

WaterSense® Notice of Intent (NOI) to Revise the Requirements and Certification of WaterSense Labeled Homes Public Meeting Summary

March 14, 2018, 1:00 to 3:00 p.m. Eastern, Webinar

Meeting Participants

Attendee	Organization
Jessica Ahlstrom	City of Bozeman
John Aramian	Red Sand Foundation (Blue City Project)
Karen Barras	Green Building Consulting
Debbie Bedway	WC3 Design and Consulting
Leigh Benner	Dancing Leaf designs
Alexis Bookman	The Toro Company
Greg Bundesen	Sacramento Suburban Water District
Gary Carmack	Maronda Homes
Steve Carper	Tualatin Valley Water District
Marla Castaneda	City of Laredo Utilities
Dustin Cavanaugh	RenewAge Energy Solutions Inc.
Clay Clifton	Sweetwater Authority
Daniel Cole	International Association of Plumbing and Mechanical Officials (IAPMO)
Mike Collignon	Green Builder Coalition
Erin Conine	City of Olympia
Kevin Cook	G-ENERGY LLC
Gerald Coons	Outdoor Power Equipment Institute (OPEI)
Stephanie Cote	City of Guelph
Mike Cudahy	Plastic Pipe and Fitting Association
Allison Donahue	Niagara Conservation
Patricie Drake	Rockland County Task Force on Water Resources Management
Kevin Dugan	Western Energy
Kalani Durham	Santa Barbara County Water Agency
Cindy Dyballa	Sligo Creek Resources
John Ellis	Texas Water Development Board
Johann Feller	Southern Nevada Water Authority
Terry Floyd	City of Norman, Oklahoma
Stacy Gardner	Irrigation Consulting Inc.
Sean Golden	CLIA
Kevin Gordon	Hunter Industries



Attendee	Organization	
Leslie Graser	City of Prescott, Arizona	
Tom Graves	Water Pik, Inc.	
Ian Greene	FloLogic, Inc.	
Jill Greiner	City of Charlottesville	
Ryan Grzesiak	Region of Peel	
Jeffrey Hellenbrand	Hellenbrand Water Center	
Kevin Hickerson	Consolidated Utility District	
John Holahan	Liberty Homes Custom Builders	
Edward Huang	California Institute of Environmental Design and Management (CIEDM)	
Leah Hubbard	City of Prescott	
Dave Hubbs	Dorn Homes Inc.	
Jay Hughes	Simmons Irrigation Supply	
Nicholas Hurst	U.S. Environmental Protection Agency (EPA)	
Larry Jacobs	AHMI	
Mark James	Sprinkl.io LLC	
Jennifer Kaminski	Rinnai	
Jack Karlin	Texas Water Conservation Association (TWCA)	
Frank Kinder	Colorado Springs Utilities	
John Koeller	MaP Testing	
Jamison Kortas	Uponor, Inc	
Paul Kriescher	Lightly Treading, Inc.	
Danny Kruse Sr	Certified Irrigation Designs	
Kathy Lee	DK Landscaping Inc	
Michele LeGoff Reid	PGIM Real Estate	
Melissa Levo	Seattle Public Utilities	
Patrick J Martin	Miami-Dade Water and Sewer Department	
Megan Maurino	Alameda County Water District (ACWD)	
Elizabeth McCartney	Irrigation Association (IA)	
Judy McMahan	Hallsdale-Powell Utility District	
Jayant Mehta	STM International	
Kelsey Mullen	Energy Inspectors	
Stephen Muzyka	United Way of Long Island	
Jad Nasrallah	Nebia Inc.	
Robyn Navarra	Zone 7 Water Agency	
Chris North	Southface	
Amelia Nuding	Western Resource Advocates	
Toritseju Omaghomi	University of Cincinnati	
Kathleen Onorevole	Eastern Research Group, Inc. (ERG)	



