



WaterSense® Bath and Shower Diverter Notice of Intent (NOI) Public Meeting Summary

February 8, 2017, 1:00 to 3:00 p.m. Eastern, Webinar

Meeting Participants

Attendee	Organization
Katharina Adrian	Dornbracht Americas Inc.
Hugo Aguilar	American Supply Association
Vivianna Bendixson	Southwest Florida Water Management District
John Bertrand	Moen Incorporated
Veronica Blette	U.S. Environmental Protection Agency (EPA)
Rick Borg	Foremost Groups
Terry Burger	NSF International
Carlos Bustos	Albuquerque (New Mexico) Water Utility Authority (ABCWUA)
Maribel Campos	ICC Evaluation Service
Olga Cano	EPA
Victoria Caster	City of Glendale (California)
Shirley Dewi	International Association of Plumbing and Mechanical Officials (IAPMO) R&T
Abdul D'Odo	Water Management Inc.
Yves Duchesne	Regie du batiment du Quebec (Canada)
Julius Duncan	EPA
Melissa Echevarria	City of East Point (Georgia) Water and Sewer
Kevin Ernst	OS&B
Rob Furioso	Symmons Industries
Jeffrey Gerbick	Delta Faucet Company
Mark Gibeault	Kohler Co.
Jill Greiner	City of Charlottesville (Virginia)
Larry Himmelblau	Chicago Faucets
Thomas Horner	Water Management Inc.
Natalie Jones	Tacoma (Washington) Public Utilities
Kevin Kennedy	Niagara Conservation Group
John Koeller	Koeller and Company
Duncan Liang	CSA Group
Christopher Lindsay	The IAPMO Group
Heather Mcnab	York Region (Canada)
Mark Malatesta	American Standard (LIXIL Water Technologies America)
Michael Martinez	Delta Faucet Company
Ramiro Mata	CSA Group
Peter Mayer	WaterDM
Cambria McLeod	Kohler Co.
Akshay Mishra	American National Standards Institute (ANSI)
Robert Neff	Delta Faucet Company



Attendee	Organization
Ryan Nelson	California Energy Commission (CEC)
Edward Osann	Natural Resources Defense Council (NRDC)
Calvaire Paschall	Hyatt Regency Indian Wells
Amanda Peters	Eastern Research Group (ERG)
Kim Pogue	The Home Depot
Wendy Pratt	Zurn Industries, LLC
Dawn Qualley	ICC Evaluation Service
Sally Remedios	Remedios Consulting
Stephanie Salmon	Plumbing Manufacturers International (PMI)
David Schwartzkopf	Willoughby Industries
Melanie Sherman	Evolve Technologies, Inc.
Troy Sherman	Evolve Technologies, Inc.
Gary Soe	TOTO USA Inc.
Susyn Stecchi	City of Pompano Beach (Florida) Utility OASIS Reuse Water Conservation Program
Sean Steffensen	California Energy Commission (CEC)
Imants Stiebris	Speakman Company
Dayne Tyner	Delta Faucet Company
Daniela Urigwe	Energy Solutions
Joyce Warren	City of Frisco (Texas)
Chuck White	National Association of Plumbing-Heating-Cooling Contractors (NAPHCC)
Janice Whitney	EPA

Presenter	Organization
Stephanie Tanner	U.S. Environmental Protection Agency (EPA)
Richa Sharma	EPA
Tessa Roscoe	Eastern Research Group (ERG)
Robert Pickering	ERG

Meeting Summary

Stephanie Tanner (EPA’s WaterSense program) welcomed everyone to the meeting, clarified how to use the webinar software, and reviewed the meeting agenda and purpose for the audience. The purpose of the webinar was to review the *WaterSense Notice of Intent (NOI) to Develop a Specification for Bath and Shower Diverters*. The PowerPoint slides from this presentation can be reviewed on the WaterSense website at: www.epa.gov/watersense/bath-and-shower-diverters. The presentation discussion and participant questions and comments are summarized below.

1. Introduction, Bath and Shower Diverter Background, and Field Research

Ms. Tanner provided an overview of WaterSense, a voluntary program that labels water-efficient, high-performing products. WaterSense labeled products must perform as well or better than standard products in the same category; be 20 percent more water-efficient; realize

savings on a national level; ensure water efficiency is achieved through many technological options; and be independently certified. At the time of the public meeting, more than 21,000 product models had earned the WaterSense label. Through 2015, WaterSense helped save consumers 1.5 trillion gallons of water.

