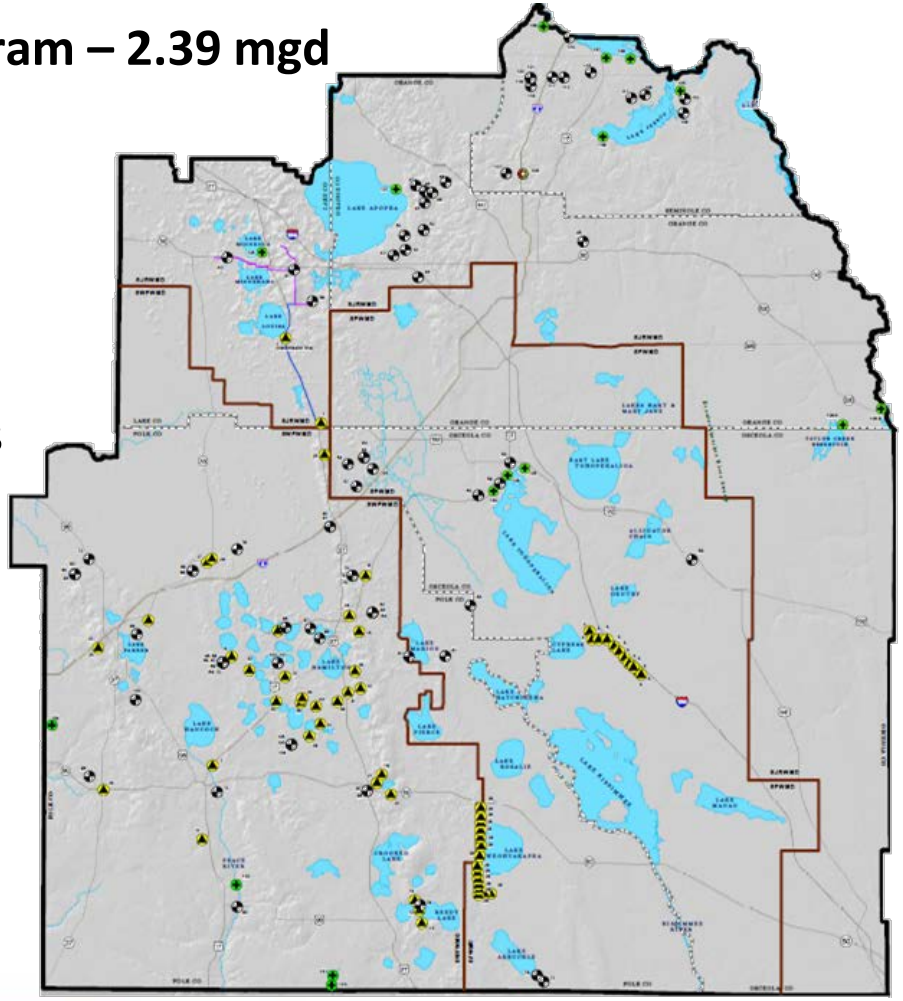
FDACS

Water Management Districts

Local Government Entities

Automatic Decision Support Systems

Irrigation Management Improvement Program – 2.39 mgd



Feasibility: _____

Funding Options: Farmers, FDACS,

State of Florida, Water Management Districts

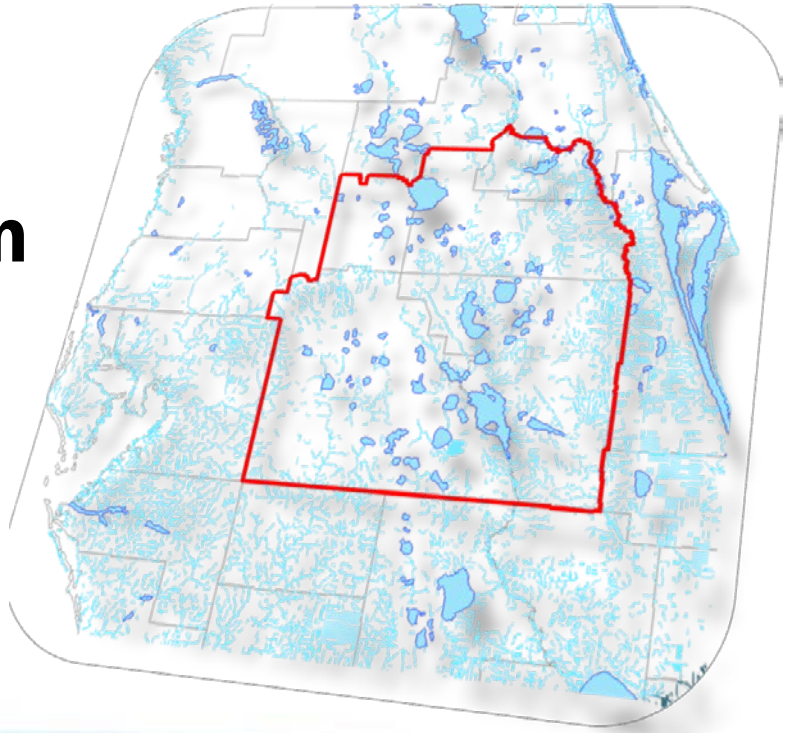
Implementation Schedule: _____

Project Evaluation Status: 0% Complete

Groundwater Sub-Team Project Evaluation Update

Solution Planning Team
August 21, 2014

Presented by: Jerry Mallams



Groundwater Sub-team
Project Evaluations

001. South Lake Lower Floridan Wellfield

005. Cypress Lake Lower Floridan Wellfield

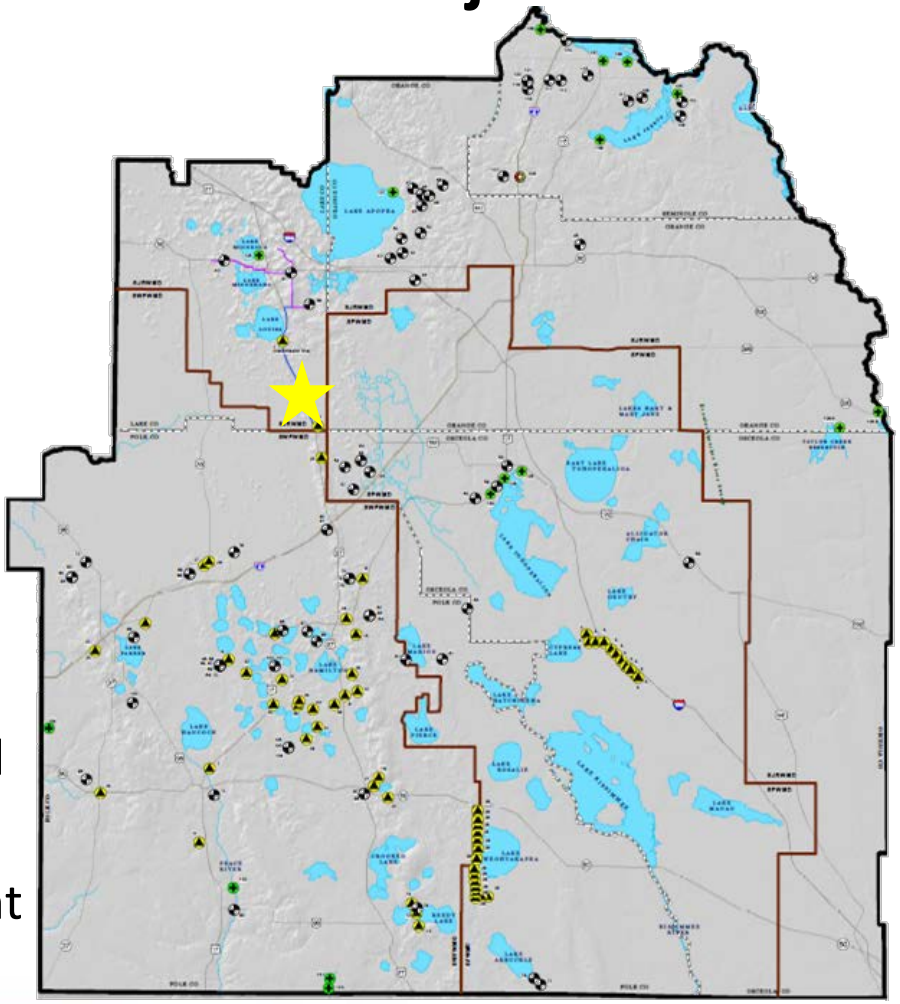
028. SE Polk Co Lower Floridan Wellfield

006-027 & 029-037. Polk Co. Distributed Lower Floridan Wellfield

140. Polk Wellfield Sharing

001. South Lake Lower Floridan Wellfield Project

Potable AWS Project – 12.73 mgd



Purpose: Produce 12.73 mgd of potable AWS for the South Lake entities. Meet 2035 demands.

Cost Estimates:

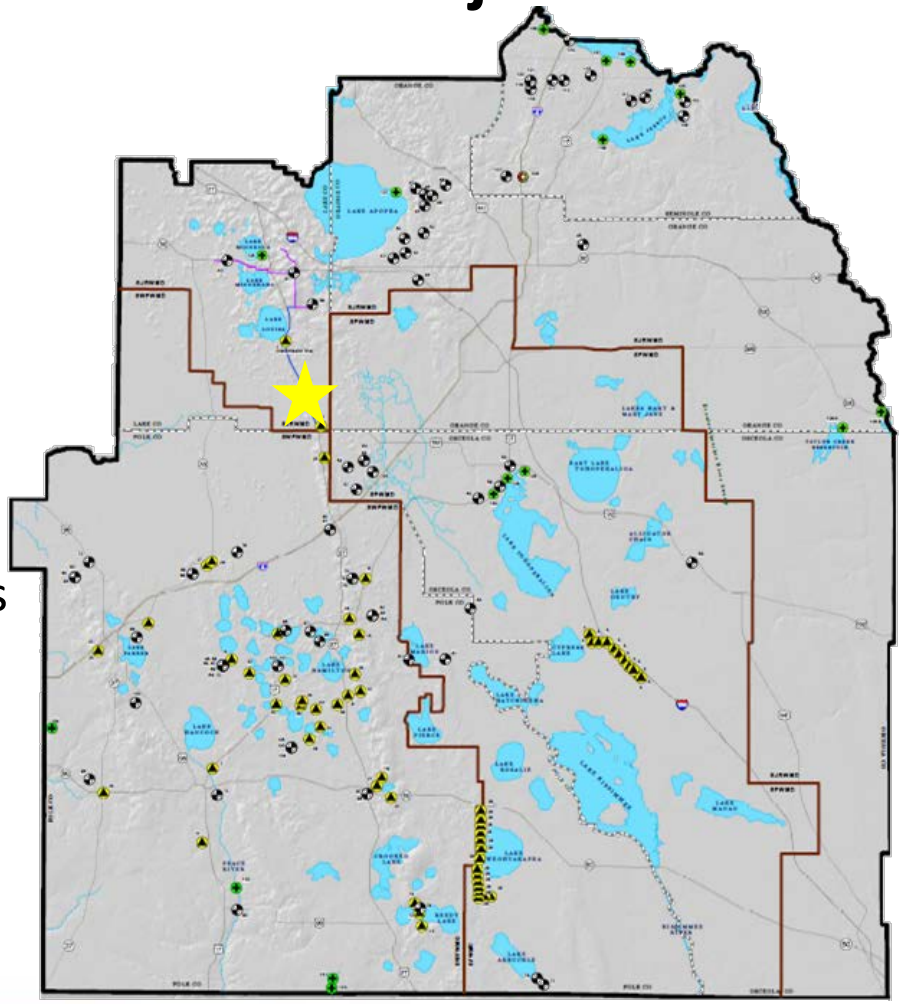
- Components: Wells, Pipes, Pumps, Treatment
- Total capital: $118,200,000
- Operation and maintenance: $6,000,000/yr
- Unit production cost: $3.38/1,000 gallons

Water Resource Constraints: Pending Model Results

Partners & Governance: Interlocal Agreement between Lake County, Clermont, Groveland, Mascotte, Minneola, Montverde, & LUSI

001. South Lake Lower Floridan Wellfield Project

Potable AWS Project – 12.73 mgd



Feasibility: Planned components are neither complex or difficult to construct. LFA quality and quantity under investigation

Funding Options: state grants, impact fees, revenue bonds and state revolving fund loans

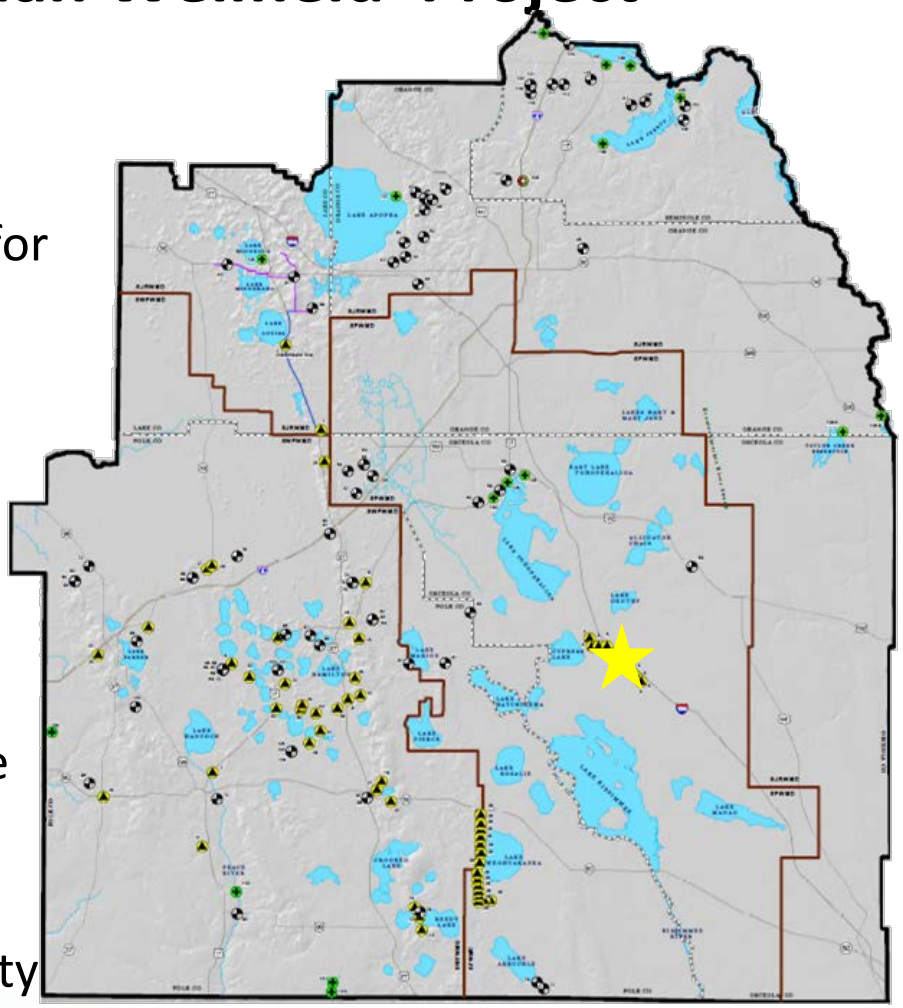
Implementation Schedule:

- Feasibility Study – 2015-2016
- Land Acquisition – 2016
- Project Design – 2017
- Construction – 2018-2020

Project Evaluation Status: Over 90% Complete

005. Cypress Lake Lower Floridan Wellfield Project

Potable AWS Project – 20.5 mgd



Purpose: Produce 20.5 mgd of potable AWS for the South Lake entities. Meet base load for 2035+ demands.

