

# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)



# Smart Irrigation Controllers Need a New Name



John B Whitcomb, PhD  
John@Waterfluence.com  
www.Waterfluence.com  
(800) 800-9519



October 5, 2016

# “Smart” Products



# Smart Conferences



# Landscape Irrigation Elements

## Design



## Distribution System



## Scheduling



# Irrigation Controller Advances



Photo: Hunter Industries

# Rebates for Smart Controllers

## Landscape Rebate Program Request For Application Form



This form must be completed and mailed or faxed to the Santa Clara Valley Water District in order to be assigned to a water conservation staff member who will mail you a Landscape Rebate Program application packet and assist you in applying for the Landscape Rebate Program. Once completed, please send this form to:

**Santa Clara Valley Water District**  
**Attn: Water Conservation Unit**  
**5750 Almaden Expressway**  
**San Jose, CA 95118-3686**  
**Fax: (408)979-5639**  
**Email: [conservation@valleywater.org](mailto:conservation@valleywater.org)**

A water conservation staff member will contact you once this form is received. **Do not begin your project until you have received a written Notice to Proceed.** For information regarding the Landscape Rebate Program, please contact the Water Conservation Hotline at (408) 630-2554 or visit [www.valleywater.org](http://www.valleywater.org).

### Customer Information

---

Official Customer Name (Must be site owner or authorized representative)

---

Business Name (For multi-family, commercial, industrial, and institutional sites)

---

Site Address

# Popularity of Rebate Concept



# Behavioral Connection with Controllers

## Setup



Photo: Bunnings

## Operations & Maintenance

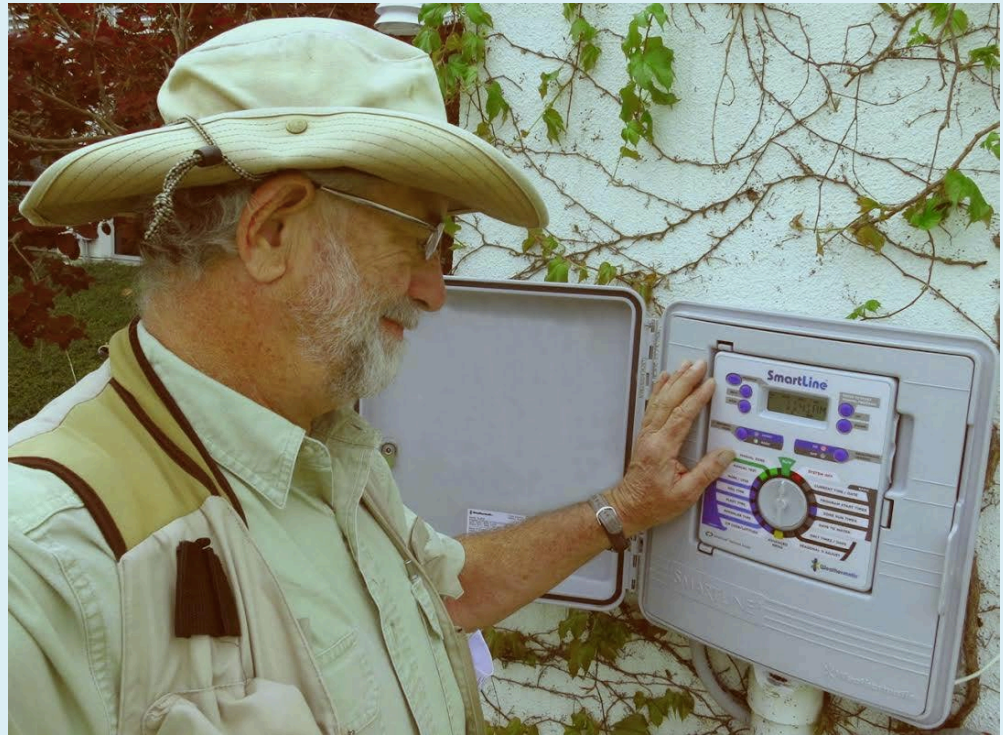
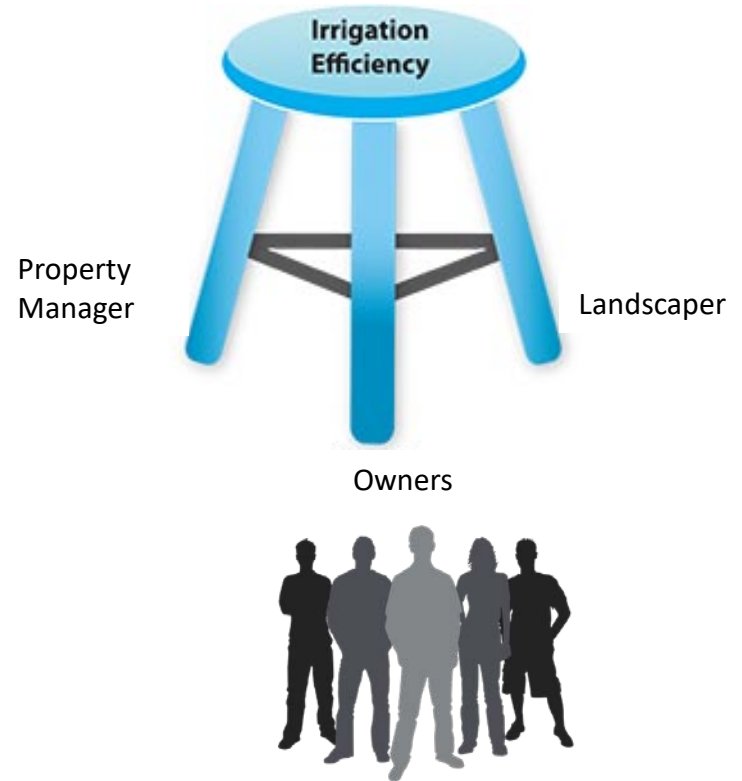


