

## WaterSense® Commercial and Institutional Sector Stakeholder Meeting Summary

**Monday, October 5, 2009, 8:00 a.m. – 5:00 p.m.**  
**South Point Hotel and Conference Center, Las Vegas, Nevada**

**Hosts:**

Tara O'Hare (U.S. Environmental Protection Agency [EPA])  
Jonah Schein (EPA)  
Veronica Blette (EPA)  
Stephanie Tanner (EPA)  
Alicia Marrs (EPA)

**Moderator:**

Roy Sieber (Eastern Research Group, Inc. [ERG])

**Participants:**

Doug Bennett (Southern Nevada Water Authority [SNWA])  
Chuck Bragdon (Water Saver Solutions)  
Debora Browning (EPA, Region 6)  
Holly Cannon (ERG)  
Elizabeth Cutright (Water Efficiency Magazine)  
Mary Ann Dickinson (Alliance for Water Efficiency [AWE])  
Al Dietemann (Seattle Public Utilities)  
John Farner (Irrigation Association [IA])  
Ed Gonzalez (Western Sustainability & P2 Network)  
Deborah Hamlin (IA)  
Bill Hoffman (Bill Hoffman & Associates)  
Mike Kenna (U.S. Golf Association)  
John Koeller (Koeller and Company)  
C.J. Lagan (American Standard)  
Carrie Lee (Consultant, Herndon Solutions Group)  
Cary McElhinney (EPA, Region 5)  
Ed Osann (Potomac Resources)  
Leon Shapiro (VRTX Technologies)  
Andrew Smith (IA)  
Kent Sovocool (SNWA)  
Brian Vinchesi (IA)  
Phil Weynand (San Antonio Water System [SAWS])  
Francis Wheeler (Water Savers, LLC)

### **Welcome and Review of Meeting Objectives**

Roy Sieber (ERG), the moderator of the session, welcomed the group and reviewed the meeting objectives.

**Meeting Objectives:**

- Obtain feedback on information presented in EPA's white paper, "Water Efficiency in the Commercial and Institutional Sector: Considerations for a WaterSense Program" (August 20, 2009, [www.epa.gov/watersense/partners/cipaper.htm](http://www.epa.gov/watersense/partners/cipaper.htm)), and identify other relevant information;
- Identify stakeholder priorities for a WaterSense commercial and institutional (CI) program structure; and
- Identify barriers to potential CI program options.

Mr. Sieber reminded the group that the purpose of this meeting is not to get into the technical details about CI water efficiency and specific technologies. WaterSense is currently in the program scope and structure stage, beginning to loosely define how a national CI program may look. Mr. Sieber reviewed the agenda. The participants had no comments.

**Overview of the WaterSense Program, Goals of a CI Program, and the CI Program Development Process**

Tara O'Hare (EPA) reviewed the background of the WaterSense program and discussed the goals of a potential CI program and the process for developing a CI program. Refer to <http://www.epa.gov/watersense/partners/cipaper.htm> to review this presentation. Ms. O'Hare reminded the group that although WaterSense is looking at a potential CI program, it does not mean that a program will definitely be created. A potential CI program depends on resources allotted and prioritization of the WaterSense program's goals.

EPA would like stakeholder input to determine what water use baselines are appropriate to use for the CI sector and its subsectors. EPA would strive for a potential program to have documented water savings.

Ms. O'Hare reminded the group that a program launch would be months or years off. Prior to launching a program, EPA would continue to engage stakeholders, may create options papers or white papers, and would have to secure resources and political support. WaterSense team members would like to make a suggestion on a CI program to their management within six to eight months, depending on how much data they need to collect and how clear the options flesh out during the brainstorming session at this meeting. If EPA plans to release an options paper, the timeline could be longer.

**Overview of CI White Paper: Data and Program Structure Summary**

Jonah Schein (EPA) reviewed the data in EPA's white paper. Refer to <http://www.epa.gov/watersense/partners/cipaper.htm> to review this presentation. He indicated that WaterSense considers the 1997 survey conducted by EPA of utilities across the country to be the best national picture of CI subsector water use data.

