



WaterSense Update: Weather-Based Irrigation Controllers and Soil Moisture Sensors

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Agenda

- Weather-based irrigation controllers: specification review
 - Review information gathered
 - Decision
- Soil moisture sensors: draft specification
 - Scope
 - Performance criteria
 - Supplemental capability requirements
 - Packing and labeling
 - Testing configuration and compatibility
 - Certification
 - Next steps



What is WaterSense

WaterSense is a voluntary partnership program launched by EPA in 2006 that provides a simple way to identify water-efficient:

- Products
- Programs
- Practices
- Homes



Products are independently certified for water efficiency **and** performance



Photo: Judith Chaddock



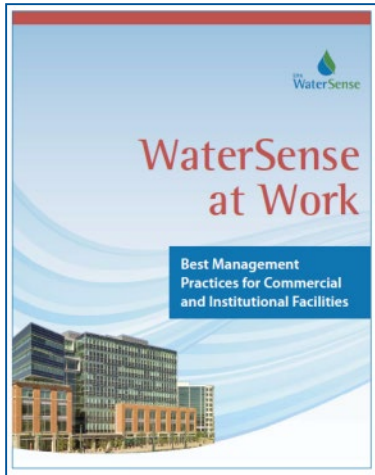
The WaterSense Vision

- WaterSense offers people a simple way to use less water
- Our vision is that all Americans will understand the importance of water efficiency and take actions to reduce their water use – in their homes, outdoors, and at work

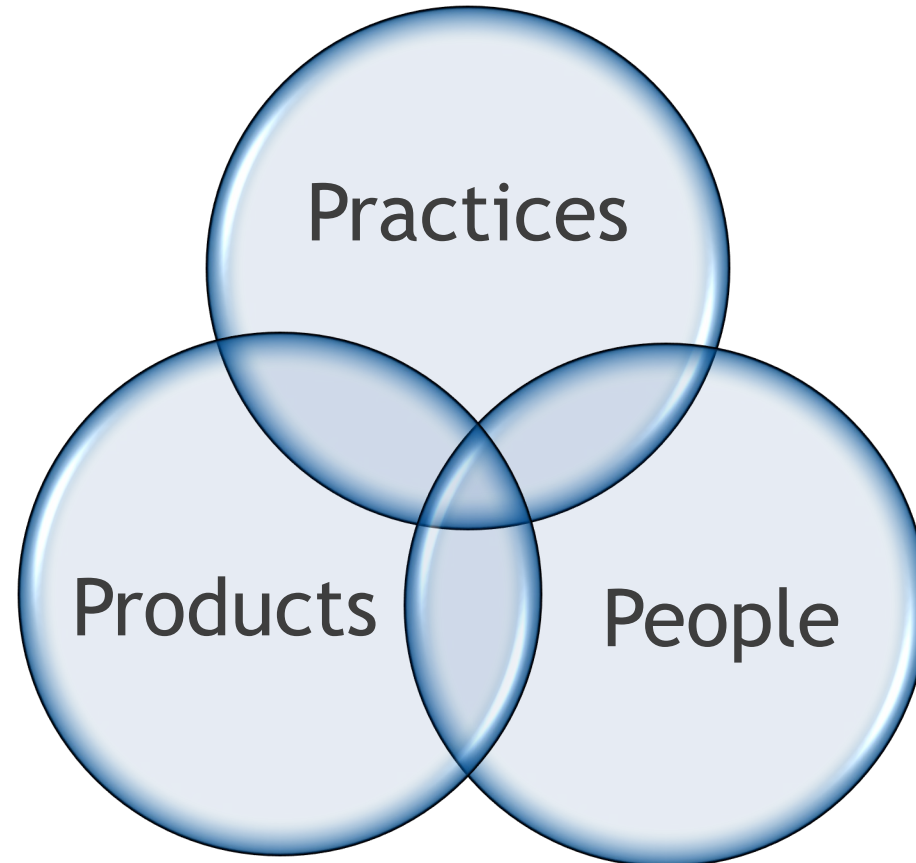
How will we achieve it?

