

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



Water Efficient Technology Program

A Targeted Approach



Non Residential Sites only

- Staffing levels
- Non SFR use is growing
- Currently at 30% of all water demand
- Mostly landscaping
- This is non-return flow water



Not a Rebate Program

- Often rebates have lower than projected savings
- Early adopters often already efficient
- They often adopt the technology without the incentive



Why is the savings lower than projected?

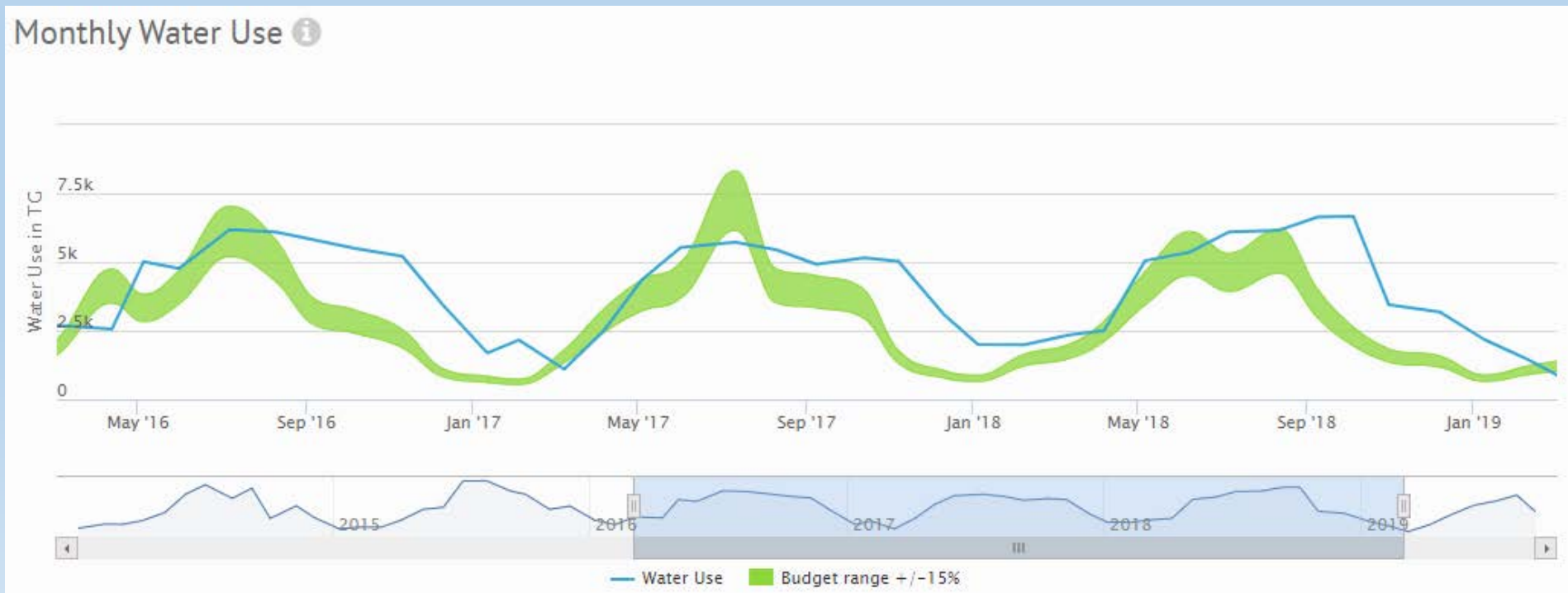
- Incorrect product selection
- For controllers incorrect programming
- Smart controllers need smart people to program them.

Not a Rebate Program

- We purchase the technology and give it to them
- Customer is responsible for installation
- Must agree to keep it installed for a minimum of one year
- Higher cost products require a three year agreement

A Targeted Approach

- We identify sites with savings potential
- The goal is demand reduction
- Market transformation is a secondary goal



A Targeted Approach

- Water budget review
- Site visit and system inspection



Choosing the Right Solution

- Not always smart controllers
- High efficiency nozzles
- Pressure compensating emitters
- Flow sensing(with smart controller)
- Pressure regulating heads



Technology Must Be Proven Performers

- EPA WaterSense
- Not all WaterSense labeled products meet criteria
- Specific needs in the desert
- Speak with manufacturers (engineers especially)
- In house testing
- Controllers must make schedule adjustments based on MAD
- Management Allowable Depletion