Photo: Chris Willig

# Complexities

- Who is in Charge?
- Nexus with distribution system
- Landscapers inherit controllers
- Freebies are not free



# Proposal

**Replace “Smart” with “Weather-Based”**

# Empirical Data

**Mission:** Influence people at large urban landscape sites to irrigate more efficiently by improving metrics, communications and incentives.

- Started 2003 in Bay Area -> 30 CA Communities
- Monitor to Manage
- Social science concepts to engage and motivate



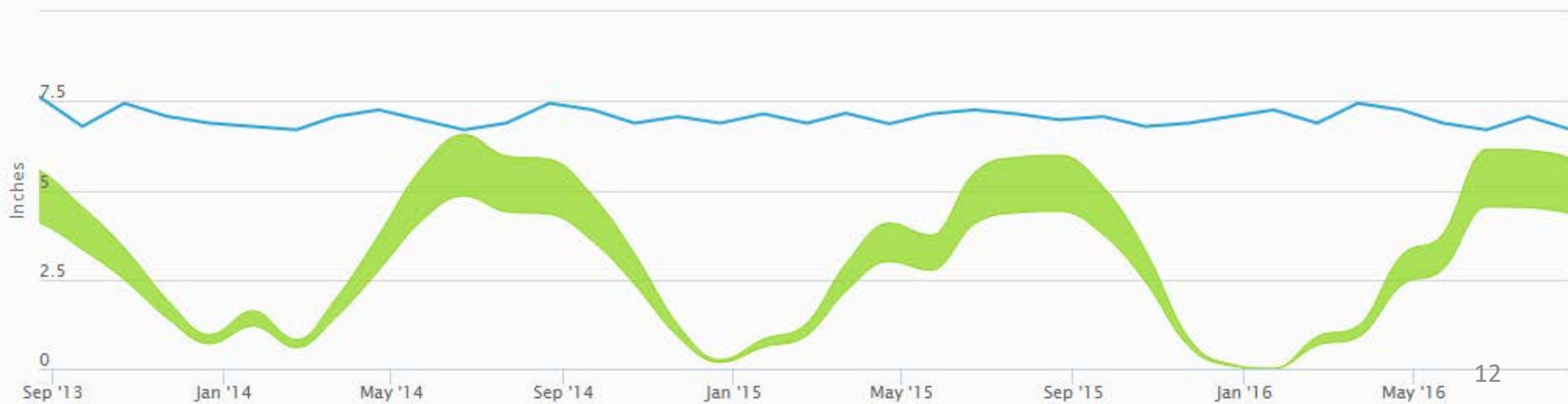
Average Overwatering Feet per Year



# Results not Guaranteed



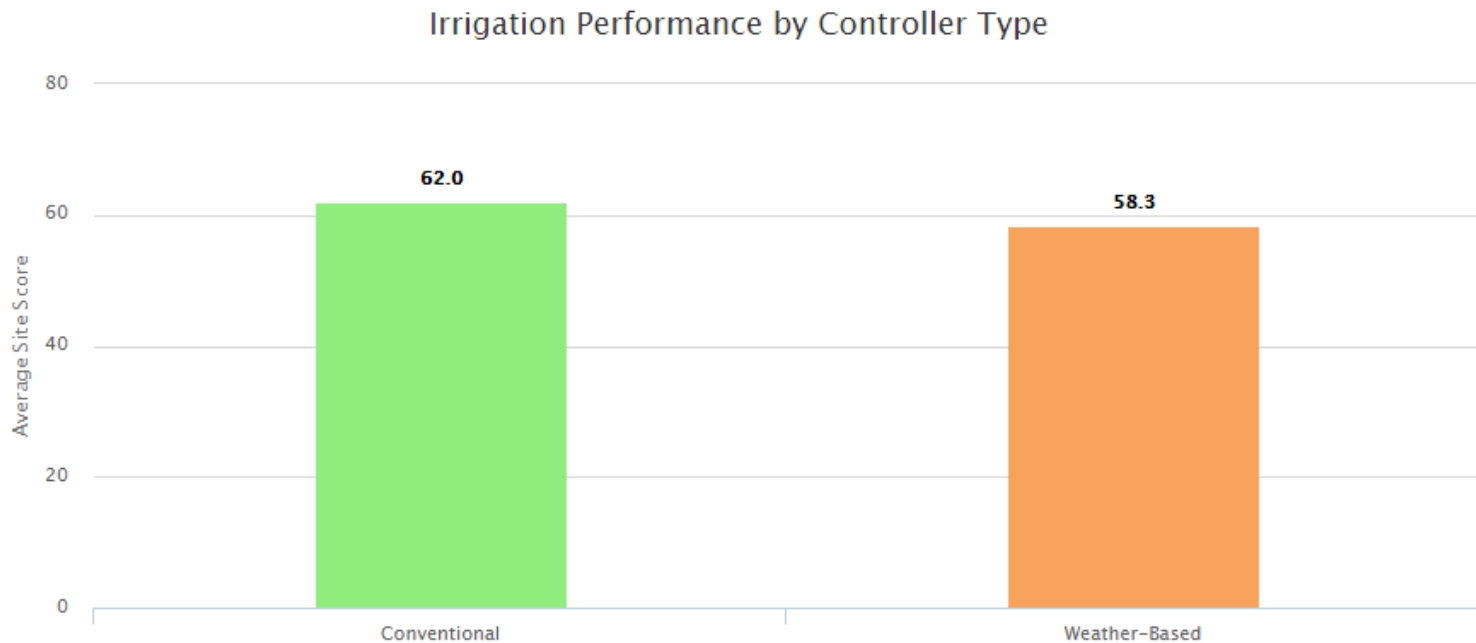
Monthly Depth Applied



# Walk the Walk?

September 2016

By



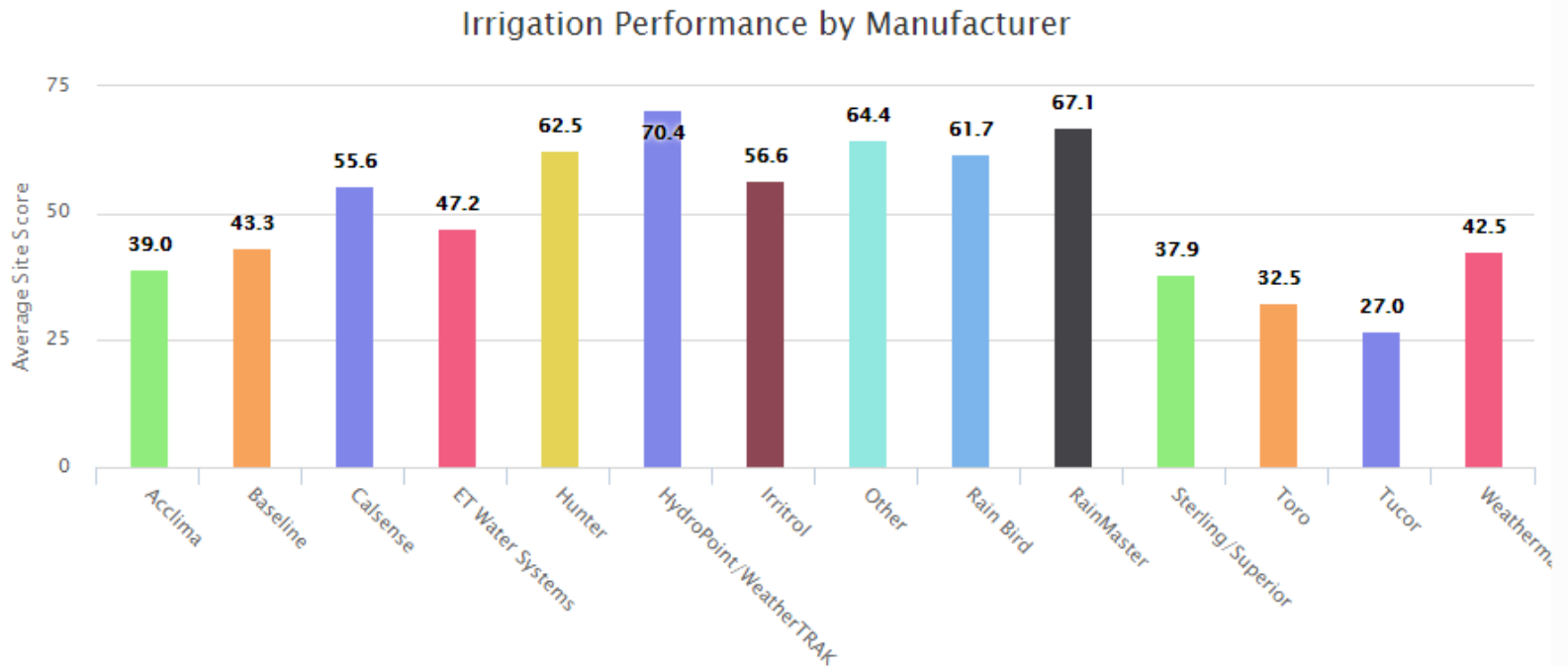
Weather-based irrigation controllers actively using on-site weather/ET sensors or off-site weather/ET signals.

[www.waterflurence.com/irrigation-controllers](http://www.waterflurence.com/irrigation-controllers)