Cost Estimates:

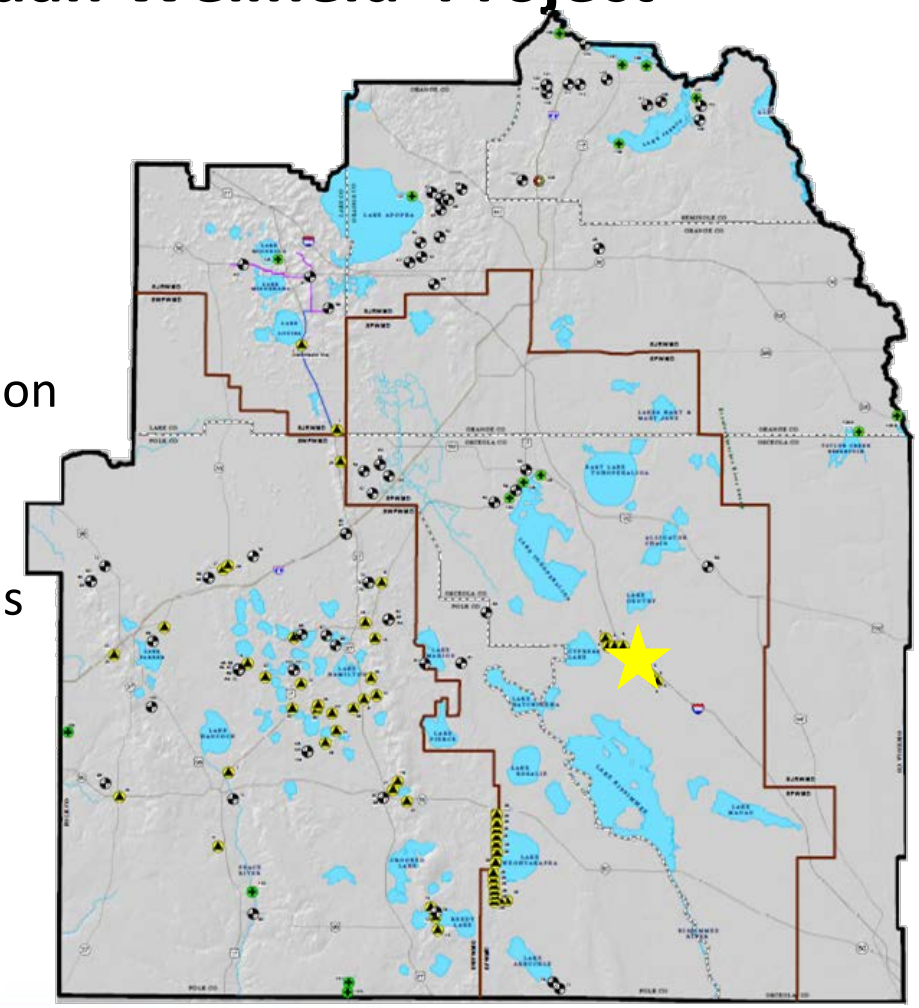
- Components: Wells, Pipes, Pumps, Treatment
- Total capital: $253,248,208
- Operation and maintenance: $25,230,676/yr
- Unit production cost: $2.76/1,000 gallons

Water Resource Constraints: Potential Ridge Lake & Wetland Constraints (addressed by permit)

Partners & Governance: Toho, Orange County Polk County, St. Cloud, Reedy Creek Improvement District.

005. Cypress Lake Lower Floridan Wellfield Project

Potable AWS Project – 20.5 mgd



Feasibility: Project is permitted. Currently implementing planning, design, and acquisition

Funding Options: WCCF & RCID members, OCU/SFWMD; state grants, impact fees, revenue bonds and state revolving fund loans

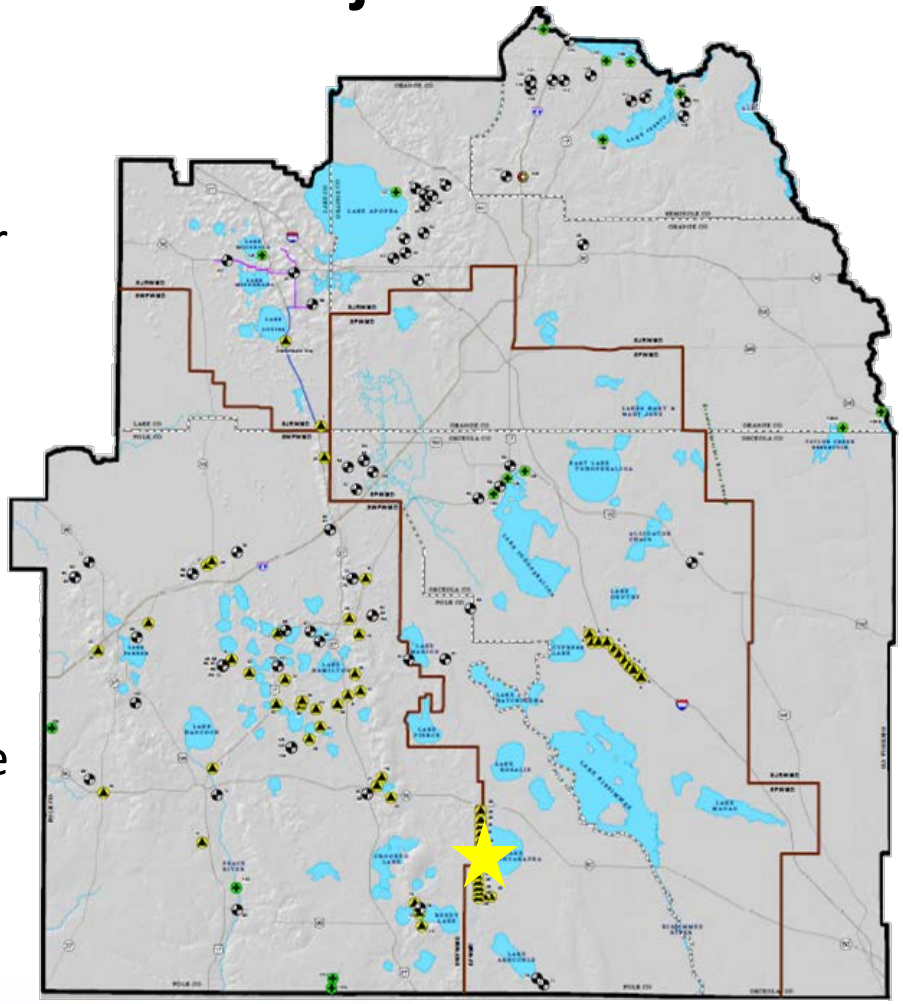
Implementation Schedule (Phase 1/2):

- Feasibility Study – 2010-15/TBD
- Land Acquisition – FY15-17/TBD
- Project Design – FY14-18/TBD
- Construction – FY15-20/TBD

Project Evaluation Status: Over 90% Complete

028. SE Polk Lower Floridan Wellfield Project

Potable AWS Project – 30 mgd



Purpose: Produce 30 mgd of potable AWS for the Polk County utilities. Meet base load for 2035+ demands.

Cost Estimates:

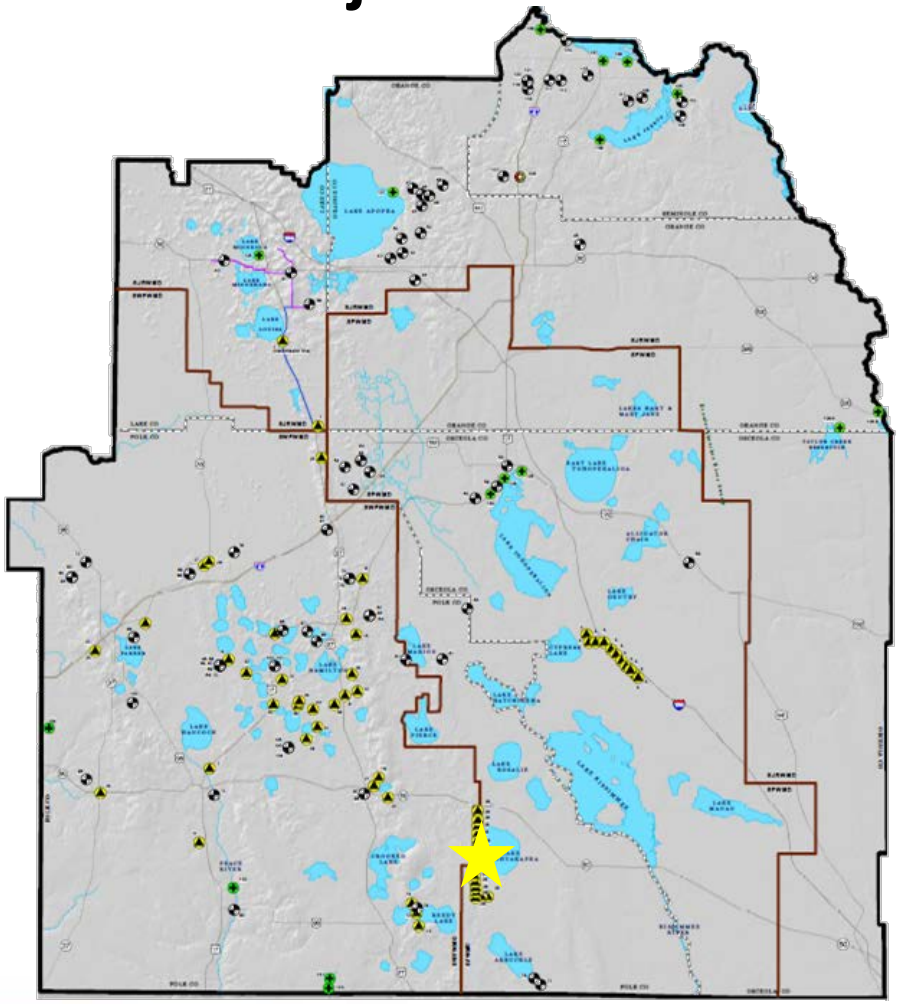
- Components: Wells, Pipes, Pumps, Treatment
- Total capital: $359,001,601
- Operation and maintenance: $9,375,000/yr
- Unit production cost: $2.05/1,000 gallons

Water Resource Constraints: Potential Ridge Lake & Wetland Constraints (addressed by permit)

Partners & Governance: 13 Project Partners (including 3 different Polk utility service areas)

028. SE Polk Lower Floridan Wellfield Project

Potable AWS Project – 30 mgd



Feasibility: Project is permitted. Requires a series of "participation agreements" and the formation of a regional water supply entity.

Funding Options: $160 million from the SWFWMD; municipal bonds and impact fees

Implementation Schedule:

- Phase 1 (up to 5 wells) – 2014-23
- Phase 2 (6-10 wells) – 2023-32
- Phase 3 (11-15 wells) – 2032-48

Project Evaluation Status: Over 90% Complete

006-027 & 029-037. Polk Co. Distributed Lower Floridan Wellfield Project

Potable AWS Project – 15.5 mgd

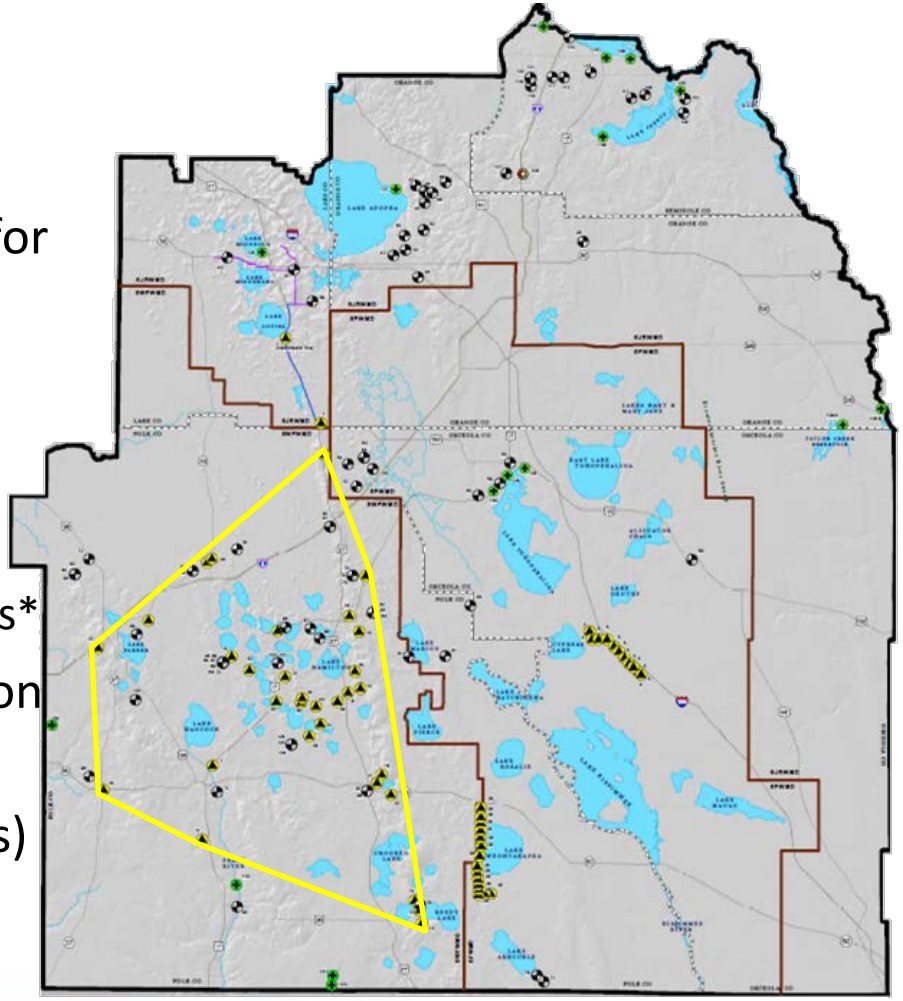
Purpose: Produce 15.5 mgd of potable AWS for the Polk County utilities.