The group discussed the end uses of water in the utilities and infrastructure subsector. End uses could include public use, system leaks, fire hydrants, police stations, energy generation, etc. More data are needed to truly define this subsector. Mr. Schein clarified that the hospitality subsector includes hotels, motels, and restaurants. He stated that the irrigation subsector (sometimes referred to as landscaping) refers to dedicated commercial irrigation accounts, not agricultural irrigation. Mr. Schein noted that major end uses in the CI sector in general are domestic/restrooms and heating and cooling.

Ms. O'Hare presented potential program options for a WaterSense CI program. Refer to <http://www.epa.gov/watersense/partners/cipaper.htm> to review this presentation. She noted that EPA's list of potential program options is not exhaustive nor mutually exclusive. She indicated that the first question to answer is whether to focus on the entire CI sector in a blanket approach or focus on CI subsectors individually. Some subsectors have already done significant water conservation work (e.g., green hotels, green hospitals). Would it be easy to plug into these groups? Could EPA develop technical best management practices on specific technologies and distribute them to multiple sectors? She reiterated that the program's water savings results should be measurable.

Ed Osann (Potomac Resources) indicated that the amount of new construction may be a factor to consider if selecting a subsector. Ms. O'Hare noted that EPA has met with McGraw-Hill to discuss new construction, which is sometimes easier to influence than retrofits. These factors will be taken into consideration as a program is developed.

Ms. O'Hare noted that the CI program should overlap with the rest of WaterSense's work but need not hold to the same structure. She indicated that the program that is most similar to the rest of WaterSense may not be what is most appropriate for the CI sector. She'd like to hear pros and cons, thoughts, and experiences on all potential program options. The group briefly discussed the following four major program options presented in the white paper:

- **Building certification and labeling.** This option may provide the most reliable data to show measurable results, and may most closely mirror the rest of the WaterSense program as it stands. Building certification programs are already offered by other groups. The U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is a building certification program where third-party raters award points if a building meets certain criteria and buildings with enough points are considered LEED certified. ENERGY STAR® also has a building rating program, which does not require third-party certification, but allows building owners to input data about their facility, benchmark it against others, and determine if it performs well enough to receive the ENERGY STAR label. WaterSense could develop a building certification program or offer a program that awards points to those facilities who achieve a specific percent reduction. A program like this may be resource-intensive, however. EPA would have to consider if self-certification would be allowed under this program structure, considering WaterSense labeled products must be third-party verified. If a building certification specification was written, EPA would likely review it every three years like the rest of its WaterSense specifications.

- Partnership commitment. Under a program like this, organizations would sign up and commit to a specific water-efficiency goal (e.g., percent reduction, implementing technology). Verification that goals were achieved could be done by self-declaration by the organization or a third-party. Ms. O'Hare noted that EPA had a partnership commitment program, National Environmental Performance Track (Performance Track), which was a public-private partnership that encouraged continuous environmental improvement through environmental management systems, community outreach, and measurable results. Members had to commit to challenge environmental goals and dedicate to continuous improvement. The program was based on the premise that government should complement existing programs with new tools and strategies that not only protect people and the environment, but also capture opportunities for reducing cost and spurring technological innovation. EPA provided exclusive regulatory and administrative benefits to Performance Track members, placed them at low priority for routine inspections, and offered public recognition, networking opportunities, and other benefits. However, the program was recently terminated due in part to performance issues. Ms. O'Hare noted that WaterSense is a voluntary program that is not associated with regulation. WaterSense would offer no such regulatory or administrative benefits under a partnership commitment structure for the CI sector. WaterSense would have to address the shortcomings of the Performance Track program if considering this program option.
- Education and outreach. EPA could provide resources and tools to enable organizations to become self-motivated leaders in water efficiency. These tools may likely be provided regardless of the program structure, but could also serve as a stand-alone structure. EPA could offer technical assistance by partnering with organizations that provide water audits and supplying these organizations with tools to work with many types of facilities. EPA could label professional certification and training programs to be sure that education and messages are consistent with WaterSense's goals. It may be difficult to document water savings within these program options.
- Awards-based program. EPA is considering rolling the Water Efficiency Leader Awards into WaterSense. When people submit their water projects for an award, their submission can become a model case study for the industry and can spark innovation. Awards could be offered in addition to another program option or as a separate program.

Ms. O'Hare opened the floor to questions and comments on the white paper and the four major program options described above.

