EPA WaterSense

Commercial and Institutional Sector Stakeholder Meeting

WaterSense Team

Today's Agenda

- **Welcome**

- **WaterSense Update**

- **Overview of White Paper**

- **Brainstorming**

- **Filtering and Analysis**

- **Public Comment**

- **Wrap-up**

Meeting Objectives

- Obtain feedback on information presented in White Paper

- Identify stakeholder priorities for WaterSense CI program structure

- Identify barriers to potential program options

What Is WaterSense?

A partnership program sponsored by the U.S. EPA

Mission

To promote the value of water and help Americans make smart decisions regarding water use and water-using products.

To increase the adoption of water-efficient products and services by consumers and organizations.
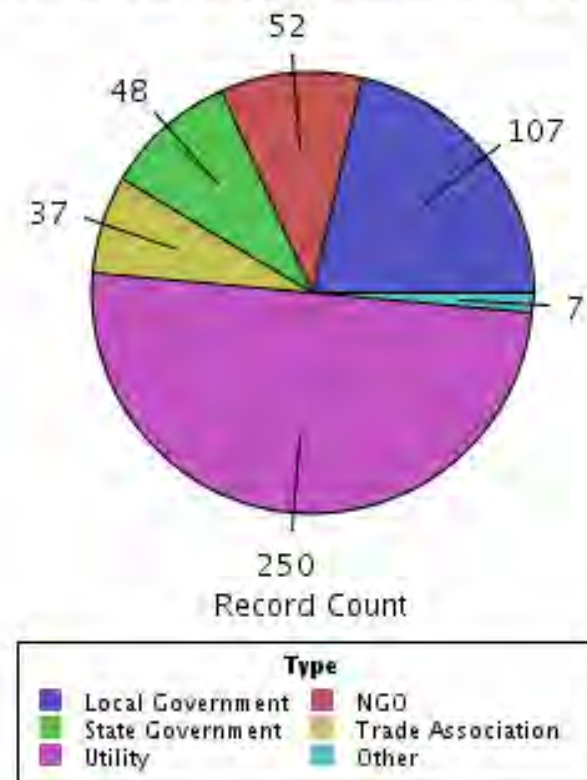
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WaterSense Partners

Partners:

- 501 Promotional Partners
  - 250 utilities in 37 states
  - 48 state agencies
  - 107 local governments
  - 52 NGOs
  - 37 trade associations
- 125 Retailers/Distributors
- 102 Manufacturers
- 4 Certifying Organizations
- 779 Irrigation Partners

WaterSense Organizational Partners

52, 48, 37, 107, 7, 250

Record Count

Type
- Local Government
- State Government
- Utility
- NGO
- Trade Association
- Other

Partnering for a Shared Goal

- Facilitate networking and cross-collaboration

- Reach broader audiences

- Lend credibility to an issue

- Leverage resources for greater impact

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Accomplishments

- Total water savings from all WaterSense labeled products shipped in 2008 topped 9.3 billion gallons
  - Enough water to supply 100,000 households for one year

- $57.4 million in water and wastewater cost savings

The WaterSense Label

To earn the WaterSense label:

- 20 percent less water
- Equivalent or superior performance
- Independent, third-party testing by licensed certifying bodies

Specification Development Process

1. Technical and market research

2. Notification of Intent (NOI) to develop a specification

3. Draft specification

4. Final specification

WaterSense Labeled Fixtures

- **Toilets**
  - 350+ labeled models
  - Nearly 9% of market share

- **Faucets and faucet accessories**
  - 1200+ labeled models
  - 11.7% market share (faucets)
  - 24.6% market share (faucet accessories)