Cost Estimates:

- Components: Wells, Pipes, Pumps, Treatment
- Total capital: $93,771,772*
- Operation and maintenance: $1,300,000/yr*
- Unit production cost: $0.47-$2.50/1000 gallons*

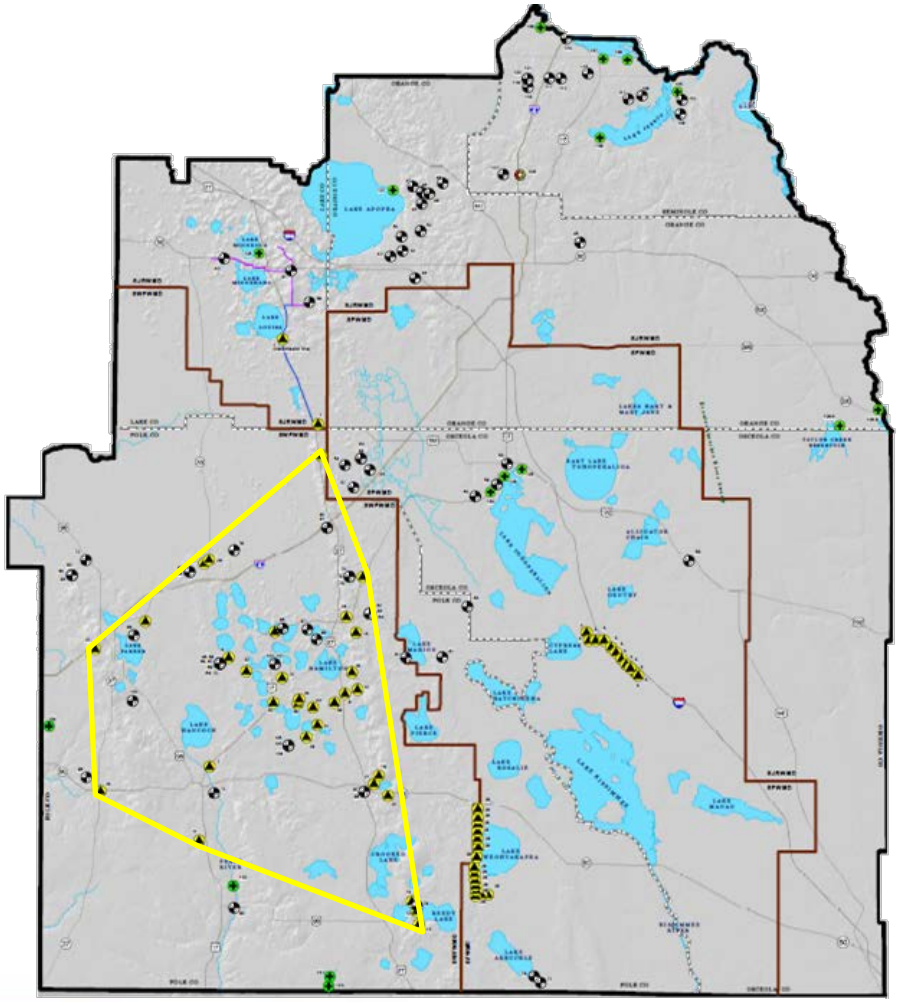
Water Resource Constraints: Under evaluation

Partners & Governance: 13 Project Partners (including 3 different Polk utility service areas)



006-027 & 029-037. Polk Co. Distributed Lower Floridan Wellfield Project

Potable AWS Project – 15.5 mgd



Feasibility: Planned components are neither complex or difficult to construct. LFA quality and quantity may be a limitation

Funding Options: Pending

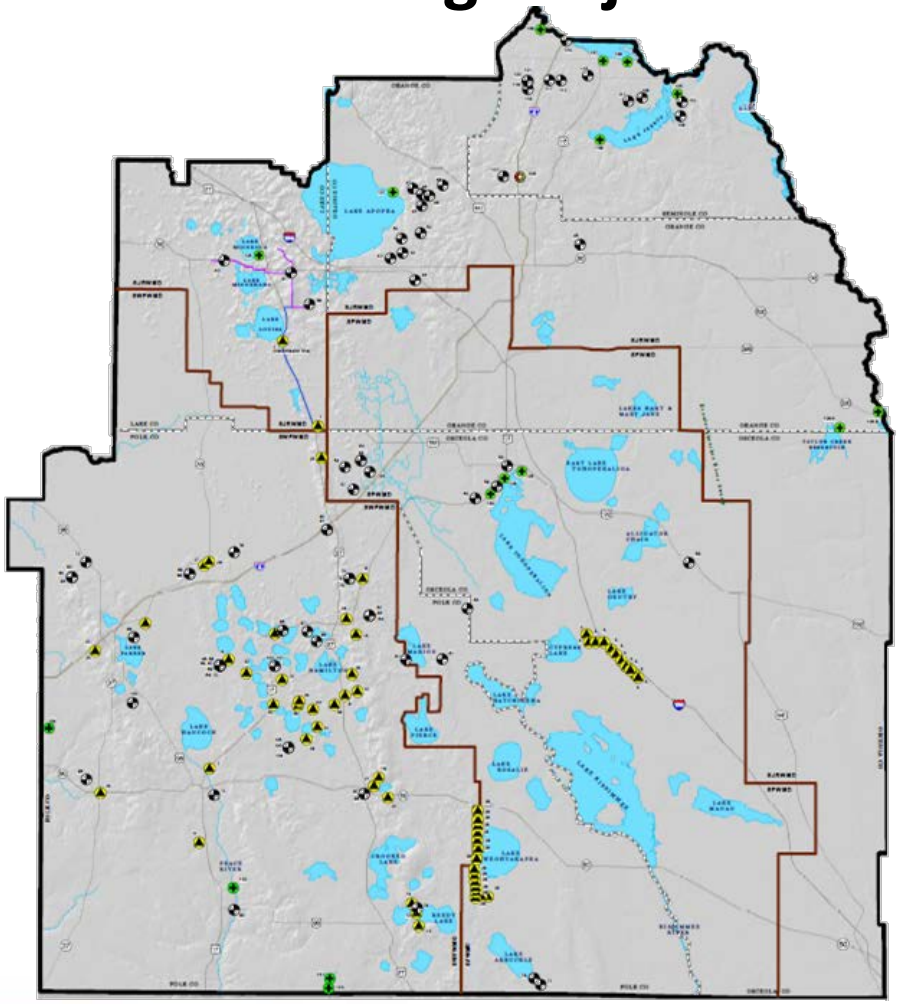
Implementation Schedule:

- Pending

Project Evaluation Status: Over 40% Complete

006-027 & 029-037. Polk Co. Wellfield Sharing Project

Potable AWS Project – 6 mgd



Purpose: Optimize permit vs. actual use and minimize impacts

Cost Estimates:

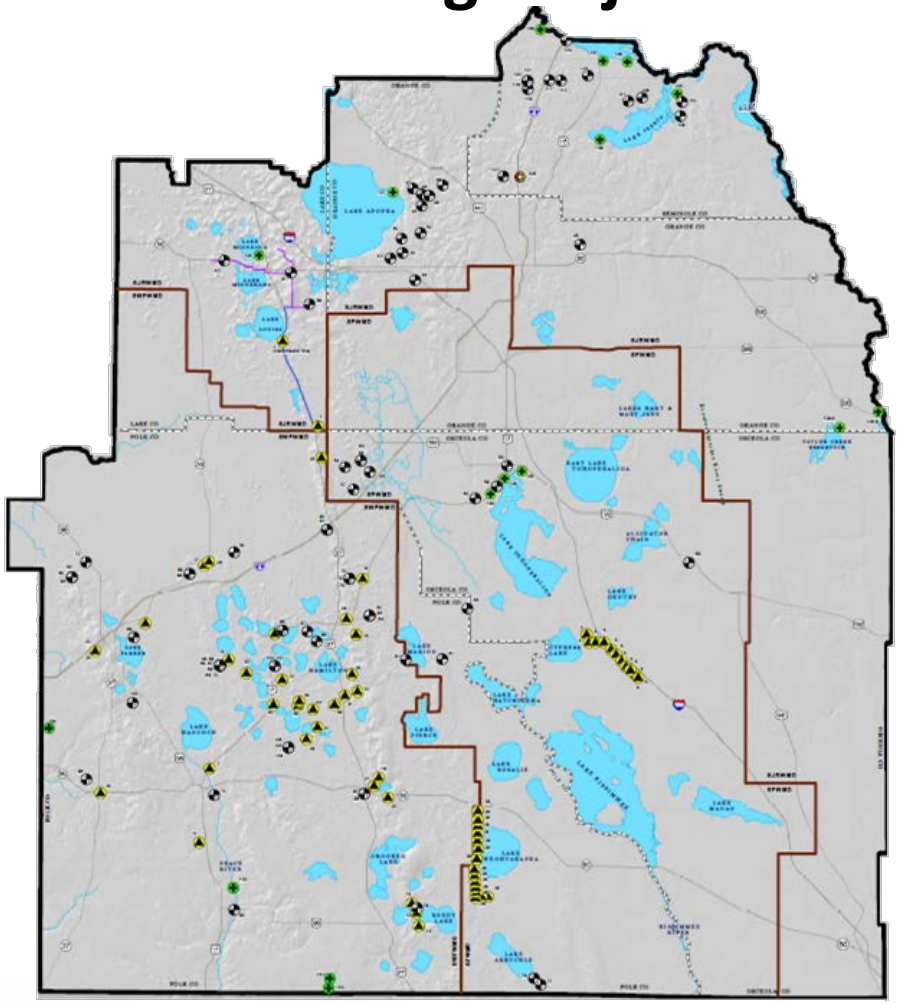
- Components: Wells, Pipes, Pumps
- Total capital: Pending
- Operation and maintenance: Pending
- Unit production cost: Pending

Water Resource Constraints: Pending

Partners & Governance: 22 Project Partners

006-027 & 029-037. Polk Co. Wellfield Sharing Project

Potable AWS Project – 6 mgd



Feasibility: All components are feasible. The optimization to achieve 6 mgd needs further evaluation

Funding Options: Pending

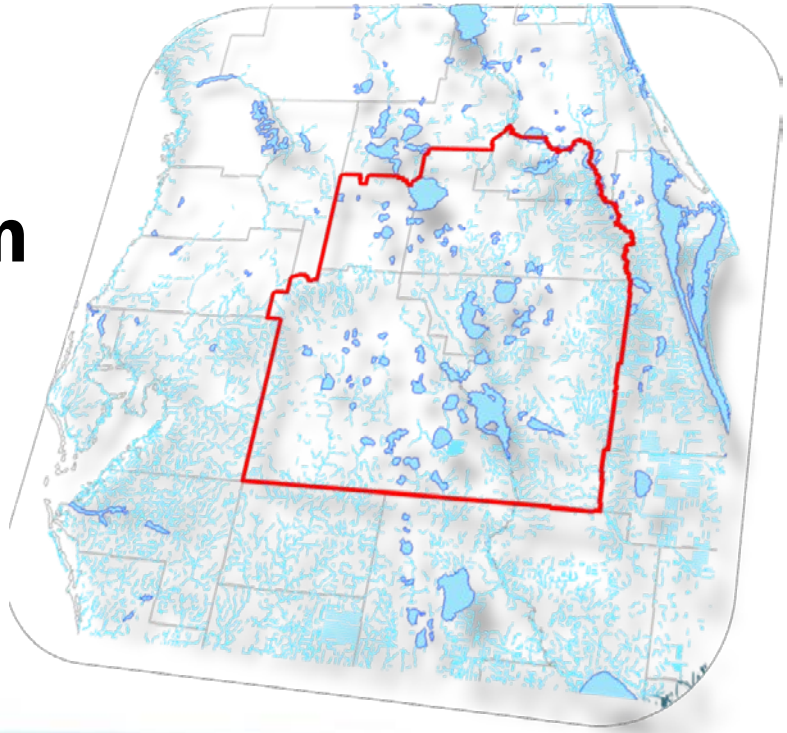
Implementation Schedule: Pending

Project Evaluation Status: 25% Complete

Reclaimed Sub-Team Project Evaluation Update

Solution Planning Team
August 21, 2014

Presented by: Jo Ann Jackson



Reclaimed Water Projects

- From RWSP
  - Tier 1 Projects
    - Meet >1 mgd and multijurisdictional screening criteria
    - 4 projects clearly meet criteria (1 is on SW list)
  - Tier 2 Projects
    - those that do not clearly meet the screening criteria
    - 21 projects
- Modification to Project RENEW to address Lake Apshawa MFL

Projects in SJRWMD

- Tier 1

Project No.	Name	Utility	Water Generated, mgd
44	Project RENEW	OUC	9.2
106	AFIRST	Altamonte Springs	4.5
114	Sanford/ Altamonte Springs Interconnect	Sanford	2.0

Projects in SWFWMD

- Tier 1

Project No.	Name	Utility	Water Generated, mgd
100	TECO Polk Power Reuse	TECO, Lakeland, Mulberry, Polk Co.	10.0

Projects in SJRWMD

- Tier 2

Project No.	Name	Utility	Water Capacity
38	Clermont Regional Storage	SLRWI	80 Mgal storage
40	Eagle Ridge RW District	Groveland	1.0
42	NW Reuse Pump/ Interconnect	Ocoee	2.9 mgd combined with project 50
50	North Service Area Interconnect	Ocoee	See above

Projects in SJRWMD

- Tier 2

Project No.	Name	Utility	Water Capacity
45	UCF RW/SW Integration	Seminole County	2.0
43	NWRF to Apopka	Orange County	3.0
46 - 49	RW Expansion and Storage Tank	Apopka	~ 3.0 mgd
52	Apopka WG Reuse	Apopka	3 mgd

Projects in SJRWMD

- Tier 2

Project No.	Name	Utility	Water Capacity
109	Reclaimed Water Interconnect Oviedo	Sanford	3.0
110	Site 10 Pond Expansion	Sanford	42 Mgal storage tank

Projects in SWFWMD

- Tier 2

Project No.	Name	Utility	Water Generated, mgd
105	Winter Haven Recharge/ Surface Water Augmentation	Winter Haven and SWFWMD	2.7
86	Lake Wales Recharge relocated to benefit Lake Wales MFL	Lake Wales	0.45
94	Polk Central Recharge - Eagle Lake MFL	Polk Co.	0.65

Projects in SFWMD

- Tier 2 – does TOHO Qualify as "Multijurisdictional"

Project No.	Name	Utility	Water Capacity
59	Cypress West Phase 1B	TOHO	6 mgd
60	Walnut Drive WRF Reuse	TOHO	5 mgd

Projects in SFWMD

- Tier 2 – does TOHO Qualify as "Multijurisdictional"

Project No.	Name	Utility	Water Capacity
51	Goodman Road RW Main Extension	TOHO	4.0
53	Sandhill Road Storage Tank	TOHO	4.5 Mgal storage tank
54	Western Reuse Pumping Facility and Storage	TOHO	4.0 Mgal storage tank

Projects in SFWMD

- Tier 2 – does TOHO Qualify as "Multijurisdictional"

Project No.	Name	Utility	Water Capacity
56	West Ditch Stormwater Capture for Reuse	TOHO	1.5 mgd
57	AWS Indirect Potable Reuse	TOHO	5.0 mgd
58	Lake Marion WRF Pumping and Storage	TOHO	2.5 Mgal storage tank

Project RENEW Modification

- Address Lake Apshawa MFL
- Expand Groveland RIBs to 3.0 mgd
  - Project submitted to HAT for modeling
  - Details being developed by OUC, SJRWMD and Groveland

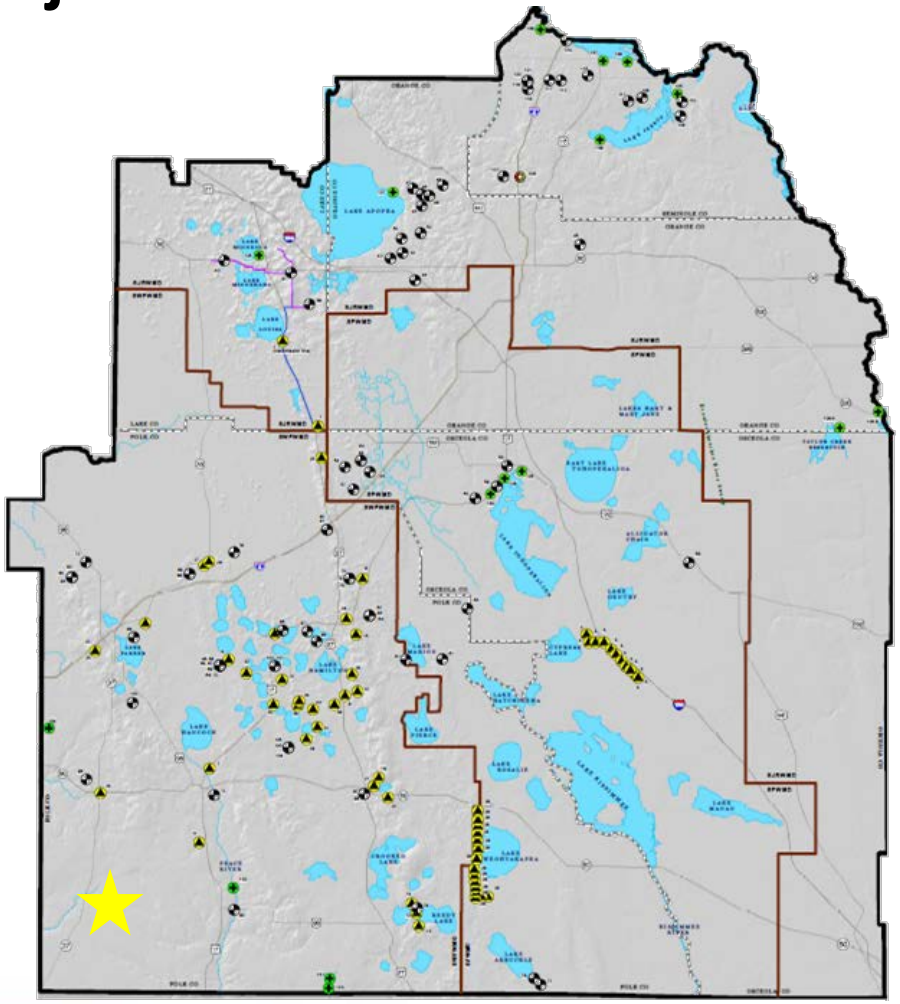
Reclaimed Water Sub-team
Project Evaluations

100 TECO Polk Power Reuse

105 Winter Haven Reuse Recharge/Surface Augment

100 TECO Polk Power Reuse Project

Reclaimed Water Project – 10.00 mgd



Purpose: Supply 10 mgd of reclaimed water for power generation at TECO Polk Facility. Meet increasing demands up to 17 mgd beyond 2035.

