WaterSense at Work – May 2013 Summary

WaterSense is a partnership program administered by the U.S. EPA. The program seeks to protect the future of our nation’s water supply by offering people simple ways to use less water with water-efficient products, new homes, and services.

WaterSense at Work is a compilation of best management practices in water-efficiency, designed to help commercial and institutional facilities understand and better manage their water use, establish effective water management policies, and identify projects and practices that can reduce facility water use.

This document summarizes the WaterSense at Work guide - offering key elements and highlights to provide essential information.

Click here to see the complete online guide.

Planning – The key to successful water reduction efforts. Water management planning generally addresses water use reductions in four areas:

1. Reducing water losses (e.g., leaks).
2. Increasing the water efficiency of fixtures, equipment, systems, and processes.
3. Educating users about water efficiency to encourage water-saving behaviors.
4. Reusing water (e.g., reusing treated gray water or rainwater to water landscape areas).

Monitoring and Education – Track and measure progress to increase awareness and build support for projects and behavior changes by:

- Metering and submetering
- User education and facility outreach
- Leak detection and repair
- Codes, standards, and voluntary programs for water efficiency

<table>
<thead>
<tr>
<th>Key Areas to Monitor</th>
<th>Typical Usage &amp; Solutions</th>
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<tbody>
<tr>
<td>Sanitary fixtures and laundry (includes: faucets, urinals, showers, etc.)</td>
<td>Accounts for nearly 50% of total water use. Inspect for leaks, install high-efficiency faucets, waterless urinals, dual-flush toilets, etc.</td>
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<tr>
<td>Kitchen equipment (includes: ice machines, combination ovens, steam cookers and kettles, woks, disposals, dishwashers, etc.)</td>
<td>In restaurants, can account for nearly 50% of total water use; In commercial and institutional sectors, it can be upwards of 10-15%. ENERGY STAR® qualified dishwashers, ice machines, and steam cookers are at least 10% more water efficient and 15% more energy efficient than standard models, with some models saving significantly more.</td>
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<tr>
<td>Outdoor Water Use (includes: landscaping, irrigation, pool/spa equipment, vehicle washing)</td>
<td>Accounts for 5-30% of a facility’s total water use. Better landscaping and pool maintenance (e.g., filter cleaning).</td>
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<td>Mechanical Systems (includes: heating and cooling systems)</td>
<td>Usage varies by facility type, but can be as much as 30% of total water use. Energy and water efficiency measures should be implemented together.</td>
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¹ WaterSense at Work (online) includes sample worksheets that can help with water management planning efforts.
Alternative Water Sources – Facilities can further reduce potable water use by taking advantage of onsite alternative water sources. An onsite alternative water source is the water discharge from one application or process that is captured, treated, and utilized in another application. Sources include:

- Rainwater/stormwater
- Condensate
- Foundation drain water
- Reject water
- Treated gray water
- Cooling equipment blowdown

Potential uses of onsite alternative water include:

- Irrigation
- Toilet and urinal flushing
- Cooling tower make-up water
- Pressure washing
- Make-up water for fountains, waterfalls, etc.
- Processes or other uses not requiring potable water

Sports-specific best practices – Measures implemented at leading water-efficient sports venues include:

- Continuously tracking water consumption and setting goals to reduce
- Waterless/low-flow urinals and dual-flush toilets
- High-efficiency plumbing fixtures
- Aerators and motion sensors on faucets
- High-efficiency dishwashers and icemakers
- Timed irrigation systems and sensors to measure moisture level in playing fields
- Drought-resistant plants
- Landscaping to reduce storm water runoff
- Water-catchment systems to capture and reuse rain water and gray water
- Replacing grass with artificial turf on playing fields
- Green roofs to reduce storm water runoff