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Eugene Water & Electric Board/ICF International

A Water Supplier's Perspective on Irrigation Code

Eugene Water & Electric Board/Best Management Partners

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Water Smart Innovations 2013



Introductions

- About Eugene Water & Electric Board
 - About 60,000 service connections
 - Landscape irrigators: our water utility's best customer
 - Too much of a good thing
- About Best Management Partners
 - Established in 1993
 - Water & Energy Efficiency
 - Served more than 100 utilities
 - CA DWR Certified Landscape Auditor

How did we get here?

- Do your own thing!
- Voluntary Public/Private Partnerships
- Voluntary Green Building Labeling
- Local Landscape Ordinances
- Statewide Model Landscape Ordinance
- Voluntary Green Building Code
- Required Building Code

Do your own thing!

- Benefits
 - No limitation on resource use
 - Creativity unleashed!
- Costs
 - No limitation on resource use
 - First come, first served until there is nothing

Public/Private Partnerships

- Voluntary participation in return for promotion by the water utility
 - EWEB/OLCA: Water Wise Landscape Contractor Program
 - SNWA: Water Smart Contractor Program
 - CLCA: Landscape Industry Certified Technician
 - PLANET: Several Certifications
 - IA: Several Certifications

Green Building Labeling

- Started out as energy efficient buildings
- Scorecard to earn points toward increasing levels of labeling
- Expanded to include whole site sustainable building issues
- Landscape measures included as water efficient building or site attribute points

Voluntary Programs

- Benefit
 - Consumers and contractors offered a choice
 - Recognition for doing the right thing
- Cost
 - Doing the right thing is often more expensive (initially)
 - Not widely adopted by consumers or contractors

Ordinance or Ordnance?

- Slow or inconsistent adoption of voluntary programs
- Resource scarcity and degradation, especially water supply
- Ordinances might have felt like ordnance aimed at the landscape irrigation industry
- Ordinances are actually aimed at sustaining the long term health of our way of life
- Ordinances achieve equity – everyone has to play by the same rules, applied across economic divisions

Ordinances

- Benefit
 - More consumers and contractors doing the right thing
 - Fines for non-compliance can be used to fund community outreach and technical & financial assistance programs
- Cost
 - Enforcement is costly to responsible agencies
 - No standardized agreement of the right thing so contractors may have conflicting compliance requirements across several jurisdictions

Statewide Model Ordinances

- Water management is a local issue
- Water resource scarcity and degradation has now become a statewide issue
 - Statewide model landscape ordinance is one of several strategies to require local ordinances
- Water resource scarcity and degradation fast becoming a national and international issue
- Facing reality that threatened water supplies require us to adapt to the local climate and environment

Landscape/Irrigation Codes and Standards

- Maturation of the move toward ordinances
- Model codes and standards are available worldwide for adoption by authorities having jurisdiction
- Model codes provide uniformity to regulations, metrics and measurements across jurisdictions
- Funding mechanism for enforcement by building officials (permits)

Codes & Standards Development

- IAPMO-Green Plumbing & Mechanical Supplement
- ICC-International Green Construction Code
- ASHRAE-189.1 High Performance Buildings
- ASABE-Landscape Irrigation Standards
 - X626: Auditing Landscape Irrigation Systems
 - X627: Environmentally Responsive Landscape Irrigation Control Systems (smart controllers)
 - X623: Landscape Water Availability and Use Standard (water budget)
 - X633: Testing Soil Moisture Sensors for Landscape Irrigation
 - Plan to transition all IA SWAT protocol to ASABE standards

IAPMO

- Codes and standards for plumbing, mechanical systems and sustainability
- Protect public health and safety;
- Code related services in cooperation with industry
 - ANSI certified consensus process
- Green Plumbing and Mechanical Supplement
- Landscape Irrigation Requirements in 2012
GPMCS

ICC

- Codes and standards for plumbing, mechanical systems, and sustainability
- Protect public health and safety;
- International Green Construction Code
- Codes and standards related services in cooperation with industry
- Landscape, site development and irrigation regulations in IgCC - 2012

ASHRAE

- American Society of Heating, Refrigeration and Air-Conditioning Engineers
- Standards development for building systems, usually focused on HVAC
- Standards development in with industry
- ASHRAE 189.1 Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings
- Landscape, site development and irrigation regulations

ASABE

- American Society of Agricultural and Biological Engineers
- Safe and abundant food, clean water, life-enhancing and life-saving products from bio-based materials
- Improve protection of people and resources
- Standards development and education, including crop irrigation

Codes & Standards

- Benefits
 - Vetted nationally/internationally; adopted locally with amendments
 - Consistent enforcement
 - Responsible and sustainable resource use
- Cost
 - Doing the right thing is often more expensive initially
 - Stretch codes and standards can exceed usual B/C ratio requirements

Now that we are here...

- Landscape/Irrigation code is critical for preserving the industry
 - Levels the playing field
- Education and certification is widely available thanks to early voluntary efforts
- The wise resource business model is the only business model for the future
- Not all benefits are received in the present, some appear in the future.

Questions?

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