

Central Florida Water Initiative

Water for Tomorrow



*A summary of the status of the
implementation strategy*

Kristine Morris and Morgan Westberry

Interim Chair

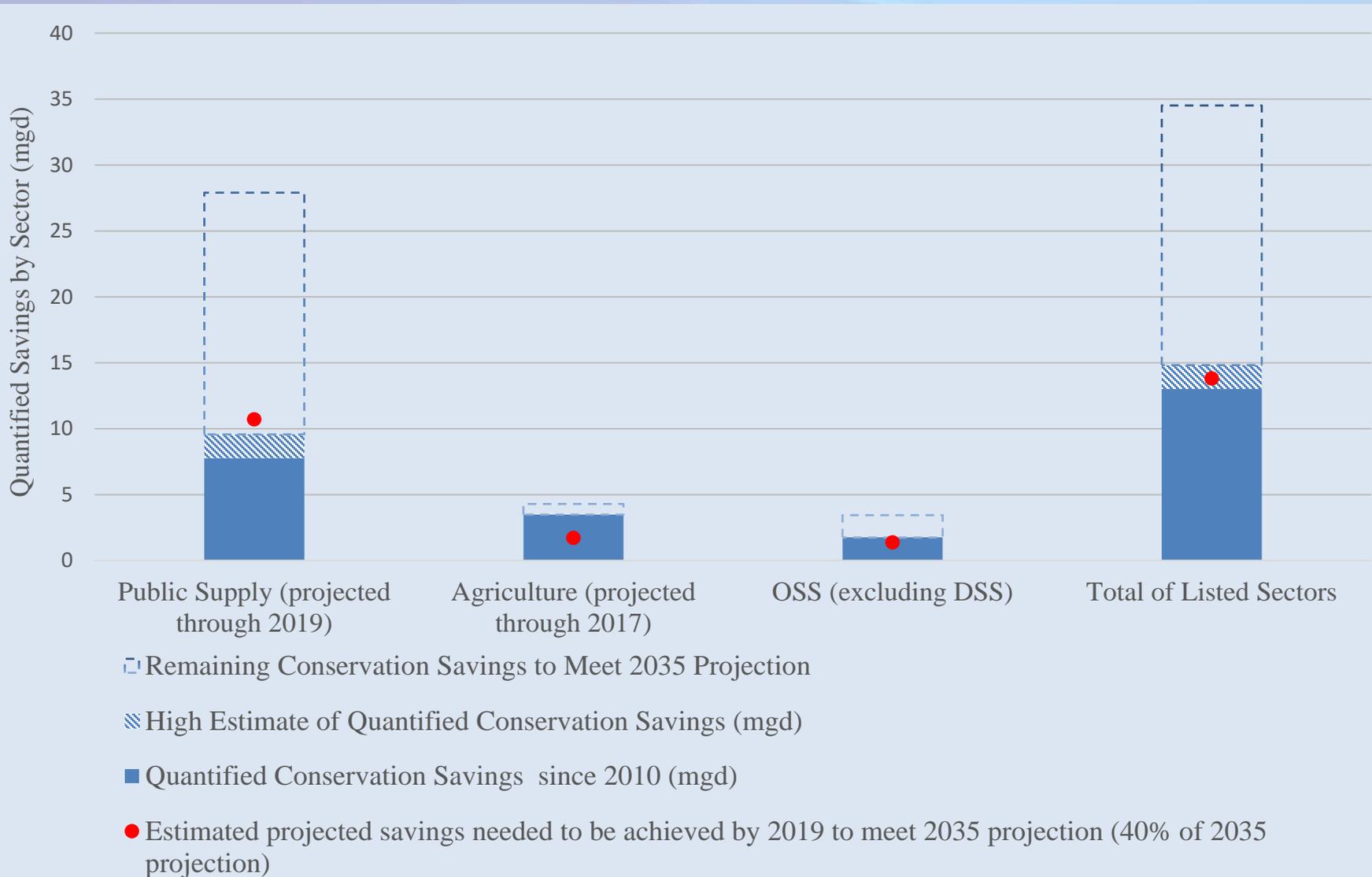
Conservation Team

Implementation Strategy Goals & Projections

1. Identify quantifiable conservation savings between 2010 to date
2. Analyze the trend of quantifiable conservation savings through the planning horizon of 2035
3. Identify and quantify conservation best management practices (BMPs) and programs that can be used to help exceed the 2035 conservation projection

