Central Florida Water Initiative

Water for Tomorrow

Conservation Team
Proposed 2020 Methodology
Public Supply

Passive Conservation – *17.93 mgd*

- Passive Conservation was calculated using the AWE Tool

  - 2 components:

    - **Natural Replacement Savings (12.89)**

      - Known utility rebate programs for BMPs were deducted

      - Savings per Device was reconciled with EZ Guide savings used in Implementation Strategy

    - **Water Savings Adjustment Factor (5.04)**

Passive Conservation – *Adjustments*

- The AWE Tool uses county level data which results in overlap between DSS and PS

  - If reduced proportionately to 2040 population, the PS passive savings would be:

    - **Natural Replacement Savings (12.28)**

    - **Water Savings Adjustment Factor (4.79)**

Methodology Sources Considered

- Per Capita

- AWE Tool

- Implementation Strategy (IS)
  - Pace

  - Pace + Population Growth

  - Pace + Water Demand Growth

Methodology Sources Eliminated

- ~~Per Capita~~
  - User specificity
- ~~AWE Tool~~
  - Time constraints
- Implementation Strategy
  - Pace
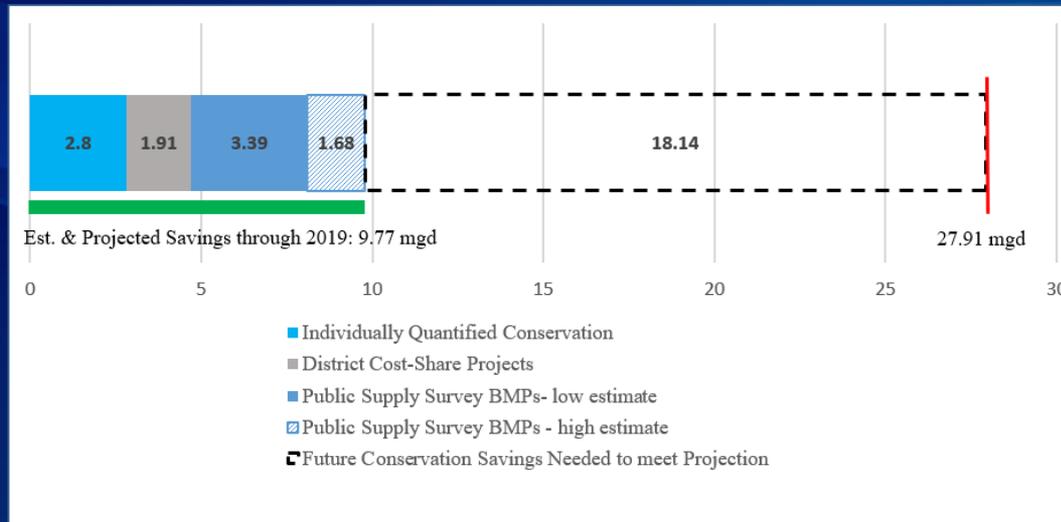 - ~~Pace + Population Growth~~
    - Sources showed Water Demand Growth was a more applicable measure
  - Pace + Water Demand Growth

Implementation Strategy

- Currently, the IS has the following estimated quantified conservation savings included:
  - Low Range estimates 8.10 mgd over 10 years
  - High Range estimates 9.77 mgd over 10 years

Bar chart showing segments: 2.8, 1.91, 3.39, 1.68, and 18.14 totaling 27.91 mgd.

Est. & Projected Savings through 2019: 9.77 mgd   27.91 mgd

Axis: 0, 5, 10, 15, 20, 25, 30

Legend:
- 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

Hybrid Range – *24.45-27.09 mgd*

- Low derived from extrapolated ("high") of Implementation Strategy (IS)
  - "Low" estimate considered but not recommended for the projection in order to account for all CFWI utilities and unquantified BMPs.
- High derived from Implementation Strategy + Water Demand Multiplier – Adjustment Factor
  - Water Demand Multiplier consists of average realized demand growth over 5 year increments
  - Minus Water Savings Adjustment Factor that is captured in Passive Conservation

Cumulative Years	2015-2020	2015-2025	2015-2030	2015-2035	2015-2040	Adjustment	Total
MGD saved over 5 years (using "low" Quantified Conservation from IS)	4.885	4.885	4.885	4.885	4.885	N/A	24.45
Ave. Demand Growth	7.45%	21.24%	32.43%	41.68%	49.77%	N/A	
MGD saved over 5 years (using "high" Quantified Conservation from IS)	5.25	5.92	6.47	6.92	7.32	-4.79	27.09

Active Conservation Projection - Overview

Plan Year	RWSP Demand (mgd)	Projected PS Conservation (mgd)		Percentage of Demand	
2015	654.34	27.91		4.27%	
		Low	High	Low	High
2020	592.28	24.45	27.09	4.13%	4.53%