Richa Sharma (WaterSense) then described some background information on bath and shower diverters and how they contribute to water waste. Ms. Sharma described the families and types of bath and shower diverters on the market. Currently, there are two families of diverters.

- Tub Spout Diverter: Diverter mechanism is embedded in the tub spout fitting
- Tub-to-Shower Diverter: Diverter mechanism is embedded as a valve in the plumbing, typically hidden behind the wall

These definitions were also presented later for input and discussion. Ms. Sharma described the applicable national (*ASME A112.18.1/CSA B125.1-2012 Plumbing Supply Fittings*) and state (*CEC’s 2016 Appliance Efficiency Regulations*) performance and water efficiency standards, as shown in Table 1.

Table 1. U.S. Bath and Shower Diverter Performance and Water Efficiency Standards

Standard	Pre-Life Cycle Leak Rate	Post-Life Cycle Leak Rate
ASME A112.18.1/ CSA B125.1	0.1 gallons per minute (gpm)	0.2 gpm
CEC Appliance Efficiency Regulations	0.01 gpm	0.05 gpm

Ms. Sharma explained the fundamental issues with bath and shower diverter water waste. With traditional bath and shower diverters, progressive leaks expressed through tub spouts result in system inefficiencies and water waste. Moreover, these leaks are typically hot water, resulting in water and energy waste, adding to the costs of household and public utility bills.

Ms. Sharma described the field studies that WaterSense consulted while developing the NOI, and how these results demonstrate substantial potential water and energy savings nationwide. The most well-known of these studies was conducted by Taitem Engineering in 2011,¹ which examined leak rates in residential tub spout diverters and found an average leak rate of 0.8 gallons per minute (gpm) for diverters with leaks greater than 0.1 gpm. The most recent study consulted was conducted at Fort Carson, Colorado, in 2015 by Johnson Controls, Inc.² This assessment of residential bath and shower diverters yielded an average leak rate of 0.7 gpm.

¹ Taitem Engineering, PC, 2011. “Leaking Shower Diverters.” *Tech Tip*. New York State Homes & Community Renewal, Weatherization Assistance Program. July 20, 2011. www.taitem.com/wp-content/uploads/Diverter-Valve-Tech-Tip-2011.7.20.pdf.

² Johnson Controls, Inc. Bath and shower diverter leak rate data, collected in support of Fort Carson energy savings performance contract, W912DY-09-D-0017. 2015.

Ms. Sharma explained some of WaterSense's preliminary water waste estimates, included in the NOI, based on these field studies.

Ms. Sharma noted that WaterSense has identified new models with innovative technologies and designs that are available on the marketplace and ensure no leakage throughout the lifetime of the bath and shower diverter. Ms. Sharma stated that WaterSense's estimates for household water savings from fixing leaky bath and shower diverters are in the same range as savings from other WaterSense labeled plumbing products, such as flushing urinals, showerheads and faucet aerators.

Vivianna Bendixson (Southwest Florida Water Management District) asked about the average cost for a diverter. On average, tub spout diverters cost between \$20 and \$50 to purchase, whereas tub-to-shower diverters cost between \$50 and \$150. WaterSense anticipates some homeowners will encounter additional costs by hiring professional assistance.

Mark Malatesta (American Standard) asked, if consumers are not converting toilets and showerheads to WaterSense labeled versions, what makes the WaterSense program confident that consumers will convert their bath and shower diverters. Ms. Tanner responded that WaterSense believes that consumers are in fact converting to WaterSense labeled toilets and other products, as products shipments and the range of available product models appear to be growing every year. Robert Pickering (ERG) added that the majority of the lavatory faucet market has shifted to be predominantly WaterSense labeled product models, and this type of market shift is a goal of the WaterSense program. Ms. Sharma added that savings will accumulate for public utilities and that WaterSense hopes both water and energy utilities will encourage consumer adoption.

2. Bath and Shower NOI: Scope and Definitions

Tessa Roscoe (ERG) said that WaterSense released an NOI for Bath and Shower Diverters in December 2016. She outlined the outstanding issues WaterSense has been attempting to resolve prior to publishing a draft specification. Ms. Roscoe explained that the scope of such a specification would apply to the product category, bath and shower diverters, as well as product families, tub spout and tub-to-shower diverters, but would exclude other types of diverters at this time (e.g., shower-to-shower, bidet, or shampoo diverters). Companion products, such as twin ell adaptors or in-line flow control devices, would also be excluded from this specification. Ms. Roscoe then described the proposed definitions for the product category and families to be used within the draft specification.