- Andy Smith (IA) expressed his displeasure in a flat percent reduction option across the entire CI sector because it penalizes early adopters and it is hard to define benchmarks. Ms. O'Hare clarified that EPA doesn't want to punish early adopters. She asked the group what the baseline should be and how EPA could normalize benchmarks (number

of rooms, beds, people, etc.). Mr. Smith commented that measurable savings can be achieved by installing water meters to monitor all water uses. The group agreed that most commercial accounts are likely metered, and submetering for specific end uses may already be in place.

- Mary Ann Dickinson (AWE) suggested EPA could have a program where participating facilities are required to have a water audit to develop a benchmark. To earn the WaterSense label, they would have to achieve a certain percentage of their water reduction potential identified during the audit.
- Ms. O'Hare asked the group if the data presented in the white paper is sufficient for EPA to use to characterize the CI sector and move forward with decision-making. Stephanie Tanner (EPA) noted that the U.S. Department of Energy (DOE) is in the process of analyzing the results of a commercial building energy survey that contained some water questions. It is not clear what kind of data the survey will contain. The U.S. Geological Survey (USGS) also produces some data from a water use survey, which it plans to release in six to eight months. EPA hopes to work with USGS on the next survey.
- Bill Hoffman (Bill Hoffman & Associates) and Francis Wheeler (Water Savers, LLC) indicated that many people are performing water audits and these experts have a wealth of data on subsectors that is region-specific. EPA may consider trying to find some incentive for these people to share their baseline data and to share the tools they use to calculate benchmarks. Ms. O'Hare indicated that EPA could make data confidential and could collect the baseline data collected already at federal facilities and other facilities and regions. Ms. O'Hare indicated that some commenters on the white paper suggested that EPA be a national repository of data from these sources.
- Chuck Bragdon (Water Saver Solutions) indicated that he surveys water use in hospitals. Hospitals are greatly influenced by regulatory rules for infectious control. Hospital facility managers cannot install faucet aerators because bacteria can linger inside the aerators. Because of this, hospital sinks flow at 4 gallons per minute (gpm) to 10 gpm. This point highlighted that subsectors have different needs and requirements.
- Ms. Dickinson suggested tapping into the success of Corporate Water Footprinting.
- Mr. Osann suggested that EPA work with the California Green Business Association.
- Mr. Smith pointed out that the white paper does not touch on economic benefits and financial savings. He indicated that most customers respond to this type of data. The group agreed that a "return on investment" (ROI) analysis would be needed for program options, since it is a driving factor in most program adoption.
- Mr. Wheeler suggested that the program structure be cash driven. Perhaps the program could be a repository of funds that are provided as a zero-interest loan that is paid back with water savings. The group noted that the cost of water is very low and pay back is not seen as quickly with water projects as with energy projects. People like to save

money, but also like to be green and have a stamp of approval, so being an environmental steward may be enough incentive for facilities to implement water-efficiency retrofits.

- Phil Weynand (SAWS) offered to send some regional and local program data from San Antonio.
- Mr. Osann indicated that EPA outlined five or six leading sectors that only account for 35 percent of CI water use. What uses the rest? He suggested focusing on multi-family residences that have commercial accounts.
- Mr. Wheeler suggested that EPA determine which subsector to focus on by evaluating the ratio of facilities within a subsector to the subsector's total water use.

Ms. O'Hare closed the discussion and indicated that EPA would like to collect additional data from anyone willing to share it.

### **Brainstorming on Features or Attributes of a WaterSense CI Program**

Following EPA's overview of the WaterSense program and the CI white paper, Mr. Sieber posed the following question to the group for brainstorming: What features or attributes should be considered in developing a WaterSense CI Program? The group brainstormed ideas in response to this question.

- Mr. Osann indicated that he'd like to see a building certification program for new facilities structured differently from one for existing facilities. He suggested that EPA first focus on developing a building certification and labeling program for CI subsectors that use the most water and have the most common, clearly defined end uses. EPA could also develop a partnership commitment program for facilities that were not included in EPA's initial target subsectors. This would allow the entire CI sector to participate even if not all facilities were part of a building certification and labeling program. He noted it could take many years for EPA to develop a certification and labeling program for all subsectors.
- Mr. Smith and Ms. Dickinson suggested a building certification and labeling program for existing buildings since new construction has received more attention by other groups. WaterSense should also have an awards program so it can recognize the early adopters.
- Mr. Hoffman and others indicated that if EPA developed a building certification and labeling program, it would need to take a comprehensive approach to all water uses—indoor and outdoor—in a building.
- Kent Sovocool (SNWA) backed the subsector approach. He indicated that EPA could also develop specifications or best management practices for common end uses (e.g., bathrooms) and issue other guidance for special end uses in each subsector.