- **Find Products**
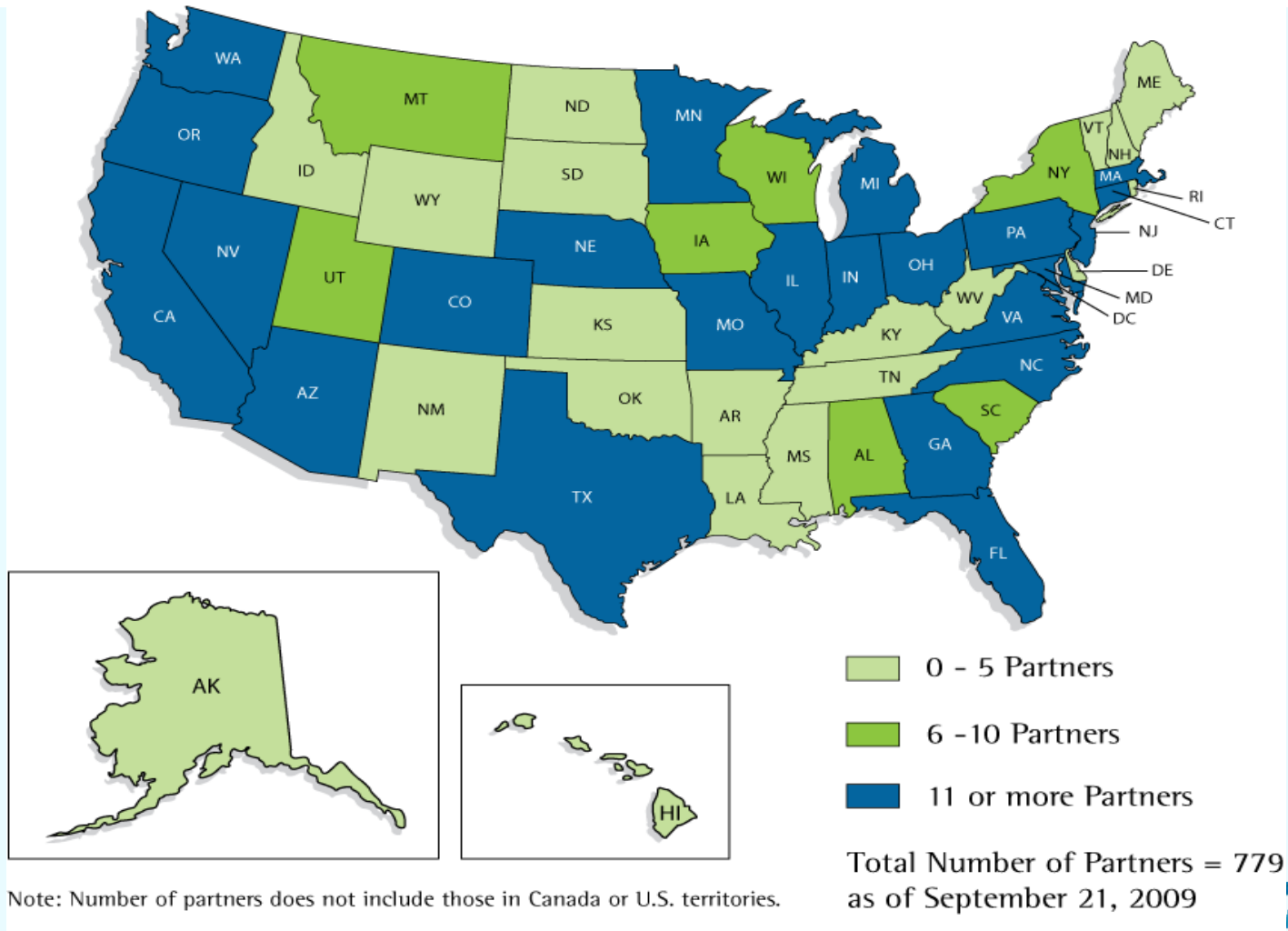 - www.epa.gov/watersense/pp/index.htm

"Products Pipeline"
2009 and beyond

	2009/2010	*2010 and Beyond*
Irrigation	*Irrigation Controllers*	*Moisture Sensors* *Drip Micro Technology*
Residential Plumbing	*Showerheads*	*Water Treatment Systems* *Water Softening Systems*
Commercial Plumbing	*Urinals* *Pre-rinse Spray Valves*	*Flushometer Valve Toilets*
Other		*Autoclaves* *Glassware Washers* *Additional Professional Certifications*

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Irrigation Partners Across the Country

0 - 5 Partners

6 -10 Partners

11 or more Partners

Total Number of Partners = 779
as of September 21, 2009

Note: Number of partners does not include those in Canada or U.S. territories.