Verify Installation

- Site visit
- Assist with programming on controllers
- Assist with programming on efficient nozzles
- Assist with programming on pressure regulating heads
- Assist with programming on pressure compensating emitters

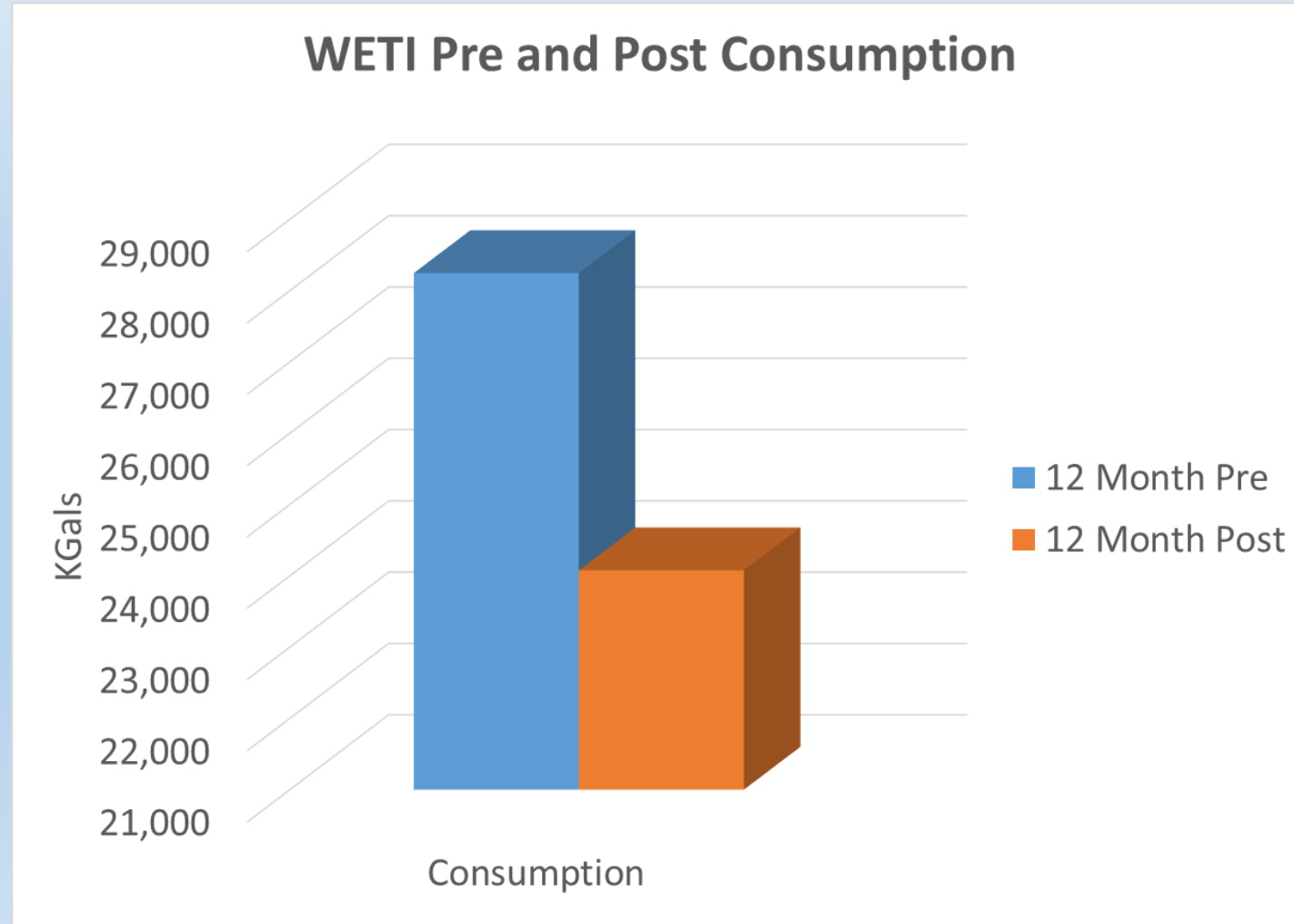
After Installation Support

- Monitoring water use
- Fine tuning controller settings
- Are issues irrigation related?