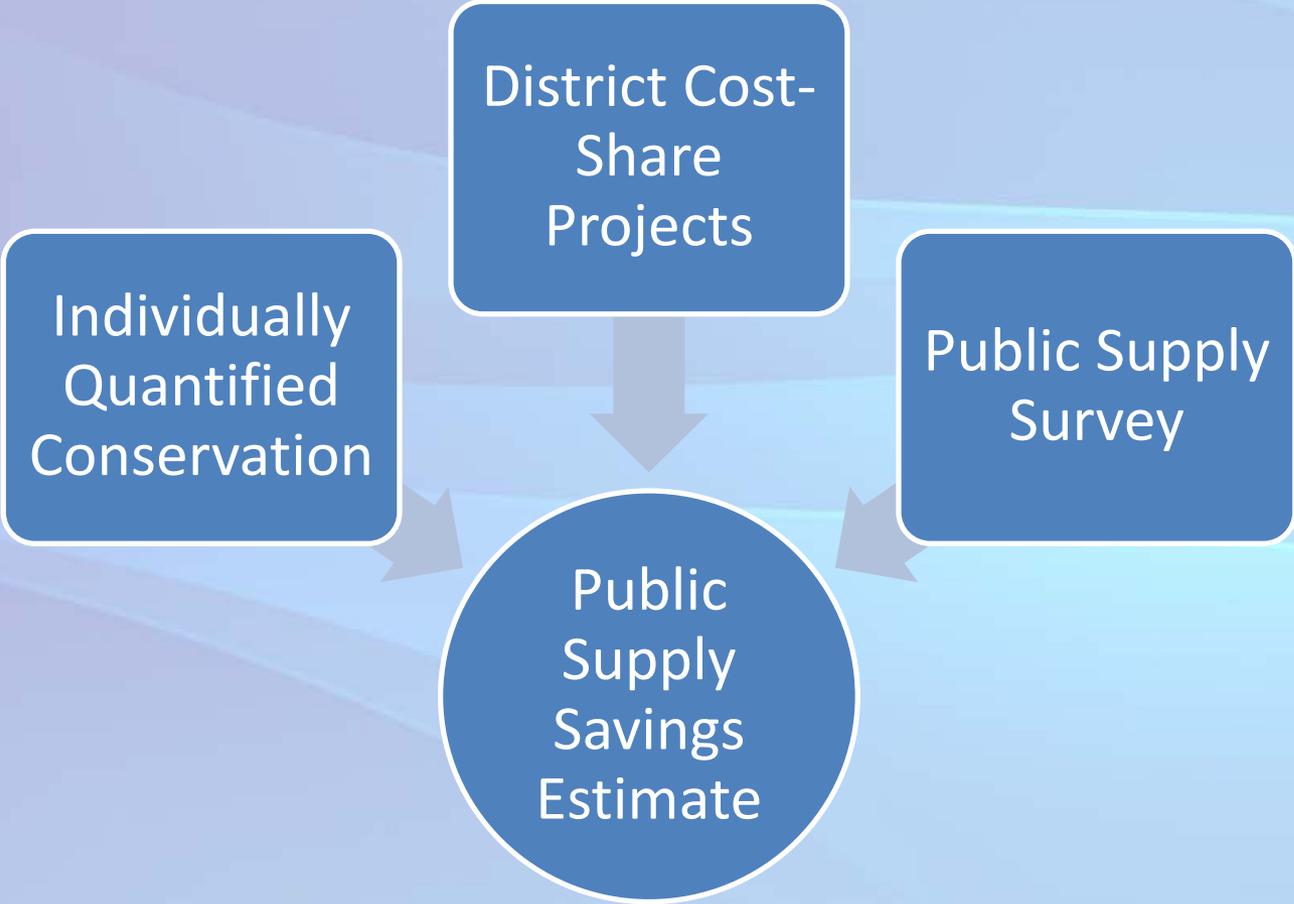
Water Use Category	Projected Solutions Strategies 2035 Conservation (mgd)
Public Supply (PS)	27.91
Agriculture (AG)	4.30
Landscape/Recreational/Aesthetic (LRA)	2.02
Domestic Self-Supply (DSS)	1.19
Commercial/Industrial/Institutional (CII)	1.15
Power Generation (PG)	0.27
Total	36.84

