

look for



WaterSense® Public Meeting

Draft Specification for Point-of-Use Reverse Osmosis (RO) Systems

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Housekeeping

- All attendees are muted to minimize background noise.
- Please type questions into the Zoom chat. We will have a dedicated time for Q&A at the end of each section and at the end of the presentation as time allows.
- This PowerPoint presentation will be posted on the public website following the call.
- Submit written comments to: watersense-products@erg.com
- This meeting is meant to be an open discussion.
- All questions, comments, and concerns are welcome!

Meeting Purpose

At this meeting, we will:

- Introduce the requirements prescribed in the draft specification
- Answer questions about the draft specification and supporting statement so that interested parties can provide more precise comments
- Explain WaterSense's specification development process and next steps

Generally, we do not:

- Provide resolution to comments or concerns
- Finalize specification criteria or test methods

Agenda

- Brief Introduction to WaterSense
- RO Systems Background
- WaterSense Draft Specification
 - Scope
 - General Requirements
 - Water Efficiency Criteria
 - Performance Criteria
 - Packaging and Documentation Requirements
- Partnership, Certification, and Product Listing
- Next Steps
- Questions and Discussion



Poll Question

Question: Please tell us who you are.
Do you represent a:

- RO System and/or RO Membrane Manufacturer/Retailer
- Water and/or Energy Utility
- Certifying Body
- Other



look for



Part 1

Introduction to WaterSense

Why WaterSense?

2006



Water shortages expected in 36 states

Communities face major infrastructure investments

Consumers challenged by rising utility bills

Much of water used outdoors is wasted

No program like ENERGY STAR for water

Identify high-performing technology

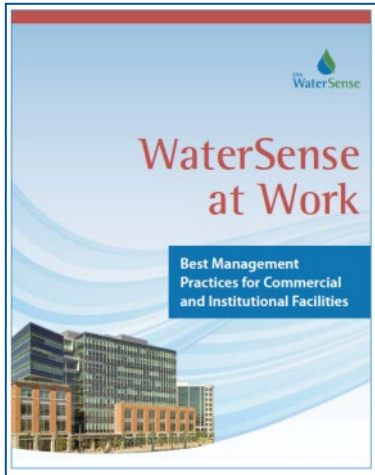
Promote water-efficient behavior/action

Help consumers save money

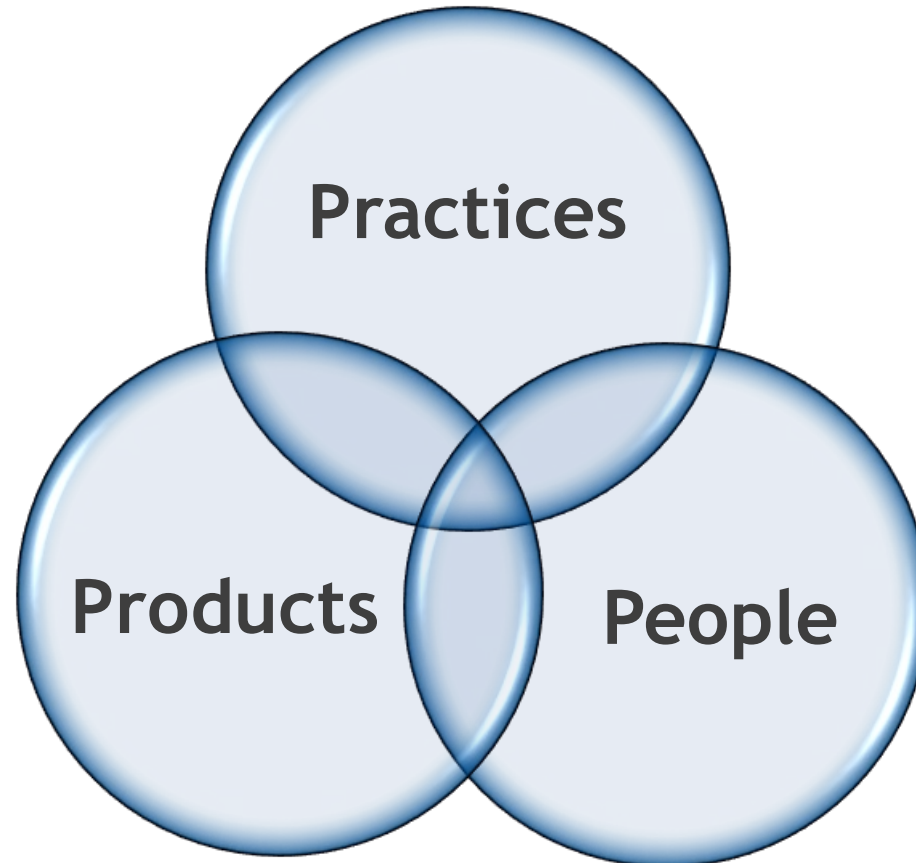
Reduce need to expand infrastructure capacity

Save water for critical needs

WaterSense Program Overview



Actions that can be taken to reduce water use—at home, outdoors, and at work



Fixtures and technologies save water



Partners reach users to change behavior



What's Special About WaterSense?

A label with integrity

- Third-parties independently certify that products and homes meet EPA criteria
- Backed by the credibility of EPA

Simple to understand

- Label tells consumer that a product is more efficient
- Manufacturers can compete on degree of efficiency or other features

Smart use of resources

- EPA provides national standardization and outreach for water efficiency
- Manufacturers absorb product research, testing, and branding costs
- Licensed certifying bodies certify the products and police the label
- EPA, manufacturers, retailers, and other partners help market/incentivize purchase of labeled products