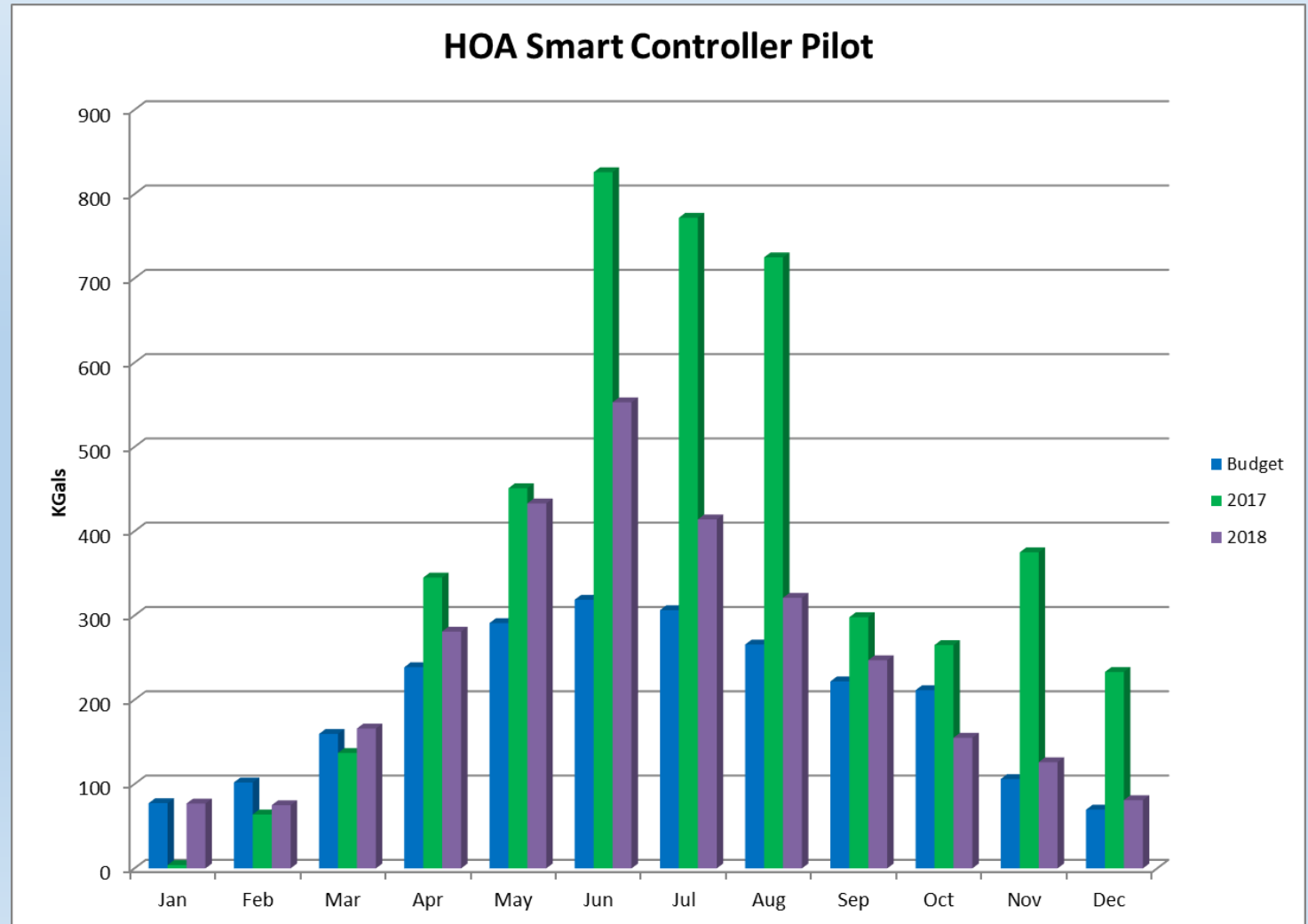
Outcomes

- 38 sites with installations
- 19 sites have full 1 year pre-installation consumption and 1 year post-installation consumption
- Savings of 4,169,000 gallons
- 18%
- Cost of program \$2.79/Kgal
- New water acquisition is \$16.16/Kgal