Quantified Savings by Sector



Accounting for Conservation Savings to Date

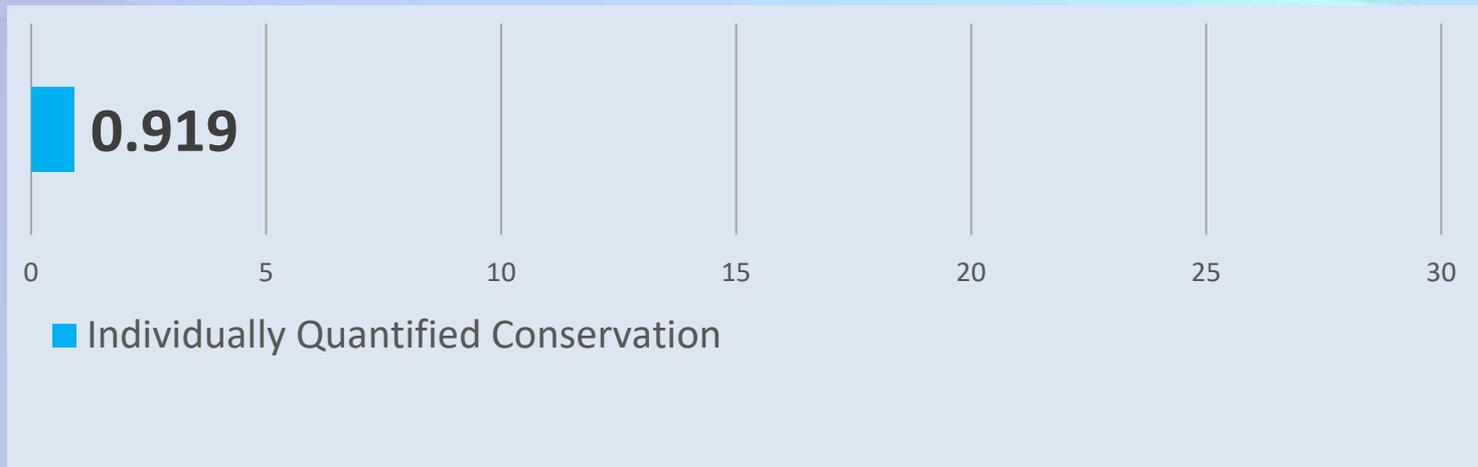
Public Supply



Public Supply – Individually Quantified Conservation

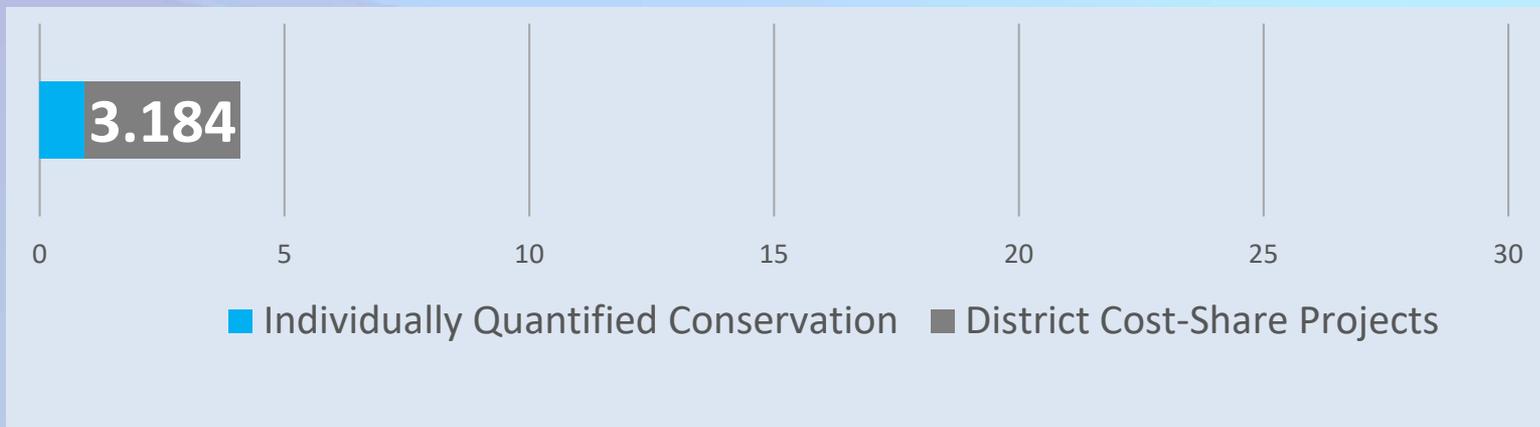
Four quantifiable programmatic savings:

1. The Florida Water Star Rebates or Requirement
2. The Extension Agent/Florida Friendly Program
3. Florida Green Building Coalition (FGBC) Homes
4. Tohopekaliga Water Authority (Toho) Enforcement Savings