Cost Estimates:

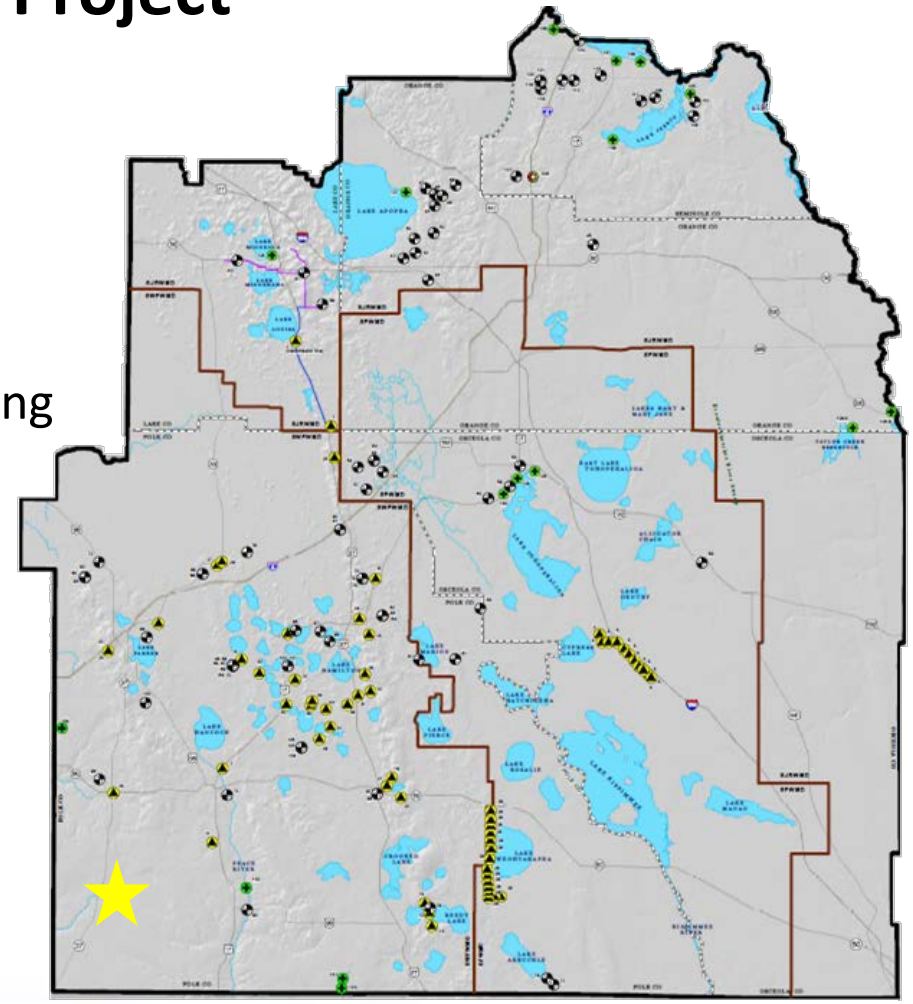
- Components: Pipes, Pumps, Treatment, Storage, Disposal Well
- Total capital: $96,960,725
- Operation and maintenance: $?,000,000/yr
- Unit capital cost: $2.34/1,000 gallons

Water Resource Constraints: SWUCA

Partners & Governance: Coop Funding Agreement between TECO and SWFWMD & Interlocal Reuse Supply Agreements between TECO, Lakeland, Mulberry and Polk County.

100 TECO Polk Power Reuse Project

Reclaimed Water Project – 10.00 mgd



Feasibility: Currently Under Construction

Funding Options: WMD funding, TECO funding and state grants (SWFWMD Project H076)

Implementation Schedule:

- Project Design – 2009-2014
- Construction – 2011-2017

Project Evaluation Status: Construction Over 85% Complete

105 Winter Haven Reuse Recharge/Surface Augmentation Project

Reclaimed Water Project – 2.70 mgd

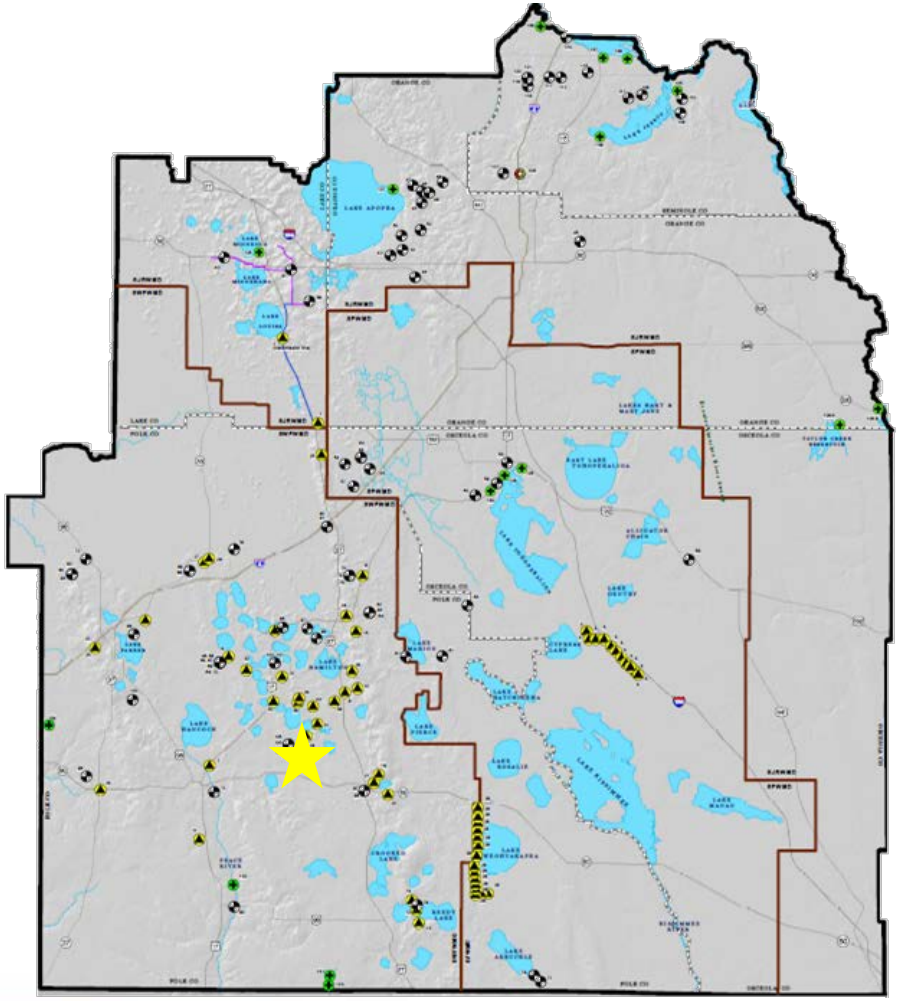
Purpose: Supply 2.7 mgd of reclaimed water for groundwater recharge (Lake Starr and others) and surface water augmentation (Peace Creek) in Winter Haven area. Meet MFLs, up to 4 mgd beyond 2035.

Cost Estimates:

- Components: Pipes, Pumps, Treatment, RIBs
- Total capital: $15,460,000
- Operation and maintenance: $?,000,000/yr
- Unit capital cost: $1.38/1,000 gallons

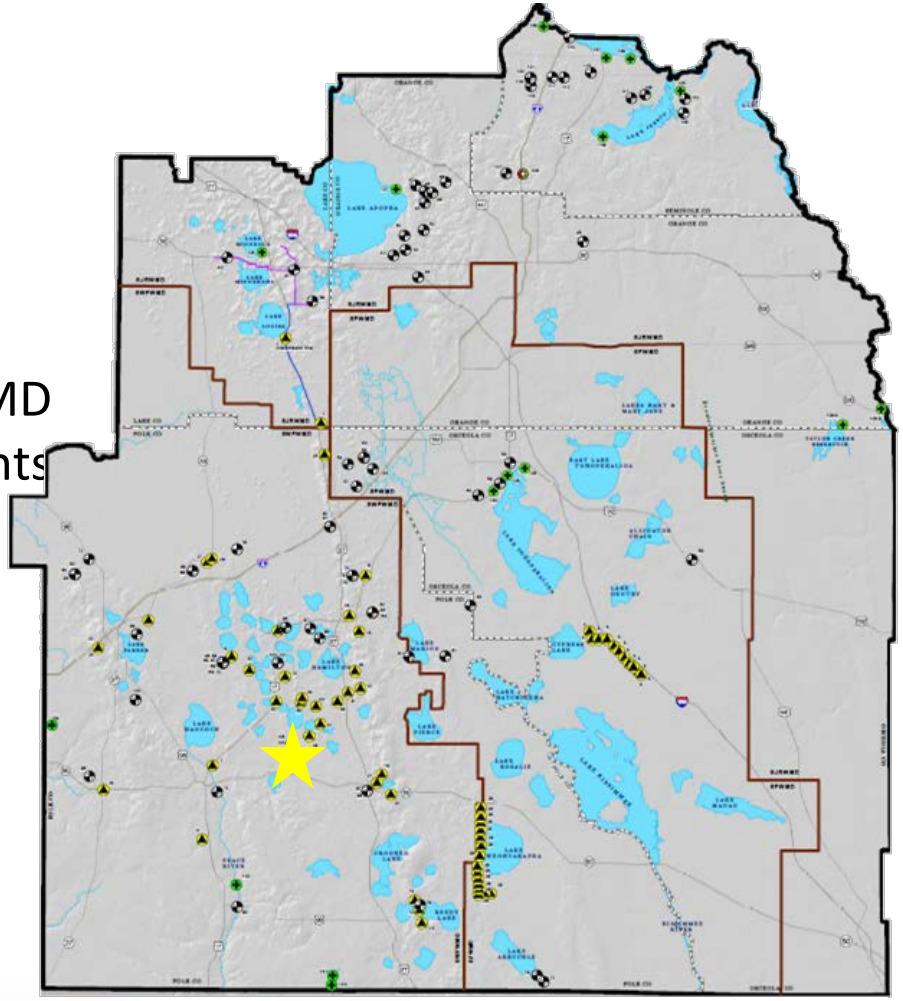
Water Resource Constraints: SWUCA, MFLs, TMDLs, NNC

Partners & Governance: Feasibility Coop Funding Agreement between Winter Haven and SWFWMD & Potential Interlocal Reuse Supply Agreements between Winter Haven and SWFWMD.



105 Winter Haven Reuse Recharge/Surface Augmentation Project

Reclaimed Water Project – 2.70 mgd



Feasibility: SWFWMD Project (N286)

Construction Funding Options: Potential WMD funding, Winter Haven funding and state grants

Implementation Schedule:

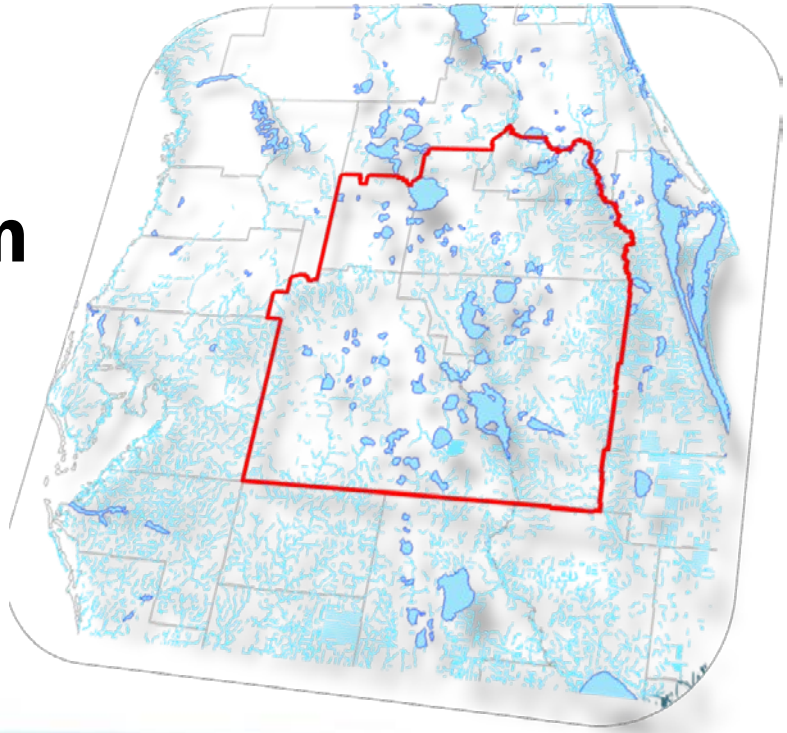
- Project Feasibility – 2011-2012
- Project Design – 2016-2018
- Project Construction – 2018-2020

Project Evaluation Status: Feasibility Study Completed

Stormwater Sub-Team Project Evaluation Update

Solution Planning Team
August 21, 2014

Presented by: Rob Teegarden



Stormwater
Project Evaluations

- Lake Wales (MFL) Recovery Project
- AFIRST - City of Altamonte Springs/FDOT
- RCID
- Judge Farms Reservoir and Impoundment
- Winter Garden

Lake Wales (MFL) Recovery Project

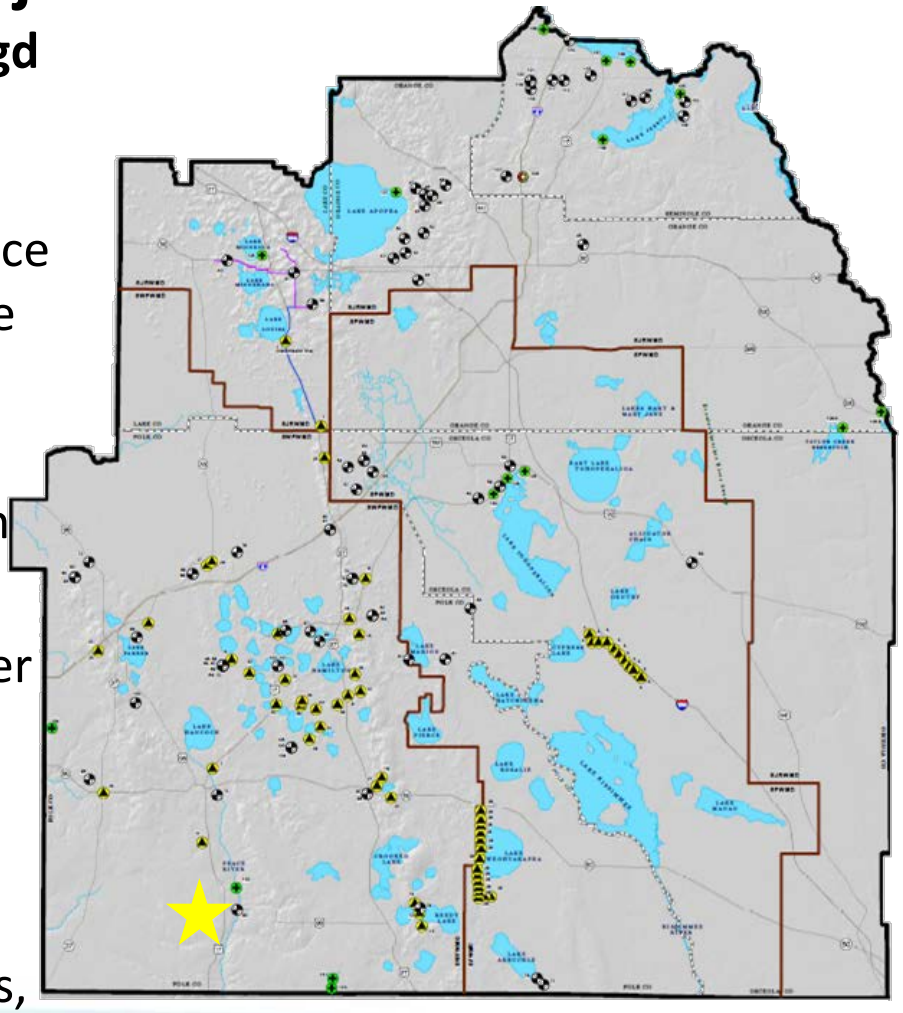
Stormwater MFL Recovery Project – 1.4 mgd

Purpose: Assist Lake Wales MFL recovery. The project takes stormwater flow from Peace Creek Canal (PCC) and conveys water to Lake Wales through two possible options.