- By transforming the marketplace for products and services that use water
- By promoting a nationwide ethic of water efficiency to conserve water resources for future generations and reduce water infrastructure costs

WaterSense Program Overview



Actions that can be taken to reduce water use – at home, outdoors, and at work



Fixtures and technologies save water



Partners reach users to change behavior





WaterSense Product Evaluation Factors

WaterSense uses the following factors in determining which products to label. Products must:



- Offer equivalent or superior performance to conventional models
- Be about 20 percent more water-efficient than conventional models
- Realize water savings on a national level
- Provide measurable results
- Achieve water efficiency through several technology options
- Be effectively differentiated by the WaterSense label
- Be tested and independently certified

WaterSense Labeled Products



Lavatory Faucets
Labeled since 2007
18,000 labeled models



Weather-Based Irrigation Controllers
Labeled since 2011
800 labeled models



Tank-Type Toilets
Labeled since 2007
3,900 labeled models



Flushometer-Valve Toilets
Labeled since 2015
1,500 labeled models



Flushing Urinals
Labeled since 2009
700 labeled models



Pre-Rinse Spray Valves
(Recently Sunset)
Labeled from 2013 to 2018
30 previously labeled models



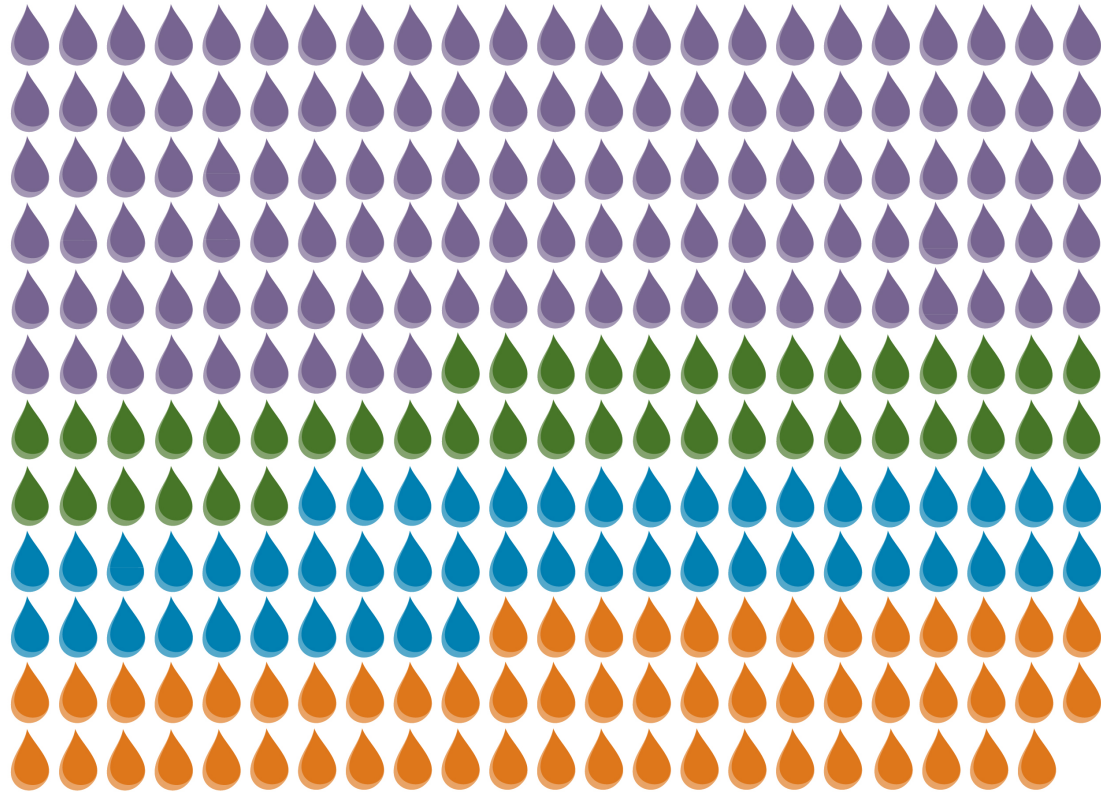
Showerheads
Labeled since 2010
9,100 labeled models



Spray Sprinkler Bodies
Labeled since 2017
200 labeled models

Accomplishments

3.4 trillion gallons of water saved since 2006!



