



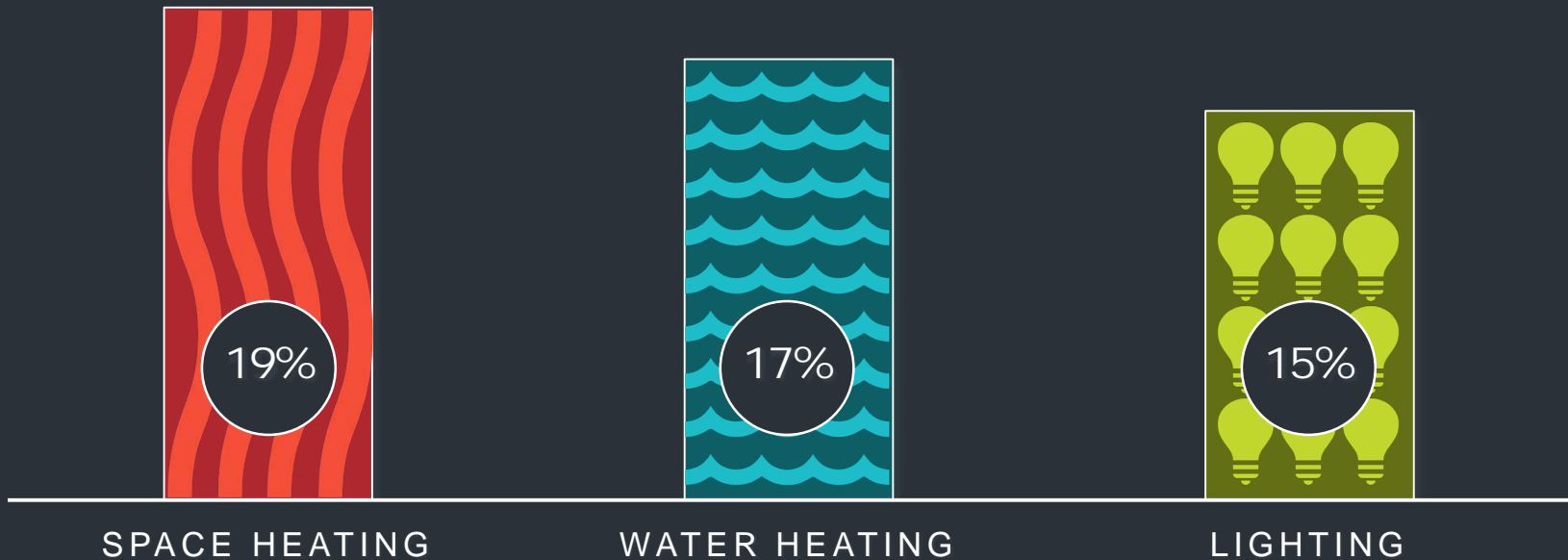
# The Future of Showerhead and Aerator Savings