Attendee	Organization	
Emily Pelosi	K-Rain Manufacturing	
JP Perez	EPA	
Niko Poulos	Rachio	
Wendy Pratt	Zurn Industries, LLC	
Colleen Quinn	EPA	
Stephanie Radebaugh	Mansfield Plumbing Products	
Robert Reaves	City of Oklahoma City Utilities	
Max Royal-Eisenberg	City of Concord	
Tom Ryan	WiserWatering	
Stephanie Salmon	Plumbing Manufacturers International (PMI)	
Mahya Sangab	City of Winnipeg	
Jonathan Sergeant	Greenville Utilities	
Danira Serrano	Pfister	
Kim Shanahan	Santa Fe Area Home Builders Association	
Valerie Silva	Independent	
Gary Soe	TOTO USA Inc	
Kay Stewart	Association for Energy Affordability, Inc.	
Jaclyn Toole	National Association of Home Builders (NAHB)	
Hector Torres	City of San Diego	
Jacqueline Valett	Gwinnett County Department of Water Resources	
Jon Vann	IAPMO	
Emilio Vargas	Intellecy Inc	
Amy Vickers	Amy Vickers & Associates, Inc.	
Vince Vu	Brasstech, Inc.	
Henry Warner	Retired: served eight years on St. Johns Soil and Water Conservation District	
Cindy Wasser	ICF	
Joseph Wilson	Sterling Design Associates	
Agnes Woebkenberg	Chester Water Authority	
Tim York	Aurora Water	
Deborah Young	Assured Home Performance	

Presenter	Organization
Jonah Schein	EPA
Olga Cano	EPA
Olivia Newport	ERG (contractor to EPA)



Meeting Summary

Olivia Newport (ERG) welcomed everyone to the meeting and started with a poll asking attendees which type of organization they represented. The responses were as follows:

Industry	Audience Response
Building (homebuilders, raters/providers, verification	18%
organizations)	
Utilities/local government	34%
Manufacturers	16%
Irrigation and landscaping	18%
Other	14%

Ms. Newport reviewed webinar logistics and informed participants that the webinar was being recorded for future reference. She also indicated that a copy of the <u>Notice of Intent (NOI) to Revise the Requirements and Certification of WaterSense Labeled Homes</u> was available in the webinar handout materials and on EPA's website.

Jonah Schein (U.S. Environmental Protection Agency [EPA] WaterSense program) thanked participants for joining the webinar and reviewed the agenda. He noted that there would be time for questions at the end of the presentation, and encouraged participants to enter clarification questions in the webinar's chat box at any time.

1. WaterSense Background

Mr. Schein began the presentation with a description of WaterSense's background. He explained that it started as a sister program to ENERGY STAR® in response to stakeholder requests for a program that would provide consistent labeling for water-efficient products. Mr. Schein said that although audience members might be most familiar with WaterSense labeled products, the program engages with diverse partners to impact behavior and practices. With regards to WaterSense labeled products, Mr. Schein noted two foundational principles: that labeled products meet performance goals, and that independent oversight is employed to test products. These principles also apply to the WaterSense labeled homes program.

Mr. Schein provided some statistics to demonstrate the success of WaterSense, most notably that the program has resulted in 2.1 trillion gallons of water savings since 2006. He explained that although the WaterSense labeling scheme works well for products, it does not readily translate to systems, including homes. The WaterSense labeled homes program enables WaterSense to utilize design strategies to address water use in homes, which is influenced by elements such as plumbing and irrigation.

In addition to the logistical benefits of using a systems approach for homes, Mr. Schein said that the program allows WaterSense to communicate the value of WaterSense labeled products by establishing a presence in the many new homes being built in the United States. He also noted that the WaterSense labeled homes program engages EPA in setting industry standards and definitions, which can in turn influence other water efficiency programs.



Mr. Schein displayed a schematic illustrating the current requirements for homes pursuing the WaterSense label:

- 1. WaterSense labeled products
- 2. Efficient hot water distribution
- 3. Leak prevention protocol & service pressure limitations
- 4. Smart landscaping & irrigation, including an irrigation audit (if irrigation is included)
- 5. Third-party certification

2. WaterSense 2.0 Notice of Intent

Mr. Schein explained that WaterSense has chosen to follow the federal rule-making process for its product and program specifications, even though it is not required to do so, because it provides an opportunity for stakeholder engagement and feedback. The process starts with a Notice of Intent (NOI) and is followed by draft and final specifications. Notably, the NOI has no formal comment period or response requirements. Mr. Schein said that there was no deadline for public comments, but he encouraged audience members to provide feedback as soon as possible. The NOI includes a series of questions related to the revision to the WaterSense Homes program that stakeholders can use as prompts for feedback.