WaterSense Labeled Products



Lavatory Faucets

Labeled since 2007
20,800 labeled models



Tank-Type Toilets

Labeled since 2007
5,100 labeled models



Flushing Urinals

Labeled since 2009
920 labeled models



Flushometer-Valve Toilets

Labeled since 2015
1,730 labeled models



Showerheads

Labeled since 2010
13,000 labeled models



Weather-Based Irrigation Controllers

Labeled since 2011
970 labeled models



Soil Moisture-Based Irrigation Controllers

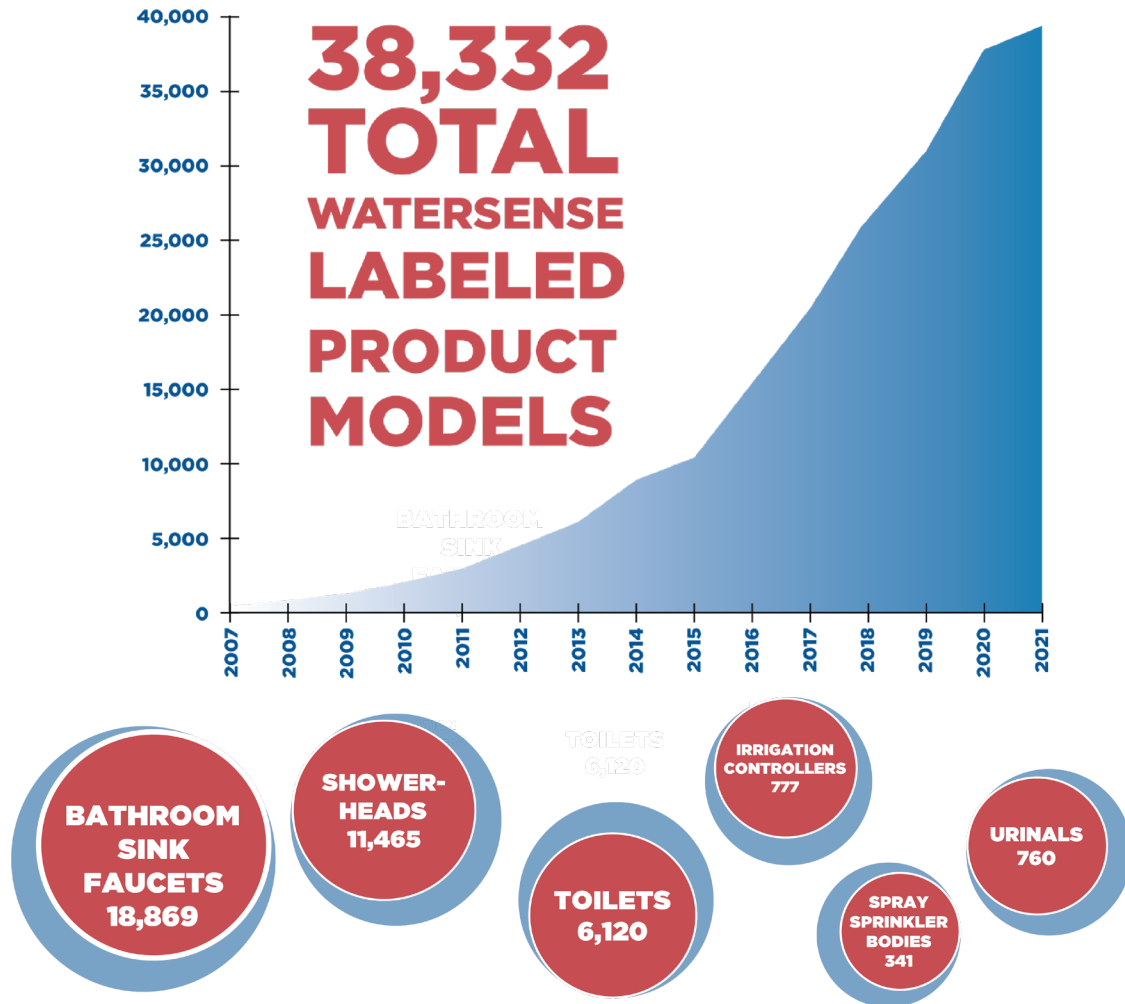
Labeled since 2021
4 labeled models



Spray Sprinkler Bodies

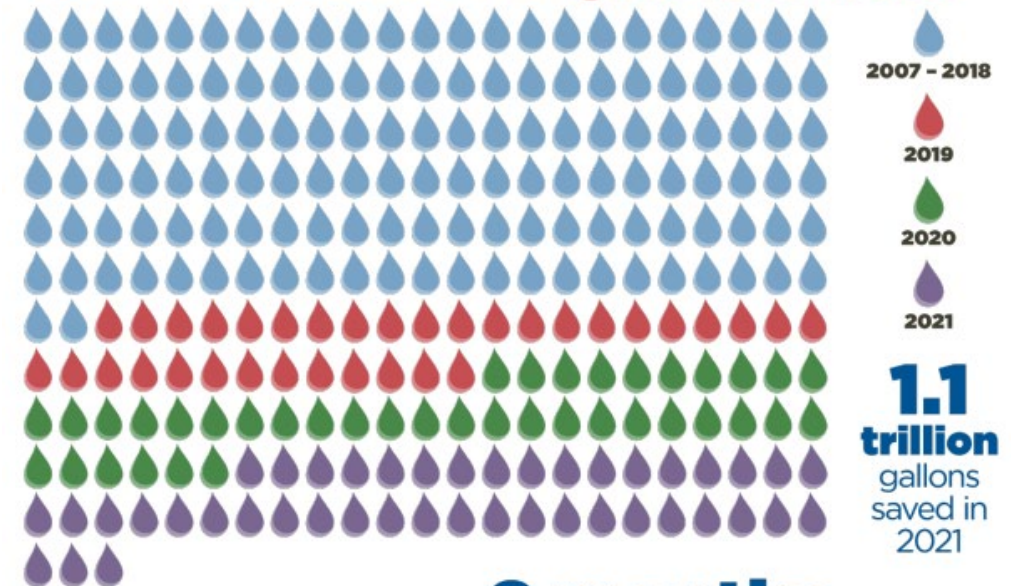
Labeled since 2017
570 labeled models

Accomplishments



Since 2006, WaterSense labeled products have saved:

6.4 trillion gallons of water



1.1 trillion gallons saved in 2021

That's the water used in **8 months** by all U.S. households!

Benefits of WaterSense Partnership

The WaterSense Partnership program was developed to:

- Share resources
- Encourage the adoption of water-efficient behaviors and products

Partner Benefits

- Distinguish your organization from others with the WaterSense partner logo and gain recognition from EPA
- Apply for program awards based on enhancing the marketplace for water-efficient products
- Participate in a national network of peers to share success stories, attend partner-only webinars, and receive regular program news and updates
- Gain access to materials that help you find out how other partners are promoting WaterSense and water efficiency and gain access to free collateral and media materials (e.g., public service announcements, fact sheets, brochures, press releases, and water-efficiency messages for utility customers)

Benefits of WaterSense Partnership

WaterSense Partner Savings Calculator

- WaterSense is developing a tool to help partners estimate how the WaterSense labeled products they manufacturer/sell or homes they build help reduce:
 - Water consumption
 - Energy consumption
 - Carbon emissions
 - Utility costs
- Intended for product manufacturers, retailers and distributors, and builders
- This tool will help partners with corporate sustainability or ESG reporting
- WaterSense plans to announce the availability of the tool soon and will hold a specific webinar for partners to demonstrate how it can be used. Stay tuned!