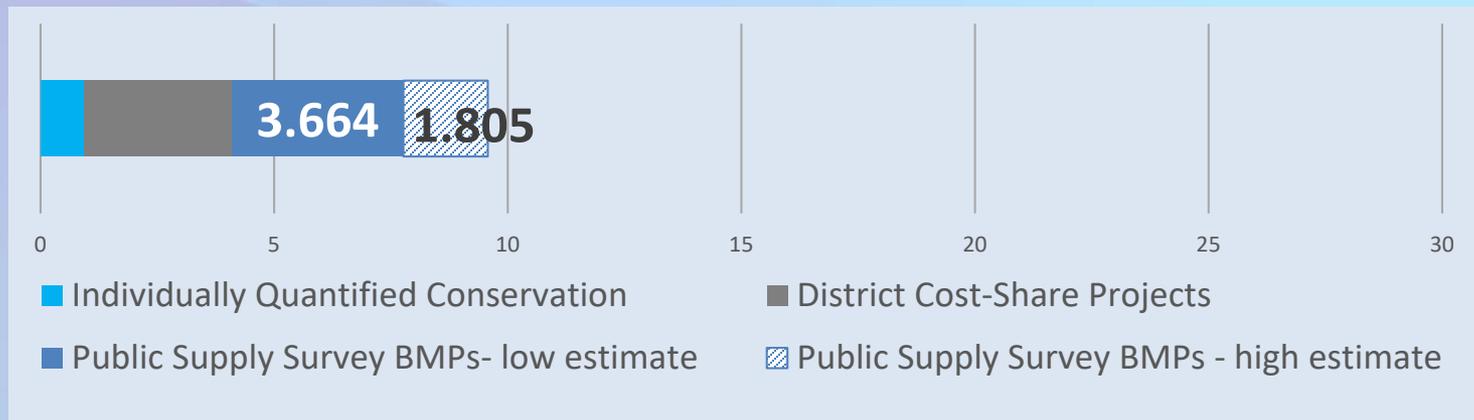
Public Supply – District Cost-Share

- The water savings estimates for projects utilizing District cost-share funding were included to the 2010 – 2018 savings estimate for number of implementations MINUS quantities that overlapped with the public supply survey PLUS an estimation for 2019.
- In addition to the 10 Quantified BMPs in the 2015 RWSP, the cost share projects also include other BMPs such as AMI Implementation, line flushing, conservation software, behavioral programs, etc.