Funding Options: state grants, impact fees, revenue bonds and state revolving fund loan

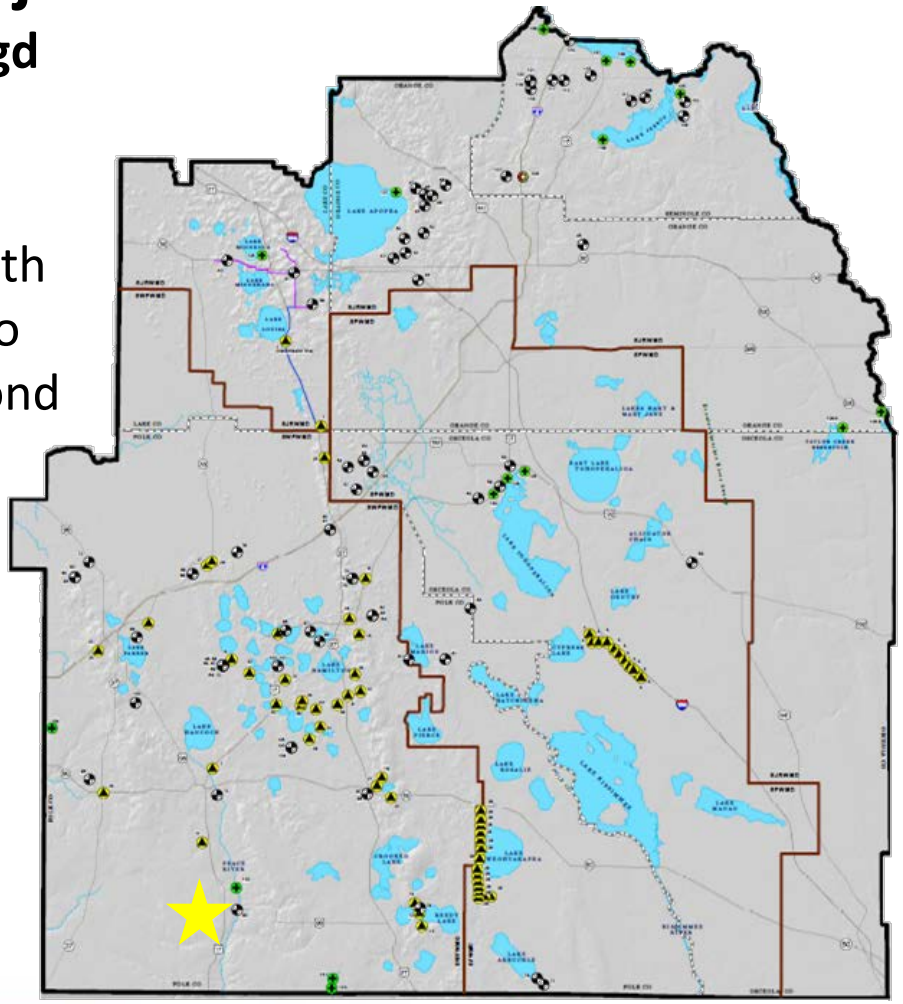
Cost Estimates (Options 1 & 2):

- Components: Pipes, Pumps, Surface water intake, RIB
- Total capital: $13.5 M, $20 M
- Operation and maintenance: $32,550, $190,168
- Unit production cost: $1.30/1,000 gallons, $2.21/1,000 gallons.



Lake Wales (MFL) Recovery Project

Stormwater MFL Recovery Project – 1.4 mgd



Water Resource Constraints: Water quality requirements. The project proposes use North Lake Wales to provide a level of treatment to improve water quality and a RIB for the second option

Implementation Schedule:

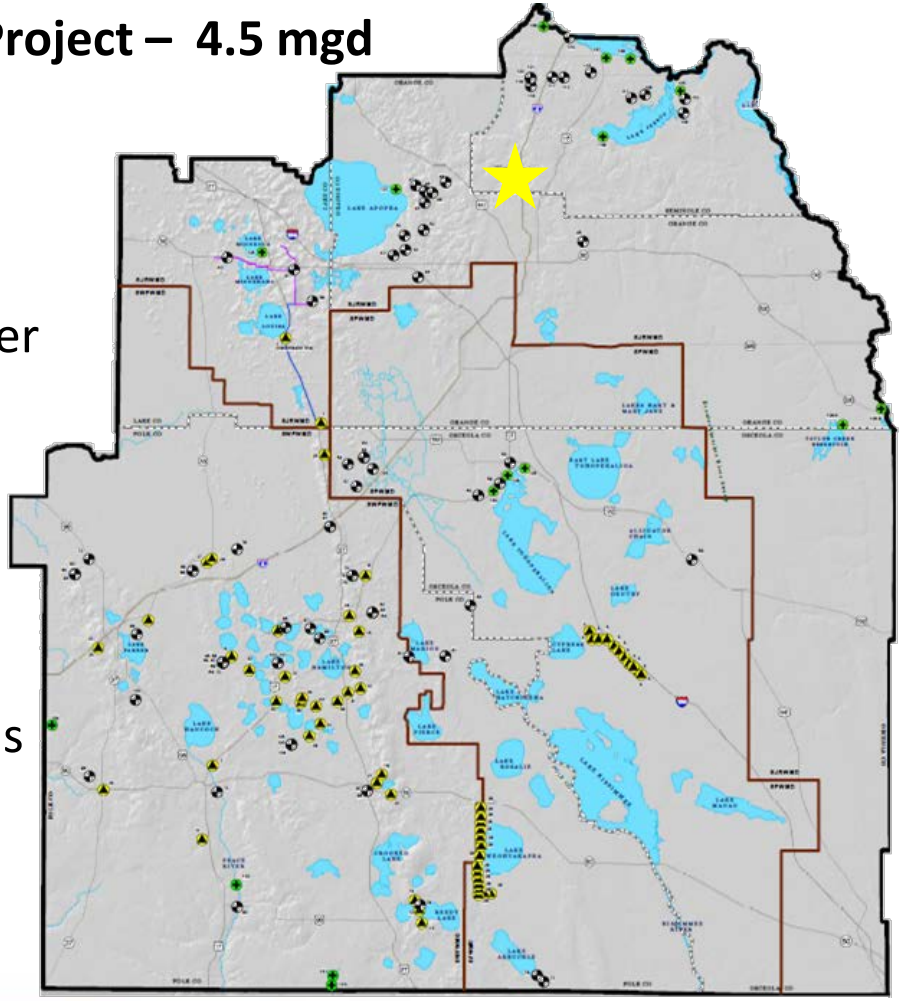
- Feasibility Study – 2015-2016
- Land Acquisition – 2016
- Project Design – 2017
- Construction – 2018-2020

Partners & Governance: SWFWMD , Polk County, City of Lake Wales

Project Evaluation Status: Over 90% Complete

103. AFIRST - City of Altamonte Springs/FDOT

Stormwater/Reclaimed non-potable AWS Project – 4.5 mgd



Purpose: Integrate stormwater/reclaimed water project to expand the City of Altamonte's and Apopka's non-potable water supply.

Cost Estimates:

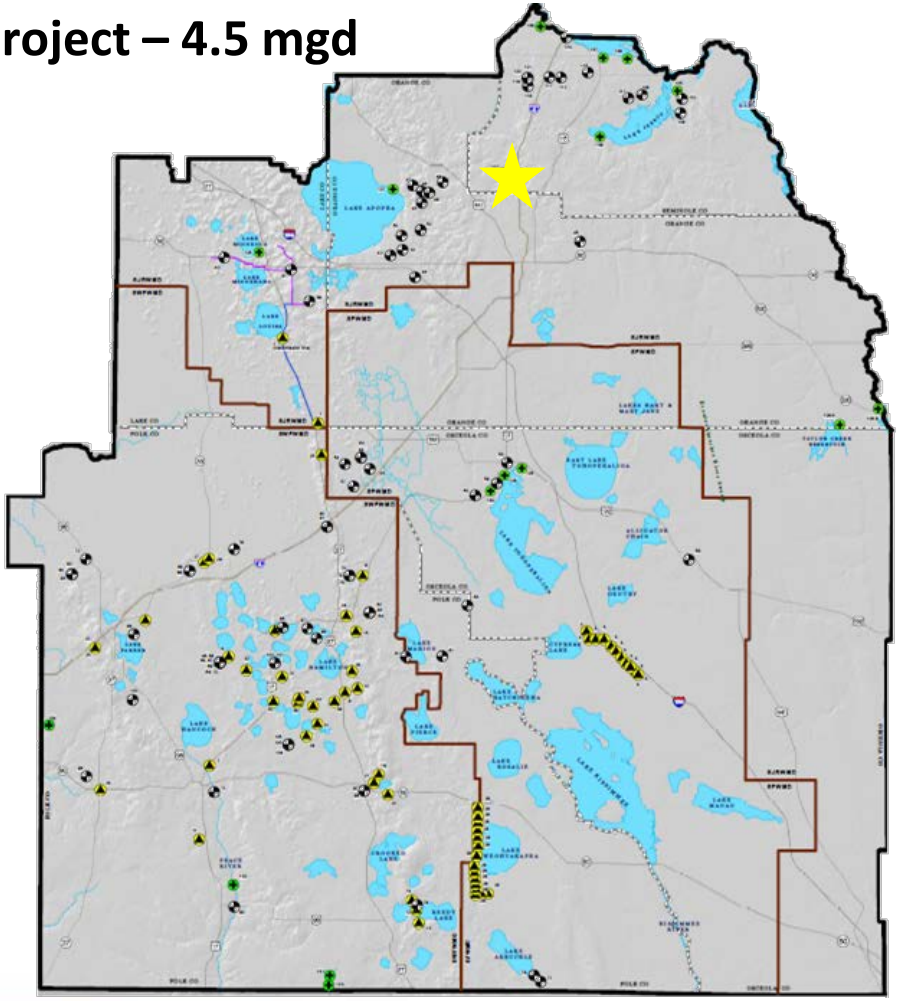
- Components: Pipes, Pumps, Treatment
- Total capital: $13.3 M
- Operation and maintenance: $
- Unit production cost: $0.93/1,000 gallons

Water Resource Constraints: Fully permitted, pending model results

Partners & Governance: Inter-local Agreement between Altamonte Springs, Apopka, & FDOT. SJRWMD

103. AFIRST - City of Altamonte Springs/FDOT

Stormwater/Reclaimed non-potable AWS Project – 4.5 mgd



Feasibility: Local and State agencies creatively solves stormwater issues and land constraints reducing I-4 road construction costs & the project augments the reclaimed water supplies for 2 local governments.

Funding Options: Inter-local Agreements between Altamonte Springs, Apopka, FDOT, FDEP & SJRWMD

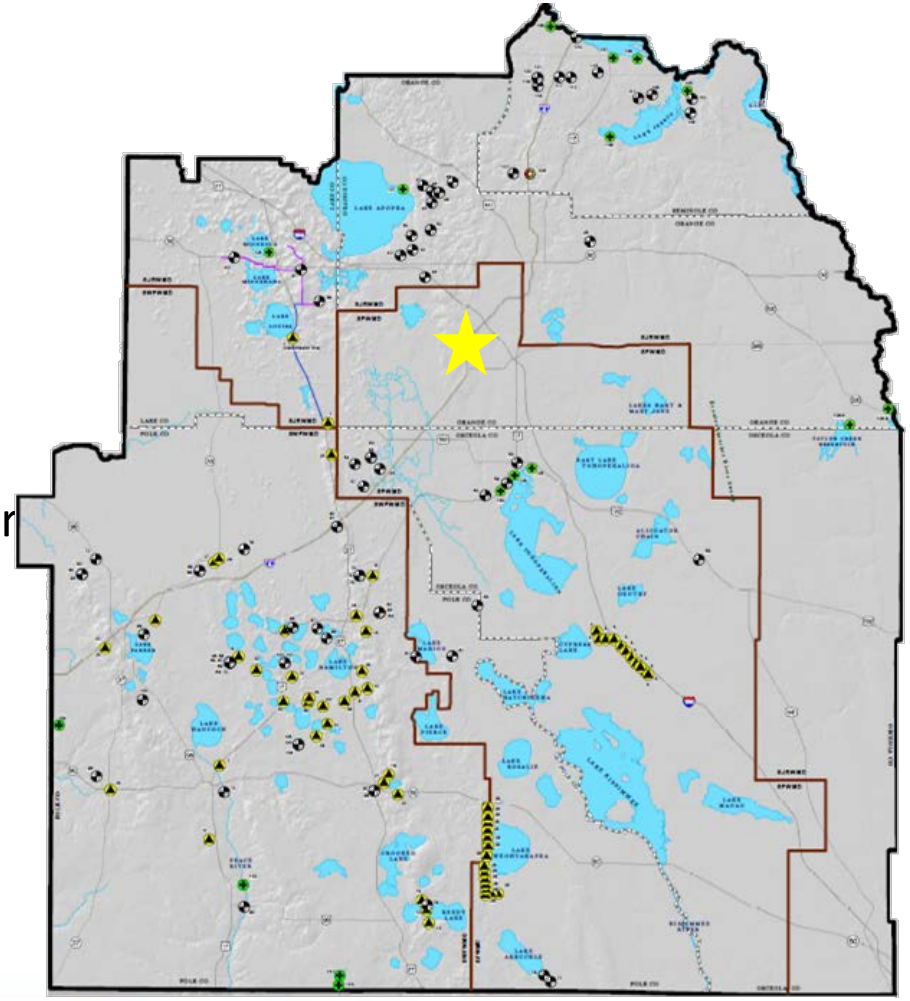
Implementation Schedule:

- Feasibility Study – 2006
- Land Acquisition – N/A
- Project Design – 2013
- Construction – 2014 -2015

Project Evaluation Status: 100 % Complete

RCID

Storm water mitigation & recharge
Phase 1 - 4mgd ; Phase 2 – 7mgd



Purpose: Use stormwater as a source for wetland rehydration and other recharge efforts in tactically advantageous areas.