Benefits of the WaterSense Label

Consumer Preference

- From 2022 EPA survey, consumers who become aware of the meaning of the WaterSense label at the point of purchase are more likely to select WaterSense labeled models over standard models

Inclusion in Utility Rebate Programs

- WaterSense labeled products are often included in utility rebate programs
- www.epa.gov/watersense/rebate-finder

Inclusion in Retailer Promotional Campaigns

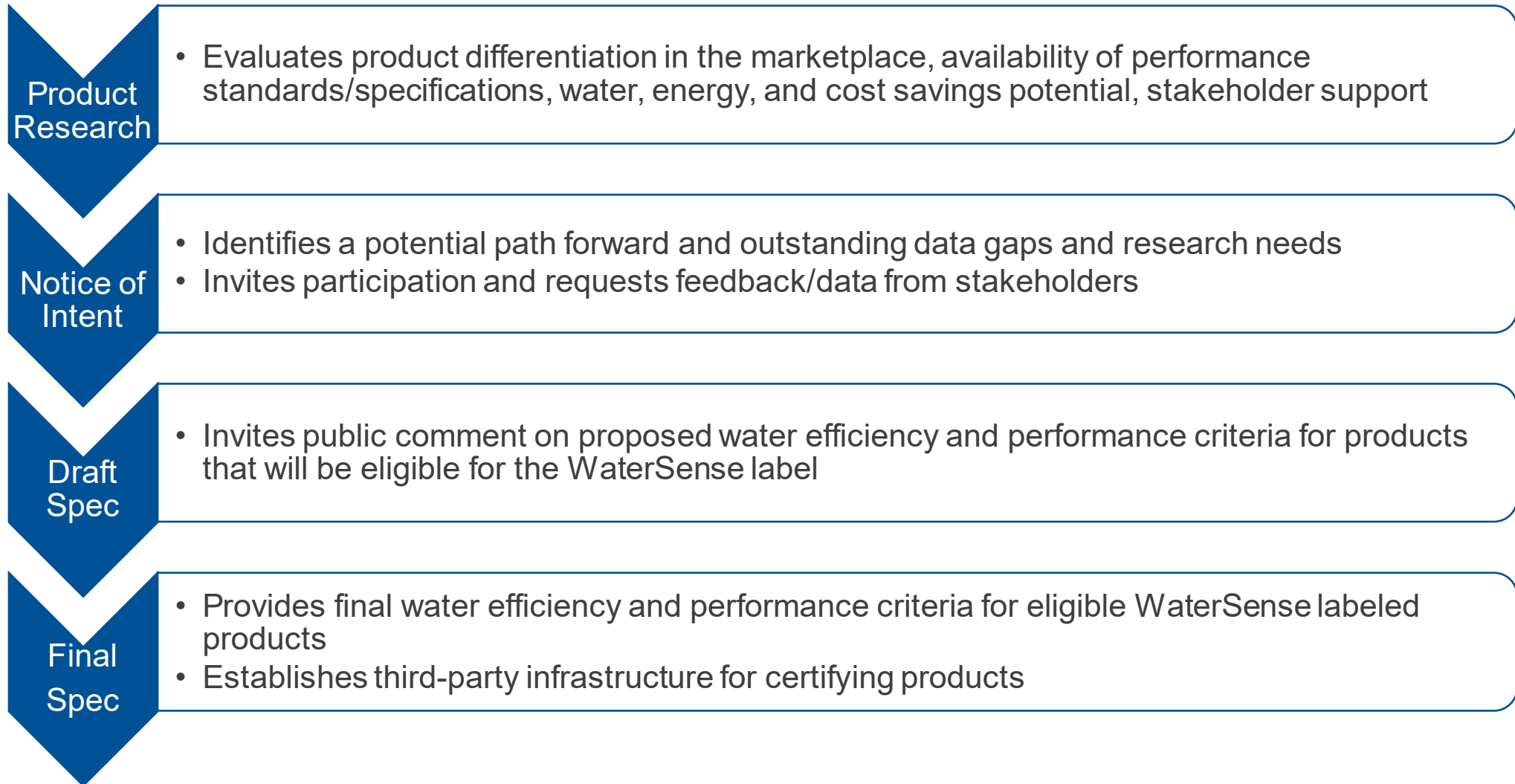
- WaterSense labeled products are often included in retailer promotional efforts
- Examples
 - Eligible for Amazon's Climate Pledge Friendly badge
 - Home Depot requires all plumbing products sold in stores to carry the WaterSense label
 - Other retailers highlight WaterSense labeled products in sustainability-focused websites or campaigns

Benefits of the WaterSense Label

Coordination on State and Local Regulations

- As a voluntary program, WaterSense is not involved in the decisions of state or local governments to adopt efficiency regulations for water using products
- However, EPA does encourage these governments to align with WaterSense's established test methods and performance criteria
- Reduces the testing and certification burden on manufacturers
- Allows easier identification of acceptable products between jurisdictions

Specification Development Process





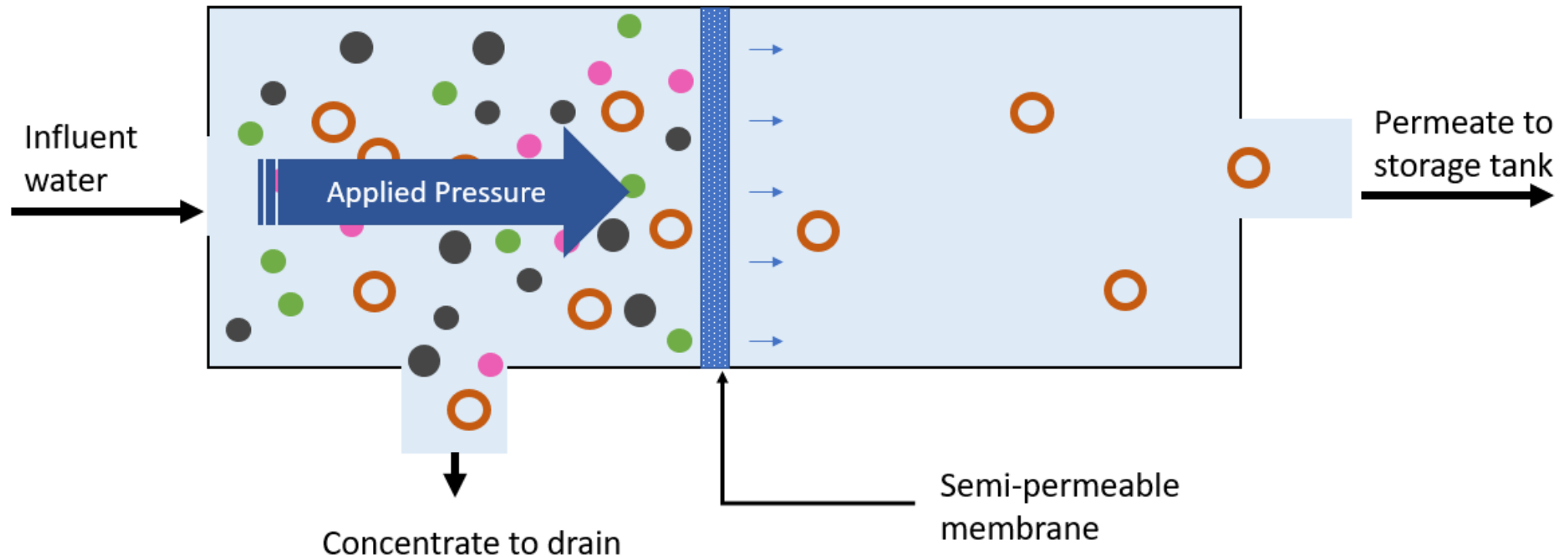
Part 2

Reverse Osmosis System Background

Reverse Osmosis Background

Reverse Osmosis (RO):

Water treatment process in which pressure forces water through a semipermeable membrane, creating a stream of treated water, called “permeate,” and a stream of reject water, called “concentrate.”