I. Introduction

Mr. Schein provided the outline for the NOI to revise the WaterSense labeled homes program. He then reviewed the history of the program. Version 1.0 of the New Home Specification was released in December 2009. Version 1.1 was released in August 2012 and contained the most substantial revisions to date. It changed the outdoor requirements, incorporated WaterSense labeled showerheads and weather-based irrigation controllers (WBICs), and expanded eligibility to some units in multifamily buildings. Version 1.2, released in July 2014, changed the irrigation partner requirement, which expanded the scope of irrigation professionals that could certify a WaterSense labeled home.

II. Technical Requirements: Challenges

Mr. Schein reviewed three technical challenges for the current WaterSense labeled homes program and associated specification. First, the current requirements are prescriptive, which may be limiting participation. Second, there are shortcomings in terms of addressing regional variation throughout the United States. Third, although required practices may save money, they do not readily translate to increased value for the homebuyer.

Mr. Schein illustrated the current challenges with a case study of irrigation requirements for a WaterSense labeled home. After explaining the irrigation requirements, he observed that it is functionally simpler to meet the requirements in arid regions, where markets have adjusted to a hot, dry climate. It is more difficult to satisfy the irrigation requirements in cool, wet climates like the Northeast, where there are fewer certified irrigation professionals and landscape designers. As a result, homebuilders located in the Northeast likely need to expend more effort to meet irrigation requirements and obtain the WaterSense label for a home. Furthermore, the net water savings associated with irrigation requirements will likely be smaller in the Northeast than in more arid climates. It may be more valuable for these customers to focus on increasing water



efficiency in another aspect of their home, which they could do if there was more flexibility in the specification.

[Note: Discussion of potential solutions to these challenges was not included during the webinar because the slide was inadvertently skipped. The following paragraph summarizes potential solutions being considered by WaterSense.]

WaterSense has identified two possible approaches to enhance flexibility and address the challenges described above. The first is a points-based rating system. This would assign a preestablished number of points to certain features of a home, with the point value weighted based on potential water savings. A set number of points would be required for a home to receive the WaterSense label. The second option is a performance-based model or rating system, in which a modeling tool would be used to predict water consumption. HERS_{H2O} and the Water Efficiency Rating Score (WERS) are two models that are currently available and could be used in a performance-based model.

III. Additional Technical Considerations

Mr. Schein shared other points that were being considered for the revised WaterSense labeled homes program. These included performance requirements; the merits of maintaining a prescriptive path in conjunction with a points- or performance-based approach; the usefulness of certification tiers; and the importance of eligibility for multifamily units.

IV. Certification System & Requirements

Mr. Schein showed the current certification scheme, which is very specific and multifaceted, resulting in a complex process. He explained that the certification system reflected three main objectives:

- 1. A verification process for all technical requirements
- 2. Professional training for raters and verifiers
- 3. Quality assurance that ensures integrity of the WaterSense label

Mr. Schein explained three current challenges. First, raters cannot receive a professional designation from WaterSense that they can transfer between employers. Second, an independent rater could experience a higher barrier of entry, because his or her ratings provider needs to offer WaterSense for the rater to certify a home to WaterSense. Finally, the Residential Energy Services Network (RESNET) is the sole provider for the WaterSense labeled homes program at the moment. Mr. Schein noted that WaterSense has had a strong partnership with RESNET and plans to continue that partnership. However, EPA is also hoping to include other verification organizations to participate in this role.

Mr. Schein proposed solutions to the challenges, including increasing flexibility in the certification system, permitting verification organizations to select raters using their own methods, and creating a professional designation for raters.



V. Summary of Information Requests

Mr. Schein displayed the specific questions WaterSense had prepared for stakeholders regarding the revision to the WaterSense labeled homes program. Some of the questions were intended to obtain information from stakeholders who may already know the answers. Mr. Schein said that the questions are also included in the NOI, and he encouraged participants to read them at their leisure and share their feedback with EPA.

Cindy Dyballa (Sligo Creek Resources) asked approximately how many homes had been certified since 2009, and whether those were all new homes or extensive renovations. Mr. Schein said that the reporting structure was a challenge. Most WaterSense labeled homes receive a rating from the Home Energy Rating System (HERS) and are certified to the ENERGY STAR Certified Homes program, so a provider needs to submit three different reports for a single home. As a result, reporting rates are low, and WaterSense does not know the exact number of WaterSense labeled homes. WaterSense hopes to streamline the reporting process. Mr. Schein noted that primarily new homes receive the WaterSense label and that this is true for most certification schemes. Renovated homes can be certified, but they are in the minority.