Ms. Roscoe polled the audience with this question: Are these definitions sufficient to encompass the possible configurations within this product category and educate consumers? 55 percent of respondents indicated Yes; 3 percent of respondents indicated No; and 42 percent of respondents indicated that they needed more information before making a decision. Ms. Roscoe instructed those who needed more information to contact the WaterSense Helpline after the presentation.

Ms. Roscoe then posed the following questions to the audience: Are there any other accepted industry or regulatory definitions of which WaterSense should be aware? Are there any

companion products that impact the water efficiency and performance of bath and shower diverters that need to be considered for the draft specification?

These questions did not receive any direct responses. However, there was a request from Ms. Bendixson for clarification on the difference between the definitions for the product category and a tub-to-shower diverter. Ms. Roscoe explained that the product category (i.e., bath and shower diverter) definition encompasses the tub-to-shower family and that this family of diverter is typically embedded in the plumbing in the stall wall.

Gary Soe (TOTO USA Inc.) asked for clarification whether a diverter embedded in a Roman tub filler with a hand shower attachment would be included in this scope; he was instructed to follow up with WaterSense following the public meeting to discuss these product types.

3. Bath and Shower Diverter NOI: Proposed Leak Rate Criteria

Ms. Roscoe explained that the anticipated specification definition for a product life cycle is 15,000 cycles (as stipulated in the ASME/CSA standard); that leak rate criteria would apply to both pre- and post-life cycle leaks; and that WaterSense intends to establish 0 gpm limits for both of these life cycle leak rates to eliminate extraneous water and energy waste. By doing so, WaterSense also aims to recognize the most water-efficient technology on the market and drive the market to offer even more options that effectively do not leak.

Ms. Roscoe cited the CEC's Appliance Efficiency Database, which shows 43 percent of the nearly 3,000 listed models as having achieved a "0-0" rating, meaning the product was rated 0.00 gpm for both pre- and post-life cycle leaks. Ms. Roscoe also noted that WaterSense would be eager to hear from any manufacturers that have an automatic reset diverter listed as a "0-0" model under the CEC database. Ms. Roscoe also mentioned that other green codes are utilizing "0-0" terminology, and WaterSense is seeking to remain consistent within the marketplace.

In some cases, the water savings resulting from fixing a leaky bath and shower diverter are reduced as some of the "saved" water is actually diverted to the showerhead and used during the showering event. This savings factor was described in the aforementioned Taitem Engineering study, which assigned a conservative estimate of 70 percent for a universal savings factor (i.e., in the worst-case scenario, only 70 percent of the water is saved). However, based on information presented within the Taitem Engineering study, WaterSense does not believe that a savings factor should be applied to its programmatic water savings. The Taitem study noted that a savings factor was unnecessary when installing a new bath and shower diverter in tandem with a low-flow showerhead. WaterSense anticipates the majority of bath and shower replacements will occur during whole bathroom retrofit efforts where the showerhead will also likely be replaced. In addition, WaterSense labeled showerheads are pressure compensating, and therefore, maintain their maximum rated flow rate even at increased water pressures. These factors should negate the need for the application of a savings factor to WaterSense's programmatic water savings calculations.

Ms. Roscoe then polled the audience with this question: Should WaterSense adopt the ASME/CSA lifecycle definition of 15,000 cycles? 86 percent of respondents indicated "Yes"; 3

percent of respondents indicated “No”; and 11 percent indicated that they would need more information to make a decision.

Mr. Malatesta asked which green codes currently reference “0-0” leakage requirements, and Mr. Pickering responded that these limits are currently included in the International Association of Plumbing and Mechanical Officials’ (IAPMO) *Green Plumbing and Mechanical Code Supplement*. These requirements are also currently incorporated in the draft IAPMO/ANSI WE•Stand water efficiency code, which will replace IAPMO’s *Green Plumbing and Mechanical Code Supplement* in the next code cycle. Mr. Troy Sherman (Evolve Technologies, Inc.) asked the year of publication on this code, and Mr. Pickering responded that the most recent publication date was 2015, but the actual release date may have been 2016.