ACEEE 2019 Hot Water Forum

Nashville, TN

# Why is BPA interested in showerheads and aerators?

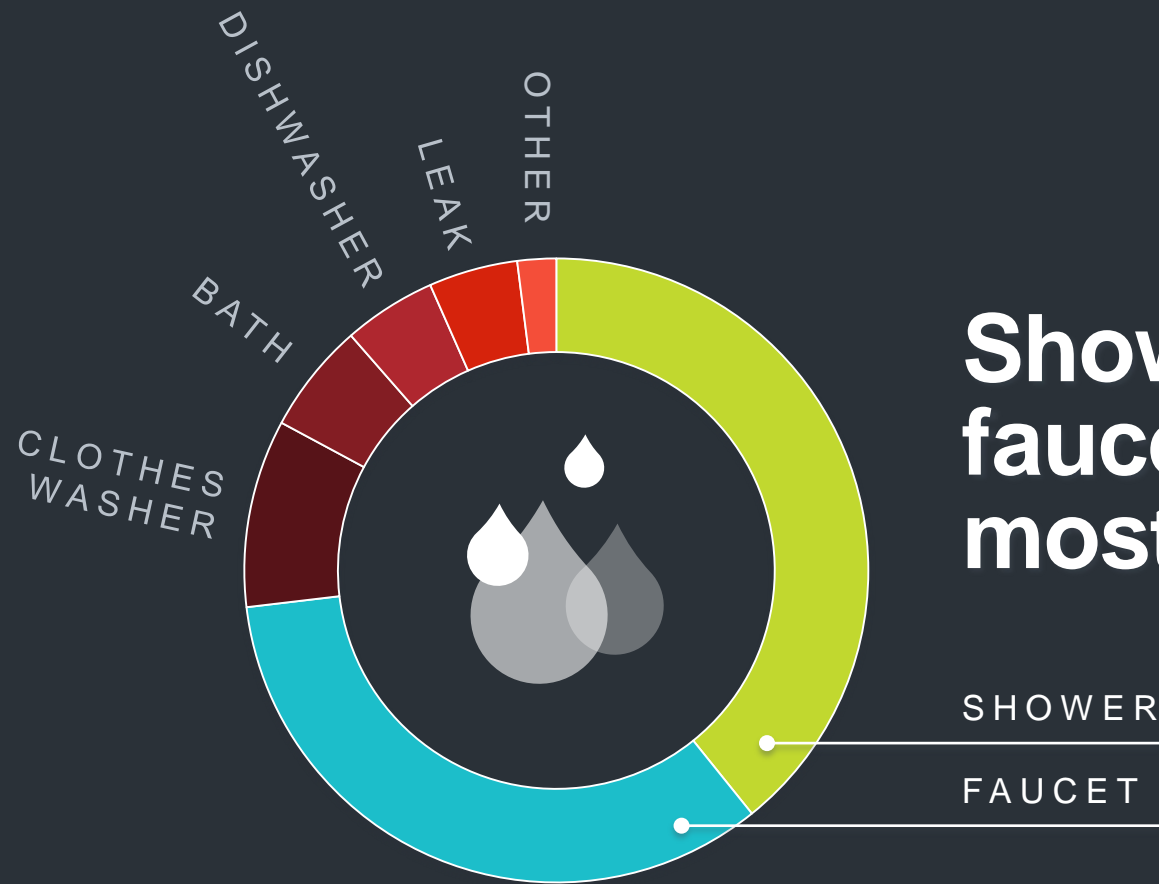
PERCENT OF 2015 NORTHWEST RESIDENTIAL LOAD (aMW)



# What is BPA measuring?



**Residential Hot Water Model**

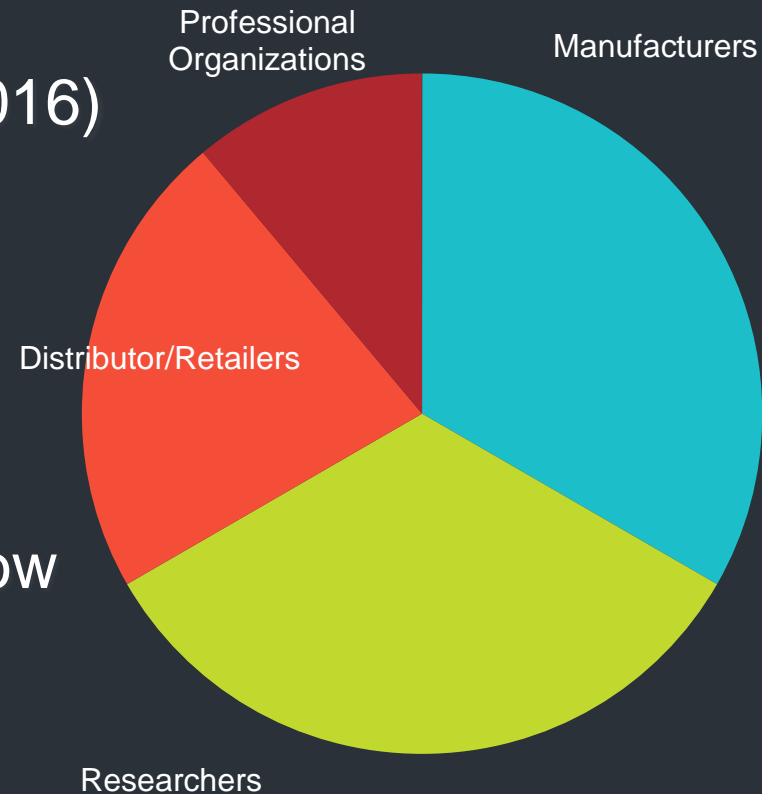


# Showers and faucets use the most hot water

Source: 2016 Residential End Uses of Water, Version 2: Executive Report, Table 1

# Data Sources

- Residential Building Stock Assessment (2011 & 2016)
- Residential End Uses of Water (2016)
- End Use Studies
- Utility Programs and Evaluations
- Efficiency Organization Studies
- Market Actor Interviews
- Kitchen & Bath Industry Trade Show