Johann Feller (Southern Nevada Water Authority [SNWA]) asked about reciprocity for similar programs, including WaterSmart and HERS_{H2O}. Mr. Schein said that reciprocity could refer to the technical requirements and/or the certification scheme. All programs use slightly different certification structures, so it may be necessary to ensure that there aren't cost or programmatic barriers to conducting the certification. Mr. Schein encouraged the attendee to provide comments if reciprocity was important to him.

lan Greene (FloLogic, Inc.) asked what products or protocols were being used for the leak detection component of a certified home. Mr. Greene said that he did not think leak detection devices were required for WaterSense labeled homes, even though he believes there is merit in including such technologies. Mr. Schein explained that a pressure lock test is required during inspection. If the pressure decreases when the plumbing system is closed off, there is a leak present. WaterSense also requires visual checks for leaks, which includes toilet dye tablet tests. Mr. Schein said that there is not a product label for leak detection devices, but he noted that WaterSense agrees that leaks are an issue. He highlighted the fact that the following week was designated as "Fix a Leak Week" to draw attention to the influence of leaks on water efficiency.

Mike Collignon (Green Builder Coalition) asked a question that he stated was a follow-up to Mr. Feller's reciprocity question: could WaterSense incorporate specific parts of a third-party program's data or results? Mr. Schein said that WaterSense welcomes data that would inform its decision-making process. He said that he did not entirely understand the intent of the question, but that in general, WaterSense is happy to consider data from other partners and colleagues.

3. Goals for WaterSense 2.0

Olga Cano (EPA WaterSense) explained that Mr. Schein had intended to provide an overview of the NOI and information that WaterSense was hoping to obtain from stakeholders. Ms. Cano



said that she would be presenting some possible solutions to the challenges outlined by Mr. Schein, which she reviewed.

Ms. Cano stated the objectives for the revision to the WaterSense labeled homes program. They include:

- 1. Providing flexibility in technical requirements
- 2. Maintaining baseline performance
- 3. Streamlining the certification process, especially to enable builders to accurately report the number of WaterSense Labeled Homes
- 4. Quantifying savings and demonstrating value
- 5. Accommodating regional variation

Ms. Cano said that she would be presenting potential program options and noted that they are not included in the NOI. The options are a structured way to present WaterSense's approach to the revision; they are examples rather than concrete plans and are included for discussion purposes rather than to identify specific technical requirements WaterSense is considering. Ms. Cano encouraged attendees to participate in the polls included in this section of the webinar.

4. Potential Program Options

Ms. Cano began by reviewing the three main components of the program options. The first is mandatory quality performance requirements, which are identical across all program options. These are the minimum acceptable features for a home to be considered "high performing," including WaterSense labeled plumbing fixtures (such as faucets, showerheads, and toilets) and absence of leaks. The second element is the efficiency requirements. The details of the efficiency requirements differ slightly among options, but they all stipulate how a home should demonstrate efficiency and WaterSense's approach to measuring it. The third component focuses on the programmatic/administrative element of the WaterSense labeled homes program: the certification structure. This component provides information about the process of inspecting and verifying a home to ensure it meets WaterSense criteria, including factors such as rater training and quality assurance protocols.

Ms. Cano reviewed the mandatory performance requirements, which included WaterSense labeled toilets, faucets, and showerheads and absence of leaks. These are consistent across all options. She conducted a poll regarding the mandatory performance requirements:

Are these mandatory requirements	
	Audience Response
Too easy?	14%
Just right?	77%
Too hard?	9%



Ms. Cano began reviewing the three program options in detail. For full summaries of each option, please refer to the webinar slides. These notes provide an overview of each option, along with any relevant comments made during the presentation.

Ms. Cano explained that Program Option 1 would use an existing rating system, such as HERS_{H2O} or WERS, as its efficiency requirement. To earn the WaterSense label, a home would have to achieve a certain score on the rating. Ms. Cano provided an example score of 70, but emphasized that this score was simply an example to facilitate explanation of the option. She also explained the revised certification structure for Program Option 1.

Ms. Cano provided an example of the process of rating a home using Program Option 1. She then reviewed some considerations associated with the option. Ms. Cano explained that EPA has some concerns about the application of currently available ratings system to multifamily properties. She noted that multifamily construction may account for an important portion of business for raters and builders, and asked how adopting this option would impact audience members and their participation in the WaterSense labeled homes program. She also asked whether a prescriptive specification option should be maintained, and whether audience members thought a suggested score of 70 for the efficiency threshold was appropriate.