Individual Sites

- Some had great water savings
- 1,055,000 gallons



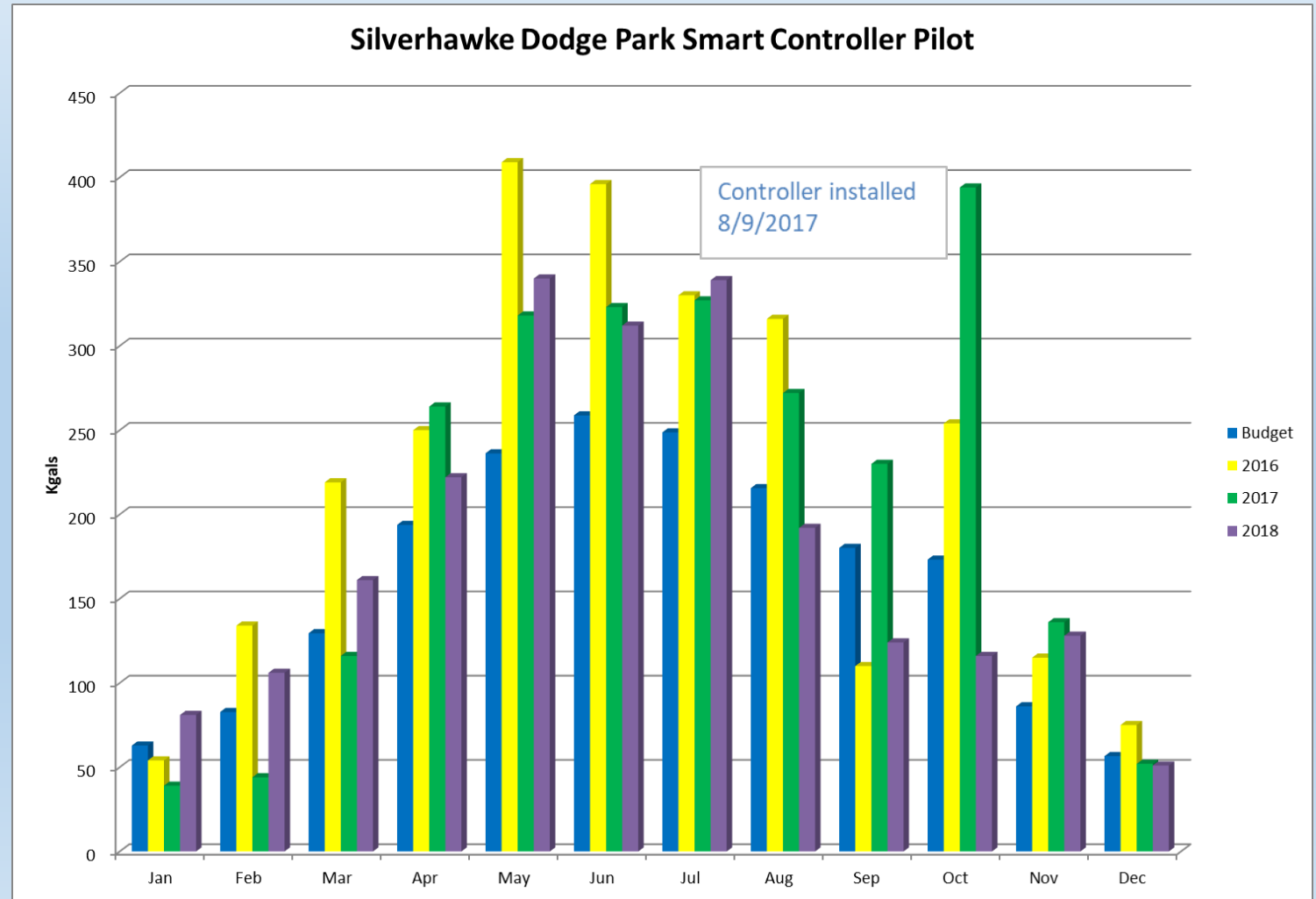
Individual Sites

- Some savings hard to quantify
- Stream Rotor nozzles



Individual Sites

- Some were more for market transformation



They Do Work

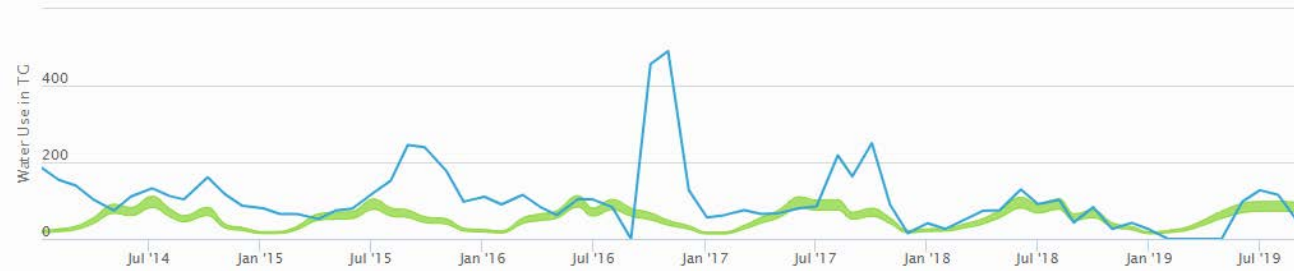
- With proper programming
- With a functional irrigation system



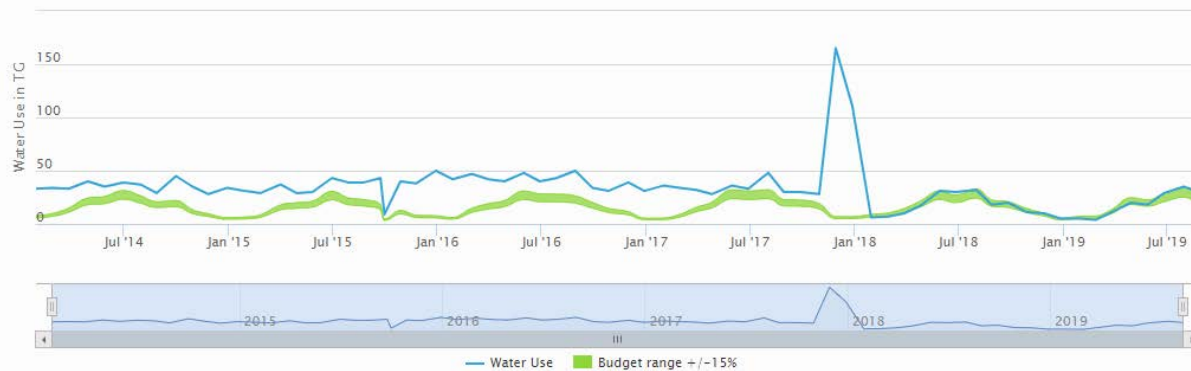
They Do Work

- With proper monitoring

