

Ken Friedman, Randy Switt

Dept. Of Environmental Engineering Sciences, U. of Florida

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Overview of the Conserve Florida Clearinghouse EZ Guide

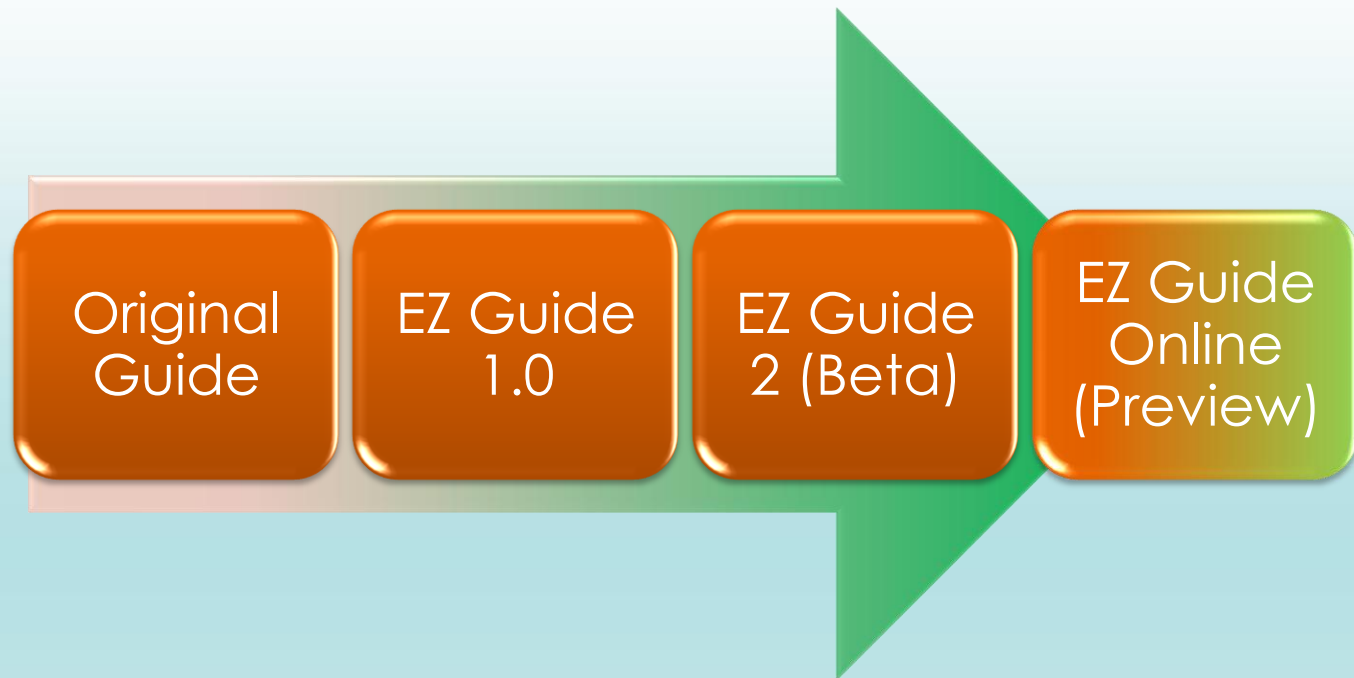


Introduction

- Purpose of EZ Guide
 - Illustrate utility system characteristics
 - Identify water conservation practices that maximize water savings and cost effectiveness
- Assist in tailoring a conservation program to high water use sectors/customers
- Provides a uniform framework to allow consistent conservation program comparisons between utilities

Introduction

- History of Guide Development



EZ Guide 2 - Links

- EZ Guide Links
 - http://www.conservefloridawater.org/ez_guide.asp
- EZ Guide 2 Download
 - <http://library.conservefloridawater.org/publications/2414674.xlsm>
- EZ Guide 2 User Manual (pdf)
 - <http://library.conservefloridawater.org/publications/3039237.pdf>