# So, are showerhead and aerator savings tapped out?



**So, are showerhead and aerator savings tapped out?**



**It depends!**

# So, are showerhead and aerator savings tapped out?



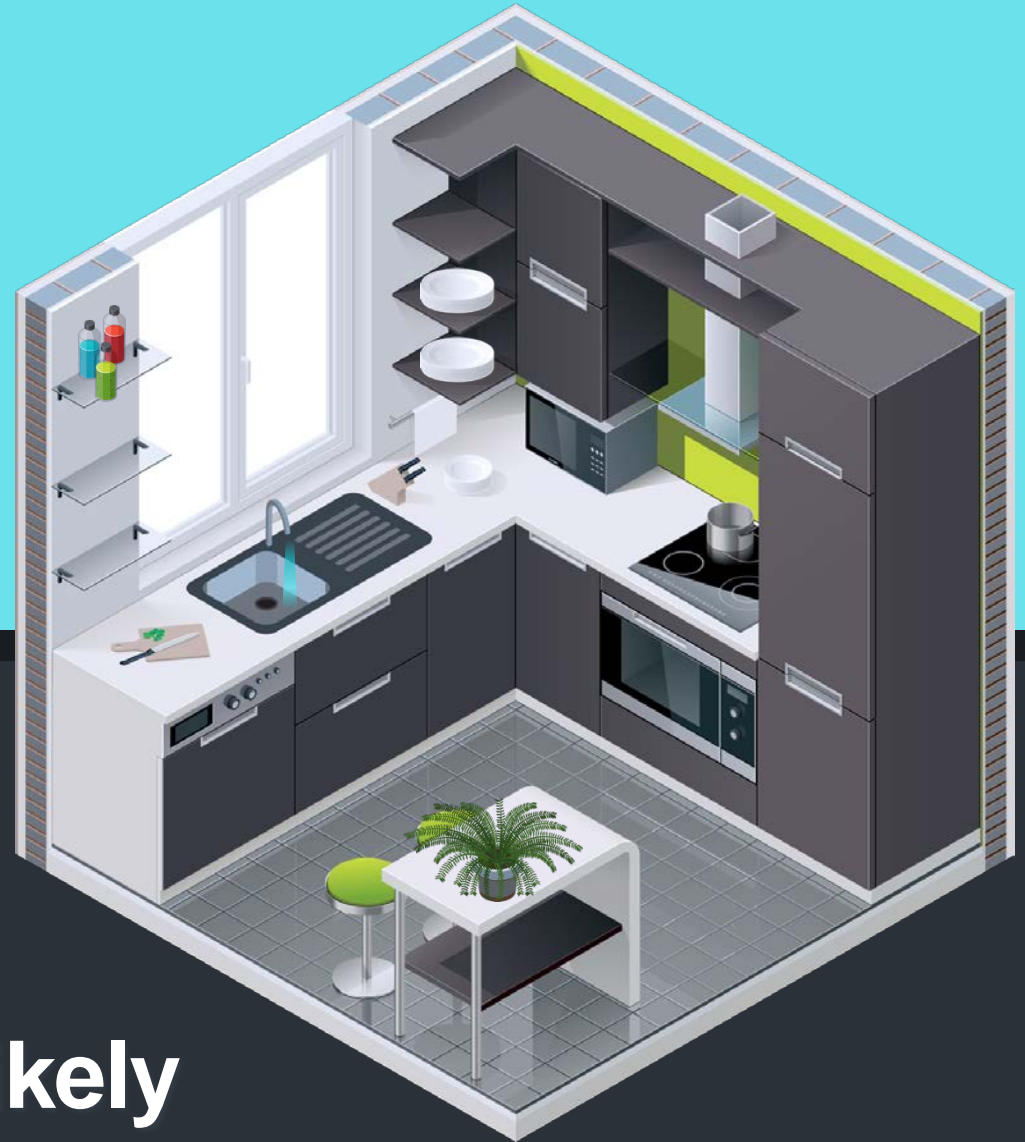
**It depends!**

**Are flow rates likely to go lower?**

**Are homes already saturated with efficient showerheads and faucets?