725 billion gallons saved in 2018



saving consumers
\$84.2 billion
in water and energy bills

look for



Weather-Based Irrigation Controllers Specification Review

The America's Water Infrastructure Act of 2018

- Formally authorized the WaterSense program
- Directed EPA to:
 - Enhance awareness of the label
 - Preserve the integrity of the WaterSense label
- Defined the scope of products and systems that could be included in the program
- Provided direction on the frequency and process for revision of product specifications
- Directed WaterSense to institute a comprehensive review of products specifications developed before 2012.
 - Specifically, not later than December 31, 2019 EPA shall, “consider for review and revise, if necessary, any WaterSense performance criteria adopted before January 1, 2012.”



Specification Review Process

Thru
Mar 2019

Internal Research

- Update product information, analyze WaterSense product database, conduct industry research
- Issue *Notice of Specification Review* and hold first stakeholder meeting

Mar-Jun
2019

Stakeholder Engagement

- Hold meetings with individual partners, standards committees, industry experts, and utilities
- Review comments, conduct additional analysis based on in house data
- Hold product type meetings with stakeholders to review information collection to date

Jun-Aug
2019

Analysis

- Compile additional comments received and post to website
- Review and analyze information collected
- Continue engagement with standards committees and industry as necessary

Aug-Dec
2019

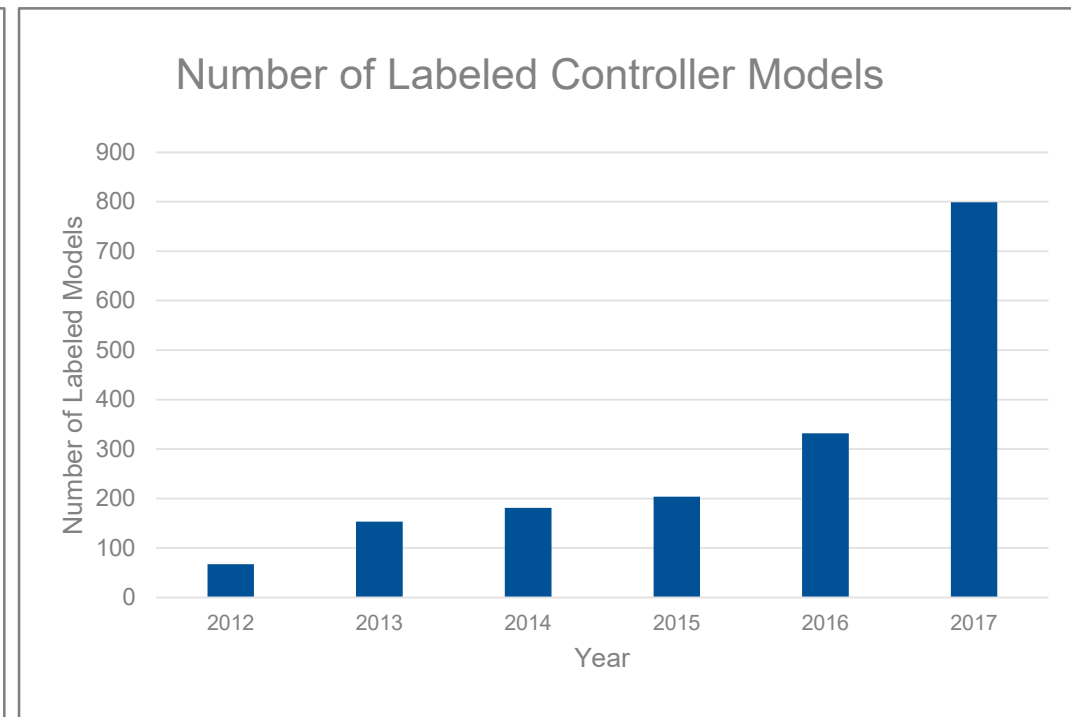
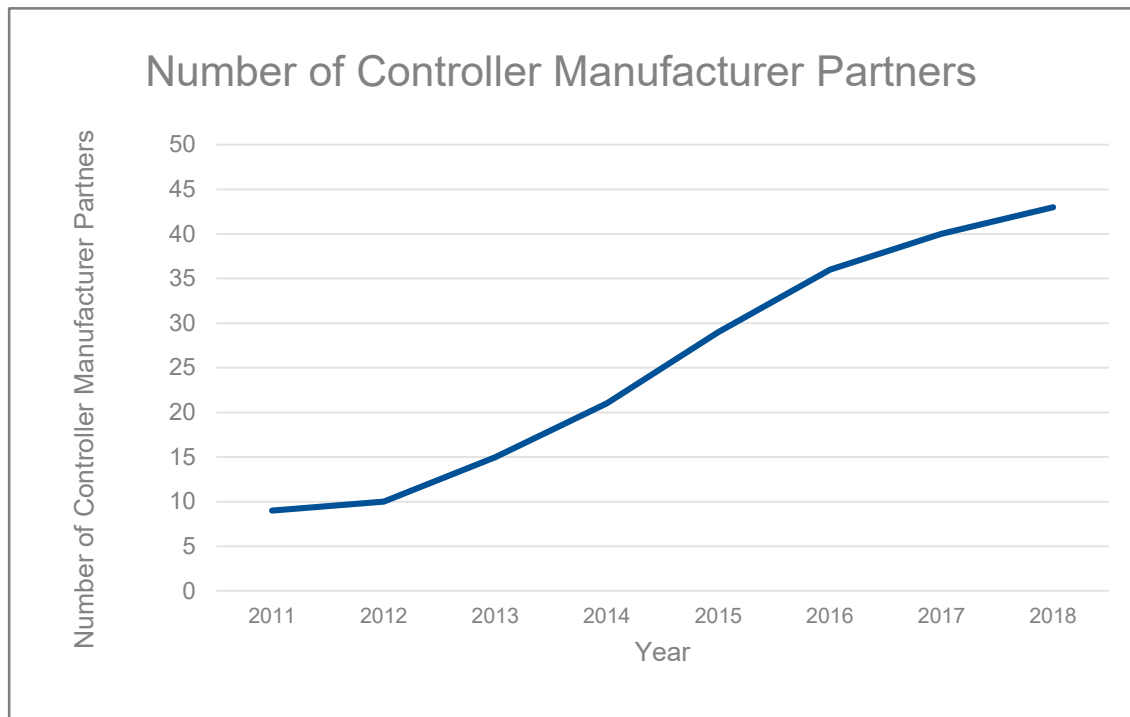