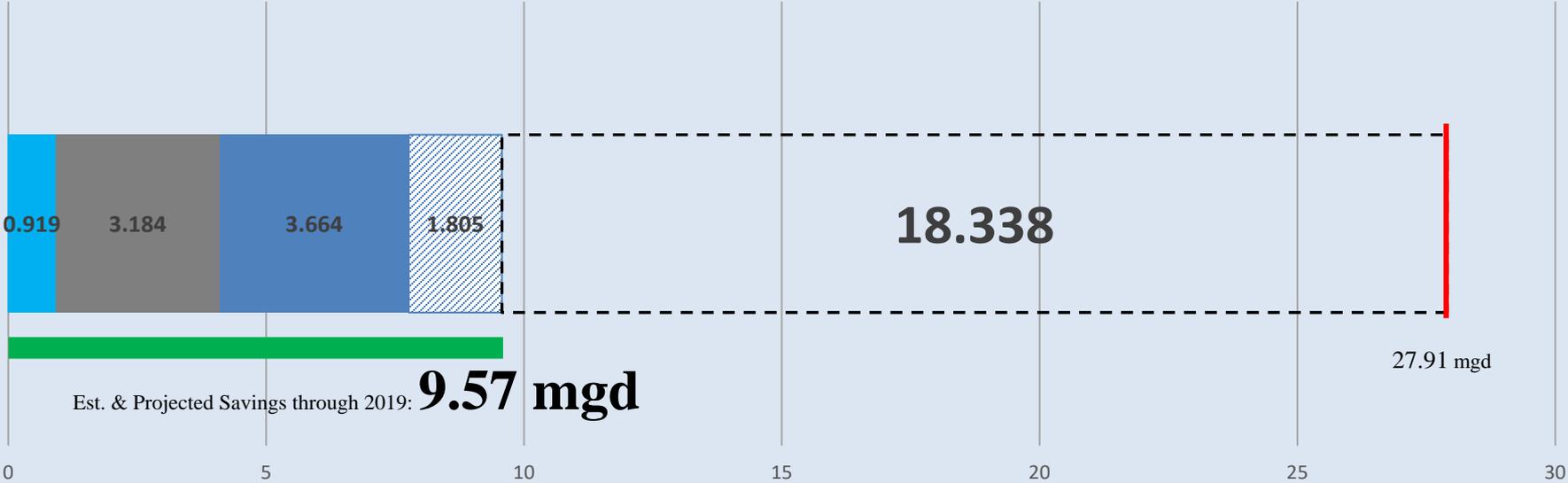


Public Supply – Survey BMPs

- The 12 utilities responding to the BMP quantification portion of the survey represent 67% of the PWS 2035 demands based on projections in the 2015 plan.
 - The estimated savings for only the 12 utilities responding represents the **low** end of the savings range, while the **high** end of the range extrapolates the savings to the entire CFWI region.
 - Three additional BMPs were developed by PWS Subteam:
 - Water efficient clothes washers
 - Water efficient dishwashers
 - Rain Sensors