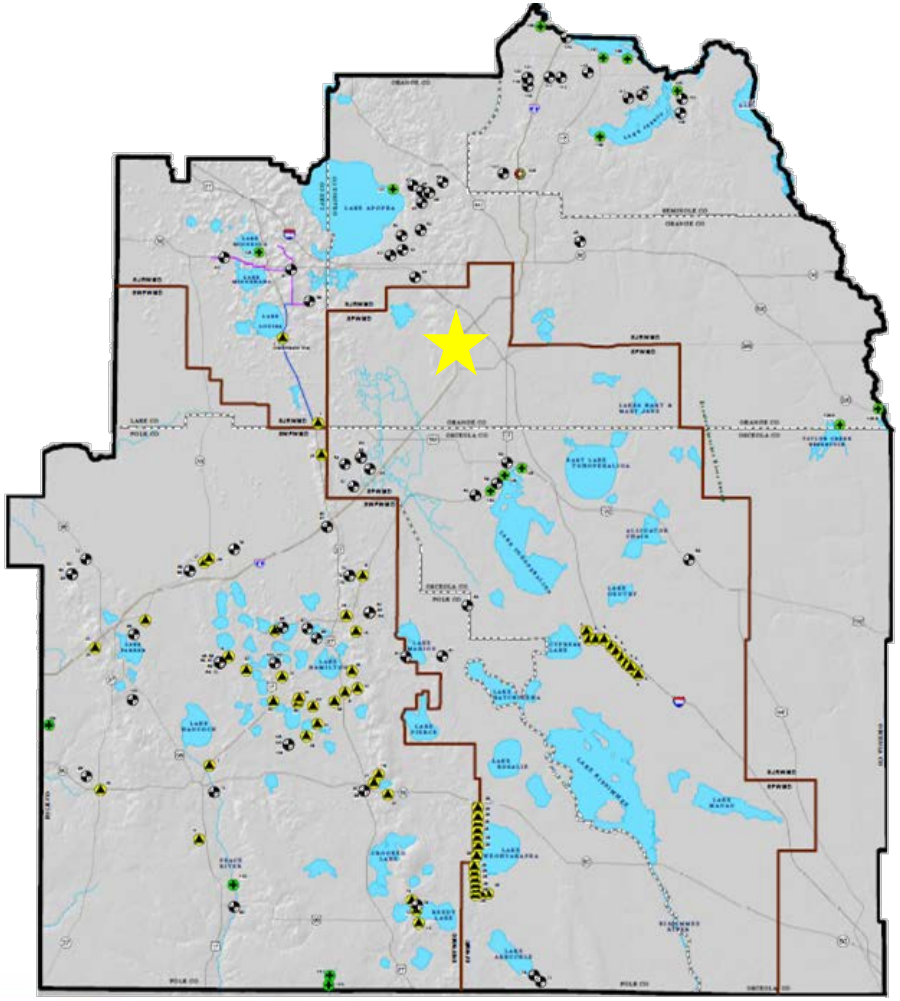
Cost Estimates (Phases 1&2)**:**

- Components: Pipes, Pumps, Surface water intake, RIB
- Total capital: $1 M, $10 M
- Operation and maintenance: TBD
- Unit production cost: TBD, cap $.25/ gallon, $70/ gallon.

Partners & Governance: RCID, FDOT, WMD local government

RCID

Storm water mitigation & recharge
Phase 1 - 4mgd ; Phase 2 – 7mgd



Water Resource Constraints: Water quality compensation options needs more investigation. Refine the modeled groundwater impacts analysis and ongoing data needs

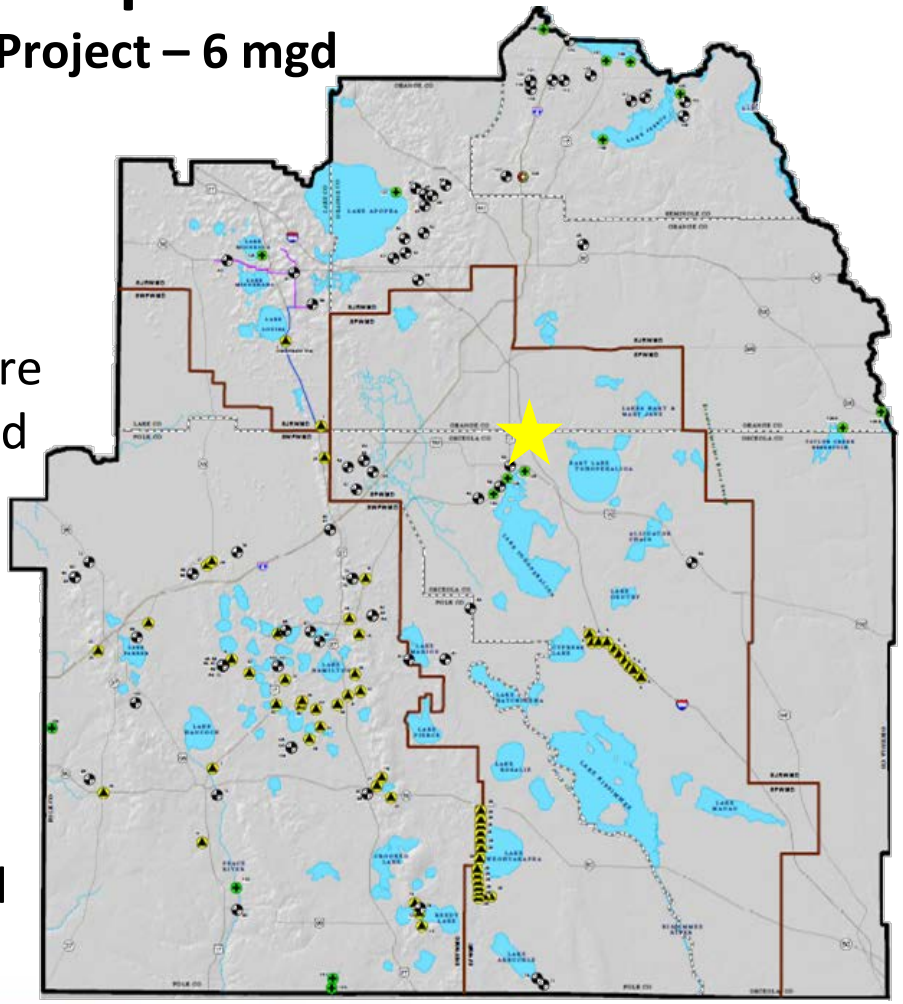
Implementation Schedule:

- Feasibility Study – 2015-2016
- Land Acquisition – NA
- Project Design – 2017
- Construction – 2019-2020

Project Evaluation Status: Over 90% Complete

125. Judge Farms Reservoir and Impoundment

Stormwater Supplement Reclaimed Water Project – 6 mgd



Purpose: Judge Farms Project is stormwater water storage facility utilizing natural topography to create approximately a 200 acre reservoir for a 6 MGD supplemental reclaimed water source.

Cost Estimates:

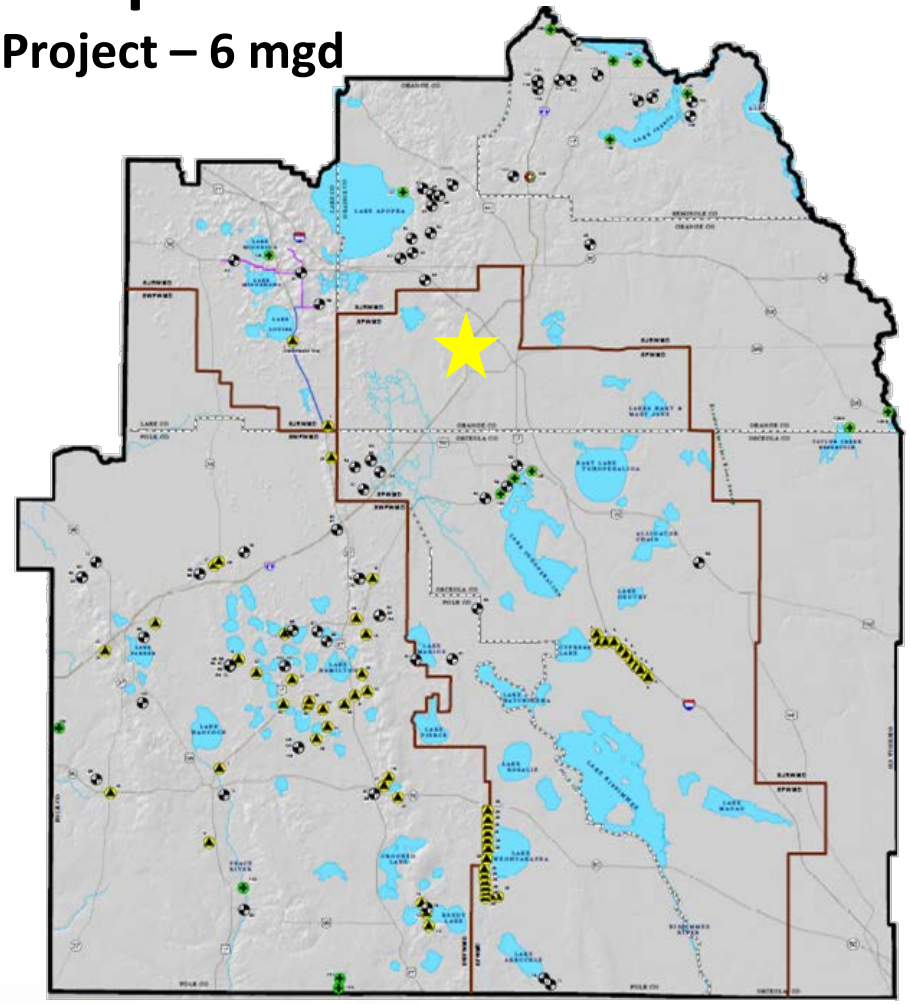
- Components: Wells, Pipes, Pumps, Treatment
- Total capital: $25M
- Operation and maintenance: $250 K /yr
- Unit production cost: TBD; cap $4.16/gal

Water Resource Constraints: Pending Model Results

Partners & Governance: St Cloud, Osceola, TOHO and WMD

125. Judge Farms Reservoir and Impoundment

Stormwater Supplement Reclaimed Water Project – 6 mgd



Feasibility: Planned components are neither complex or difficult to construct. Willing partners, community's support, water quality and groundwater model effects under investigation

Funding Options: state appropriation, impact fees, revenue bonds

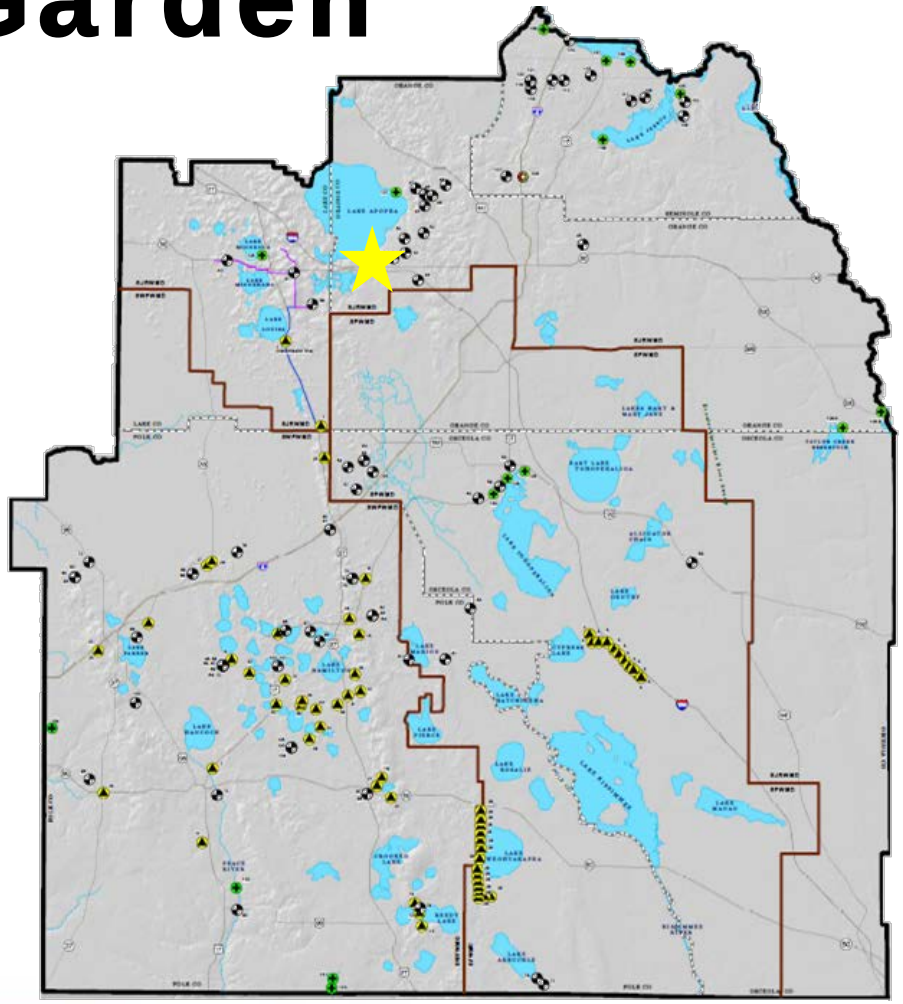
Implementation Schedule:

- Feasibility Study – 2015-2016
- Land Acquisition – 2016
- Project Design – 2017
- Construction – 2018-2020

Project Evaluation Status: Over 90% Complete

Winter Garden

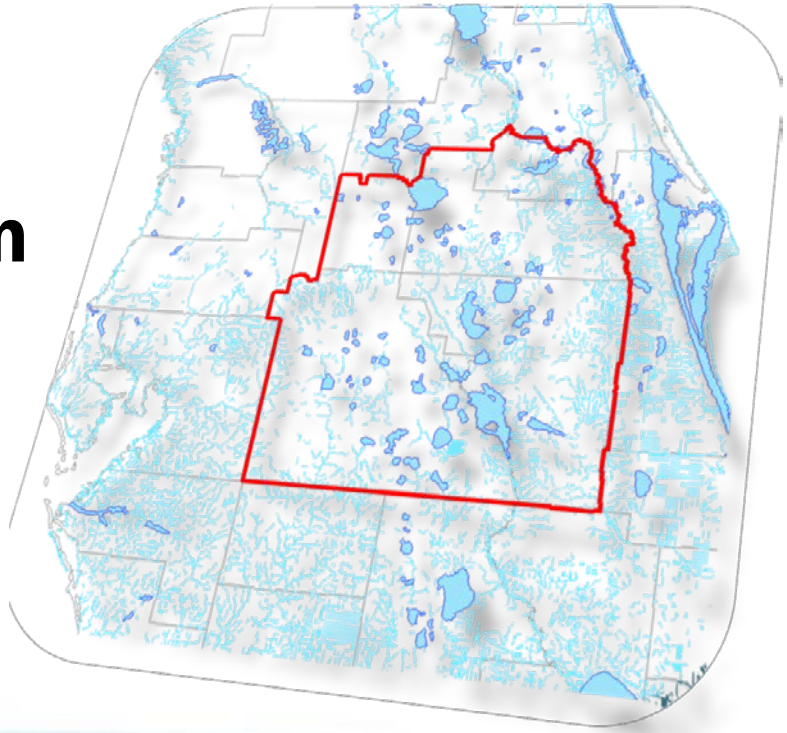
- Winter Garden Stormwater Capture Plan (7-28-14)(2).pdf



