

Appliance Standards Awareness Project
Natural Resources Defense Council

May 24, 2024

Stephanie Tanner
U.S. Environmental Protection Agency
Office of Water
WaterSense Program
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

RE: WaterSense® Notice of Intent to Revise the High-Efficiency Lavatory Faucet Specification

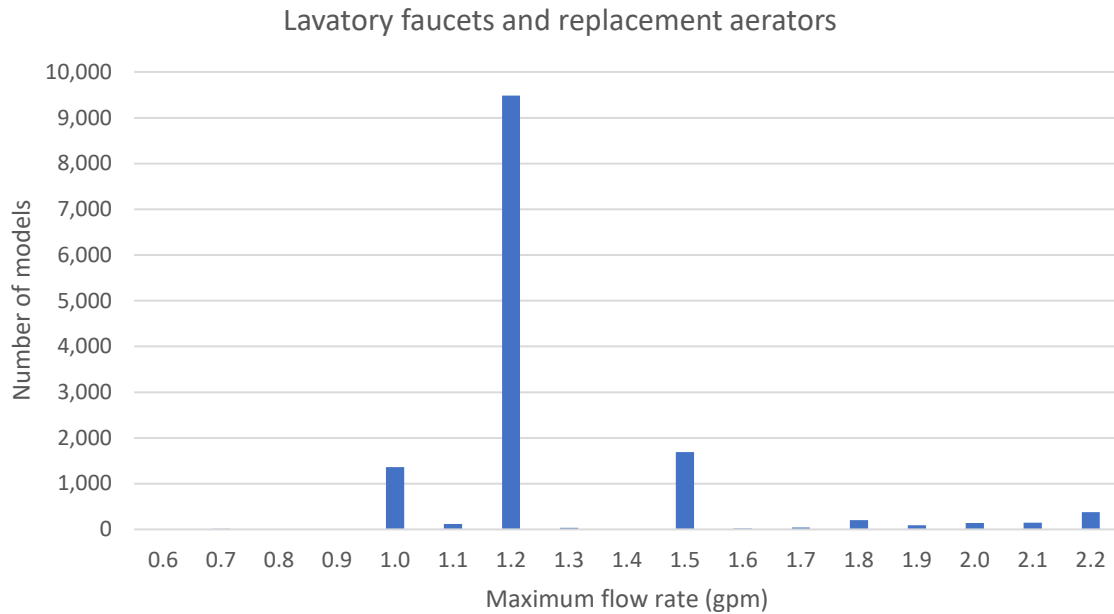
Dear Ms. Tanner:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP) and the Natural Resources Defense Council (NRDC) on the Notice of Intent (NOI) released on March 7, 2024 to revise the High-Efficiency Lavatory Faucet Specification. We appreciate the opportunity to comment.

We strongly support updating the WaterSense specification for faucets. The current WaterSense specification for lavatory faucets was released in 2007; since then, more than a dozen states have adopted standards for lavatory faucets that either match the WaterSense criteria of 1.5 gallons per minute (gpm) or are more stringent (at 1.2 gpm). Thus, updated criteria for lavatory faucets will be critical to ensuring market differentiation for WaterSense certified products. Furthermore, states have also adopted standards for kitchen faucets and public lavatory faucets. We believe that there is large potential for water and energy savings from adopting a WaterSense specification for kitchen faucets, and we encourage EPA to consider specifying a maximum flow rate of 1.5 gpm for kitchen faucets. Furthermore, there could be significant benefit to including performance requirements for public lavatory faucets as part of a WaterSense specification to help ensure user satisfaction; for the same reason we also support including minimum flow rates for all WaterSense certified faucets. Finally, we encourage EPA to publish shipment data for WaterSense products, which would help inform the specification development process.

For lavatory faucets, we encourage EPA at a minimum to lower the maximum flow rate to 1.2 gpm and to consider whether 1.1 or 1.0 gpm would be appropriate. As shown in Figure 1, most lavatory faucet models (and replacement aerators) on the market today have maximum flow rates that are at or below 1.2 gpm. Therefore, we support EPA's intent to lower the maximum flow rate for lavatory faucets from the current specification of 1.5 gpm. In addition, in order to provide greater market differentiation, we encourage EPA to investigate whether specifying a maximum flow rate of 1.1 or 1.0 gpm could achieve greater water savings than a 1.2 gpm specification while maintaining consumer satisfaction.