Ms. Cano conducted two polls regarding Program Option 1:

If WaterSense utilizes a performance model in version 2.0, should a prescriptive path be offered along with a performance path?	
	Audience Response
Yes	93%
No	7%

Before the second poll closed, Mr. Schein clarified that WERS does support multifamily buildings (which had previously been misstated), but that WaterSense has outstanding questions as to whether that option could be integrated into a revised specification for homes.



How important is it to you that multifamily homes be able to earn the WaterSense label?	
	Audience Response
Completely unimportant	0%
Unimportant	3%
Neutral	8%
Important	45%
Extremely important	45%

Ms. Cano reviewed the criteria for Program Option 2. She noted that the efficiency requirement would be based on a documented increase in efficiency, measured as a percentage relative to a standard home. Builders could select their preferred method to achieve this efficiency goal, such as using a rating system, points-based rating, or a prescriptive path. Program Option 2's certification element would increase flexibility by accepting qualified verification organizations with a variety of oversight structures, provided they met basic criteria.

Ms. Cano provided an example of Program Option 2 in practice. She illustrated the different ways a home would be evaluated under varying sets of efficiency requirements and corresponding certification schemes.

Jaclyn Toole (National Association of Home Builders [NAHB]) asked how WaterSense defines a standard home. Ms. Cano explained that performance models, such as HERS_{H2O}, compare the home in question to a reference home. Mr. Schein said that for HERS_{H2O} specifically, the reference home is based on data for a new home constructed in 2006. He said that defining a standard home would be relevant for WaterSense if it chose to incorporate that model, and suggested that audience members share their opinions on the topic.

Emilio Vargas (Intellecy Inc.) asked if Program Option 2 is only intended for new homes. Ms. Cano said that this was a common question, but that Option 2 was just a general example, and that specific eligibility requirements would need to be determined.

Mr. Feller (SNWA) asked why a score of 70 had been proposed for the efficiency requirements in Program Option 1. He noted that WaterSense typically mandates a 20 percent reduction in water use, and pointed out that a score of 70 equated to a 30 percent reduction. Ms. Cano said that current product specifications do require demonstrated efficiency of at least 20 percent. She stated the numbers provided in the discussion of possible program options were merely examples that were intended to generate discussion. Mr. Schein added that 20 percent is a guideline for WaterSense, even for its labeled products. WaterSense's product specifications have resulted in water use reductions ranging from 15 to 50 percent.

Ms. Newport reported that there were no further questions, and reminded audience members that more questions would be accepted at the end of the webinar.



Ms. Cano reviewed some considerations for Program Option 2. These questions are also included in the NOI. Ms. Cano asked the audience's opinion regarding appropriate requirements for quality assurance, especially if multiple certifying organizations were involved. She noted that, if homes could be certified to WaterSense by different verification organizations, homes might look different even if they achieved the same increase in water efficiency. Ms. Cano asked audience members for their opinions on the advantages and disadvantages of that point. She also asked about the importance of WaterSense partnering with raters and offering a professional designation.

Ms. Cano conducted a poll regarding Program Option 2:

Do you believe the program would maintain its reliability if there were varying "types" of WaterSense certified homes?	
	Audience Response
Yes	71%
No	29%

Ms. Cano reminded the audience that the program options were provided as an exercise to conceptualize how WaterSense could achieve its goals. Ms. Cano then reviewed the criteria for Program Option 3. She explained that a points-based checklist would be used to evaluate the efficiency requirement. She noted that WaterSense has not yet determined point values for certain features, making Program Option 3 rather open-ended. Mr. Schein clarified that point values would be tied to the corresponding magnitude of water savings. Ms. Cano stated that the certification scheme would be revised, but that raters would still be required to go through a WaterSense provider.

Ms. Cano provided an example of Program Option 3. If WaterSense required 20 points for certification, homes would be required to meet the mandatory components of the specification and also include a sufficient number of design features to achieve 20 points or higher. Ms. Cano said that this structure should facilitate regional flexibility, as builders could choose options appropriate for their location.

Ms. Cano posed considerations for Program Option 3. She asked whether audience members thought that the option offered enough flexibility. She mentioned that it was conceivable that builders might consistently opt to incorporate features worth the most points, which could defeat the purpose of a "flexible" checklist. Ms. Cano also asked participants what changes they might recommend to the certification structure and to what extent a professional designation was valued by raters.