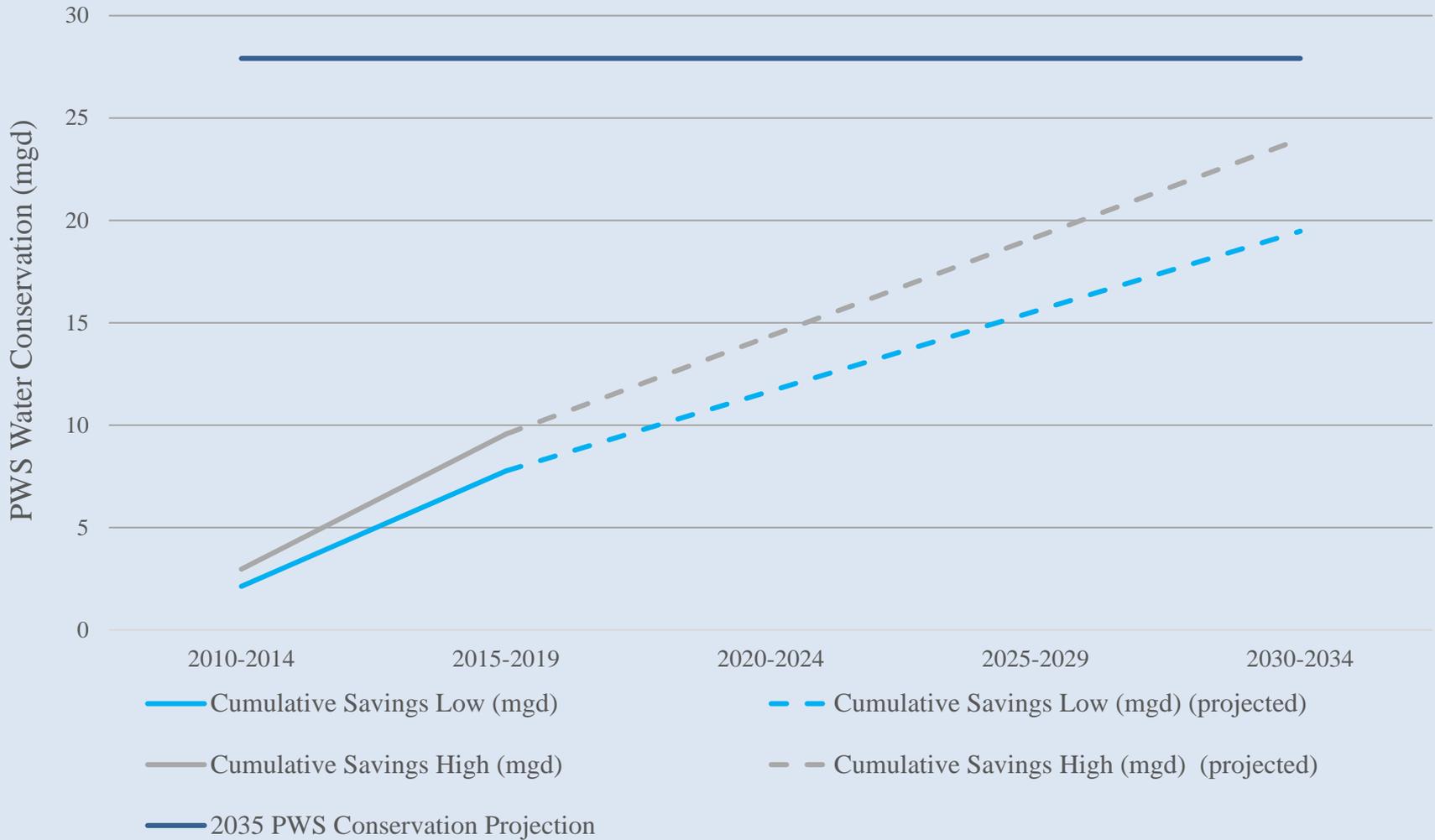


Public Supply Total

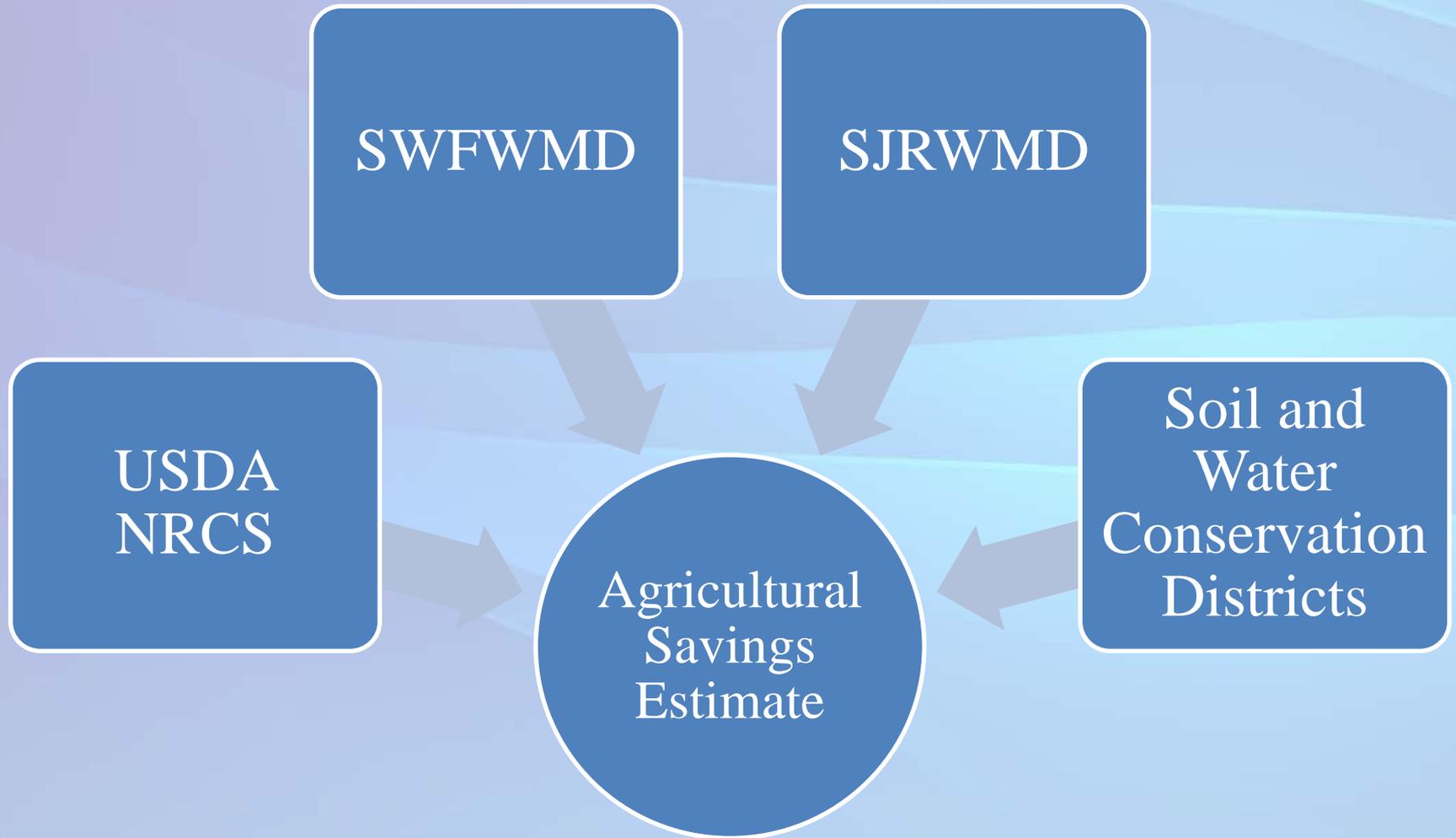


- Individually Quantified Conservation
- District Cost-Share Projects
- Public Supply Survey BMPs- low estimate
- ▨ Public Supply Survey BMPs - high estimate
- ⌊ Future Conservation Savings Needed to meet Projection

Public Supply Trend



Agriculture Self Supply



Agriculture Self Supply

USDA NRCS

- Programs that compensate agricultural producers and landowners that voluntarily implement practices that protect soil, water, air, wildlife habitats, and related natural resources.