What Is an RO System?

RO System:

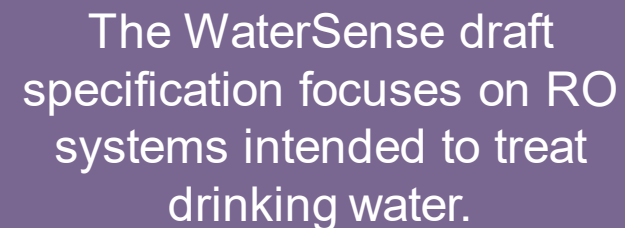
A water treatment system that incorporates the process of RO to remove contaminants from influent water

RO systems can significantly reduce contaminants such as:

- Total dissolved solids (TDS)
- Heavy metals
- Bacteria and viruses
- Volatile organic compounds (VOCs)
- Herbicides and pesticides

RO system applications:

- Drinking water treatment
- Wastewater treatment
- Desalination

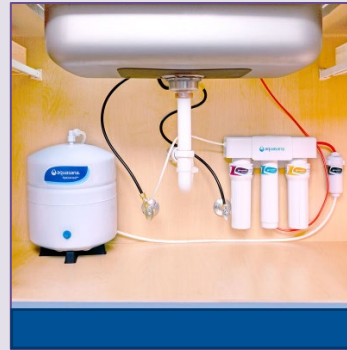


The WaterSense draft specification focuses on RO systems intended to treat drinking water.

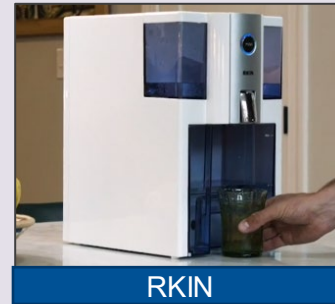
Types of RO Systems

Point-of-Use (POU)

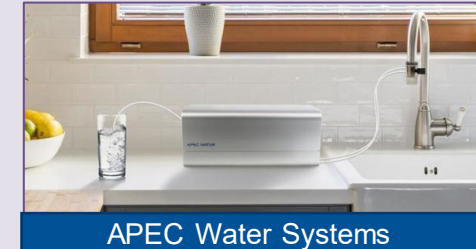
A plumbed-in or faucet-mounted RO system used to treat the drinking and/or cooking water at a single tap



Under-sink



RKIN
Reservoir-Type
Countertop



APEC Water Systems
Faucet-Mounted
Countertop

Point-of-Entry (POE)

An RO system used to treat the water supply at the entry of a building or facility for drinking and for washing, flushing, or other non-consumption use

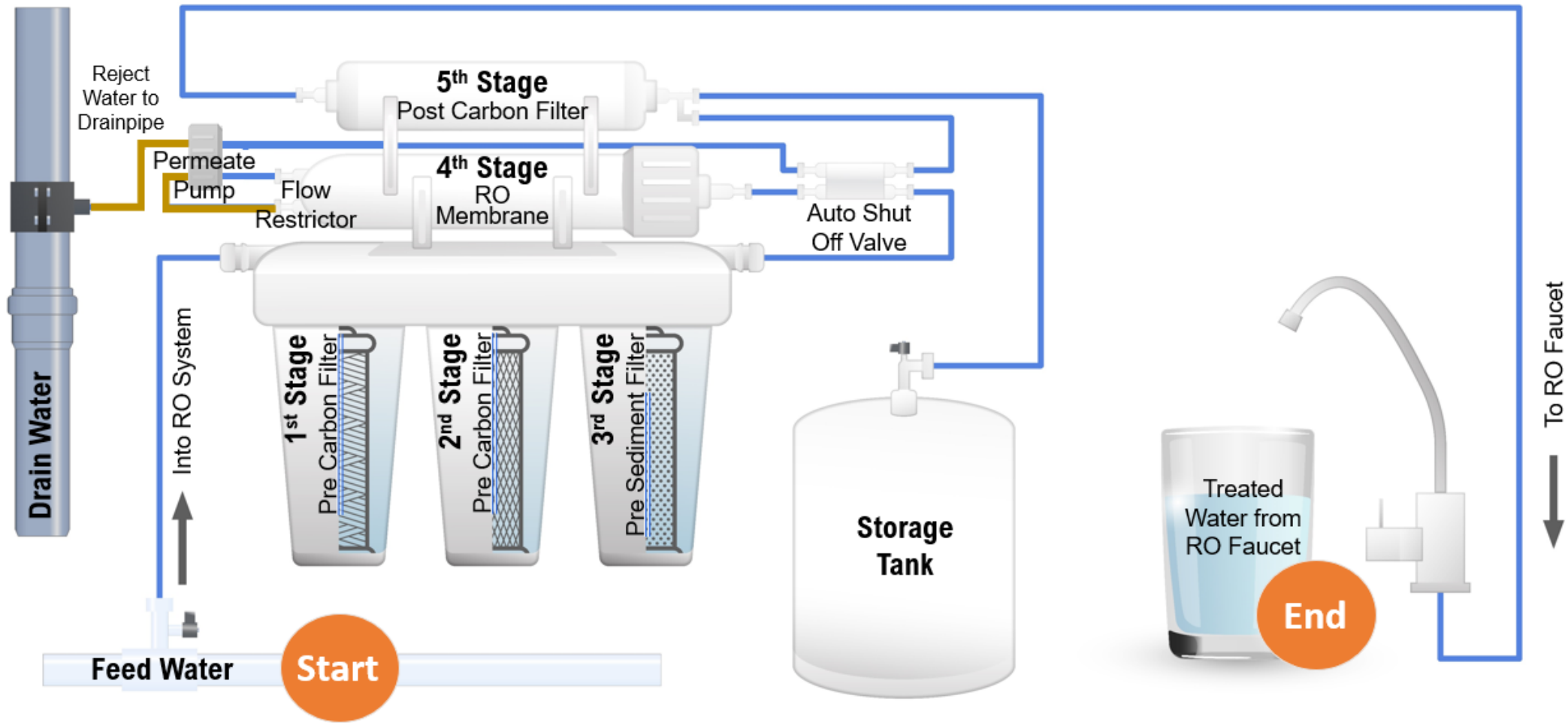


Whole house



Apex Water Filters
Commercial
POE system

RO System Diagram



Typical under-sink POU system configuration

RO System Water Use

- While RO systems can improve water quality, these systems also can generate a significant amount of water waste during operation
- A typical residential POU RO system will generate **five or more gallons of concentrate for every gallon of permeate** produced



For every 1 gallon of treated water produced...