Ms. Cano conducted a poll regarding Program Option 3:

Does a point-based system provide enough technical flexibility?



	Audience Response
Yes	87%
No	13%

Ms. Cano showed a slide summarizing the efficiency requirements and certification structure for each of the three program options. She explained that audience members would be asked to vote on their preferred option. Ms. Cano briefly reviewed the highlights of each program option and reminded audience members that none of the options have been finalized yet. She then conducted the poll:

What program option do you prefer?	
	Audience Response
Option 1	26%
Option 2	35%
Option 3	39%

5. Next Steps and Questions

Ms. Cano reviewed the timeline for the next steps in the specification revision process. WaterSense will review feedback and comments on the NOI during summer 2018. WaterSense will attend the Energy and Environmental Building Alliance (EEBA) conference in October 2018, where it intends to host a participatory workshop. Ms. Cano explained that EEBA is attended by builders pursuing green building certifications, so attending the conference will allow WaterSense to get feedback from those stakeholders. WaterSense will also attend the WaterSmart Innovations (WSI) conference in October 2018. WSI is focused on water efficiency and attended by many water utilities, giving WaterSense an opportunity to obtain feedback from a different group of stakeholders.

Ms. Cano stated that WaterSense hoped to publish a draft specification in fall 2018. The draft specification includes a 90-day comment period, so Ms. Cano recommended that audience members look out for the draft so they can submit comments before the deadline. WaterSense plans to release a final specification by spring 2019 and roll out the specification over the following year.

Robert Reaves (City of Oklahoma City Utilities) asked why WaterSense had not planned to attend the mainstream builders' national conference put on by the National Association of Home Buildings. Ms. Cano said that WaterSense does attend this conference to represent the product labeling program. Mr. Schein added that WaterSense has attended the International Builders' Show in the past and has found it to be a challenging venue due to its large size. He explained that WaterSense had to consider whether they could have meaningful conversations with stakeholders at such a large conference. Mr. Schein said that WaterSense appreciated hearing from stakeholders regarding its presence at professional events.



John Ellis (Texas Water Development Board) asked whether there are formal incentives to build a WaterSense labeled home, or whether motivation to do so was based on an implicit increase in the value of the home. Mr. Ellis suggested that incentives could include subsidies or tax breaks for the adopter, or some other form of inducement. Mr. Schein said that there is no formal incentive on the national level for WaterSense labeled homes. He stated that there might be incentives for WaterSense labeled homes or products on the local level or from a utility, but not from the federal government.

Mr. Feller (SNWA) asked whether metering should be mandatory. Mr. Schein encouraged Mr. Feller to submit a comment if he believed metering was important. Mr. Schein said that, based on his experience, homes with well water are the only portion of new construction that consistently do not have meters. He noted that there was potential for an interesting debate on the cost/benefit of metering homes using well water. Mr. Schein stated that most newly constructed homes are built with meters. As a result, he suggested that metering would not be a particularly stringent or impactful way to influence water efficiency.

Mr. Vargas (Intellecy Inc.) asked whether smart products that can guide behavior, such as those that identify if a toilet flapper is open or a shower is too long, could be considered for WaterSense labeling. Mr. Schein said that this topic was beyond the scope of the considerations for this specification development process, but he encouraged Mr. Vargas to submit a comment or suggestion on how WaterSense could go about evaluating such products.

Tom Ryan (WiserWatering) asked whether WaterSense is considering certifying an affordable low-flow outdoor hand-watering product. The participant asked if such a product were to be developed, how it should be introduced to WaterSense and whether a WaterSense lab could be used to evaluate its water efficiency. Mr. Schein stated that this was a question about obtaining the WaterSense label for a particular product, which is similarly outside of the scope of revisions to the WaterSense labeled homes program, but encouraged the participant to submit data and comments to WaterSense. He clarified that there are no WaterSense testing laboratories; certification is performed by independent licensed certification bodies. Mr. Schein directed the participant to the WaterSense website and the WaterSense Helpline for further information.

Judy McMahan (Hallsdale-Powell Utility District) asked, if the inspections are not an EPA requirement, who is responsible for the cost of the HERS inspector. She also asked, if the inspections were to become an EPA requirement, would the utilities be responsible for the cost of the HERS inspection. Ms. Cano observed that this was a question regarding the certification processes. She explained that the cost of the inspection is assumed by the builder as part of the process of obtaining the WaterSense label. Mr. Schein clarified that WaterSense labeled homes are currently required to be inspected, and confirmed that the cost is typically paid by the builder (although in some circumstances utilities may willingly absorb this cost).

