



Alachua County Landscape Irrigation Efficiency Code



July 27, 2015

Residential Water Use

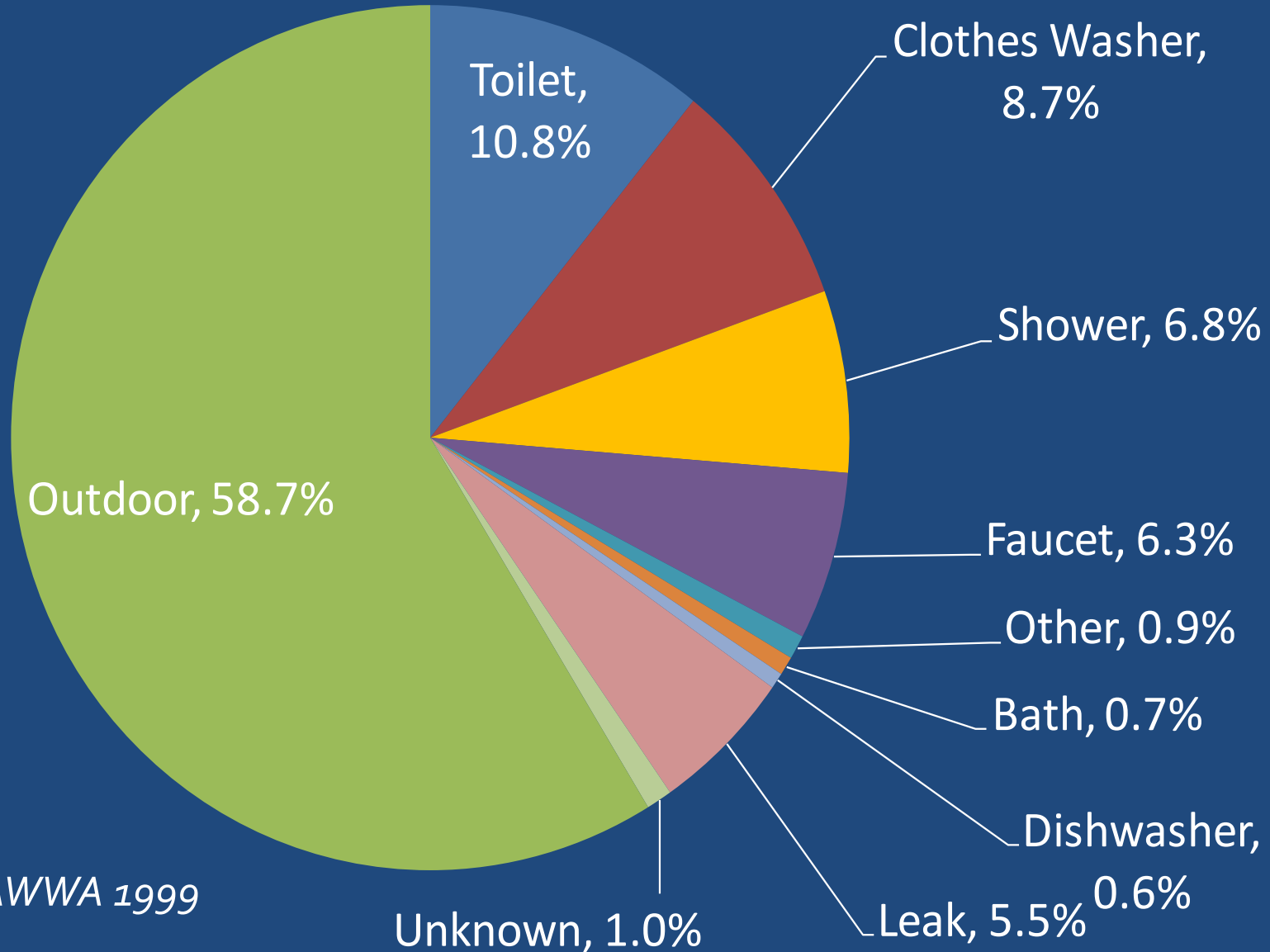


Chart Source: AWWA 1999

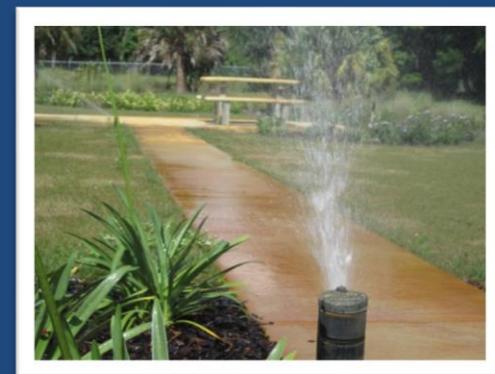
Water Use

There are at least 14,000 landscape irrigation systems within Alachua County

Average daily water use in newer homes:

- 💧 358 gallons- with irrigation system
- 💧 190 gallons- without irrigation

90% of new homes (in GRU's service area) have irrigation systems



Local Government Tools for Reducing Outdoor Water Use

- Conservation rates
- Public education
- Irrigation schedule restrictions
- Change development trends
 - Florida Water Star Program
- Landscape irrigation efficiency code/design standards