... at least 5 gallons of concentrate are sent down the drain.

Existing Standards and Test Methodologies

- There are no current federal requirements that regulate water use of RO systems
- However, there are two applicable existing consensus-based industry standards used to certify RO systems based on performance, design and construction, and materials
- Some of these standards include water efficiency testing procedures and criteria

Existing Standards and Test Methodologies

NSF/ANSI 58-2020 Reverse Osmosis Drinking Water Treatment Systems

Scope/Application

POU RO drinking water treatment systems designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality.

- Materials
- Structural performance
- Performance, including flow control, connections, and storage capacity
- TDS reduction by 75 percent
- Verification of other chemical and mechanical reduction claims
- Verification of recovery and efficiency rating claims

ASSE 1086-2020 Performance Requirements for Reverse Osmosis Water Efficiency—Drinking Water

Scope/Application

Residential RO systems used to treat drinking water. RO water treatment equipment reduces total dissolved solids, heavy metals, inorganics, and organics water contaminants.

Through reference to NSF/ANSI 58, this standard is intended for residential POU systems, not POE.

- Requires compliance with NSF/ANSI 58
- Membrane life test for high-efficiency membrane systems
- Minimum system efficiency and recovery rating (which impact water efficiency) of 40 percent, tested in accordance with NSF/ANSI 58

Questions and Discussion





Part 3

WaterSense Draft Specification

Scope—Definitions

- The specification applies to POU RO systems as applicable under NSF/ANSI 58
- EPA is defining this product category as follows:
 - **Reverse osmosis system:** A system that incorporates a water treatment process that removes undesirable materials from water by using pressure to force the water molecules through a semipermeable membrane.
 - **Point-of-use reverse osmosis system:** A plumbed-in or faucet-mounted RO system used to treat the drinking and/or cooking water at a single tap or multiple taps, but not used to treat the majority of water used for washing and flushing or other non-consumption purposes at a building or facility. Any batch RO system or device not connected to the plumbing system is considered a point-of-use RO system.

Additional Definitions

Definitions within NSF/ANSI 330 are included by reference.

- **Point-of-entry RO system:** An RO system used to treat the water supply at the entry of a building or facility for drinking and for washing, flushing, or other non-consumption use. A point-of-entry RO system has a minimum initial clean-system flow rate of not less than 15 liters per minute at 103 kilopascals pressure drop and 18 ± 5 °C water temperature (not less than 4.0 gallons per minute at 15 pounds per square inch gauge pressure drop and 65 ± 10 °F water temperature).
- **Shut-off device:** A device that prevents reject water from an RO system when the system is not treating water.
- **Waste-to-product ratio:** A ratio that expresses the number of gallons of water an RO system wastes for every gallon of treated water it produces. Can be expressed as a full ratio (i.e., 2.3:1) or a single value (e.g., 2.3).

Scope

This specification applies to:

- Under-sink and countertop POU systems
- Commercial and residential POU systems
- Systems that combine multiple treatment technologies



This specification does not apply to:

- Components (e.g., replacement filters, membranes)
- POE systems
- RO system add-on devices, accessories, or aftermarket companion products (e.g., permeate pump)



General Requirements

WaterSense Specification Criteria:

2.1 Except as otherwise indicated in this specification, the RO system shall conform to applicable requirements in NSF/ANSI 58, including the total dissolved solids (TDS) reduction requirement.

2.2 The RO system shall be equipped with a shut-off device.

General Requirements

NSF/ANSI 58 Requirements

- NSF/ANSI 58 includes requirements related to materials, structural performance, chemical and mechanical reduction claims, and packaging and marking
- Requires minimum 75 percent TDS reduction

General Requirements

Shut-off Device

- Important water saving component
- Prevents reject water when the system is not treating water
- Required by ASSE 1086 and other green/water efficiency building standards (e.g., ASHRAE 189.1, IAPMO, WE•Stand)

Questions and Discussion



Water Efficiency Criteria

There are two metrics used to define RO system water use/efficiency:

Recovery Rating

- Percentage of the influent water to the RO membrane that becomes available to the user as RO treated water when the system is operated **without a storage tank**, or when the storage tank is bypassed and the permeate is open to the atmosphere
- All products have a recovery rating
- Does not incorporate backpressure from tank and therefore will always be higher than efficiency rating

Efficiency Rating

- Percentage of the influent water to the system that becomes available to the user as RO treated water under operating conditions that approximate typical daily usage
- Only systems equipped with an automatic shutoff valve and a pressurized or non-pressurized tank will have an efficiency rating
- Incorporates backpressure from tank and therefore will always be lower than recovery rating

Water Efficiency Criteria

- NSF/ANSI 58 defines and sets the testing procedures for “efficiency rating” and “recovery rating”
- For the purposes of the draft specification, the calculations from both efficiency rating and recover rating can be simplified as:

$$\textit{Percent recovery and percent efficiency} = \frac{\textit{permeate volume}}{\textit{concentrate volume} + \textit{permeate volume}} * 100\%$$

Water Efficiency Criteria

A system (with a storage tank) that generates 4 gallons of concentrate for every 1 gallon of permeate produced would have an efficiency rating of 20 percent:

$$\text{Percent Efficiency} = \frac{1 \text{ gallon permeate}}{4 \text{ gallons concentrate} + 1 \text{ gallon permeate}} * 100\% = 20\%$$



Water Efficiency Criteria

- The NSF/ANSI 58 standard does not establish criteria for water efficiency, only test methods
- ASSE 1086 references the test methods in NSF/ANSI 58 and further establishes a minimum efficiency rating of 40 percent
- This efficiency criteria applies regardless of whether the RO system has a tank (i.e., the results of recovery rating and efficiency rating, as applicable, must be at least 40 percent)

Water Efficiency Criteria

WaterSense Specification Criteria:

3.1 The recovery rating and efficiency rating (as applicable) of the system shall be tested in accordance with the applicable procedures in NSF/ANSI 58 and shall meet the following criteria:

- **3.1.1** For a system **with** a storage tank, the recovery rating and efficiency rating shall be a minimum of 30 percent.
- **3.1.2** For a system **without** a storage tank, the recovery rating shall be a minimum of 30 percent.

Water Efficiency Criteria

A 30 percent efficiency or recovery rating means that all WaterSense labeled systems would send no more than 2.3 gallons of water down the drain for every gallon of treated water they produce.



For every 1 gallon of
treated water produced...