# Product Choices

September 2016

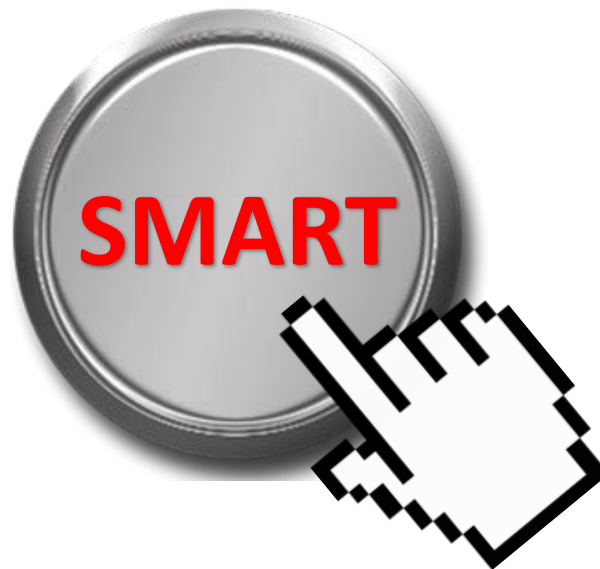
By



[www.waterflurence.com/irrigation-controllers?filter=manufacturer](http://www.waterflurence.com/irrigation-controllers?filter=manufacturer)

# My irrigation controller is so smart ...

- I don't have to worry about scheduling ever again
- I don't have to worry about the state of the irrigation distribution system
- I am smart!





