This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



Landscape Water Budgets with an Annual Kick

Steve Toler, Assistant City Manager City of Foster City/ Estero Municipal Improvement District stoler@fostercity.org

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



Estero Municipal Improvement District





Compelling Case for Conservation

Water Supply Assurance with our water supplier

 5.9 MGD
 Projections: 6.1 MGD

Potential Limit on Future Growth
Environmental Sustainability Efforts



Estero Conservation Plan

■ 20 × 2020

- 15% reduction in consumption by 2012
- 20% reduction in consumption by 2020

Three-Pronged Approach

- Education
- Tiered Rates
 - Residential
 - Irrigation
 - Commercial
- Rebate Programs
 - Toilets, Washing Machines, and Smart Controllers oh my!
- Greatest Potential Irrigation!

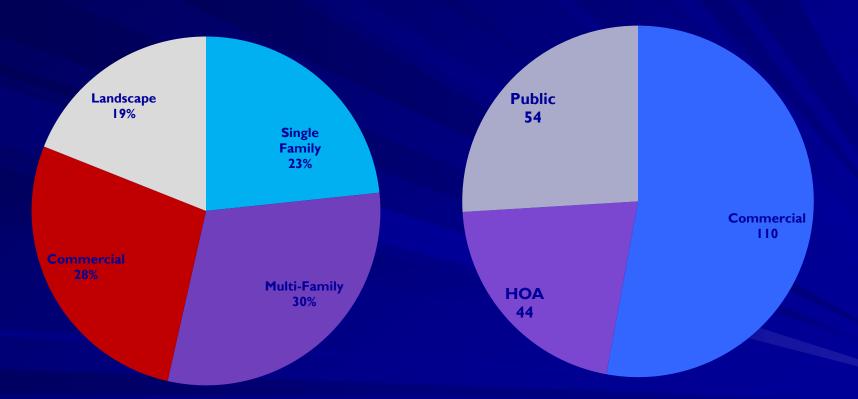




Landscape Customers

Estero Water Use 2010

Number of Landscape Sites: 208

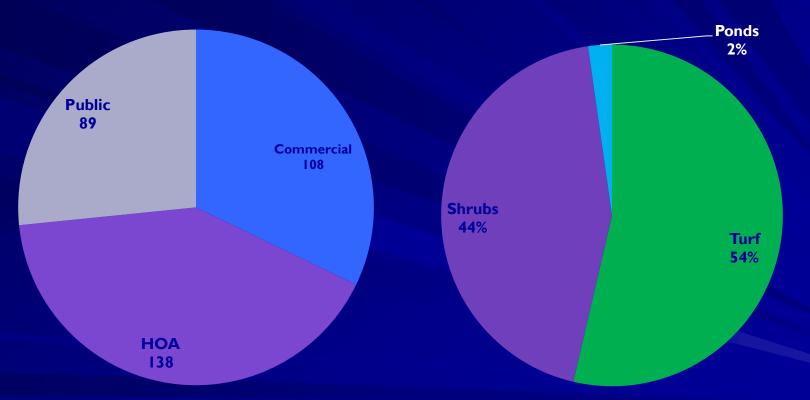




Landscape Acres

Number of Irrigated Acres: 334

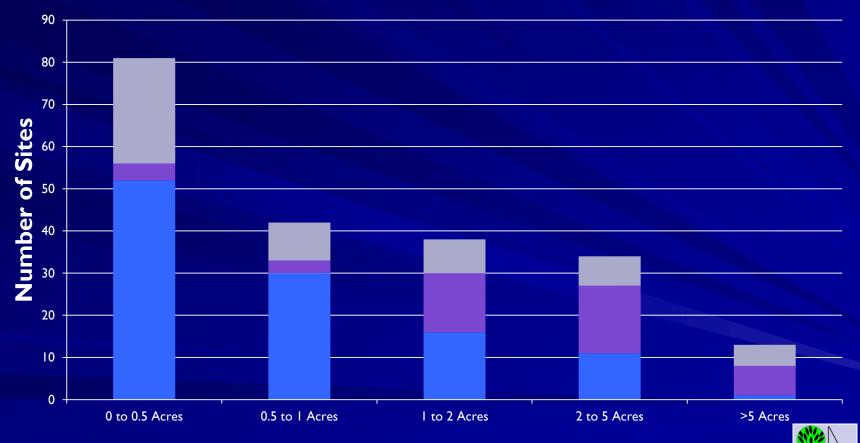
Acres by Type





Sites by Irrigated Area

■ Commercial ■ HOA ■ Public





Landscape Water Budgets

Start September 2009

- Intro Letter
- Water Use Report
- Site Map
- FAQ



Contractor:



Irrigation Water Rate Model

How do we...