Mr. Sherman asked what assumptions and data WaterSense used in its evaluative calculations of the product life cycle to equate 15,000 cycles with approximately 22 years of use. Mr. Pickering explained that these calculations were based on empirical data, such as average number of showers per person per day and average number of people per household, from the *2016 Residential End Uses of Water*³ study by the Water Research Foundation. Mr. Pickering noted that WaterSense would like to receive any additional data that could help refine this estimate.

Ms. Roscoe then polled the audience with this question: Should WaterSense apply a savings factor to its programmatic water savings calculations for bath and shower diverters? 38 percent of respondents indicated “Yes”; 24 percent indicated “No”; and 38 percent indicated they would need more information to make a decision. Ms. Roscoe posed a follow-up question: “Is there additional information that WaterSense should consider when determining an appropriate value for this savings factor?” No responses to this question were submitted.

Mr. Edward Osann (National Resources Defense Council) asked if WaterSense had collected information on how long life cycle testing takes, or how much additional time it would take to extend the test to 20,000 or 25,000 cycles. Ms. Tanner responded that WaterSense has not determined how long it takes to test to 15,000 cycles.

Mr. David Schwartzkopf (Willoughby Industries) posed a question for discussion: Is it possible for WaterSense to work with existing standards-making bodies (e.g., ASME/CSA) to simplify process time and costs to update to the newer requirements for manufacturers? He explained that small businesses experience difficulty, as existing standards-making bodies have adopted WaterSense standards and new test methods, but manufacturers incur the extra cost of obtaining new certifications while also maintaining their existing certifications. Ms. Tanner acknowledged that there are two issues at the heart of this question. First, WaterSense does attempt to harmonize its standards with existing national standards and codes wherever possible. Second, industry has expressed a strong desire for WaterSense criteria to only be incorporated on a voluntary basis with committee standards, so future references within codes are streamlined. She reiterated that WaterSense works closely with many standards-making bodies to mitigate these challenges, but there is only so much control WaterSense can exercise

³ Water Resources Foundation (WRF), 2016. DeOreo, William B., Peter Mayer, Benedykt Dziegielewski, and Jack Kiefer. *Residential End Uses of Water, Version 2*. Rep. no. #4309b.

over licensed certifying bodies (LCBs) and the marketplace. Ms. Tanner also emphasized that companies and manufacturers are encouraged to explore all available options for LCBs and find the partnership that is most beneficial to that specific company and its product lines. Mr. Schwartzkopf pointed out that while this may technically be possible, it is in fact very costly for small manufacturers to switch LCB partnerships, and this option is in fact more often cost prohibitive.

Ms. Tanner reviewed the questions that had been submitted up to this point. Mr. Sherman noted that he thought it was surprising that one drip, possibly from residual water at the spout, during testing would not be considered “0-0”. Ms. Tanner explained that according to the CEC requirements, any product that drips during the test is not labeled “0-0” but noted that the test stipulates that measurements not be taken until one minute after the bath and shower diverter has been activated, thereby reducing the likelihood that residual droplets would be captured in the test results. Mr. Sherman also commented that a savings factor should not be applied to any bath and shower diverter installed with a showerhead equipped with a pressure compensating flow regulator (since no more water can be used by the showerhead than what the regulator’s maximum flow will allow). Ms. Tanner noted that this aligned with WaterSense’s interpretation as well.

Mr. Malatesta asked how many of the models listed in the CEC database with a “0-0” rating are automatic reset diverters. Ms. Tanner responded that the team was unaware of the answer to this question, but WaterSense has reached out to the CEC to understand exactly how models are classified as “0-0” within CEC’s database. Ms. Tanner also reiterated that WaterSense is eager to hear from any manufacturers that make an automatic reset diverter that is listed as “0-0” in this database.

Mr. Osann commented that documentation on the relationship between water pressure and savings would be helpful.

Ms. Wendy Pratt (Zurn Industries) noted that, similar to Mr. Schwartzkopf’s comment, WaterSense certifications are additional certifications that are over and above the standards her company complies with, and thus, they are charged for the additional testing and certification listing.

Ms. Roscoe posed two prepared questions to the audience: What constitutes ‘zero leakage’? How much leak tolerance is required, if any, to encompass automatic reset diverters?

Neither of these questions received responses from the audience.

4. Bath and Shower Diverter NOI: Product and Performance Testing

Ms. Roscoe discussed the proposed product and performance testing criteria under a WaterSense specification for bath and shower diverters. As discussed, WaterSense hopes to align with existing standards wherever possible, and, as such, intends to adopt the performance testing protocol presented in the ASME/CSA standard. Presently, this is the nationally accepted test method for bath and shower diverter leakage.