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Overview of New Homes Specification

- **Indoor**
  - Service pressure
  - Plumbing fixtures
  - Hot water distribution
  - Appliances (if installed)
  - Other equipment (if installed)
- **Outdoor**
  - Landscape design
  - Irrigation (if installed)
- **Homeowner Education**
  - Homeowner's manual
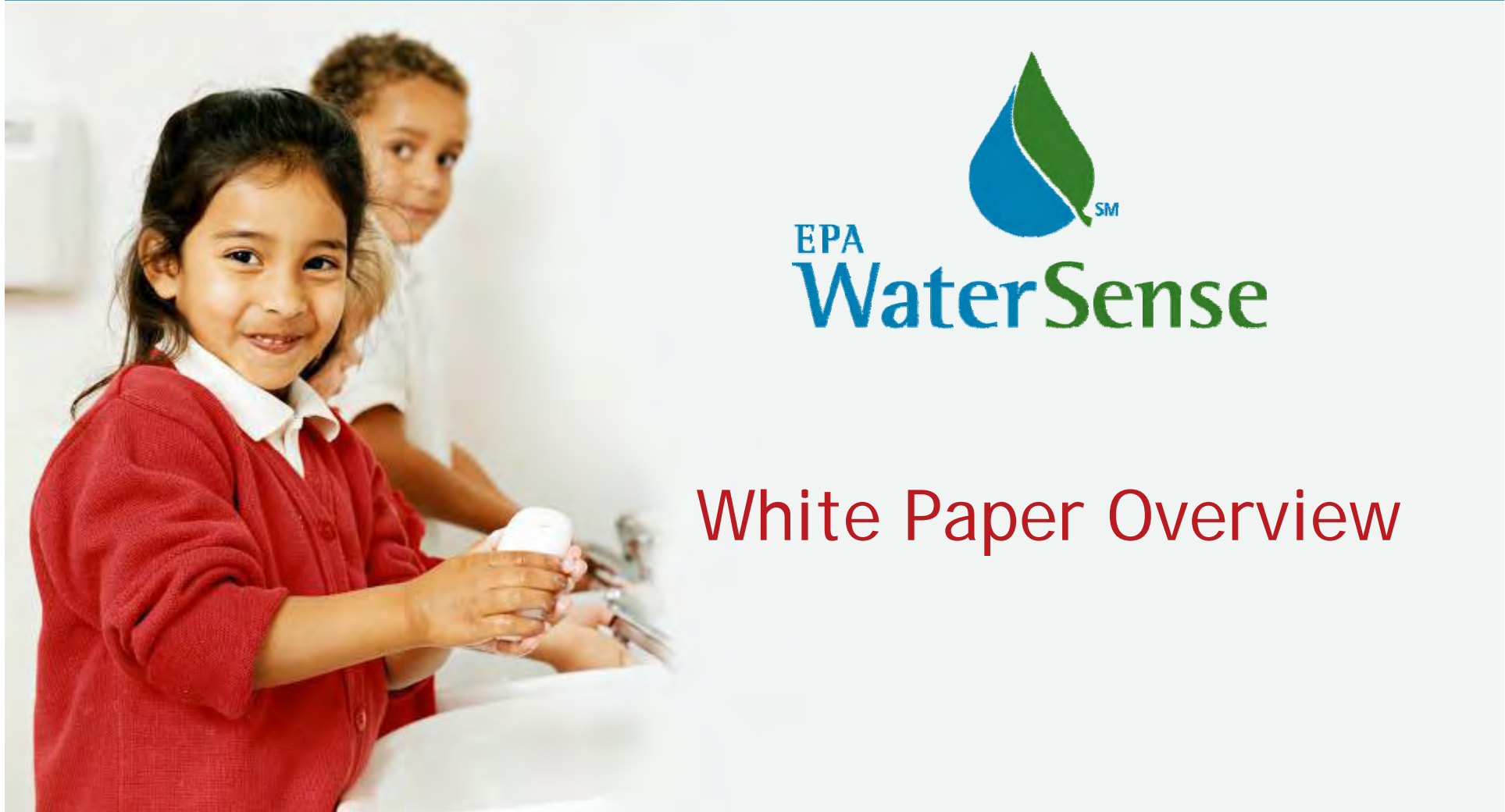

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Goals of Potential CI Program

- **Verifiable and documented water savings**
- Raise visibility of WaterSense program
- Increase demand for WaterSense labeled products
- Assist water utilities with their larger customers
- Foster private investment in water efficiency
- Increase participation and partnership opportunities

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CI Program Development Process

- Gather information
  - White paper and stakeholder meetings
- Flesh out several options
- Present to management
- Release a Notification of Intent for particular structure **if approved**
- Hold additional stakeholder meetings

White Paper Overview

A review of the currently available literature and data pertaining to Commercial and Institutional water use on the national level.