Develop Recommendations and Announce to Stakeholders by December 31, 2019

- Develop recommendations and review with EPA Management
- By December, present recommendations, post material to website, host public meetings

← We are here

Specification for Weather-Based Irrigation Controllers

- Released November 2011
- More than 30 manufacturer partners
- Approximately 800 labeled models





Placeholder

- Placeholder for WBIC materials



Questions

look for



Soil Moisture Sensors Draft Specification

Soil Moisture-Based Control Technologies

- Soil Moisture-Based Control Technologies
 - Conducted research and worked with manufacturers to identify test protocols from 2007 to 2013
 - Issued a Notice of Intent (NOI) in May 2013
 - Working with ASABE X633 committee on a test method
 - Method tests sensors in a box of soil with a known depletion
 - Two soil types, two salinities, three depletions
 - Performance testing at the University of Florida completed in the summer of 2019
 - EPA released a draft specification on November 7, 2019.



Image courtesy of Hunter Industries, Inc.

Placeholder

- Placeholder for SMS draft specification materials



Questions

Next Steps

- Pertinent information and comments can still be submitted to watersense-products@erg.com
- Deadline to submit comments: January 10, 2020.
- WaterSense will summarize information collected and issue a comment compilation
- WaterSense will review all comments and work toward a final specification (anticipated in summer 2020).

Contact Us



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Comment Submission E-mail: watersense-products@erg.com

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