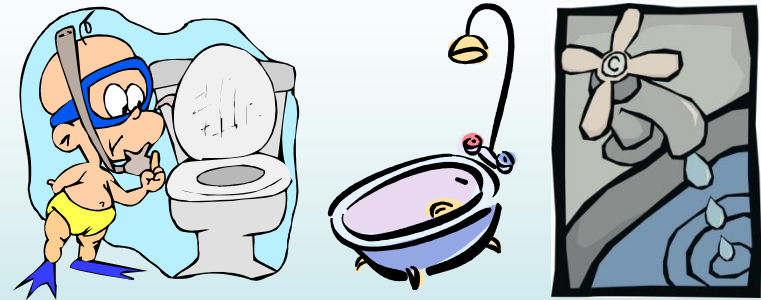
EZ Guide 2 – Method of Analysis

“How” does it work?

- Water Production



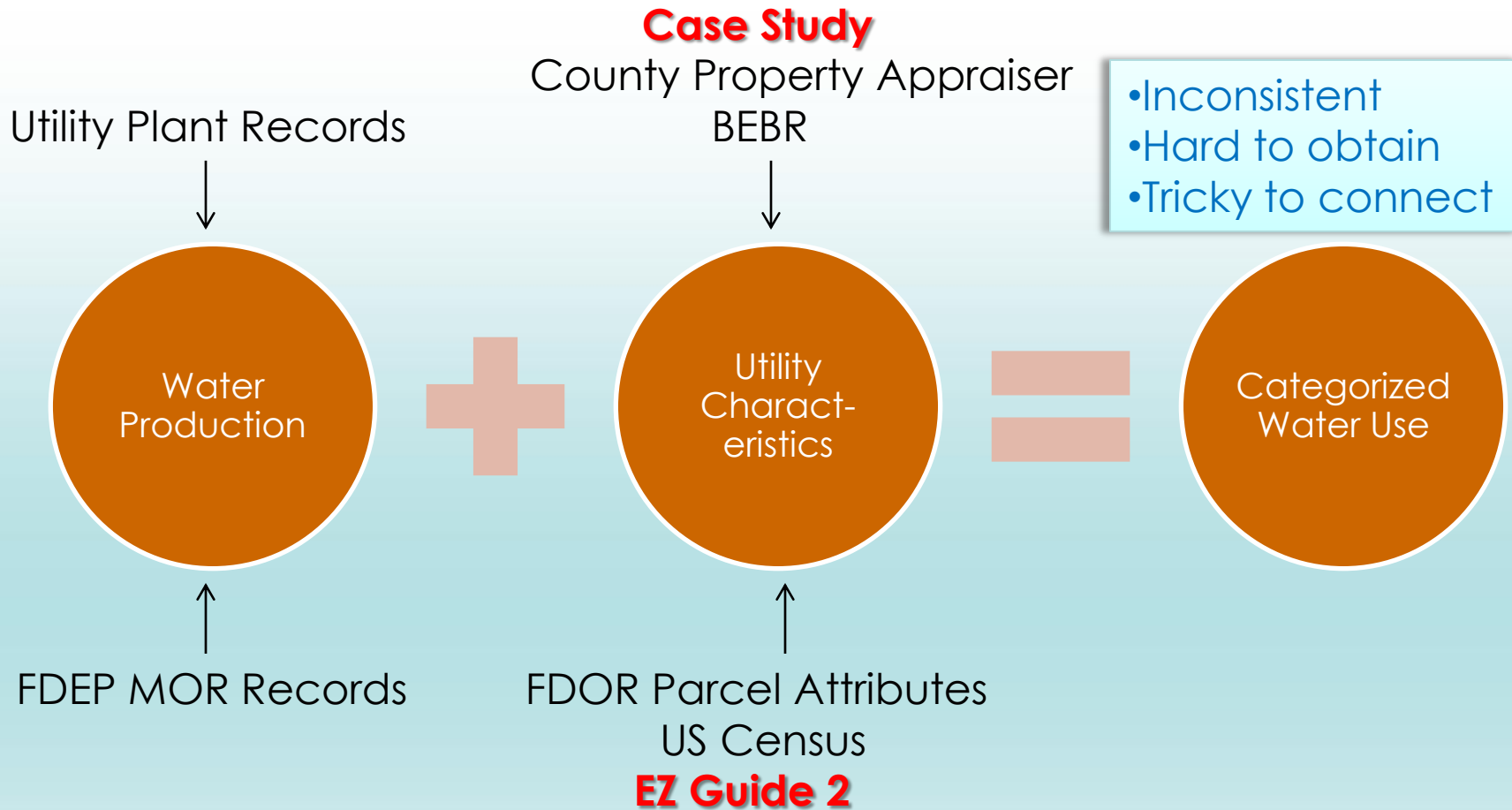
- Water Consumption



- Obtained from FDEP Monthly reports

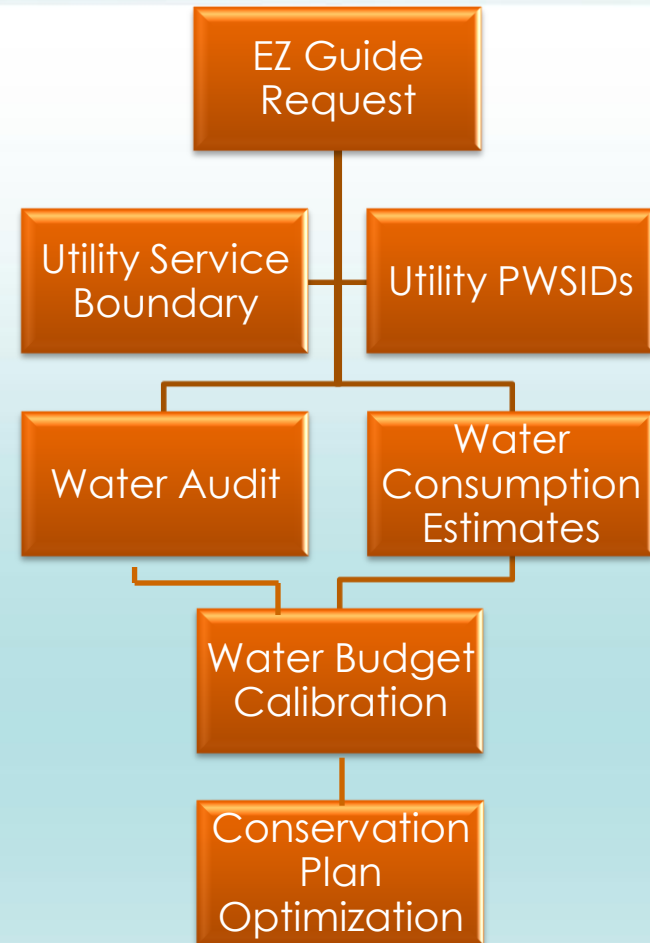
- Parcel data obtained from Department of Revenue and US Census
- Estimate number and age of fixtures

EZ Guide 2 Overview



EZ Guide 2 Overview

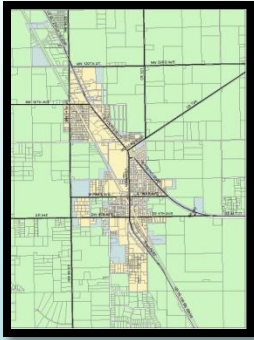
- Top level view of EZ Guide steps



EZ Guide 2 - Prerequisites









- Microsoft Excel 2007



- Provide Clearinghouse with **Utility Service Boundary**
- Provide Clearinghouse with **PWSIDs** (Potable Water System IDs) managed by Utility

EZ Guide 2 – Color Key

Color Key for EZ Guide 2.0

	Column/Table Headers
	User Input/Calibration Field
	Default Parameter
	Optional User Input
	Row Labels
	Calculated Field

EZ Guide 2 – Profile Section

Data Sources

- FDEP Basic Facility Reports
- FDEP Monthly Operation Reports

Table 1.1.1 Utility Profile

Utility Profile	
PWS IDs e.g.(02xxxx,03xxxx)	4061429
Name of Utility	Utility
Type of Water Supplier	Retail
Address	
Description	