Soil and Water Conservation Districts

- Mobile Irrigation Labs (MILs) are used to ensure irrigation systems are operating optimally. Verified results are available from FDACS.



Agriculture Self Supply

District Programs:

SWFWMD

- FARMS Program assists with implementation of BMPs related to reducing groundwater demands from the Upper Floridan aquifer in agricultural areas.

SJRWMD

- Agricultural Cost-Share Program focuses on increasing irrigation efficiency through partnership efforts.

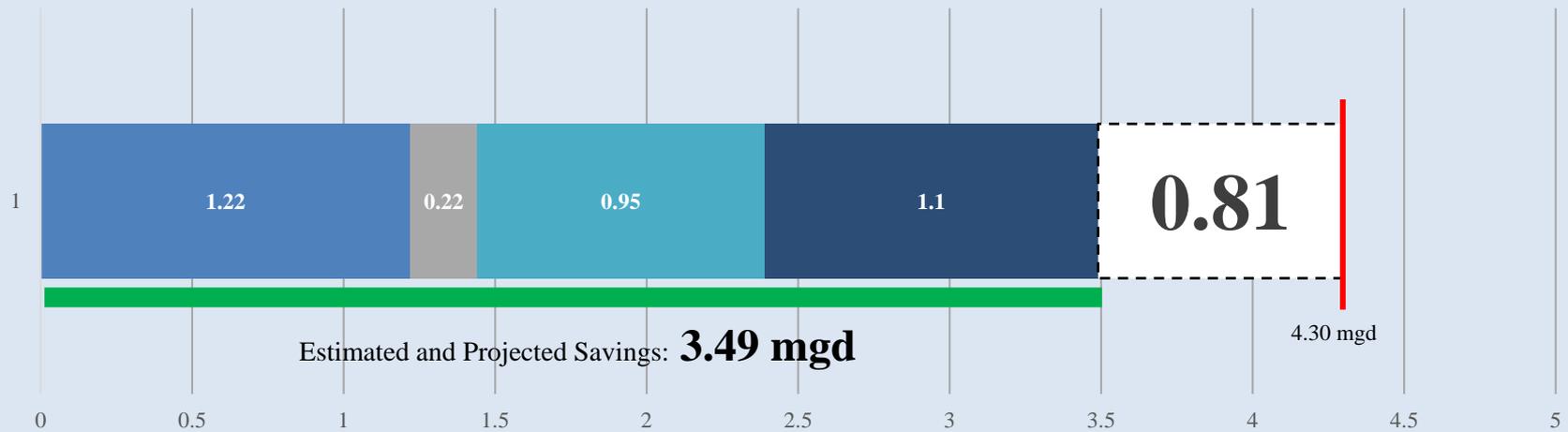
SFWMD

- Agricultural producers have not historically taken advantage of SFWMD cost-share opportunities for this region



Agriculture Total

Estimated and Project Conservation Savings 2010-2017 mgd



- NRCS
- Soil and Water Conservation District (MILs)
- SJRWMD
- SWFWMD
- Conservation savings needed to meet Projection

Other Self Supply Projections

Water Use Category	2035 Demand (mgd)	Percent Conservation	Projected 2035 Conservation (mgd)
CII	95.85	1.2%	1.15
LRA	72.18	2.8%	2.02
PG	22.41	1.2%	0.27
Total	190.44		3.44