Proposed Landscape Irrigation Efficiency Code

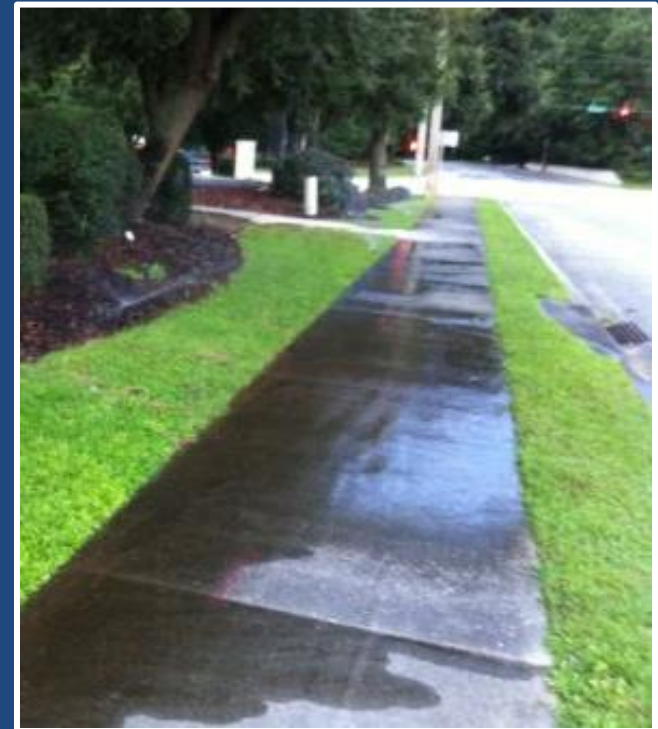


Stakeholder Outreach

- Builders Association of North Central Florida (BANCF) Liaison meetings (2014 - 2015)
- Presentations at stakeholder meetings
- Joint City/County Water Policy Committee (4/13/15)
- League of Cities Meeting (5/26/15)
- County Manager letter to City Managers (6/1/15)
- County Manager email to City Managers (7/9/15)
- Hawthorne (7/7/15), High Springs (7/9/15), Newberry (7/13/15), Alachua (7/27/15), Public Workshop for Cities (8/5/15), Gainesville (8/6/15)

Intent

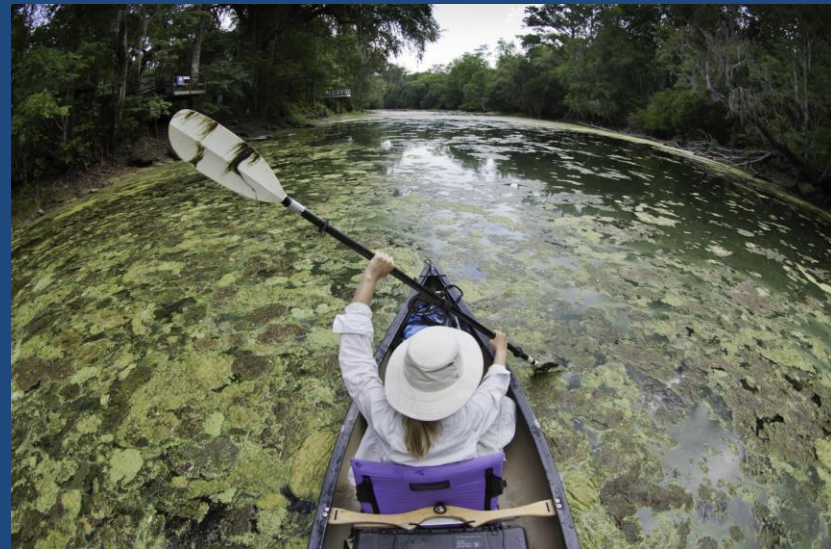
- Reduce discretionary outdoor water use
- Improve water quality by reducing lawn chemical pollution from inefficient irrigation



Water Quality

- Numerous water bodies in Alachua are impaired by nitrogen and phosphorus
- Residential fertilizer is one of the main sources
- Proper irrigation management is key to reducing nutrient pollution

Photo by John Moran - May 2012



Jurisdiction and Applicability

- Applies within Alachua County (including municipalities)
- All new residential/commercial irrigation systems (including open space and common areas)
- Does not apply to temporary irrigation for establishment or to Florida Water Star Certified properties



Alachua County Charter

- Voter approved referendum November 11, 2000 amended County Charter
- Establishes County authority to set minimum standards for air and water resources protection
- Recognizes city authority to establish stricter standards

Irrigation Professional Registration

- All irrigation professionals installing and/or maintaining irrigation systems must register with Alachua County by November 1, 2015.
 - Business name, contact information, certifications
 - No registration fee proposed

Irrigation System Approval

All new irrigation systems require County approval

- Proposed effective date March 1, 2016
- Submit completed Application Review Form, irrigation site sketch, and fee
- County will review and send approval letter
- System inspection

Irrigation System Inspection

All new systems must be inspected by **one** of these methods:

- A. Self inspection by irrigation contractors with Irrigation Specialty Contractor Licensure by the State of Florida or by Florida Water Star Accredited Professional, or
- B. 3rd Party Inspection by Florida Water Star Certifiers, or
- C. Inspection by Alachua County
(inspection fee required)

Design Standards

- High volume irrigation shall not exceed 60% of landscaped area (applicable on lots over 1/8 acre).
- Maximum irrigated area of residential lots shall not exceed 0.5 acres.