Ms. Roscoe posed the following question to the audience: Are there other factors that can cause a bath and shower diverter to leak that should be addressed?

Mr. John Bertrand (Moen Incorporated) commented that water quality and consumer maintenance efforts both play large roles in bath and shower diverter longevity.

Mr. Schwarzkopf asked for clarification on whether shower-to-shower diverters would be excluded from this specification, and Ms. Roscoe reiterated that this was true; only tub spout and tub-to-shower diverters would be covered under the proposed draft specification.

Ms. Roscoe then posed a follow-up question on this topic to the audience: Does fixing a leaking bath and shower diverter cause any impacts to the system or use health and safety that WaterSense has not considered?

No responses were submitted by the audience.

5. Bath and Shower Diverter NOI: Product Marking

Ms. Roscoe explained that the proposed WaterSense draft specification would make similar product marking requirements as found in the national ASME/CSA standard, namely, requiring manufacturers and brand names to be clearly marked on the product and its packaging. She also explained that, to WaterSense' knowledge, there are no existing standards that stipulate marking of product tested leak rates on the product or its packaging.

Ms. Roscoe continued to explain that under this draft specification, marking for showerhead-tub spout diverter combination packages (where a bath and shower diverter and matching showerhead are packaged and sold together) could be impacted, as WaterSense is considering requiring both products within the combination package to be individually certified for the combination package to bear the WaterSense label. In general, it is WaterSense's intention to use product marking and marketing to draw attention to leaky bath and shower diverters as water wasting and to promote products that do not leak to utilities, plumbing professionals, and consumers.

Ms. Roscoe posed the following question to the audience: Currently, how are bath and shower diverters and their packaging and documentation marked to communicate tested leak rates?

Ms. Tanner reviewed the responses.

Mr. Larry Himmelblau (Chicago Faucets) noted that a zero-leakage requirement may impact the automatic reset function on some tub spout diverters and that not allowing the automatic reset diverter to reset itself may "give the user a surprise." Ms. Tanner agreed and reiterated that WaterSense was keenly interested in determining how much leakage is necessary to get the tub spout diverter to reset.

Mr. Osann commented that the value for zero leakage should be zero (0). He commented that he felt that the test procedure should allow for initial drainage, but after an appropriately short interval, the leakage rate limit should be set at 0.0 gpm, and any visible drips or leakage should

result in the model not passing the test. Ms. Tanner explained that, to her knowledge, this is how bath and shower diverter leaks are tested under the CEC standard.

Mr. Sherman, Mr. Malatesta, and Mr. Bertrand all noted that there are no rated leak rates required to be marked on products or packaging.

Ms. Roscoe posed a follow-up question: Are there any unforeseen impacts of requiring both a showerhead and a bath and shower diverter to earn the WaterSense label in order for their combination packaging to bear the label?

Mr. Robert Neff (Delta Faucet Company) responded that requiring both showerheads and diverters to meet the WaterSense requirements could result in less use of the WaterSense label on showerheads and tub spout diverters. He noted that manufacturers may not be able to meet requirements for both products, which would result in fewer showerhead-tub spout diverter combination packages becoming WaterSense labeled. He noted this package labeling requirement could also make it difficult for consumers to differentiate between 2.5 and 2.0 gpm showerhead models. Multiple attendees submitted similar comments, but these were not individually reviewed during the webinar.

6. Bath and Shower Diverter NOI: Product Terminology and Marketing

Ms. Roscoe explained that WaterSense does not anticipate using common efficiency descriptors, such as “water-efficient” and “high efficiency,” to describe WaterSense labeled bath and shower diverters. This is because these phrases are often associated with flow restriction requirements in other WaterSense labeled plumbing products, and this is an association WaterSense would like to avoid for this product category. As such, WaterSense is considering the use of words such as “leakless” and “dripless” to describe WaterSense labeled bath and shower diverters.

Ms. Roscoe posed the following question to the audience: Should the proposed terms and definitions also be used for marketing purposes?

Mr. Sherman responded that the proposed definitions would not be helpful, as “tub spouts will leak or drip—just not in the way you test for it,” seemingly implying that the performance standard does not address water quality (i.e., water hardness) issues that lead to diverter leaks in real world applications.