Defining the CI Sector

WaterSense defines CI users of water as all those that cannot be clearly categorized as residential or industrial.
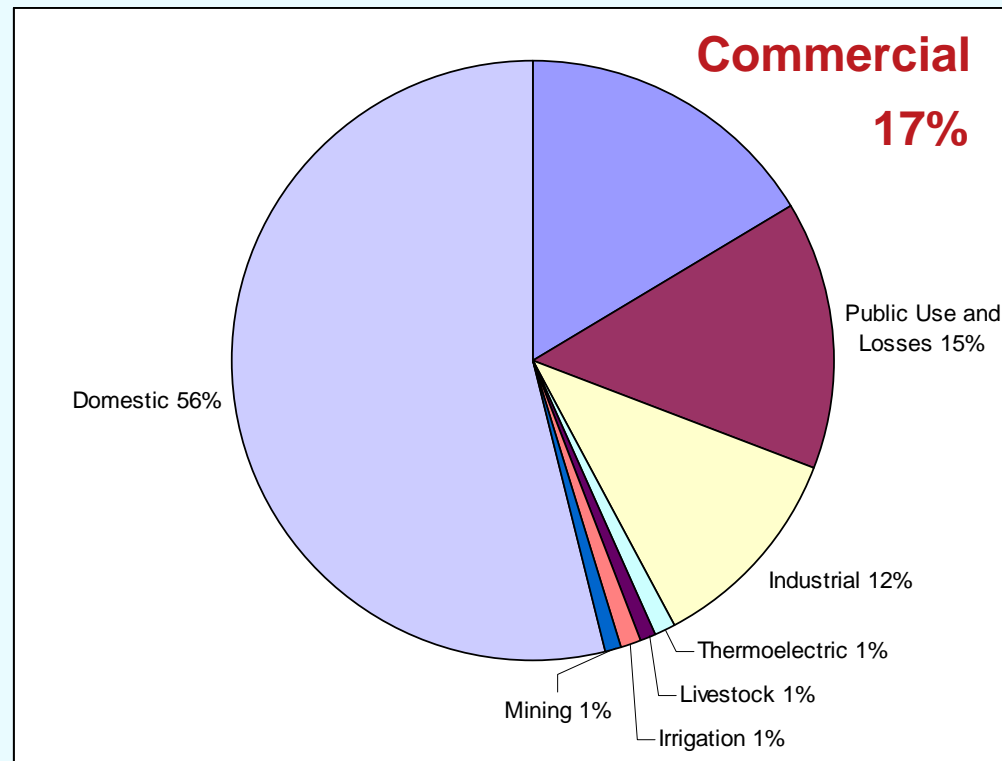
Included Subsectors

- Office Buildings
- Schools/Educational Complexes
- Commercial & Retail Centers
- Hotels & Motels
- Laboratories
- Laundry Facilities

- Vehicle Washes
- Bakery/Pastry Shops
- Auto Service & Repair Shops
- Fuel Service Stations & Convenience Stores
- Churches & Other Places of Worship

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What We Know

- The CI sector consumes a substantial portion of the publicly supplied water in the United States

Pie chart:
- Commercial 17%
- Public Use and Losses 15%
- Industrial 12%
- Thermoelectric 1%
- Livestock 1%
- Irrigation 1%
- Mining 1%
- Domestic 56%

What We Know

- CI water users tend to represent a small percentage of accounts
- CI water use varies from region to region due to multiple factors
- Lack of uniformity in studies
- Studies do not typically contain extensive national data

Subsector Water Use

Primary sources of data on subsector water use:

- Solley, Wayne, Robert Pierce, and Howard Perlman. *Estimated Use of Water in the United States in 1995*. U.S. Geological Survey Circular 1200. 1998.

- Gleick, Peter, et. al. *Waste Not, Want Not: The Potential for Urban Water Conservation in California*. Pacific Institute. November 2003.