# Product Manufacturers vs Users

- “Smart” is good selling tactic for manufactures
- But is it a good mindset for users?



# “Smart” Kids?

Journal of Personality and Social Psychology  
1998, Vol. 75, No. 1, 33–52

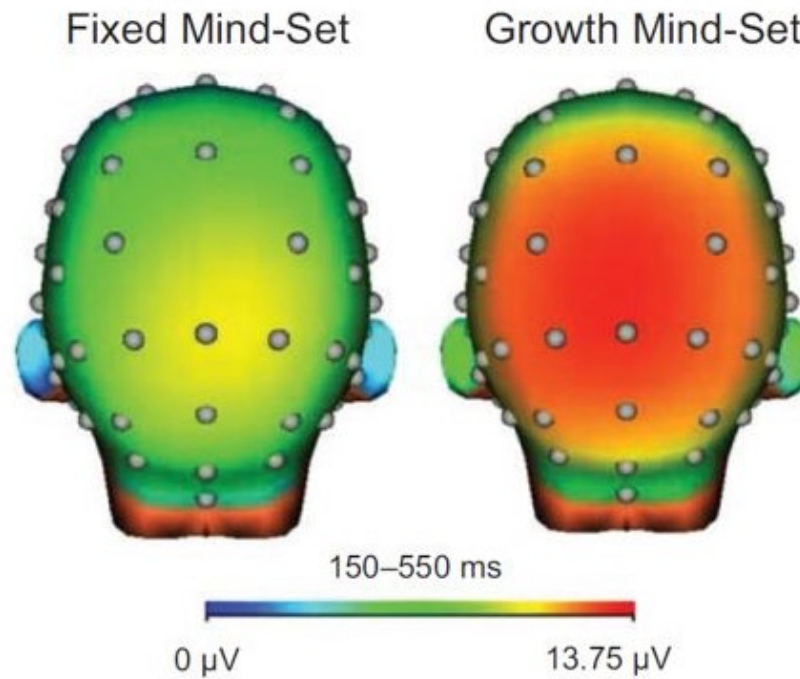
Copyright 1998 by the American Psychological Association, Inc.  
0022-3514/98/\$3.00

## Praise for Intelligence Can Undermine Children’s Motivation and Performance

Claudia M. Mueller and Carol S. Dweck  
Columbia University

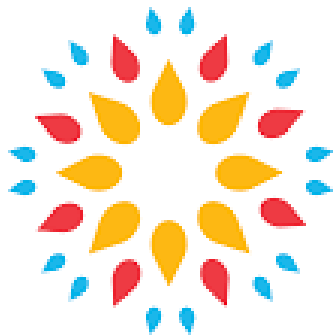
Praise for ability is commonly considered to have beneficial effects on motivation. Contrary to this popular belief, six studies demonstrated that praise for intelligence had more negative consequences for students’ achievement motivation than praise for effort. Fifth graders praised for intelligence were found to care more about performance goals relative to learning goals than children praised for effort. After failure, they also displayed less task persistence, less task enjoyment, more low-ability attributions, and worse task performance than children praised for effort. Finally, children praised for intelligence described it as a fixed trait more than children praised for hard work, who believed it to be subject to improvement. These findings have important implications for how achievement is best encouraged, as well as for more theoretical issues, such as the potential cost of performance goals and the socialization of contingent self-worth.

# Fixed vs Growth Mindset



# Conclusion

- Weather-Based Irrigation Controllers
- People



watersmart  
INNOVATIONS