- Ms. Dickinson suggested that EPA work with the Food Service Technology Center (FSTC) on the hospitality subsector because it has made significant progress on energy and water efficiency there. Because of the progress already made by FSTC and other groups, EPA could launch a program for this subsector soon.
- C.J. Lagan (American Standard) suggested that EPA work with green teams, such as those assembled in hospitals and hotels, and resource efficiency management companies, like Tetra Tech green teams on military bases, to tap their knowledge and gather their water balance and water savings potential calculations. EPA should gather all of the existing data it can.
- Doug Bennett (SNWA) indicated that EPA's program should be compatible with other green building programs. Hoffman suggested that EPA tap the expansive knowledge from other building programs and groups like LEED, the Green Building Initiative, the plumbing code, etc. EPA should take advantage of and work with these programs. He indicated that he hoped WaterSense criteria could be embedded into other programs—that it be the “go-to water program” for green building programs. EPA should assess which programs may be potential competitors and which may be collaborators and try to develop a program that will complement or enhance those already existing.
- Ed Gonzalez (Western Sustainability & P2 Network) indicated that EPA should tap into local and state programs that promote water efficiency.
- Mr. Wheeler indicated that multiple leadership levels from organizations should be involved if EPA plans to create a building certification and labeling program. EPA should create a committee to develop specific subsector programs and include key players in organizations, such as the director, facility manager, and plant manager, and also market experts and other stakeholders.
- Leon Shapiro (VRTX Technologies) indicated that an EPA program should include a regional focus because water quality can have an impact on technology implementation.
- Mr. Smith said EPA should focus on the human element—certifying professionals like plumbers, building owners, and energy and water managers.
- Mr. Lagan recommended that the WaterSense Web site, Helpline, and its product specifications should mesh with a potential CI program. The new program component should dovetail with all aspects of WaterSense.
- Mr. Gonzalez noted the need for a rapid response service to have questions answered quickly—a mechanism to submit questions and get them answered. EPA responded that the WaterSense Helpline would serve this function.
- Ms. Dickinson suggested that EPA only adopt strategies that can be verified and measured.

- Mr. Lagan suggested that EPA avoid self-certification.
- Multiple participants suggested that ROI calculators be developed for technologies and best practices. Mr. Smith indicated that consideration of related impacts and offsets may be regional in nature and should be captured in the ROI process.
- Mr. Wheeler suggested that EPA create an incentive to encourage people to share proprietary information, such as water balance software developed by experts in the water auditing field. Alternatively, EPA could list proprietary tools and products and author contact information on its Web site for interested parties.
- Mr. Hoffman suggested that EPA be a repository of information to start a much-needed building benchmarking tool. Mr. Wheeler suggested that EPA create a communication forum and become a central repository for water business.
- Mr. Gonzalez suggested that EPA provide access to technical resources such as documentation on the newest, best technologies.
- Mr. Weynand and Mr. Bragdon suggested that EPA post model case studies with examples of lessons learned from each subsector.
- Mr. Osann indicated that EPA needs to develop analytical tools. DOE provides tools for energy efficiency and building design. Tools should be developed for water that can be embedded in existing tools or stand alone. EPA could create a reference building to develop a baseline for evaluating water savings strategies. Mr. Hoffman added to Mr. Osann's point saying that DOE takes benchmarking data from thousands of cases for many specific facility types, and a user can input facility-specific data to determine how much energy the building will use and how it compares to average buildings of the same type. A similar tool to track water use and water efficiency across various facilities does not exist, and there is a need for it. Mr. Wheeler suggested that EPA host a baseline database where facilities can input water audit and annual usage data. A questionnaire could determine how well they are doing compared to other facilities.
- Mr. Hoffman indicated that EPA should look carefully at the relationship between water savings and energy savings and be prepared to handle conflict areas.
- Ms. Dickinson suggested that EPA be able to accurately calculate embedded energy from water use and water savings. EPA should explore how to collaborate with account managers that manage both energy and water.
- Mr. Smith indicated that EPA should look at reuse and reclaimed water. Others indicated that EPA should be aware of the energy required for treating and using reclaimed water.
- Mr. Hoffman indicated that EPA should come up with best management practices and guidance for use of alternate sources of water.