- Achieve Fairness?
- Incentivize Conservation / Achieve Water Consumption Goals?
- Protect Beauty of our Master-Planned Community?
- Avoid a Complex Administrative Nightmare?

Solution!

- Base Consumption Rate
- Over Budget Penalty Fee Once Annually!
- Periodic Reporting of Water Budget Performance



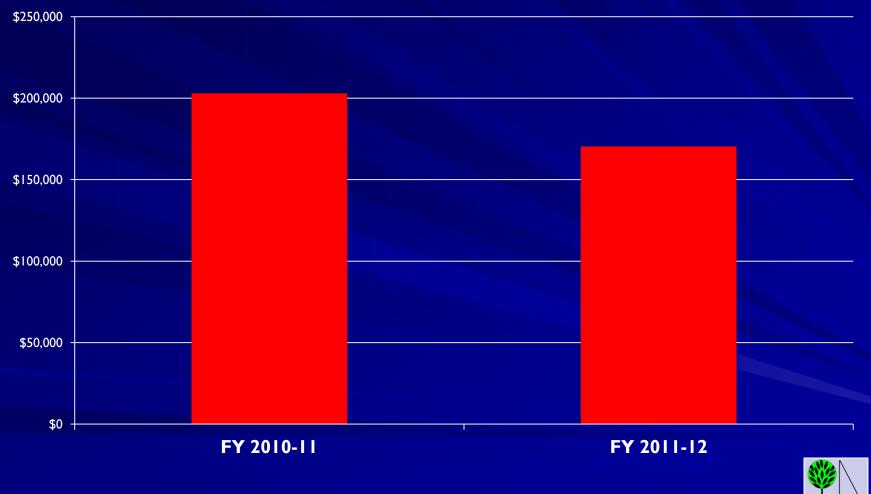
Over Budget Penalty Fee

FY 2009-10

- Budgets Informational Only
- **FY 2010-11** (Sept 2010 to July 2011)
 - Base Rate: All Water \$2.09/ccf
 - Over Budget an additional \$2.09/ccf
- FY 2011-12
 - Base Rate: All Water \$2.66/Ccf
 - Over Budget an additional \$2.00/ccf
- FY 2012-13
 - Base Rate: All Water \$3.13/ccf
 - Over Budget an additional \$1.57/ccf



Penalties \rightarrow Sustainability Fund



Annual Penalty Invoice: Practical

- Customers monitor water consumption monthly
- Time to adjust water budget assumptions as needed without financial implications
 - Customer Inquires
 - Field Surveys
 - Weather Data
- Single Invoice after FY
- Does not complicate regular water billing process
- Customer Mid-Year Changes Rare



Annual Penalty Invoice: Politics

District Board Supported

Consistent with Other Customer Rate Classes

Parks Department

Water Budget = Healthy Landscape



Annual Penalty Invoice: Effective

Customers over budget get walloped with a single large Penalty Bill

Overwatering declined 49% since program start

Triangular Accountability

Owners

HOA Boards

Apartment Complex Owners

- Property Managers
- Landscapers

Impact Achieved!

Overwatering Reductions 2.5 2 1.5 $\times \times \times \times$ $\times \times$

Average Overwater Depth (Feet Last 12 **Program Start Penalties Start** Penalty Invoice FY 0 Dec-09 Jan-10 Feb-10 Mar-10 Apr-10 Jun-10 Jul-10 Oct-10 Nov-10 Aug-10 Sep-10 Jul-09 Aug-09 Nov-09 1ay-10 Dec-10 Jan-12 Feb-12 Mar-12 Sep-09 Oct-09 Apr-12 Jan-II Feb-II Mar-II 1ay-12 Jun-12 Nov-11 Dec-11 Jun-11 Jul-11 Aug-11 Sep-11 Apr-11 May-I I Oct-|| –––––HOA –––––Commercial ––×––Public



Landscape Water Budgets with an Annual Kick

Months)

0.5

Overwatering Reduction by Type





Key Point: Communicate

 Parks Department not immune
Work with HOA and property manager groups
Show Landscape Firms their client's Penalty





Key Point: Monthly Monitoring

2011-2012	Fiscal	Year	Summary
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Net Over Water Ccf	2,234
Cumulative Penalty Fee @ \$2.00 per Ccf	\$4,468.00



Key Point: Healthy Landscapes





Key Point: Annual Penalty Invoice

No Slow Bleed - If water efficiency is Important then,

Get their Attention!