- U.S. Environmental Protection Agency. *Study of Potential Water Efficiency Improvements in Commercial Businesses*. Completed through grant by State of California Department of Water Resources. April 1997.
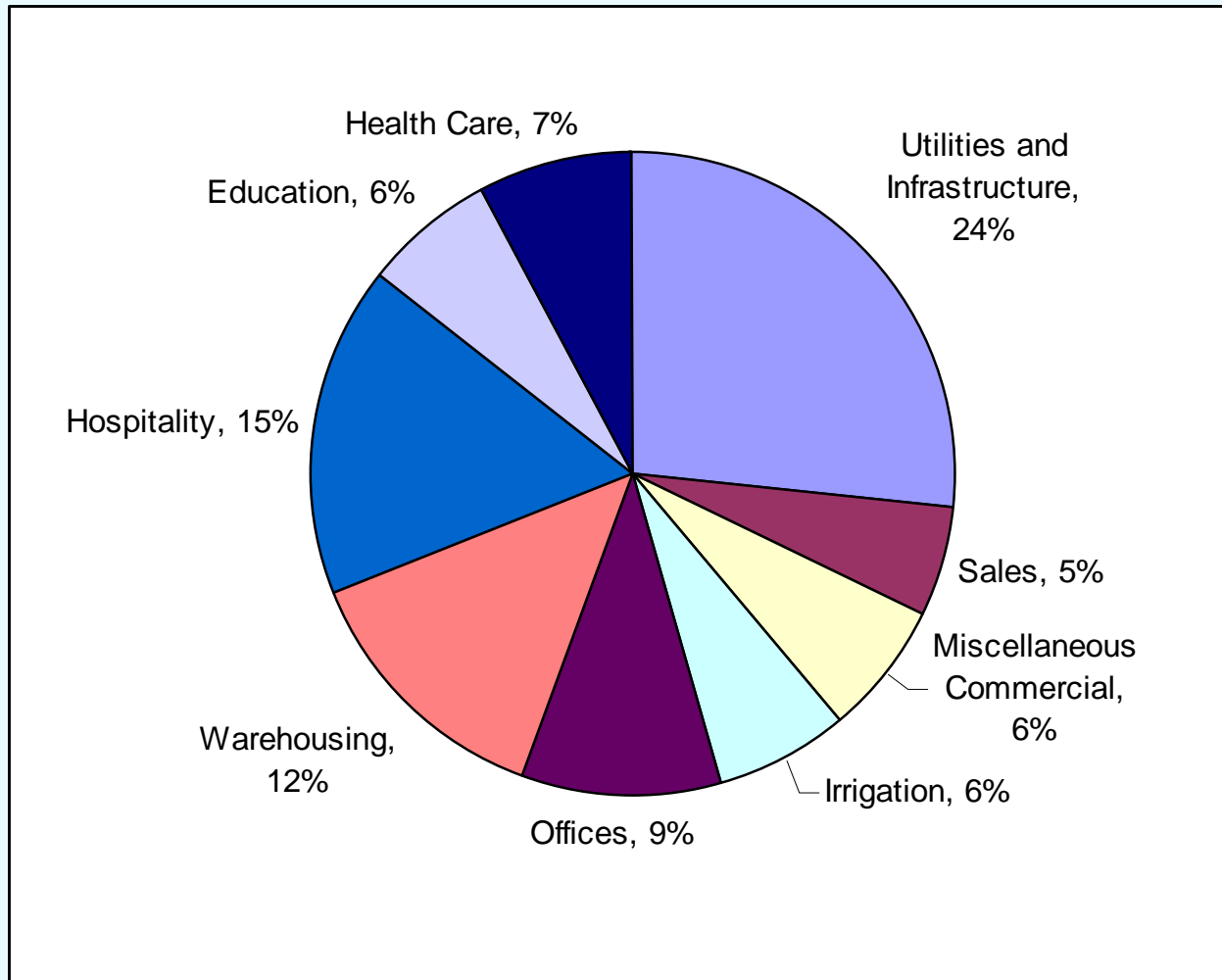
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Where is CI Water Being Used?

Subsector	Range from all 3 sources	Range from 1997 Survey	Weighted Avg.
Hospitals/Healthcare Facilities	2-20%	7-12%	7.32%
Office Buildings	8-17%	9-12%	9.2%
Schools	5-13%	5-8%	5.88%
Hospitality	6-16%	9-21%	14.8%
Laundries	1-4%	1-4%	1.73%
Car Washes	0-2%	0-1%	0.28%

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Where is CI Water Being Used?

Pie chart: Where is CI Water Being Used?
- Utilities and Infrastructure, 24%
- Sales, 5%
- Miscellaneous Commercial, 6%
- Irrigation, 6%
- Offices, 9%
- Warehousing, 12%
- Hospitality, 15%
- Education, 6%
- Health Care, 7%

What do These Subsectors Have in Common?