**

**Are there other opportunities to save shower and faucet hot water?**





**Are flow rates likely to go lower?**

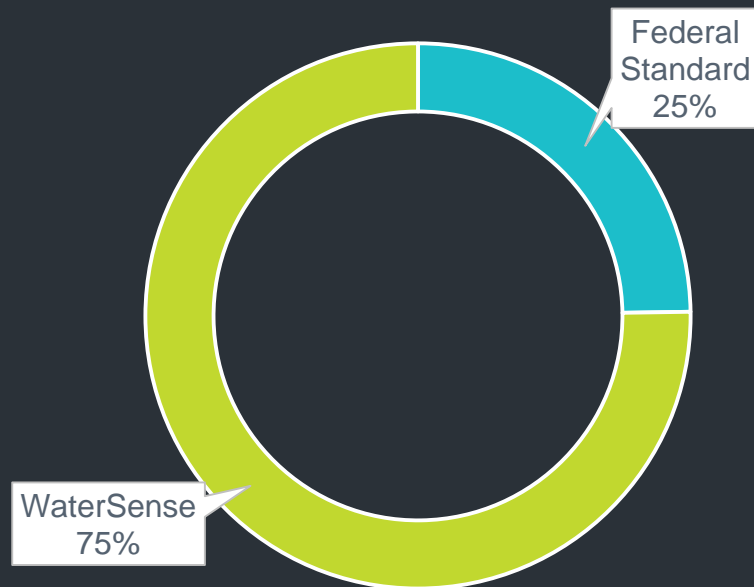


## Not in the near term

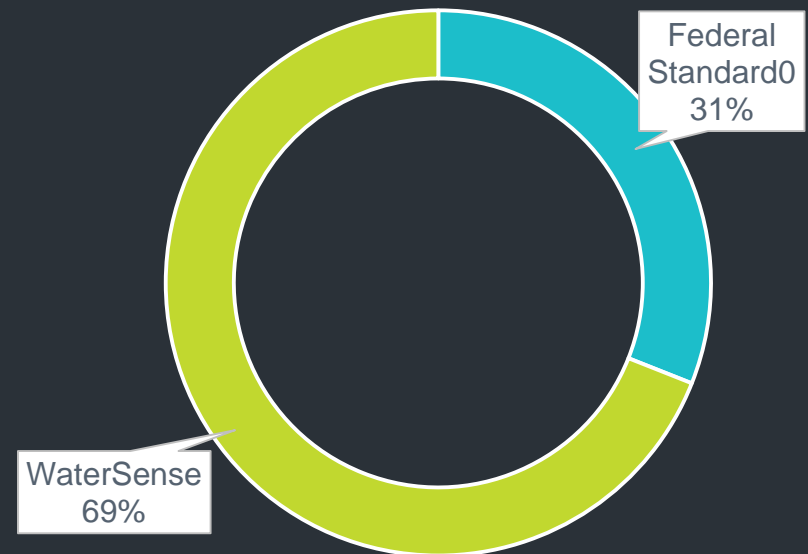
1. Is the industry likely to push rated flow rates lower?
2. Are standards likely to mandate lower flow rates in the near future?