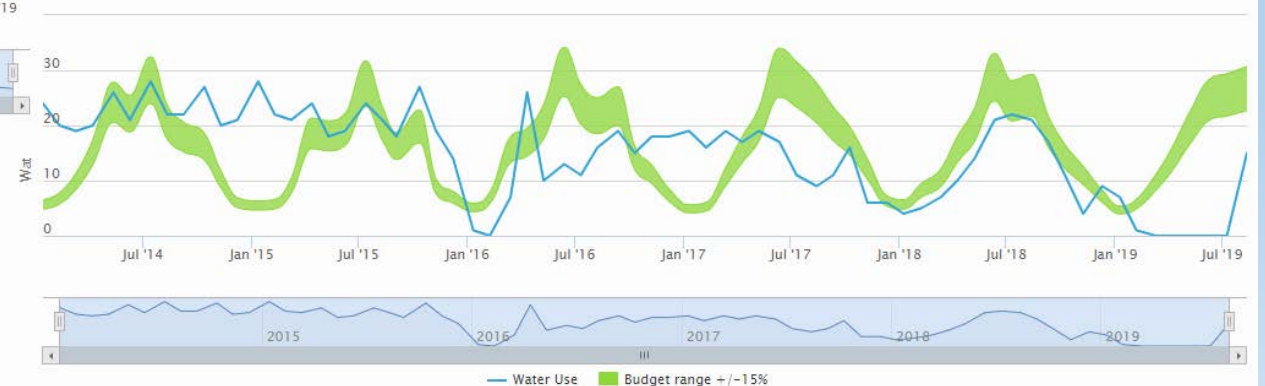
Monthly Water Use ⓘ



Monthly Water Use ⓘ



Monthly Water Use ⓘ



When They Don't Work



Leaks or
blown
emitters

Clogged
emitters



Achieving the Full Savings Potential

- Proper selection of the technology is critical
- Proper programming of smart controllers is critical
- Follow up support is critical
- Introducing and training of the technology will push market transformation

Hunt For the Full Savings Potential

- Questions?