- Mike Kenna (U.S. Golf Association) was in favor of outreach and education. He commented that the golf industry would like recognition from EPA on its water conservation efforts.

Veronica Blette (EPA) indicated that EPA is looking at a potential CI program because there has been interest in commercial entities becoming partners. EPA doesn't want to turn away potential partners and would like to develop a program to include these entities. Mr. Smith suggested that EPA put together a committee of stakeholders to work on the program structure.

Following this brainstorming session, EPA gathered all of the comments and grouped those that were similar and determined which comments may be considered advice to EPA rather than a consideration, attribute, or feature of a potential CI program. The result was a list of 20 potential program features, attributes, or considerations, and a list of several pieces of advice for EPA as it develops a potential CI program. The 20 ideas to consider for a WaterSense CI program are:

1. Consider reclaimed/reused water and its environmental/energy impacts.
2. Develop a one-time-only building certification and labeling program for new construction, considering a comprehensive view of the facility.
3. Develop an existing building certification and labeling program (including criteria for recertification), considering a comprehensive view of the facility.
4. Provide technical resources (checklists, manuals, etc.).
5. Require that participating buildings seek a water audit, then score buildings based on the percent of their water savings potential achieved through retrofits.
6. Consider an awards-only program that would allow EPA to recognize early adopters.
7. Use a subsector-by-subsector approach during program development, and begin by looking at subsectors that consume the most water and have the most common end uses.
8. Consider a program that offers two options: (1) a subsector-specific focus for "defined-cases" (i.e., where the subsector's water use and end uses are clearly defined and a program is easy to develop), and (2) a commitment-based partnership program for those buildings or groups that do not fall into a categorized, focused subsector. Some opportunities are universal, but some are sector-specific.
9. Collaborate with existing programs (such as those in food service, the golf industry, etc.) to develop an outreach and education program.
10. Coordinate with codes and standards initiatives to offer guidance on alternate sources of water (e.g., air handler condensate recovery).

11. Tap local and state networks on water efficiency to develop a CI program.
12. Create incentives to urge the private sector to share existing tools and data.
13. Collaborate with energy/water account managers through a program option.
14. Create a communication forum for CI information.
15. Label more certification professionals.
16. Be a repository for subsector-specific benchmarking data.
17. Develop a program with regional flexibility since water quality issues vary across the country.
18. Develop appropriate analytical tools to benchmark facilities and compare facility performance to benchmarks (e.g., Portfolio Manager, DOE2 model).
19. Generate subsector-specific model case studies.
20. Consider a commitment-based program.

EPA will also consider the following advice when moving forward with developing a CI program:

- Make use of subsector-specific initiatives and green building programs that already exist.
- Fill gaps that existing programs do not cover rather than reinventing the wheel. Ensure that a WaterSense program is compatible with existing green building programs.
- Develop a program that is understandable.
- Evaluate potential competitors and collaborators and understand the CI marketplace before developing a program.
- Consider related impacts, offsets, and embedded energy costs in potential CI program options, and understand that some may be regional in nature.
- Become the “go-to water program” for other green building programs.
- Ensure that stakeholders can quickly receive answers to questions and find information about the CI program.
- Ensure that a CI program dovetails with all ongoing aspects of the WaterSense program.
- Engage stakeholders and market experts in program development.

- Develop a program with measurable results.
- Present lessons learned through model case studies.
- Avoid self-certification with any certification and labeling program option.
- Consider the costs of programs (especially building certification and labeling) and calculate the ROI on any program option.
- Work with assembled “green teams” at facilities and organizations, and be sure to market the program to various levels of leadership within an organization.

### **Defining Level of Effort and Benefit to EPA for Summarized Considerations**

After EPA grouped and summarized the features, attributes, or considerations generated during the brainstorming session, participants were divided into four groups and were asked to determine the level of effort (LOE) to EPA and the benefit to EPA for each of the 20 listed considerations. Each could be (1) high LOE, high benefit, (2) high LOE, low benefit, (3) low LOE, high benefit, or (4) low LOE, low benefit.