... no more than 2.3 gallons of
concentrate are sent down the drain.



Water Efficiency Criteria

Estimated Water Savings:

- The average household uses approximately 950 gallons of water per year for drinking and cooking
- A typical RO system with a 15 percent efficiency rating will send approximately 5,400 gallons of water down the drain per year
- A high-efficiency RO system with a 30 percent efficiency rating will send approximately 2,220 gallons of water down the drain per year
- **A WaterSense labeled system can reduce water use by approximately 3,180 gallons per household per year**

Water Efficiency Criteria

Comparison to ASSE 1086

- The WaterSense specification requires a lower efficiency rating than ASSE 1086
- WaterSense criteria balances the tradeoff between efficiency rating and membrane life and contaminant reduction

Water Efficiency Criteria

NSF 58 Task Group

- EPA is aware of a current NSF task group that is considering revising the recovery rating procedures to account for an automatic flushing feature in many tankless systems
- The task group is also considering removing the recovery rating term altogether
- EPA will evaluate any changes to the standard and revise the specification if necessary

Questions and Discussion



Performance Criteria

- From a consumer's perspective, the ideal RO system can substantially **reduce drinking water contaminants** and is **easy to maintain**
- These qualities provide convenience for the consumer and assurance that their drinking water is adequately treated
- The specification includes two performance criteria that address:
 - Membrane life
 - Contaminant reduction claims

Performance Criteria

Membrane Life

- Membrane replacement is an essential part of RO system maintenance
- Higher efficiency systems can cause the membrane to foul more quickly, which requires more frequent membrane replacements
- More frequent membrane replacement may be costly and burdensome for consumers
- To ensure a minimum membrane lifespan, WaterSense is adopting the ASSE 1086 membrane life test (with modified efficiency requirements)

Performance Criteria

ASSE 1086 Membrane Life Test

- Performed over a minimum of 20 days
- Produces a total product volume of at least 1,000 gallons
 - Representative of about 1-year's worth of treated water
- Difficult challenge water

- $$\textit{Percent recovery} = \frac{100 \textit{ mL permeate}}{\textit{reject volume} + 100 \textit{ mL permeate}} * 100\%$$

Performance Criteria: Membrane Life

WaterSense Specification Criteria:

4.1 Membrane Life: The system shall be tested in accordance with the Membrane Life Test for High Efficiency Membrane Systems procedures of ASSE 1086 and shall meet the following criteria:

- **4.1.1** The percent TDS reduction shall be a minimum of 75 percent each day.
- **4.1.2** The flow rate shall not decrease by more than 50 percent of the Day 1 reading throughout the test.
- **4.1.3** The percent recovery, as calculated according to the ASSE 1086 testing procedures, shall be on average a minimum of 30 percent. One tenth of the sample readings may be less than 30 percent but no less than 23 percent. The final percent recovery measurement shall be at a minimum of 30 percent.

Performance Criteria

Contaminant Reduction

- Verifying contaminant reduction claims is important for ensuring adequate system performance
- NSF/ANSI 58 requires manufacturers to verify their reduction claims via testing and certification
- There are concerns about tradeoffs between water efficiency and contaminant reduction, particularly for nitrates/nitrites
- WaterSense chose to model NSF 58 framework by requiring manufacturers to verify any reduction claims through testing



Performance Criteria: Contaminant Reduction

WaterSense Specification Criteria:

4.2 Performance Claims: The manufacturer's performance (chemical reduction and mechanical filtration) claims for the RO system shall be verified according to the applicable criteria and requirements of NSF/ANSI 58.

Questions and Discussion



Packaging and Documentation

The specification includes packaging and documentation criteria that address:

- Adherence to NSF/ANSI 58 requirements
- Water efficiency marking
- Contaminant reduction marking

Packaging and Documentation

NSF/ANSI 58 Requirements

- Section 8 of NSF/ANSI 58 includes packaging and documentation requirements for certified RO systems that cover:
 - Installation and operation manual requirements
 - Product data plates
 - Performance data sheets

Packaging and Documentation

WaterSense Specification Criteria:

5.1 The RO system shall conform to applicable instructions and information requirements in NSF/ANSI 58 in addition to the requirements included in [the Packaging and Documentation section of the WaterSense specification].

Packaging and Documentation

Water Efficiency Markings

- Currently, EPA observed water efficiency being displayed as a:
 - Percentage (e.g., percent recovery, percent efficiency), or
 - Waste-to-product ratio (i.e., number of gallons wasted per gallon treated)
- In some cases, EPA has observed water efficiency claims in marketing materials that are not supported by test data
- To increase consumer comprehension, the specification requires product documentation to include **both** the efficiency/recovery percentage and the waste-to-product ratio

Packaging and Documentation

WaterSense Specification Criteria:

5.2 The system's packaging and point-of-purchase documentation (e.g., specification sheet) shall be marked with the following information and messaging:

- **5.2.1** For a system with a storage tank: “This system is certified to achieve a **XX%** efficiency rating in the production of treated water. This means that it will send **Y.Y** gallons of water down the drain for every gallon of treated water it produces.”

Where:

- **XX%** is the system's efficiency rating (e.g., 30% or 30.0%); and
- **Y.Y** is the system's waste-to-product ratio (e.g., 2.3 gallons). (continued...)

Packaging and Documentation

WaterSense Specification Criteria:

- **5.2.2** For a system without a storage tank: “This system is certified to achieve a **XX%** recovery rating in the production of treated water. This means that it will send **Y.Y** gallons of water down the drain for every gallon of treated water it produces.”

Where:

- XX% is the system’s recovery rating (e.g., 30% or 30.0%); and
- Y.Y is the system’s waste-to-product ratio (e.g., 2.3 gallons).

Packaging and Documentation

- Efficiency rating and recovery rating
 - Expressed in two- or three-digit resolution (e.g., 30%, 30.0%)
 - Verified by NSF/ANSI 58 testing
- Waste-to-product ratio
 - Expressed in at least two-digit resolution (e.g., 2.3 gallons)
 - Waste to product ratio (with storage tank) = Y.Y = $\frac{100\%}{\text{verified efficiency rating}} - 1$
 - Waste-to-product ratio (without storage tank) = Y.Y = $\frac{100\%}{\text{verified recovery rating}} - 1$

Packaging and Documentation

Contaminant Reduction Claim Markings

- EPA wants to make it easy for consumers to identify whether a system is certified to remove a specific contaminant
- WaterSense identified the following five priority drinking water contaminants in consultation with the EPA Office of Ground Water and Drinking Water:
 - Arsenic (pentavalent)
 - Nitrate/nitrite
 - Lead
 - Chromium (hexavalent and trivalent)
 - Perfluorooctanoic acid (PFOA)/perfluorooctane sulfonate (PFOS)

Packaging and Documentation

WaterSense Specification Criteria:

5.2.3 For all systems, include the NSF/ANSI 58 verified contaminant removal rates for the following contaminants:

- Arsenic (pentavalent) at a concentration of 300 parts per billion (ppb)
- Chromium (hexavalent and trivalent)
- Lead
- Nitrate/nitrite
- Perfluorooctanoic acid (PFOA)/perfluorooctane sulfonate (PFOS)

If the system does not have verified reduction claims for any of the above contaminants, the packaging and documentation shall clearly indicate that the product has not been certified to remove these contaminants.