Figure 1. Maximum flow rate of lavatory faucet models in the DOE Compliance Certification Database¹



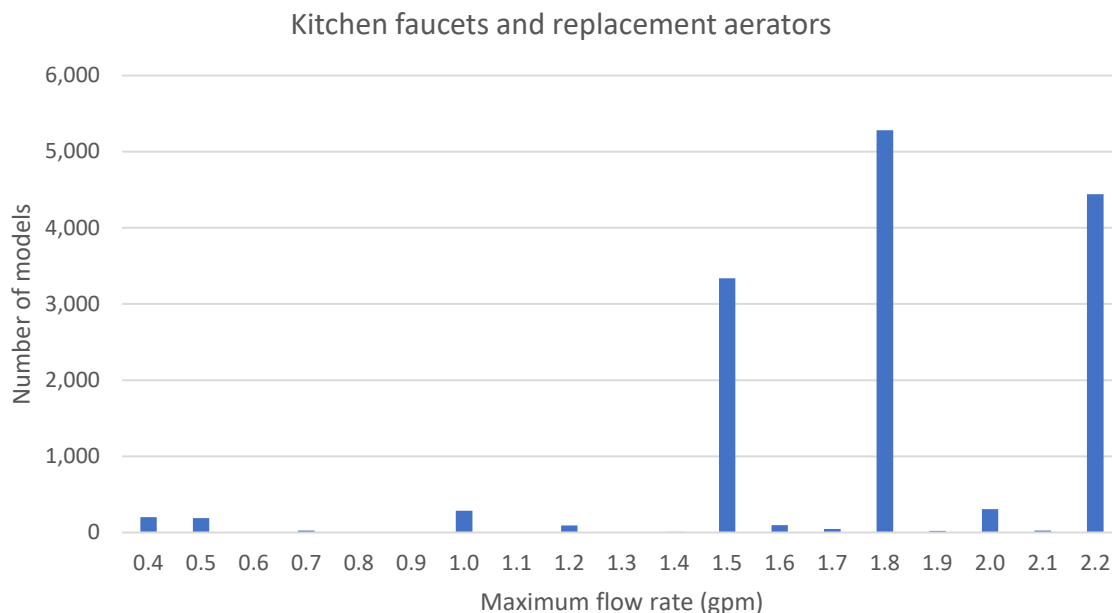
We support adopting a WaterSense specification for kitchen faucets and encourage EPA to consider specifying a maximum flow rate of 1.5 gpm. Kitchen faucets consume a significant amount of water, and kitchen faucet hot water use translates into significant water heating energy consumption.² Furthermore, as shown in Figure 2 below, about two-thirds of all kitchen faucets (and replacement aerators) on the market are rated at or below 1.8 gpm (compared to the federal standard of 2.2 gpm). Therefore, there appears to be a significant opportunity for a new WaterSense kitchen faucet specification to drive large water and energy savings.

Furthermore, it appears that the market for kitchen faucets has largely transitioned to products with rated maximum flow rates of 1.8 gpm and below. For example, HomeDepot’s October 2021 “Responsible Product Standards” specify that all kitchen faucets sold in their U.S. stores will have a rated maximum flow rate no greater than 1.8 gpm.³ Of all the kitchen faucets advertised on lowes.com, there are 2,700 models rated at 1.8 gpm and 795 models rated at 1.5 gpm, while just 84 models are rated at 2.2 gpm;⁴ the cheapest kitchen faucet advertised on lowes.com is rated at 1.8 gpm.⁵ And all Moen kitchen faucets have a rated maximum flow rate no greater than 1.5 gpm.⁶ Therefore, we would be concerned that a WaterSense specification of 1.8 gpm for kitchen faucets would not provide meaningful