Hospitals | Office Buildings | Schools

Restaurants | Hotels & Motels

Legend:
- Domestic/Restrooms
- Cooling & Heating
- Landscaping
- Kitchen
- Laundry
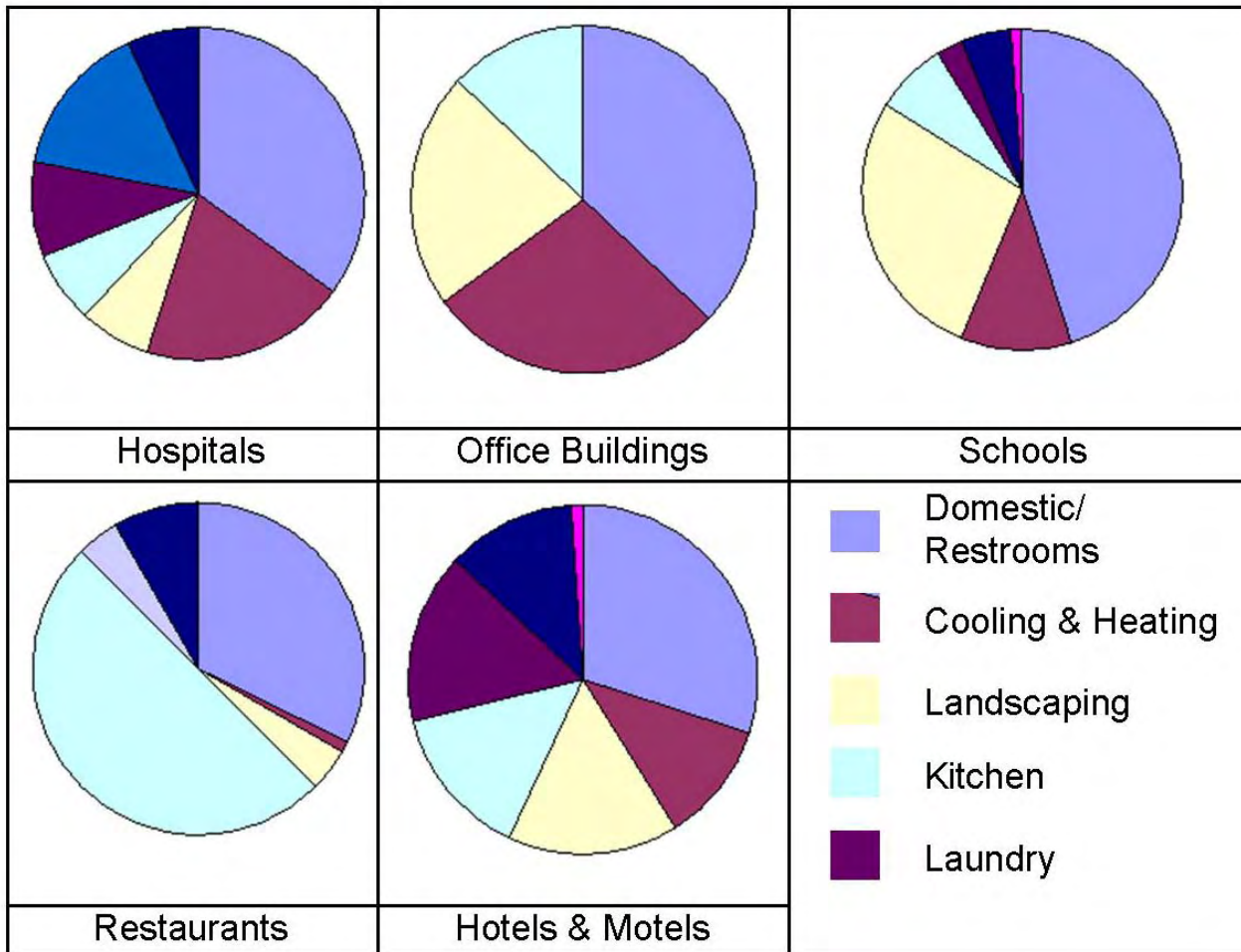
Potential Program Scope

- Comprehensive program with all CI sectors

- Phased subsector by subsector approach

Subsector Evaluation Factors

- Relative water use within CI sector
- Water use intensity
- Water-efficiency potential
- Willingness to participate
- Concentration of customers/accounts in subsector
- Connections to existing efforts
- Cross-sector applicability of tools and resources
- Measurability of results

Potential Program Structures

- **Certification and labeling program**
  - 3rd party certification/self-declaration
  - Single tiered/multi-tiered rating program
- **Commitment-based partnership with verification**
- **Awards-based partnership program**
- **Education and outreach**

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Potential Technical Approaches

- Flat percent reduction
- Percent reduction by sector
- Implementation of specified BMPs
- Technical assistance
- Auditing