Utility and
User
Identification



Table 1.1.4 FDEP Basic Facility Report

FDEP Basic Facility Report	
Analysis Year	2009
Design Capacity (gal/day)	20,000,000
Number of Plants	1
Number of Service Connections	18,077
Population Served	63,270
Population Served	63,270

Enter
Treatment
imports and
exports

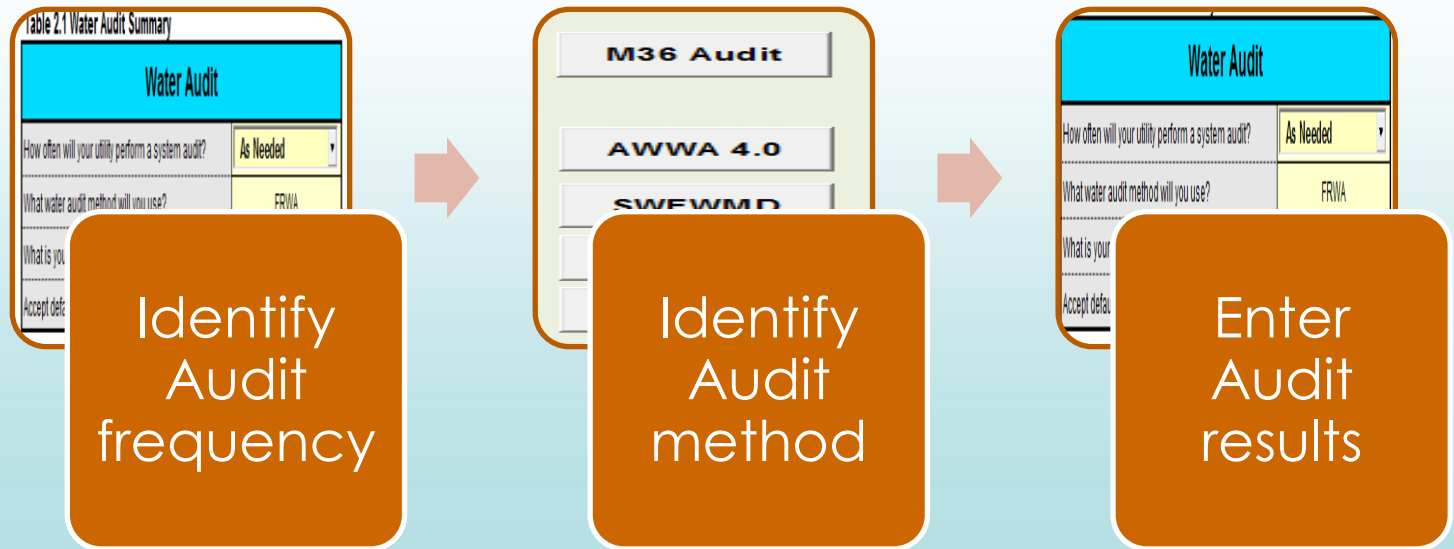


Review and
correct water
production

Results

- Annual Water Production

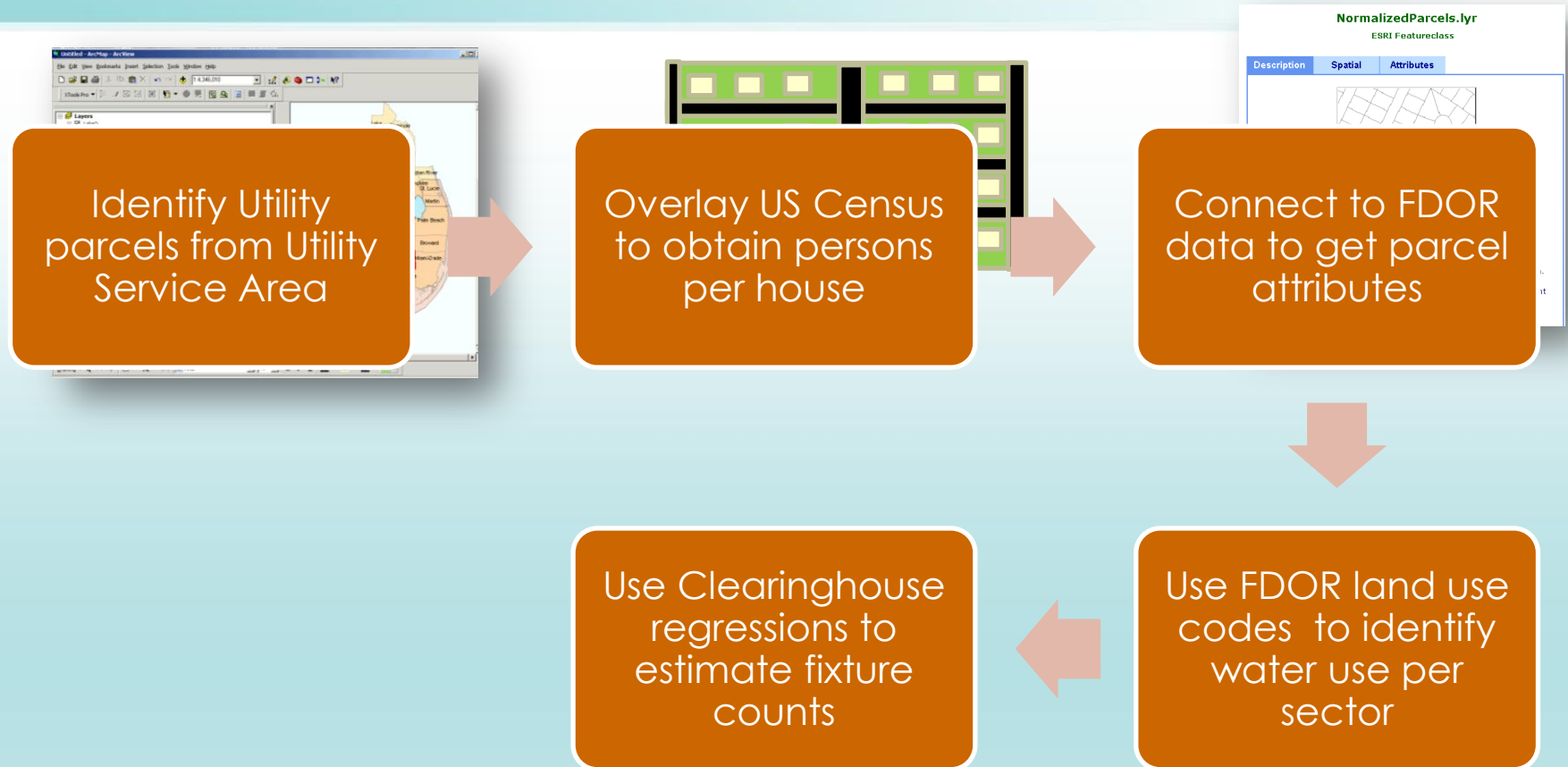
EZ Guide 2 – Audit Section



Results

- Estimated Water Loss

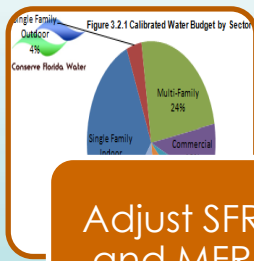
EZ Guide 2 – Water Budget method



EZ Guide 2 – Water Budget Section

Data Sources

- FDOR Parcel Attributes
- US Census (Persons per house)



Adjust SFR and MFR Indoor coefficients

Sector	Number of Parcels
Single Family Residential	8,951
Multi-Family Residential	734
Commercial	315
Industrial	420
Institutional	541

Adjust CII Parcels and coefficients

3.2.4 Single Family Indoor Calculation

Fixture Type	Flow (GPD)	2005-2014	2015-2024	Overall
Total number of SFR parcels	4,676	390	3,285	8,951
% of accounts with automatic toilets	91	226	671	998
Number of SFR parcels with automatic toilets	421	226	2,004	2,651