Other Self Supply

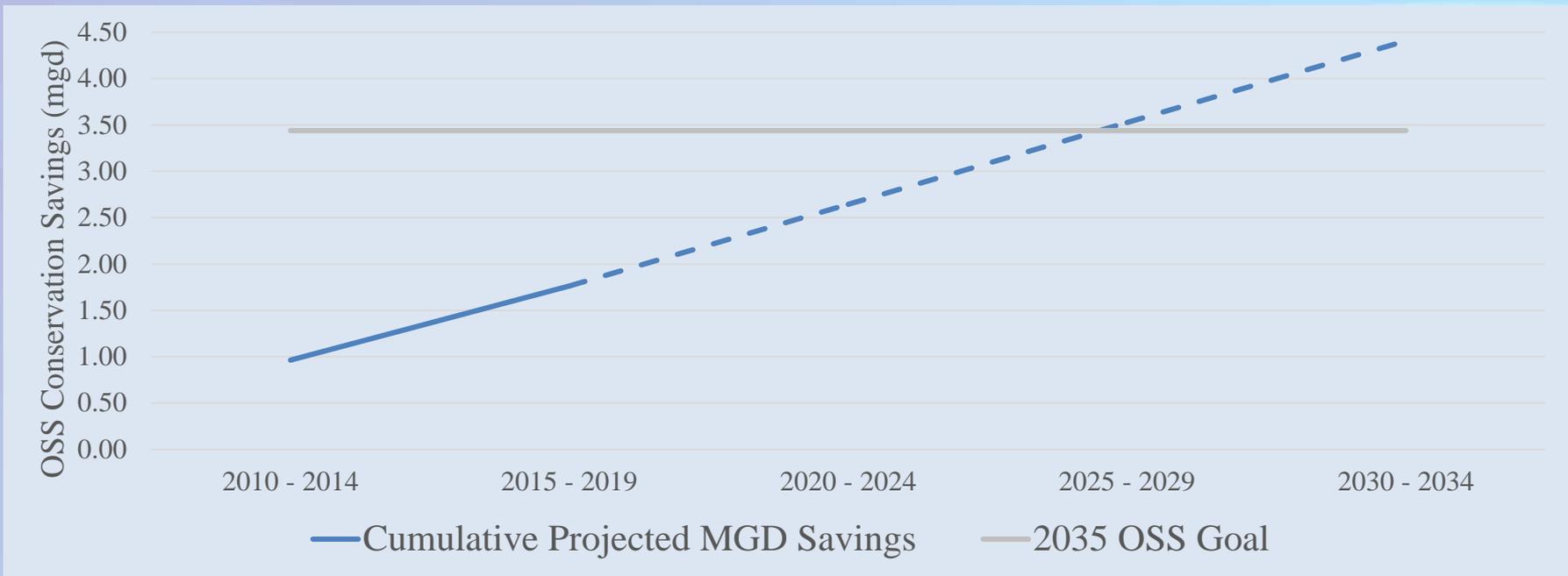
- The implementation strategy for the OSS water use sector proposes to re-focus the evaluation of the conservation potential from PS-type BMPs to more optimal BMPs based the water demand described in specific permits in each water use category.
- Methodology to quantify savings based on a permit-specific review of conservation plans.

OSS Allocations by Primary Use Category

Primary Use Category	Number of permits	Allocation (mgd)	Portion of total OSS Allocation
CII	156	26	23%
Golf Course	110	40	36%
LRA	586	21	19%
Mining/Dewatering	19	12	11%
Other	26	13	12%
TOTAL	897	112	100%

Other Self Supply Totals and Trend

- For the 2010 – 2014-time period an estimated 0.963 mgd was conserved.
- For the 2015 – 2019-time period an estimated 0.799 mgd was/is estimated to be conserved.



Domestic Self Supply

- Water use within this category is expected to increase by approximately 20% from 20.36 mgd in 2010 to 24.42 mgd in 2035.
- The 2015 CFWI RWSP identified 1.19 mgd of water conservation potential for this water use sector.
- Though passive conservation is anticipated, water savings to achieve projected conservation to come from outdoor irrigation restrictions, local ordinances, regional conservation messaging and similar.

Next Steps

Goal Topic	Deliverable	Target Deadline
Guideposts	Identify guideposts that can be included in the conservation chapter of the 2020 RWSP update	August 2018
Cost-Share Participation Review	Future iterations of this implementation strategy may undertake a review of cost-share applications in each district, evaluate which users are utilizing cost-share programs for conservation and identify how additional applicants can be encouraged to apply for cost-share funding to implement larger conservation efforts.	January 2019
Conservation Outreach and Communication	Designate a Conservation Messaging Liaison to work with the Communications and Outreach Team to develop a white paper about how to message water conservation for various audiences to maximize behavior change.	August 2018
	Identify funding sources, conservation messaging, and target audiences as well as other outreach opportunities, such as trainings, workshops, etc.	August 2018

Next Steps continued

Goal Topic	Deliverable	Target Deadline
Agriculture White Paper	Review and contribute to a white paper on agricultural BMPs for ultimate review and approval by the Steering Committee	August 2018
Project Options	Continue to work with stakeholders to develop designated projects for the 2020 RWSP update.	October 2018
BMP Improvement/Expanded Effort	Develop/finalize savings estimates for new BMPs including: irrigation restriction enforcement, rain sensors, customer portal/AMI, and irrigation system audits. Identify additional BMPs with goal to increase rate of implementation.	August 2018
Passive Conservation	Estimate passive conservation savings for the 2020 RWSP.	August 2018
Geographic Target Areas	Further define “geographic target areas,” and generate maps to depict the areas	January 2019
Golf course survey	Develop a survey to document conservation efforts being made by Golf Courses	Summer 2018
Data Source Improvement	Improve data collection and analysis.	2020