¹ https://www.regulations.doe.gov/certification-data/#q=Product_Group_s%3A*. Accessed May 14, 2024.
 Excluding models with maximum flow rates of 0.5 gpm or below since these are likely to be public lavatory faucets.
² For example, the 2017 ASAP & ACEEE report “States Go First” estimated that a 1.8 gpm kitchen faucet saves 2,214 gallons of water, 75 kWh of electricity, and 0.55 MMBtu of natural gas annually on average relative to a 2.2 gpm faucet. <https://appliance-standards.org/sites/default/files/States%20Go%20First.pdf>. p. 57.
³ <https://ecoactions.homedepot.com/wp-content/uploads/Responsible-Product-Standard-October-2021.pdf>.
⁴ <https://www.lowes.com/search?searchTerm=kitchen%20faucet>. Accessed May 21, 2024.
⁵ <https://www.lowes.com/pd/Keeney-Polished-Chrome-2-Handle-Deck-Mount-Low-Arc-Handle-Lever-Residential-Kitchen-Faucet/1002859368>.
⁶ <https://www.moen.com/c/Kitchen?query=:launchDate-desc:allCategories:Kitchen:category:Kitchen%20Faucets>.

differentiation in the market, and we instead encourage EPA to consider establishing a maximum flow rate of 1.5 gpm.

Figure 2. Maximum flow rate of kitchen faucet models in the DOE Compliance Certification Database⁷



We support adopting a WaterSense specification for public lavatory faucets and encourage EPA to include performance requirements. As EPA notes in the NOI, none of the existing standards (e.g., ASME A112.18.1/CSA B125.1) for public lavatory faucets include performance requirements. EPA further notes that adequacy of water flow and spray force and comfort may be important performance considerations, while sensor sensitivity and responsiveness may also be important for sensor faucets. We understand that each of these performance attributes can impact user satisfaction, and we therefore encourage EPA to develop performance requirements for public lavatory faucets to address minimum flow rate, spray force, and, for sensor faucets, sensor sensitivity and responsiveness. We also encourage EPA to evaluate resistance to tampering with any component that would influence the water use of a public lavatory faucet as a potential design requirement.

We support including minimum flow rates for all WaterSense certified faucets. The current WaterSense specification includes a minimum flow rate of 0.8 gpm at a pressure of 20 psi at the inlet for private lavatory faucets. The NOI notes that EPA intends to maintain the current minimum flow rate requirement and is also considering setting minimum flow rates for kitchen faucets and public lavatory faucets. We support including minimum flow rate requirements for all WaterSense certified faucets in order to ensure user satisfaction at locations with lower operating pressures. As EPA notes in the NOI, including minimum flow rate requirements would effectively ensure that manufacturers are providing pressure compensation to provide a fairly steady flow rate across a range of operating pressures.

⁷ https://www.regulations.doe.gov/certification-data/#q=Product_Group_s%3A*. Accessed May 14, 2024.

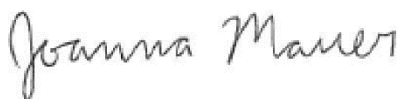
We question the efficacy of requiring metering and self-closing faucets to convert flow quantities into flow rates (gpm) for labeling eligibility. While a conversion of the water usage of metering and self-closing faucets from maximum volumes to maximum flow rates might appear to offer an opportunity for comparison within the same product category as manually closed faucets, metering faucets by design do not run continuously, and the comparison may not be apt. Metering and self-closing faucets could comprise their own product category, or could be presented as a subgroup within a faucet category with their performance metric expressed as a maximum volume. WaterSense informational materials could be developed to illustrate and compare the water use of manual and metering faucets in different occupancies and use levels.

We encourage EPA to publish shipment data for WaterSense products. Unlike with the ENERGY STAR program, EPA does not currently publish shipment data for WaterSense certified products. For the ENERGY STAR program, EPA annually publishes a unit shipment and market penetration report,⁸ which allows stakeholders to understand the market penetration of ENERGY STAR certified products. We encourage EPA to publish similar data for WaterSense certified products, which would help inform the specification development process.

We encourage EPA to consider publishing separate specifications for different faucet types. We understand that it may be possible for EPA to move forward relatively quickly for certain faucet types, while others may require more research and analysis. Each one of the major faucet types (e.g., residential lavatory, kitchen, public lavatory) are distinct and significant enough to warrant its own specification. We therefore encourage EPA to consider publishing separate specifications for different faucet types if such a process would allow for moving forward more quickly with certain products.

Thank you for considering these comments.

Sincerely,



Joanna Mauer
Deputy Director
Appliance Standards Awareness Project



Edward R. Osann
Senior Policy Analyst
Natural Resources Defense Council

⁸ See, for example, for 2022:

<https://www.energystar.gov/sites/default/files/2022%20Unit%20Shipment%20Data%20Summary%20Report.pdf>.