- All groups initially agreed that a commitment-based program is a high LOE and low benefit. They disliked this idea at first, but discussed it again later and did not dismiss it.
- All agreed that EPA should start with subsectors that have the highest water consumption and common end uses. A subsector-based theme emerged from the group.
- The entire group discussed the three program ideas in detail that were ranked as high benefit and high or low LOE by the subgroups. They defined important considerations and barriers to these ideas:
  - Use a subsector-by-subsector approach during program development, and begin by looking at subsectors that consume the most water and have the most common end uses.
  - Develop a one-time-only building certification and labeling program for new construction, considering a comprehensive view of the facility.
  - Develop an existing building certification and labeling program (including criteria for recertification), considering a comprehensive view of the facility.

The group discussed the idea to “use a subsector-by-subsector approach.” They identified the following important considerations of this idea:

- Geography is important because water quality issues and end uses (e.g., irrigation) may vary regionally.
- Subsectors may be complex.

- WaterSense needs to work with industry experts.
- Consider the willingness of stakeholders to embrace the program.
- Identify common variables/end uses with respect to consumption across the entire sector and subsectors (e.g., food service is present in hospitals, restaurants, schools, etc.).
- Need product-specific specifications.
- Need to be able to measure water use and savings.

They identified the following barriers:

- Is there enough information, and the right information, to select subsectors to target first?
- This may be the first time WaterSense experiences competition with another program.
- Regulatory barriers may prevent full implementation of water-efficiency practices (e.g., hospitals and faucet aerator bacteria, restaurants and oil and grease).

Ms. O'Hare asked the group for feedback on which subsectors to focus on first if EPA chooses to develop a CI program with a subsector-by-subsector approach.

- Mr. Wheeler suggested tackling the hardest subsector first then shaving off portions of the complex subsector program to feed other subsector programs. If EPA developed a program for hospitals, which have many complex end uses, portions of that program could be used as a program for an entirely different sector. The food service program component for hospitals, for example, could be used to easily develop a program for other subsectors like restaurants or school cafeterias. Within the complex subsector, EPA should target the simplest end uses first.
- Other stakeholders didn't think that beginning with the most complex industry was the right approach and may wind up being very resource-intensive; EPA should focus instead on the industry with the most water savings potential.
- The group discussed that if EPA spends resources to develop a CI program, it will have less resources for product specifications. Several participants felt that EPA should focus on labeling products before developing a CI program. Other participants noted that there is a huge savings opportunity within the CI sector, and EPA should not wait for more completed product specifications to create a CI program. The group agreed that EPA should align product specification development with the subsector-based approach, developing product specifications for the subsectors of interest first.

- Mr. Smith indicated that EPA should focus on the return from outdoor water savings. EPA should focus on a specific end use and promote the efficient use of that end use across the entire CI sector.
- Ms. Blette suggested that EPA could maintain focus on product development, while developing a program option with a somewhat-low LOE, such as a performance-based, commitment-based program. Participating facilities that want to become WaterSense partners could be required to do a water audit and commit to attaining some amount of water savings. EPA could collect the information derived from the audits and water-efficiency initiatives. These data could form the foundation to a sound subsector-based program. CI program development could move forward incrementally while product specifications are developed and released.

The group discussed the idea to “develop building certification and labeling program for new construction.” They identified the following important considerations of this idea:

- A program of this type should be able to tie into existing programs, third-party or industry-specific.
- EPA could certify existing programs that address water, such as WaterSmart in Florida.
- Consider how new construction may tie into existing buildings.
- Consider the challenges of a building shell that is not built-out and ready for occupation (i.e., offices, laboratory spaces, commercial kitchens, and any other non-furniture construction are not yet designated or constructed) versus a space that is built out and ready for occupation (i.e., all building spaces are constructed for occupant to enter, supply with furniture, and use).
- This type of program would require a certification infrastructure.
- Learn from the WaterSense new homes program for one or two years, then develop a CI program.
- Existing programs may like to reference a set of WaterSense outputs; consider developing water-efficiency criteria that can be incorporated into other programs instead of making a new program.
- Consider the delta between water-efficient versus base design.
- A building would likely be labeled once under a new construction program and would then need to meet an existing building specification.
- Plumbing codes and other programs offer a good base to starting a new construction building certification and labeling program.

They identified the following barriers:

- This industry lacks similar analytical tools for water efficiency that exist for energy efficiency.
- Many other building certification and labeling programs exist.
- There are not many WaterSense labeled products for the CI sector.
- A disconnect exists between initial investment and operating costs.
- The water savings impact is much smaller for new construction than for existing buildings because these buildings already need to meet current regulations that existing buildings may not.

