

Industrial, Commercial, and Institutional Water Conservation

Collaborative efforts of northern Colorado water providers



WATER CONSERVATION BENCHMARKING COLLABORATION

Goal: Inform conservation efforts for industrial, commercial, and industrial sector

Process:

- ✓ Determine high-priority ICI sectors
- ✓ Gather water use data for these sectors
- ✓ Analyze and normalize data
- ✓ Develop useful water use benchmarks for priority sectors
- ✓ Disseminate benchmarks to water providers and users

Why Benchmarks are Important:

- The issues of **water quality** and **supply** reflect the State's **top environmental priority**.
- ICI sectors in Colorado present an area of particular need for conservation programs.
- Benchmarks inform conservation policy/decision making related to water budgeting/ allocation.
- Few reliable benchmarks exist for assessing performance and conservation in ICI sectors...**until now**.

Annual Benchmarks:

95% confidence interval for annual water consumption

- Restaurants: 0.17-0.21 thousand gallons (kgal)/square foot; 10.6-14.3 kgal/seat
- Schools: 0.012-0.019 kgal/square foot; 1.7-2.7 kgal/student
- Hotel/motels: 0.079-0.165 kgal/square foot; 30.2-39.5 kgal/room
- Nursing homes/assisted living: 0.062-0.101 kgal/square foot; 32.8-40.7 kgal/bed; 25.4-39.6 kgal/apartment

Benchmark Evolution:

- Collaboration among regional partners participating on an ICI task force whose goals include a robust, standardized water benchmark database containing relevant data for providers and consumers in many regions and industries
 - ✓ Aurora Water
 - ✓ City of Boulder
 - ✓ City of Fort Collins
 - ✓ City of Greeley
 - ✓ City of Loveland
 - ✓ City of Westminster
 - ✓ City of Thornton
 - ✓ Colorado Springs Utilities
 - ✓ Colorado State University
 - ✓ Denver Water
 - ✓ Northern Colorado Water Conservancy District
- Grant sponsorship by the Colorado Department of Public Health and Environment's Pollution Prevention Advisory Board (PPAB)

- Technical facilitation by The Brendle Group, Inc.

Website: water.brendlegroup.com