Mr. Reaves (City of Oklahoma City Utilities) asked whether WaterSense intends to place more emphasis on landscape irrigation, since it comprises the largest percentage of a home's water use. Mr. Schein encouraged the participant to submit a comment if he believed this was an important consideration for WaterSense.



Mr. Reaves asked about the current status of the pressure-regulated pop-up spray testing method. Mr. Schein explained that WaterSense currently labels spray sprinkler bodies and that some are available on the market. He directed the audience to the WaterSense website and stated that audience members could contact WaterSense for a direct link to the spray sprinkler bodies page.

Mr. Collignon (Green Builder Coalition) asked whether the WaterSense efficiency criteria for homes change in places where WaterSense fixtures are required by code. Mr. Schein said that it does not: there is one set of standards for the entire country. He explained that this was a contrast to ENERGY STAR. States with more stringent state-wide energy codes, such as the International Energy Conservation Code (IECC), have different ENERGY STAR requirements. Mr. Schein said that the participant should submit a comment if he thought this would be a useful model for WaterSense. Mr. Schein expressed his opinion that it could be difficult for WaterSense to change its criteria on a state-by-state basis with its current set of technical requirements.

Kay Stewart (Association for Energy Affordability, Inc.) asked whether WaterSense has considered participating in the National Home Performance Coalition Conference. Mr. Schein stated that it is helpful for WaterSense to receive suggestions on audiences with which it should interact, and that the participant should submit a comment with her suggestion.

Mr. Reaves (City of Oklahoma City Utilities) asked whether a WaterSense labeled home includes pressure-regulated pop-up sprays and/or weather-based controllers. Mr. Schein said that the current criteria require either WaterSense labeled irrigation controllers or soil moisture sensor-based controllers that meet a variety of requirements. WaterSense labeled homes do not require pressure-compensating spray sprinkler bodies. Sprinkler bodies only recently became eligible for WaterSense labeling in September 2017. Mr. Schein specified that sprinkler zones must be within operating pressure during the irrigation audit required by the current WaterSense specification for homes. Although the pressure-compensating technology is not specifically required, Mr. Schein explained that the commissioning process verifies that sprinkler heads do not have excess pressure. Mr. Schein noted that this point could be reconsidered in the revised specification.

Stephanie Radebaugh (Mansfield Plumbing Products) asked whether WaterSense anticipated changes to product requirements in the revision, or whether the approval processes covered in the webinar are the only changes being considered at the moment. Ms. Radebaugh indicated that her question was specifically with regards to toilets. Mr. Schein stated that all aspects of the WaterSense specification for homes are being reconsidered. He said that WaterSense did not anticipate eliminating the requirement for WaterSense labeled products because of the program's commitment to performance as well as efficiency. Mr. Schein encouraged the participant to submit a comment if she felt differently. Mr. Schein also clarified that, in case he misunderstood the question, revisions to the WaterSense specification for homes will *not* impact criteria within individual product specifications. Any changes made to the technical requirements of the homes specification will not impact requirements for WaterSense labeled toilets, for example.



Mr. Reaves (City of Oklahoma City Utilities) asked how audience members can get the word out about WaterSense Labeled Homes across the United States. He wanted to know what individuals listening to the webinar could do on behalf of the program. Mr. Schein expressed appreciation for their partners' engagement. He said that stakeholders could help to communicate the value of WaterSense and WaterSense labeled homes in the water conservation, water supply, and home building industries represented by webinar attendees. Mr. Schein said that WaterSense relies on its partners to spread the word about the program.

Ms. Newport indicated that there were no further questions.

Ms. Cano expressed her thanks for the audience's participation and encouraged audience members to submit comments reflecting both support and suggestions. She referenced a slide showing contact information, including an email address for general comments on the NOI (watersense-products@erg.com). Ms. Cano encouraged audience members to email herself or Mr. Schein, as either would be happy to engage with stakeholders and provide as much assistance as possible. Ms. Cano stated that the WaterSense team would respond to any unanswered questions following the webinar.

Mr. Schein reiterated his gratitude for the audience's participation. He encouraged audience members to share their comments on aspects of the WaterSense labeled homes program that they believed were successful or effective.

The webinar concluded around 2:30 pm EST.