Calibrate SFR Outdoor coefficients

Fixture	Residential Service Life (years)	Commercial Service Life (years)
Toilets	40	20
Urinals		20
Closets		
Sinks		
Pie-Pan		

Update Fixture service lives

Results

- Estimated annual water use classified by sector
- Estimated fixture types and counts

EZ Guide 2 – BMP Selection

With fixture counts, potential water savings can be calculated:

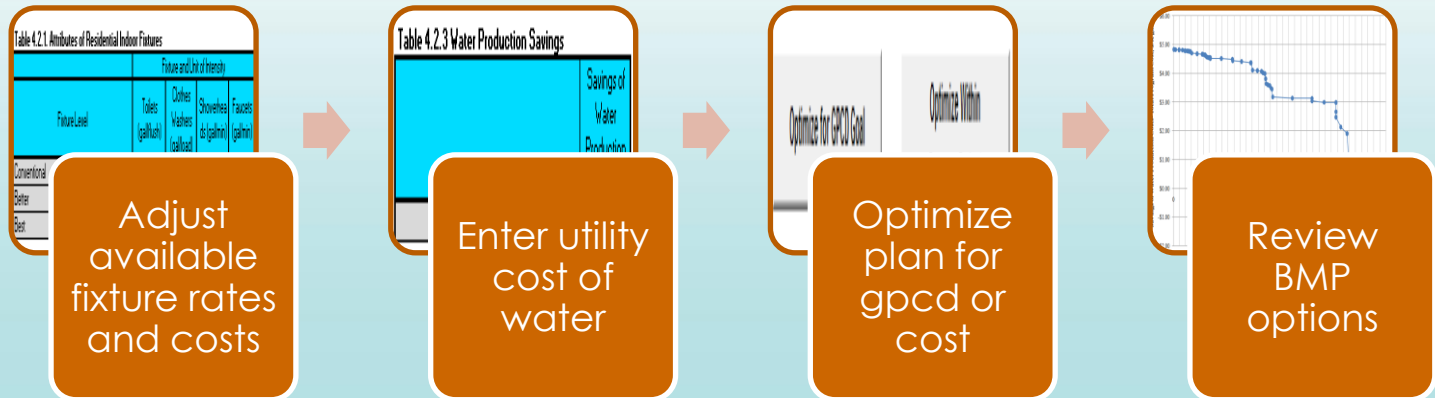
Per Person Daily indoor water use =

(toilet) ~~3.5~~^{1.28} gpf x 5.1 flushes +
(faucet) ~~2.2~~^{1.0} gpm x 8.1 minutes +
(shower) ~~2.5~~^{1.75} gpm x 5.3 minutes +
(dishwasher) ~~14~~^{4.5} gal/load x 0.1 loads +
(clothes washer) ~~45~~¹⁶ gal/load x 0.37 loads

EZ Guide 2 – BMP Section

Data Sources

- Fixture counts from water budget
- Calibrated coefficients



Results

- Potential water savings

EZ Guide 2 – Measures Section

- Descriptive input of qualitative conservation activities

5.1.1 Conservation Measures

Line	Measures	Select and Describe Implemented Measures	Modify Existing Measure, or Select and Describe Planned Measures
	Operational Measures	<input type="checkbox"/>	<input type="checkbox"/>
1	Source-water metering	<input type="checkbox"/>	<input type="checkbox"/>
2	Service-connection metering	<input type="checkbox"/>	<input type="checkbox"/>
3	Fixed-interval meter (reading, testing, calibrating, repairing & replacing)	<input type="checkbox"/>	<input type="checkbox"/>

EZ Guide 2 – Future Development

- Water use projections
 - Population estimation
- BMP program tracking
 - Include existing or prior programs and activities
- Increased options for Irrigation restrictions
- Multi-year calibration
- Platform refresh and update (more later)

Questions?