Spray head



Rotor

Design Standards

- No high volume for trees and shrubs
- Separate zones for spray heads and rotors
- Separate zones for turf and mulched areas
- Pressure regulating spray heads
- No overspray to impervious areas



Completion of Installation

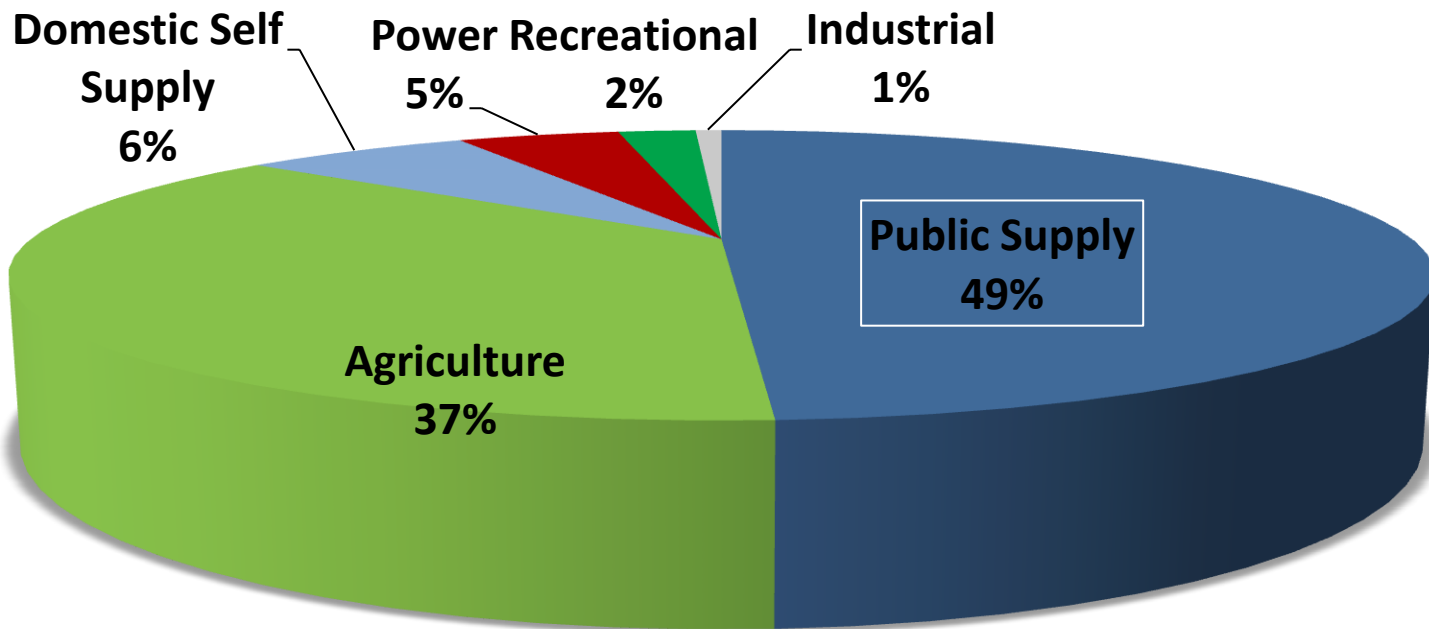
- Irrigation professionals must conduct final testing
- Must provide property owner with:
 - Site sketch
 - Self inspection form
 - Manual for irrigation controller
 - Maintenance schedule and recommendations

Maintenance of Irrigation Systems

- Annual inspections for leaks and performance
- Rainfall shut off devices properly functioning
- Irrigation systems with known leaks shall not be operated until corrected
- Systems must be re-adjusted to meet irrigation timing restrictions 60 days after installation

Exemptions

- Agricultural activities
- Vegetable gardens and fruit trees
- Athletic Fields, golf courses, cemeteries



2010 Groundwater data for Alachua County (USGS)

Alternative Compliance

- Consideration of alternative compliance methods for unique site features, innovative design, or extraordinary hardship



Code Implementation

- County will offer training opportunities for local irrigation professionals.
- Violations of the code will lead to written warnings, fines , and possibly court appearances.
- Retrofitting of non-compliant irrigation systems may be required to achieve compliance.

Return on Investment

- Water utility bill savings will offset start up costs
- Estimated \$700 - \$1000 per yard for more efficient irrigation and landscaping
- Estimated 2 to 3 year payback period
- Property owner may choose to install higher value landscaping that is not required by the Code



Planning
NOW, so
there is
adequate
water for the
future.

California Drought
Photo Credit: NY Times

Contact

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www.AlachuaCountyWater.org