Packaging and Documentation

WaterSense Specification Criteria:

5.2.4 The information required in Sections 5.2.1 through 5.2.3, as applicable, shall be marked on packaging and other point-of-purchase documentation in a manner consistent with the table [on the next slide].



Water Efficiency and Performance at a Glance

Water Use

This system is certified to achieve a XX% [efficiency rating/recovery rating] in the production of treated water. This means that it will send Y.Y gallons of water down the drain for every gallon of treated water it produces.

Contaminant Removal

Contaminant	NSF 58 Minimum Required Reduction	Actual Reduction
Arsenic ¹	96.7%	% Removal/Not Tested
Chromium ²	66.7%	% Removal/Not Tested
Lead	96.7%	% Removal/Not Tested
Nitrate/nitrite	66.7%	% Removal/Not Tested
PFOA/PFOS ³	95.3%	% Removal/Not Tested

- All contaminant removal claims listed above are verified through NSF/ANSI 58 testing
- Contaminants listed as “Not tested” have not been verified for removal under NSF/ANSI 58
- All contaminants reduced by this system are listed in the performance data sheet
- Not all contaminants listed may be present in the water

¹ Pentavalent, at a concentration of 300 parts per billion (ppb)

² Hexavalent and trivalent

³ Perfluorooctanoic acid/perfluorooctane sulfonate

Packaging and Documentation

WaterSense Specification Criteria:

5.3 If a system requires the use of components or companion products (e.g., a permeate pump) to meet the requirements of this specification, all components and/or companion products shall be packaged and sold along with the system.

Packaging and Documentation

WaterSense Specification Criteria:

5.4 The manufacturer shall specify in the system manual and/or maintenance instructions replacement parts for all system components the consumer is expected to replace during the life of the system (e.g., RO membrane, pre-filters, post-filters, shutoff valve, storage tank) along with their recommended replacement frequencies.

Packaging and Documentation

WaterSense Specification Criteria:

5.5 A system shall not be packaged, marked, nor provided with instructions directing the user to an operational setting that would override the system's efficiency, as established by this specification and verified through testing. Any instruction related to the maintenance of the system shall direct the user on how to maintain the system's efficiency

Questions and Discussion





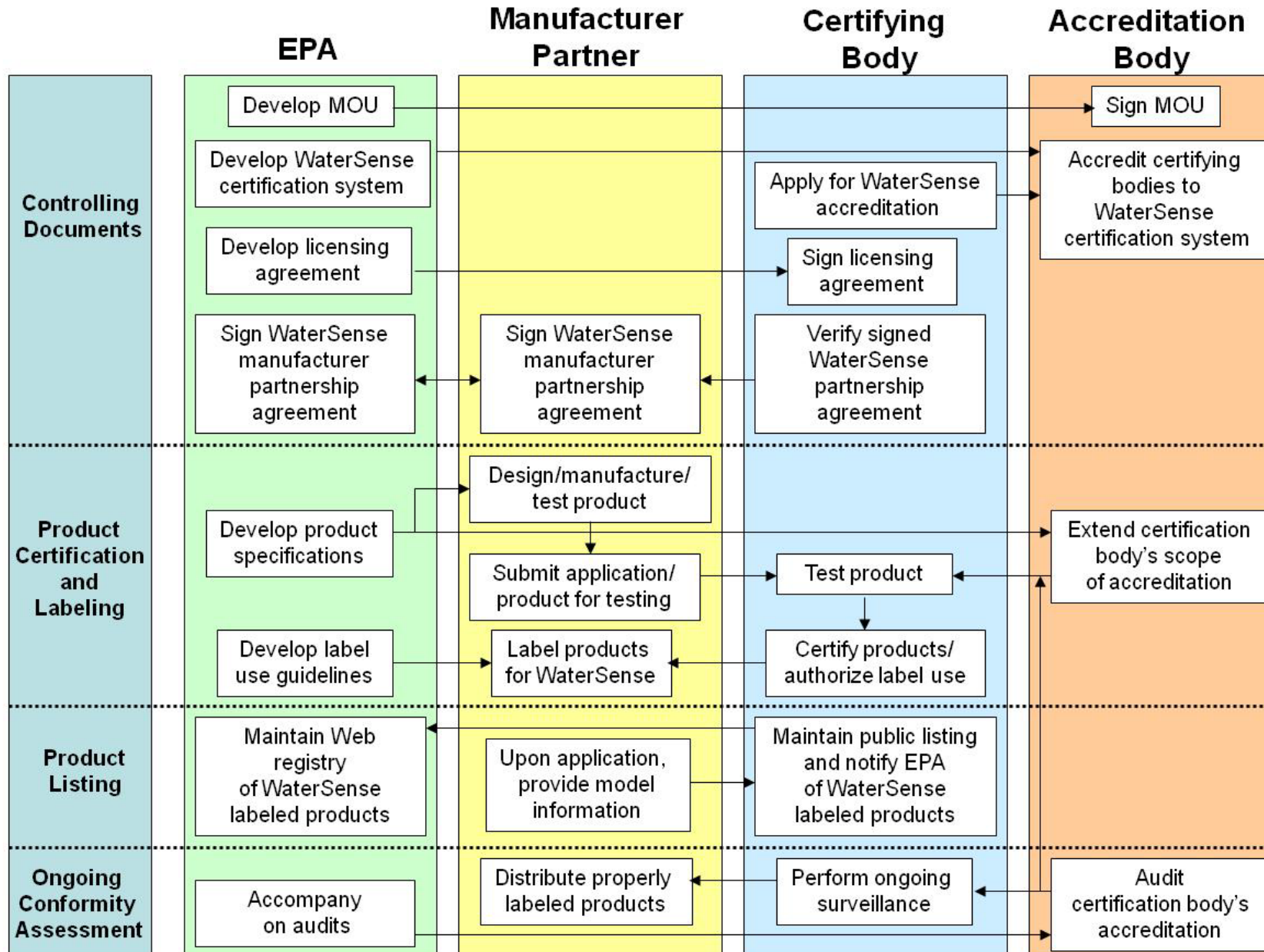
WaterSense Product Certification

Independent third-party certification is the key to bringing labeled products to market and ensuring confidence in the WaterSense brand