Surface Water Sub-Team Project Evaluation Update

Solution Planning Team
August 21, 2014

Presented by: Joanne Chamberlain

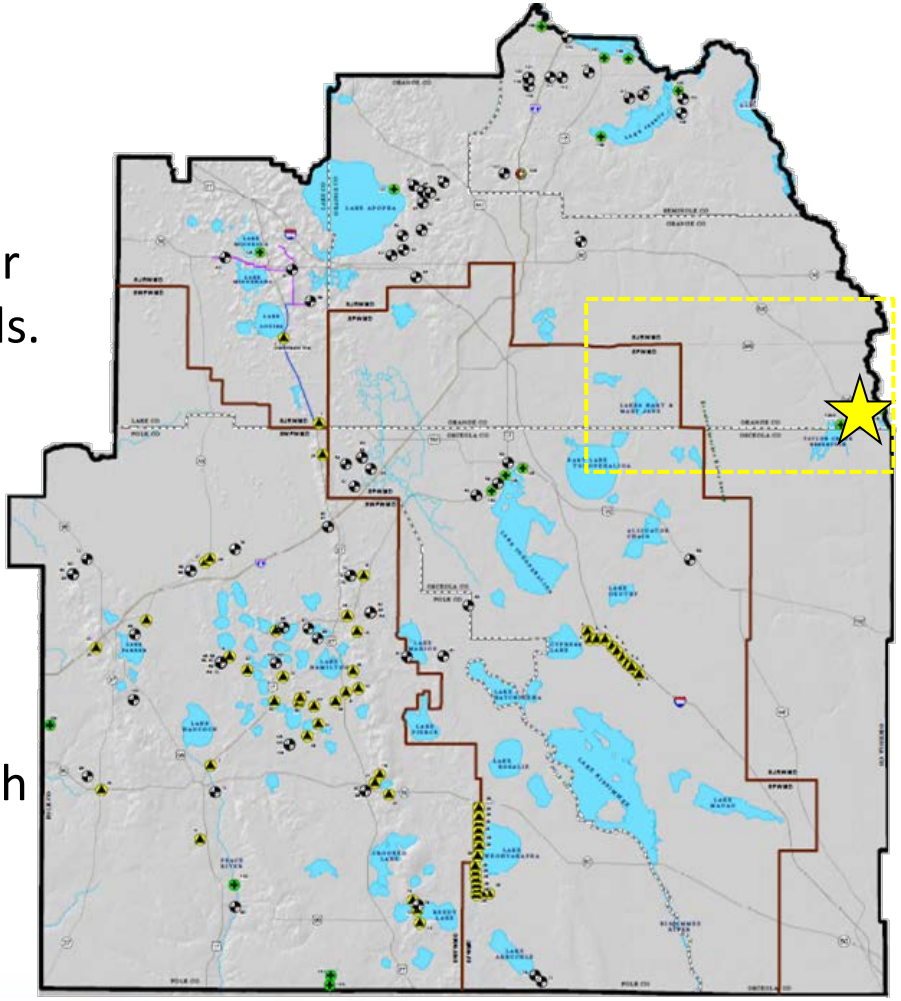


Surface Water Sub-team
Project Evaluations

Project ID	County	CFWI Sub-Regions	Project Name	Est. Water Generated (AADF mgd)
126	**Orange**	**SJRWMD/ SFWMD**	**St. Johns River/TCR**	**54.0**
129	Osceola	SFWMD	Kissimmee River Basin AWS Project	0.0 - 25.0
135	**Seminole**	**SJRWMD**	**St. Johns River Near SR 46**	**50.0 – 63.1**
138	**Seminole**	**SJRWMD**	**St. Johns River Near Yankee Lake PHASE II**	**4.5 – 31.7**
144	**Osceola**	**SFWMD / SJRWMD**	**C-25 Groveland Reservoir & STA**	**136**
134 150	Polk, Hillsborough	SWFWMD	Joint Tampa Bay Water/Polk County Supply Polk County - TBW Customer Project	10.0

126. St Johns River/TCR

PWS – 54 mgd



Purpose: Regional AWS project withdrawing surface water from the Taylor Creek Reservoir and the St. Johns River to meet 2035 demands.

Cost Estimates: *not from CE Tool*

- Total capital: 647.3 M
- Construction: 533.7 M
- Operation and maintenance: 43.8 M
- Unit production cost:

Water Resource Constraints: Compliance with adopted and proposed MFLs

Partners & Governance: City of Cocoa, East Central Florida Services, Orange County, Orlando Utilities Commission, and the Tohopekaliga Water Authority. Governance agreement in progress

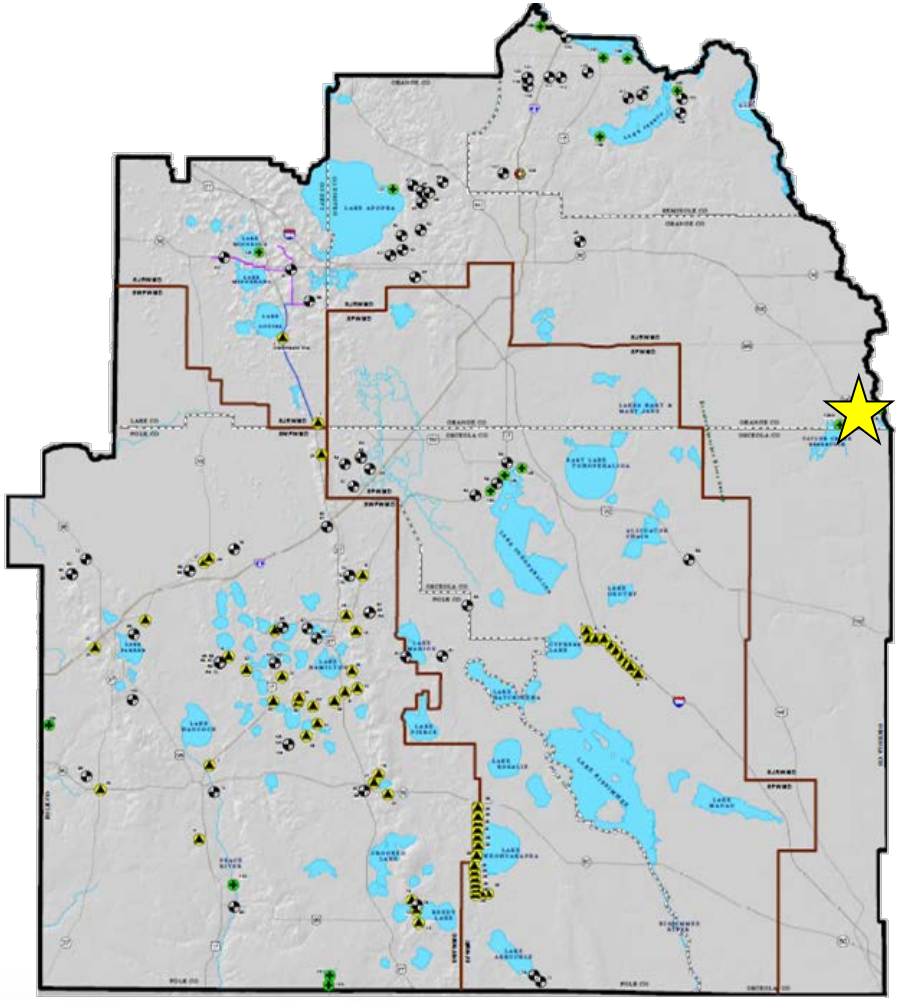
126. St Johns River/TCR

PWS – 54 mgd

Feasibility: Project is feasible; no limitations due to rule inconsistencies identified Included in SJRWMD District Water Supply Plan and examined through the WSIS

Funding Options: Project partners, State of Florida Water Protection and Sustainability Program, WMD ad valorem tax revenues, Florida Forever Trust Fund, and federal revenues.

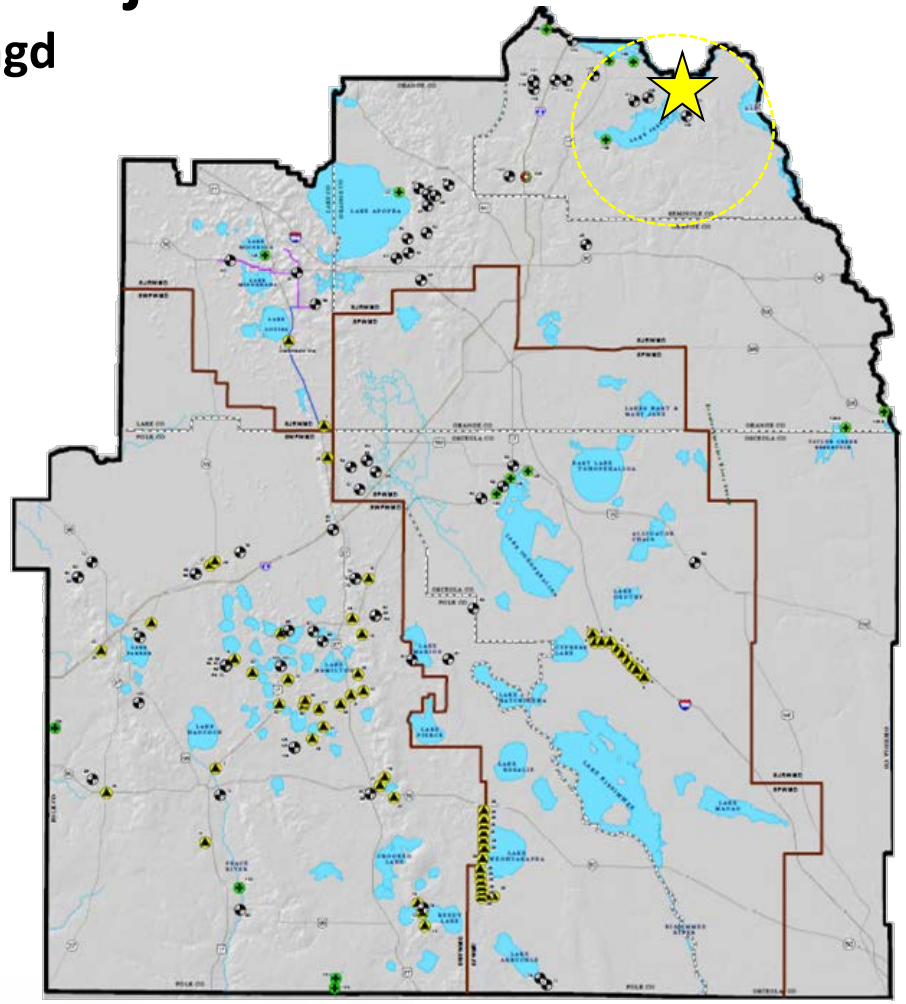
Implementation Schedule: CUP applications in review; currently pending. Project could be implemented within the next 10 years



Project Evaluation Status: 90% Complete

135. St. Johns River Near SR 46 Project

PWS and Reuse Augmentation – 50-63.1 mgd



Purpose: Managed withdrawal of surface water from the St. Johns River (SJR) for potable consumption and potential augmentation of reclaimed water systems to meet 2035 demands.

Cost Estimates: *not from CE Tool*

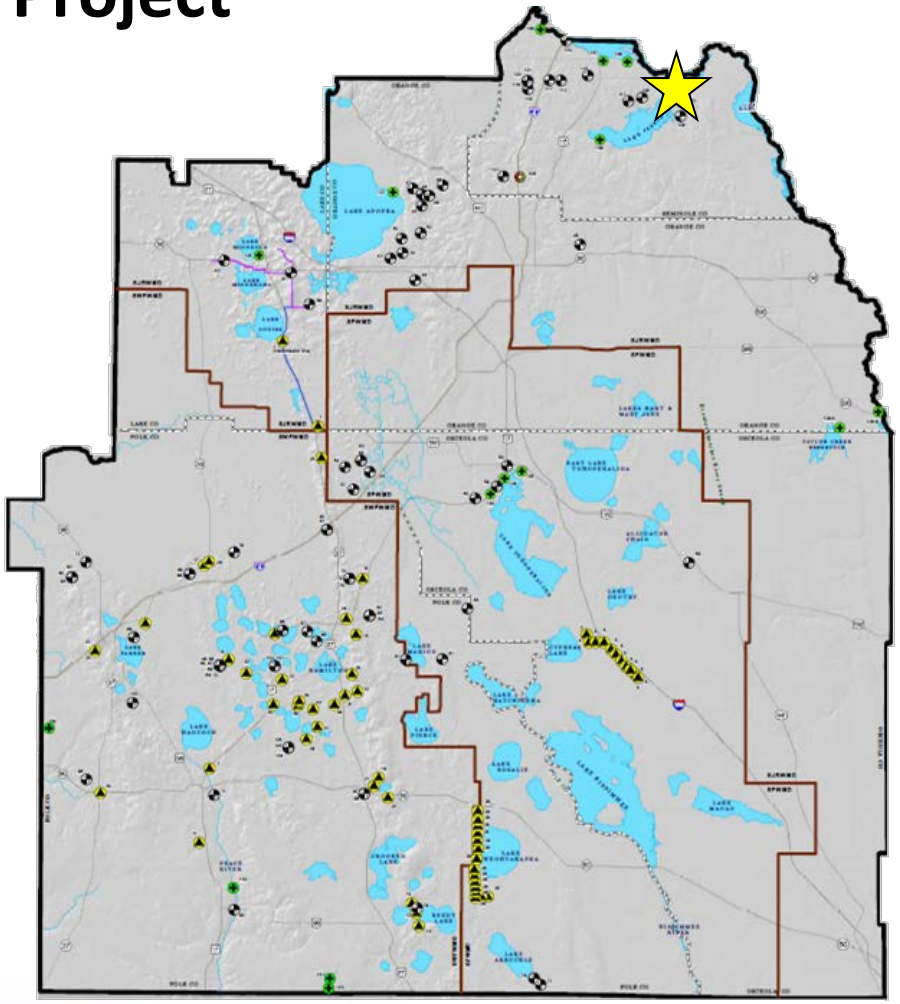
- Total capital: 625.78 M
- Construction: $501.15 M
- Operation and maintenance: $51.51 M
- Unit production cost:

Water Resource Constraints: Compliance with adopted and propose MFLs

Partners & Governance: Altamonte Springs, Casselberry, Maitland, Orange County, Oviedo, Sanford and Winter Springs. 2009 agreement to conduct a PDR has been on hold since 2011

135. St. Johns River Near SR 46 Project

PWS and Reuse Augmentation– 55 mgd



Feasibility: Project is feasible and no project limitations due to rule inconsistencies have been identified. Included in SJRWMD District Water Supply Plan and examined through the WSIS

Funding Options: Project partners, State of Florida Water Protection and Sustainability Program, WMD ad valorem tax revenues, and Florida Forever Trust Fund, and federal revenues.