The group discussed the idea to “develop an existing building certification and labeling program (including criteria for recertification), considering a comprehensive view of the facility.” They identified the following important considerations of this idea:

- Require participating facilities to perform a water audit to identify savings and require that facilities meet a percentage of their potential savings; early adopters still have potential to save.
- Develop building benchmarks for the entire CI sector.
- Consider building systems (core/shell) and occupant activities.
- Understand the recertification must be embedded in program design.
- Building certification and labeling criteria should represent premium performance to protect the brand.

They identified the following barriers:

- Is there adequate benchmarking data? Utility partners may be able to fill this data gap.

### **Participants’ Closing Thoughts: The Most Important Action for WaterSense**

Following the detailed discussion of three program options and the evaluating of many ideas generated during brainstorming, EPA asked participants to share their thoughts in a closing exercise. Mr. Sieber asked participants to reflect on the day and identify the most important action for the EPA WaterSense program to take right now. The action does not necessary have to center around developing a CI program, but could be any action that will most benefit the WaterSense program and would complement its goals.



- Mr. Bragdon and Mr. Osann said EPA should continue to focus on labeling products, especially CI products. When more products are labeled, developing a building certification and labeling program could be easier. Deborah Hamlin (IA), Carrie Lee (Consultant, Herndon Solutions Group), and Debora Browning (EPA, Region 6) also felt that EPA should focus on products.
- Ms. Lee and Ms. Browning indicated that EPA should learn from the new homes specification prior to developing a CI program.
- Mr. Lagan indicated that EPA should focus on irrigation.
- Mr. Sovocool said that EPA should develop end use profiles in all major subsectors, focusing regionally, because EPA will need the data to develop benchmarks.
- Mr. Wheeler indicated that EPA should be a data repository for all CI water data.
- Brian Vinchesi (IA) and Mr. Hoffman said that EPA should label more professional certification programs.
- Mr. Smith said that EPA should require water meters in all programs and ensure that it can measure and verify data so benchmarks can be developed.
- Mr. Kenna thought that EPA should recognize the progress that specific industries have made in water conservation.
- Mr. Osann said that EPA should develop guidance or provide assistance to utilities to begin a systematic categorization of non-residential customers.
- Mr. Koeller and Ms. Dickinson said that EPA should create a CI program and focus on laundries (CI, not coin-operated), the hospitality sector (lodging and food service), and the medical sector (care facilities, skilled nursing, etc.). These three industries all have cooling towers, landscaping, and plumbing end uses, and would yield the greatest amount of water savings. EPA could engage trade associations from all three groups.
- Cary McElhinney (EPA, Region 5) said that EPA should refine water audit methodology and develop self-audit templates so facilities can look for water savings opportunities through more than just labeled products.
- Mr. Shapiro said that EPA should develop a storyline to sell the sense of urgency for water conservation, including life cycle cost assessment.
- Al Dietemann (Seattle Public Utilities) said that EPA should enhance the visibility of the CI sector and WaterSense.

## Wrap Up and Next Steps

EPA began wrapping up the session by asking that the group spread the word to their colleagues that the white paper is posted and comments will still be accepted. EPA will accept any data anyone can provide. Ms. Blette reminded the group that the purpose of this meeting is to discuss the potential for a CI program and not to account that WaterSense will be developing said program. She asked how many people thought WaterSense should develop a CI program and a majority of the participants indicated that they felt it should. Ms. Blette said that EPA would hold internal discussions to review stakeholder comments on the white paper and from this meeting and would post information on its Web site regarding EPA's next steps. Mr. Schein indicated that EPA will post the public comments on the white paper, distribute the meeting slides, and post the meeting summary. EPA may host a webinar to discuss the options.

- Mr. Smith said that EPA should gather a stakeholder panel to be involved in the process. The group brainstormed that the stakeholder panel could include trade associations, utilities, wholesalers, end use customers, construction professionals, performance contractors, etc.
- Ms. Dickinson commented that WaterSense has been a very open process. The mailing list is extensive and stakeholders have been invited to comment throughout many processes.
- All participants said they would like to continue to be involved if EPA needed expert input and would be happy to be involved in any and all parts of the process as needed.