- EPA established the *WaterSense Product Certification System* in March 2009 (revised most recently in 2016)
- The system guides certification and labeling for all WaterSense labeled products and includes:
 - Eligibility and requirements for accreditation and product certifying bodies
 - Production inspection and testing requirements
 - Requirements for issuing the WaterSense label
 - Requirements for ongoing surveillance of labeled products
 - Procedures for handling label misuse

www.epa.gov/watersense/certification-systems#products

Product Certification Overview





Manufacturer Partnership

Partnership Background

- With the release of the draft specification, RO system manufacturers are now eligible to partner with WaterSense
- RO system manufacturers must have signed a WaterSense partnership agreement with EPA in order to label products
- Component manufacturers are NOT eligible for partnership



Partnership Requirements

- Commit to having at least one labeled product within 12 months of the final specification
- Abide by the *WaterSense Program Mark Guidelines*
 - Include label on product packaging and product webpages
- Submit annual data

www.epa.gov/watersense/join-watersense#Manufacturers

Licensing of Certifying Bodies

Licensing of Certifying Bodies

- Prior to the final specification being published, EPA will establish requirements for certifying bodies to become licensed to issue the label for RO systems
- EPA will disseminate information on requirements when the specification criteria and test methods are finalized
- Typically requires competency with standards/test methods referenced in the WaterSense specification
- Existing certifying bodies will need to request extension of scope of accreditation to include RO systems
- New certifying bodies will need to apply to an accreditation body for WaterSense accreditation and sign a licensing agreement with EPA
- Complete list of licensed certifying bodies (LCBs) will be posted to WaterSense website

www.epa.gov/watersense/accreditation-licensed-certifying-bodies

Product Certification and Listing

Conformity Assessment and Product Listing

- Conformance to the specification must be certified by a LCB accredited in accordance with the *WaterSense Product Certification System*
- The LCB will test product and, if it meets the specification criteria, will authorize the manufacturer to use the WaterSense label on the product
- The LCB will maintain a certification listing of all products that meet the specification and report it to EPA
- The WaterSense Search Tool (www.epa.gov/watersense/product-search) is an up-to-date list of all available WaterSense labeled products on the market
- The product listing makes it easy for consumers to find WaterSense labeled products that meet their needs

WaterSense









Product Search

WaterSense makes it easy to find and select water-efficient products that can help your wallet and the environment. Just look for products bearing the WaterSense label at your local retailer. Reduce your water use while enjoying exceptional performance with the following WaterSense labeled products. Select a product category below to get started.

Related Links

- [WaterSense Products Section](#)
- [WaterSense Home](#)
- [Rebate Finder](#)

Download a full list of WaterSense labeled product models that includes efficiency information

 TOILETS	 BATHROOM SINK FAUCETS/ACCESSORIES	 SHOWERHEADS	 FLUSHING URINALS
 FLUSHOMETER-VALVE TOILETS	 WEATHER-BASED IRRIGATION CONTROLLERS	 SOIL MOISTURE-BASED IRRIGATION CONTROLLERS	 SPRAY SPRINKLER BODIES

Product Notification Template

- Used by LCBs to report certified products to WaterSense
- Populates the product listing on WaterSense website
- Includes product attributes that will be helpful to consumers:
 - System type (tank or tankless)
 - Waste-to-Product Ratio
 - Target Contaminant Claims and Associated Percent Reduction

Draft
WaterSense® Labeled Point-of-Use Reverse Osmosis Systems Notification Template

Please read these instructions carefully and in their entirety. Understanding these steps will reduce errors and ensure the notification process works smoothly. Version 1.0 - DRAFT

• System Type: Indicate whether the product is a tank system or a tankless system.	Displayed	Displayed	↔
• Efficiency Rating: Complete this field only if the product entry is for a tank system. The efficiency rating is the product's efficiency rating verified through testing, and in compliance with the NSF/ANSI 58 procedures. Please report the number as a percent.	Displayed	Not Displayed	↔
• Recovery Rating: Complete this field only if the product entry is for a tankless system. The recovery rating is the product's recovery rating verified through testing, and in compliance with the NSF/ANSI 58 procedures. Please report the number as a percent.	Displayed	Not Displayed	↔
• Waste-to-Product Ratio: The waste-to-product ratio is the value calculated based on the efficiency rating or recovery rating, as applicable, per the <i>WaterSense Specification for Point-of-Use Reverse Osmosis Systems</i> . The waste-to-product ratio is auto-calculated in three-digit resolution based on data entered into the Efficiency Rating or Recovery Rating fields. The waste-to-product ratio cannot be greater than 2.33 gallons.	Displayed	Displayed	↔
• Arsenic: Indicate whether the product has been certified to reduce pentavalent arsenic at 300 parts per billion (ppb) per the NSF/ANSI 58 requirements.	Displayed	Not Displayed	↔
• Arsenic Percent Reduction: Enter the product's reduction percent for pentavalent arsenic (300 ppb), as verified through testing according to NSF/ANSI 58.	Displayed	Displayed	↔
• Chromium: Indicate whether the product has been certified to reduce chromium (hexavalent and trivalent) per the NSF/ANSI 58 requirements.	Displayed	Not Displayed	↔
• Chromium Percent Reduction: Enter the product's reduction percent for chromium (hexavalent and trivalent), as verified through testing according to NSF/ANSI 58.	Displayed	Displayed	↔
• Lead: Indicate whether the product has been certified to reduce lead per the NSF/ANSI 58 requirements.	Displayed	Not Displayed	↔
• Lead Percent Reduction: Enter the product's reduction percent for lead, as verified through testing according to NSF/ANSI 58.	Displayed	Displayed	↔
• Nitrate/Nitrite: Indicate whether the product has been certified to reduce nitrate/nitrite per the NSF/ANSI 58 requirements.	Displayed	Not Displayed	↔
• Nitrate/Nitrite Percent Reduction: Enter the product's reduction percent for nitrate/nitrite, as verified through testing according to NSF/ANSI 58.	Displayed	Displayed	↔
• PFOA/PFOS: Indicate whether the product has been certified to reduce perfluorooctanoic acid (PFOA)/perfluorooctane sulfonate (PFOS) per the NSF/ANSI 58 requirements.	Displayed	Not Displayed	↔
• PFOA/PFOS Percent Reduction: Enter the product's reduction percent for PFOA/PFOS, as verified through testing according to NSF/ANSI 58.	Displayed	Displayed	↔
• Universal Product Codes (UPCs): If desired, include the 12-digit UPCs for models sold at retail.	Not Displayed	Displayed	↔

Instructions | Product Data | +

Questions and Discussion



Next Steps

- The draft specification, supporting statement, and product notification template can be reviewed at www.epa.gov/watersense/point-use-reverse-osmosis-systems
- Submit written comments to watersense-products@erg.com **by February 3, 2023.**
- EPA will review comments and data submission to determine next steps for developing a final specification
- EPA is targeting a final specification for later in 2023.



Contact Us



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