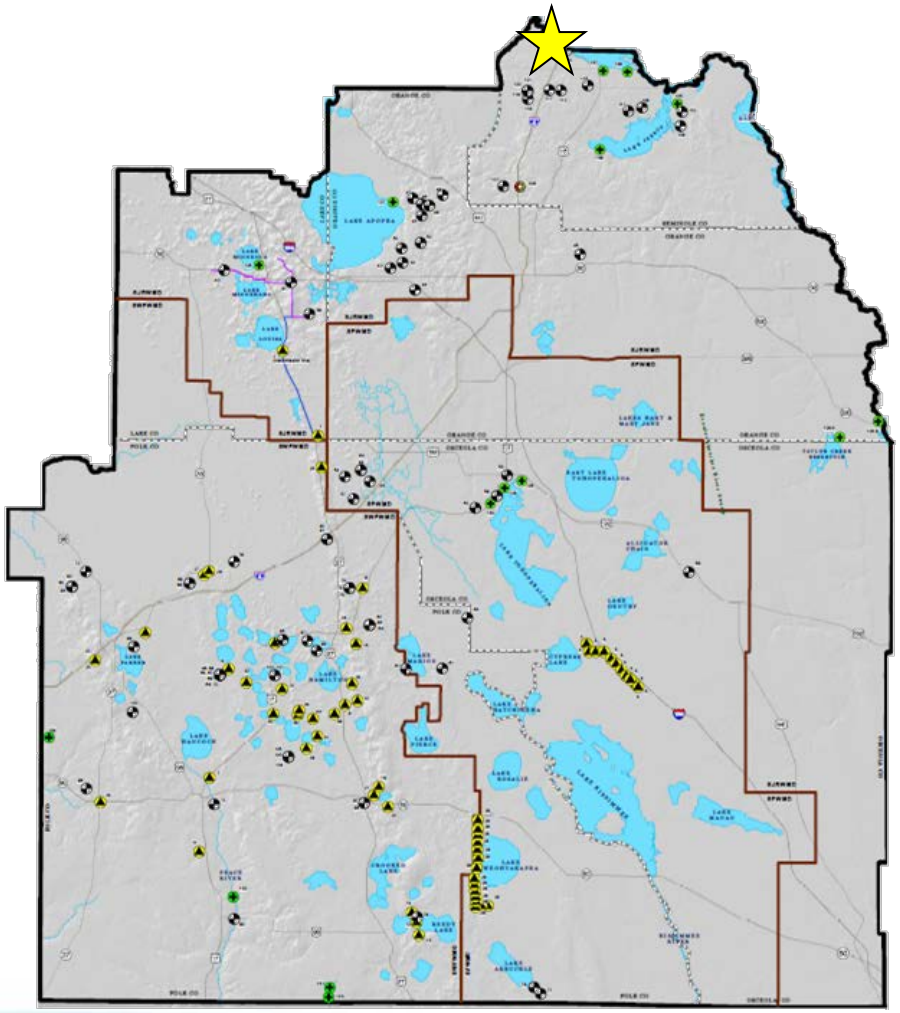
Implementation Schedule: Not developed

Project Evaluation Status:

80% Complete

138. St. Johns River Near Yankee Lake Project – Phase II

PWS – 4.5-31.7 mgd



Purpose: Managed withdrawal of surface water from the St. Johns River (SJR) for potable consumption to meet 2035 demands.

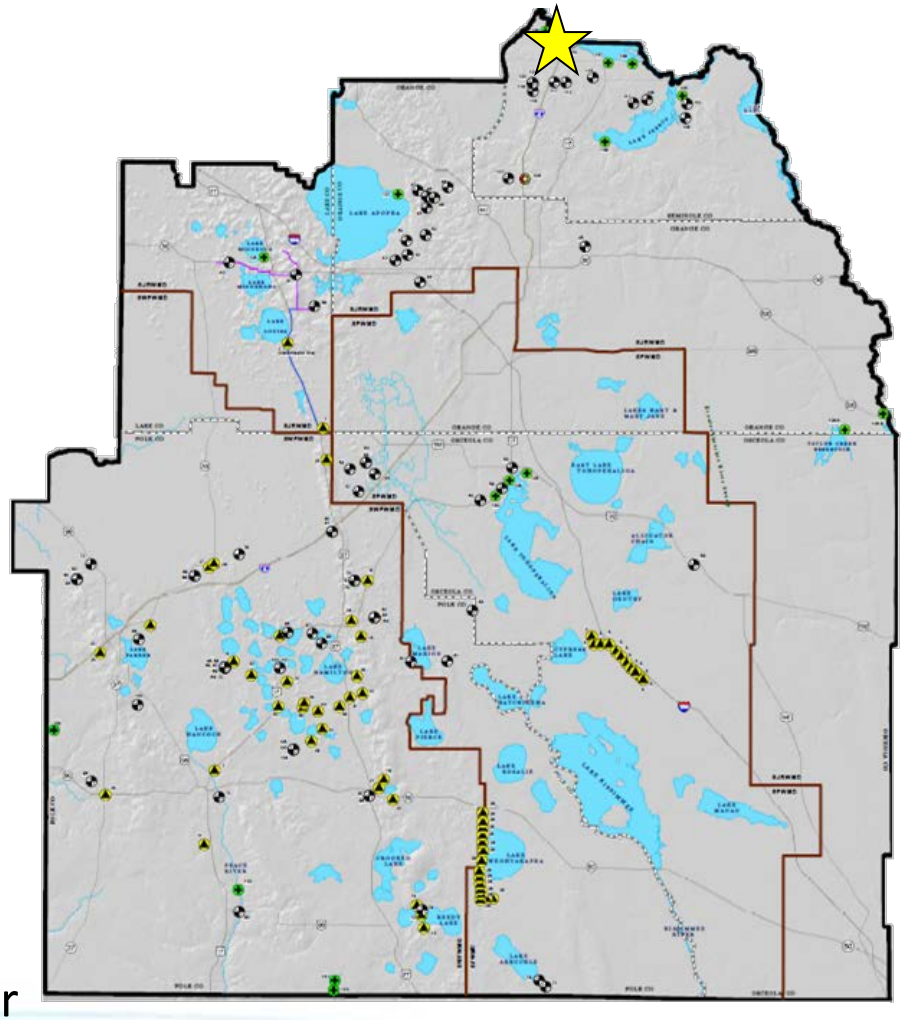
Cost Estimates: *not from CE Tool*

- Construction Phase I: $54.2 M
- Already constructed – 10 mgd / 5.5 mgd permitted
- Construction Phase II: $53.3 M (4.5 mgd) to $245.7 M (31.7 mgd)
- Operation and maintenance Phase II:
- Unit production cost:

Water Resource Constraints: Compliance with adopted and proposed MFLs

138. St. Johns River Near Yankee Lake Project – Phase II

PWS – 4.5-31.7 mgd

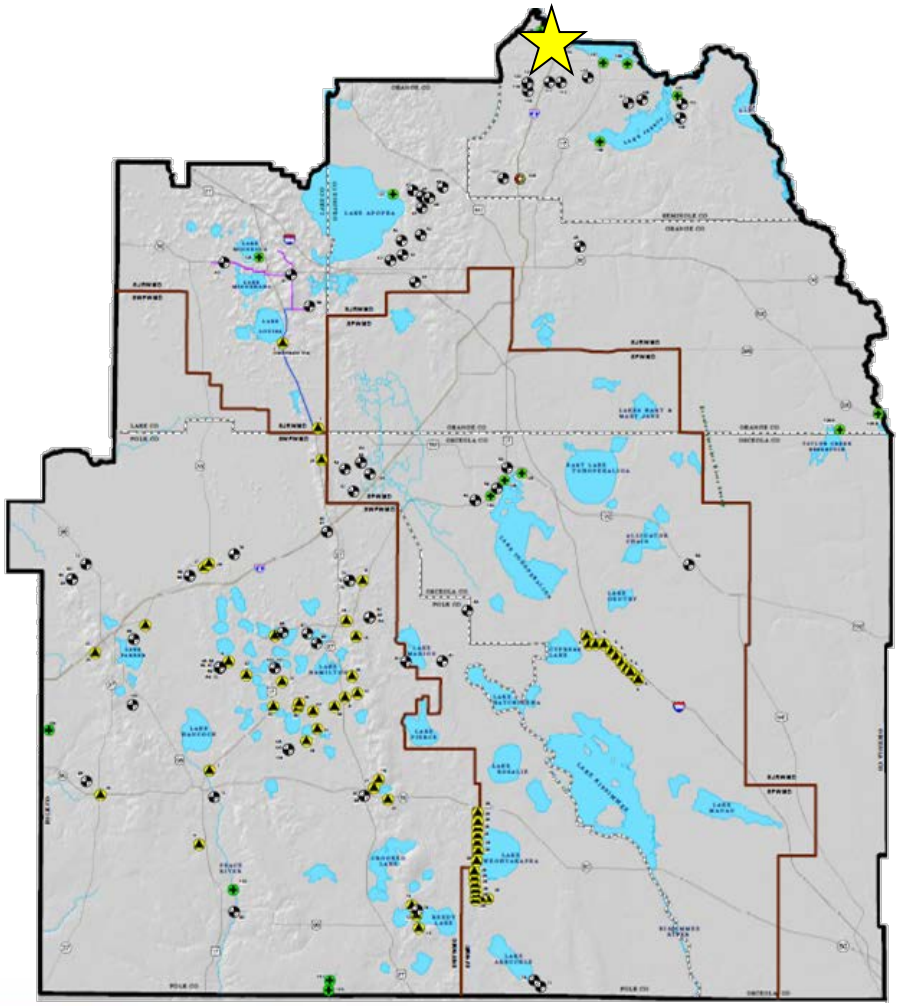


Partners & Governance: Proposed governance & partnership developed in 2008 - included: Eustis, Mount Dora, OUC, Aqua, Sanford, Longwood, DeLand, Winter Park, Oviedo, Apopka, Orange County, Maitland, Volusia County, Deltona and Lake Mary. Currently on hold due to reduced demand and pending the identification of specific regional partners to help this project realize an appropriate economy of scale.

Feasibility: Project is feasible; no limitations due to rule inconsistencies have been identified. Included in SJRWMD District Water Supply Plan and examined through the WSIS

138. St. Johns River Near Yankee Lake Project – Phase II

PWS – 4.5-31.7 mgd



Funding Options: Project partners, customers, State of Florida Water Protection and Sustainability Program, WMD ad valorem tax revenues, new development impact fees, Florida Forever Trust Fund, federal revenues & private investments.

Implementation Schedule: Phase I of the Yankee Lake Water Supply Project was placed into operation in December 2011.

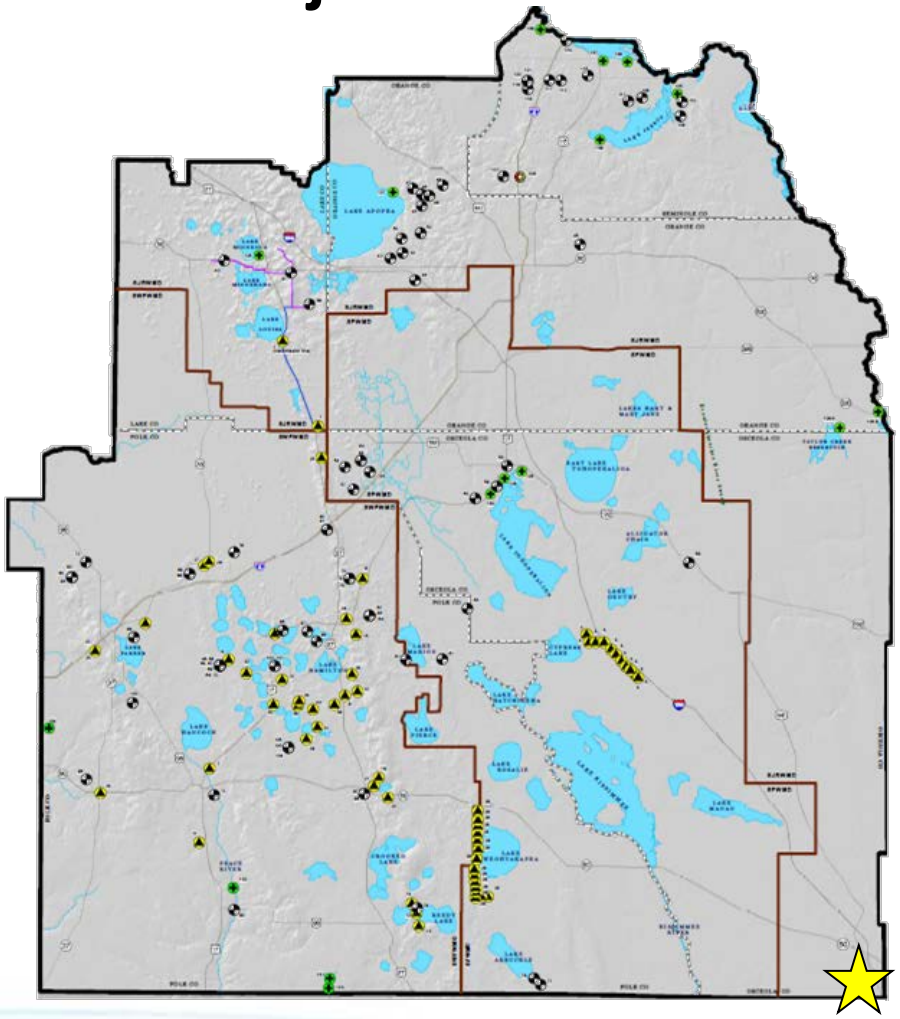
Phase II could be implemented within the next 10 years.

Project Evaluation Status:

80% Complete

144. C-25 Groveland Reservoir & STA Project

PWS – 136 mgd



Purpose: Project is expected to provide a variety of benefits to water utilities, landowners and government including surface water augmentation, GW recharge.

Cost Estimates: *not from CE Tool*

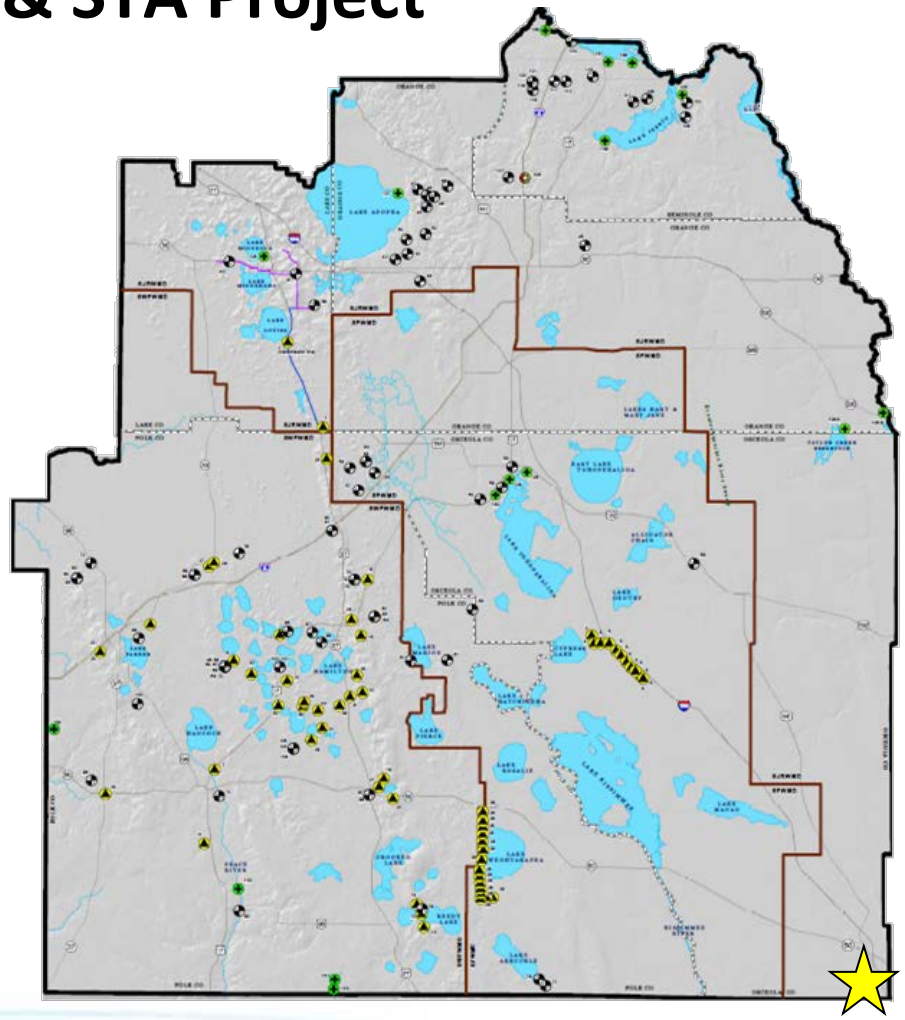
- Total capital: 662.9 M

Water Resource Constraints: Compliance with existing or future water reservation

Partners & Governance: Yet to be defined

144. C-25 Groveland Reservoir & STA Project

PWS – 136 mgd



Feasibility: Project is technically feasible based on conceptual engineering report. Project is potentially permittable as a regional water supply project.

Funding Options: Project beneficiaries

Implementation Schedule:

- Design 2015 - 2016
- Construction 2017- 2020

Project Evaluation Status:

70% Complete