Shirley Dewi (IAPMO R&T) suggested “leak-free” as an alternative product descriptor.

Mr. Malatesta commented that “tub spout diverters are simply accessories in the eyes of the consumer. We have a ton of educating to do in order for this specification to have any impact.”

Mr. Osann commented that “leakage is often much more than a ‘drip.’ ‘Dripless,’ while simple, does not convey the extent of the savings.” He suggested “no-leak” or “leak-free” as alternative product descriptors and warned not to rule out “water-efficient” as a possible descriptor.

Attendees submitted additional questions and comments pertaining to previous discussions. Mr. Osann noted that he felt WaterSense should not allow combination packages to display the WaterSense label unless both products have been certified to their respective specifications. Ms. Pratt requested clarification on whether this approach was WaterSense's intention. Ms. Roscoe responded that currently, WaterSense requires all other labeled products packaged together to be labeled prior to being packaged together, or the package must clearly state which products within the package are not labeled.

Ms. Roscoe posed the following question to the audience: What are the best ways to raise consumer awareness of bath and shower diverter leaks and availability of product versions that eliminate leaks?

No responses were submitted by the audience.

Ms. Bendixson asked if the WaterSense team was aware of how familiar the public is with the program currently. Ms. Tanner responded that the program does not have concrete market research data but rather deduces its impact through its annual reporting activities. Data from these activities show strong market penetration for WaterSense labeled products.

Mr. Sherman commented, "This is a great problem to solve and should be solved" but noted it was very difficult to solve at the consumer level. He said that this is because consumers often do not notice or understand that their bath and shower diverter leaks because they are already wet when showering and thus, do not notice or feel the additional leakage expressed in the bathtub. Ms. Tanner concurred and noted that consumers typically have their backs to the bath and shower diverter while showering, and therefore are unable to see the water being expressed from the tub spout. She commented that, moreover, consumers are unlikely to be aware that they can replace or repair their leaking bath and shower diverters with a relatively simple process. She reiterated that this is one reason WaterSense is pursuing a draft specification for bath and shower diverters—to draw more attention to this problem and the availability of product solutions, as well as drive the development of more product models that eliminate leakage.

Ms. Roscoe posed a final question to the audience: What are the best ways to engage the plumbing community in this specification design process?

Mr. Osann replied that he has found video clips to be very useful. He noted that videos capturing leakage at a variety of locations and with different types of bath and shower diverters are especially helpful.

7. Other Issues and Next Steps

Ms. Tanner asked for any remaining questions or comments. Katharina Adrian (Dornbracht Americas, Inc.) asked whether WaterSense planned to revise the showerhead flow rate, spray pattern, and spray force requirements to be less stringent in future specification versions, noting that products often meet the water efficiency criteria of WaterSense specifications but fail to meet the performance testing requirements. Ms. Tanner explained that these requirements are based on extensive consumer feedback and preliminary testing data on widespread preference

for showerhead performance. Ms. Tanner noted that while specification requirements are always open for review, changing requirements would only occur following the validation of objective data on a change in widespread user preference. Ms. Tanner said that any manufacturers with additional concerns of this nature could approach existing standards-making bodies or committees to incorporate these changes into future standard versions. Ms. Adrian responded by explaining that the future CEC requirements for showerheads (Starting in 2018, maximum flow rate is limited to 1.8 gpm.) present a challenge for her small company; revising the product design to meet the stricter water efficiency criteria could sufficiently impact the product's performance to no longer meet the WaterSense label performance test requirements for showerheads, possibly causing the company to drop these models from its certification listing. Mr. Schwarzkopf also commented that his company experiences a similar challenge as Ms. Adrian's. Ms. Tanner concluded the discussion by noting that WaterSense intends to align with existing standards wherever possible and encouraged manufacturers to approach standards-making committees with these problems.

Ms. Tanner discussed the next steps in the specification development process and requested that those attending the webinar submit their comments to watersense-products@erg.com or the WaterSense Helpline (watersense@epa.gov). Ms. Tanner announced that WaterSense intends to make the comments received public prior to the publication of the draft specification, which is intended for spring or summer 2017, if the issues outlined within this meeting and the NOI are resolved.

Ms. Tanner adjourned the meeting by encouraging those with outstanding question to contact the WaterSense Helpline at watersense@epa.gov and noting that the WaterSense team will follow up with specific attendees following the presentation to discuss their specific issues.