# Because the industry has made huge progress!

Number of Showerheads Available on the Market

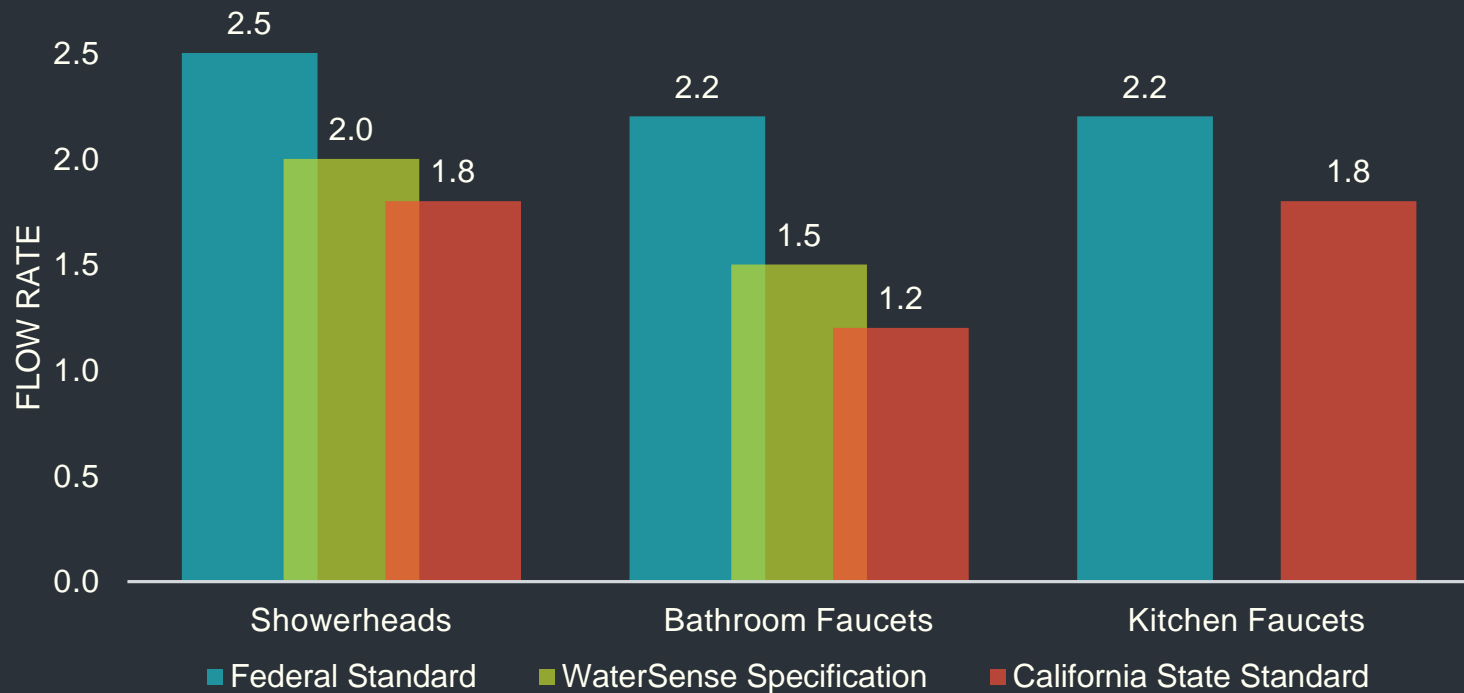


Number of Faucets Available on the Market



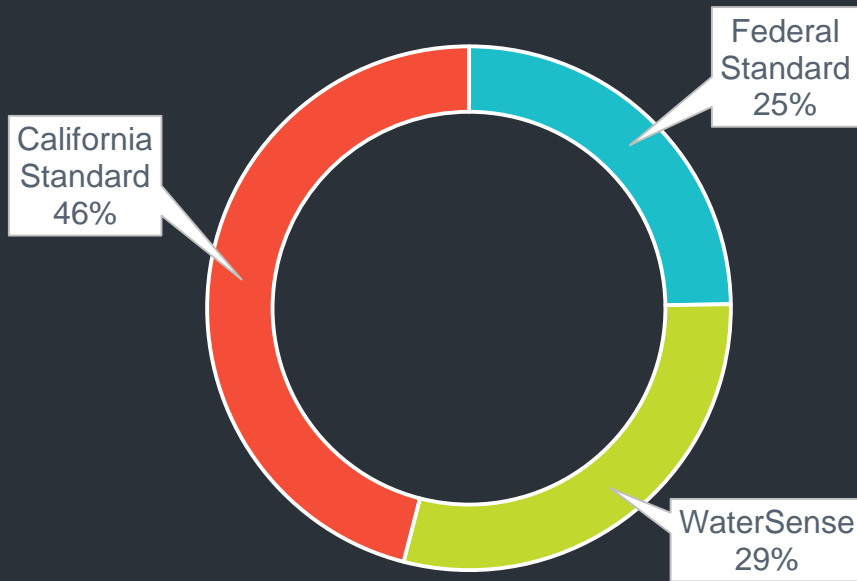
# WaterSense has Driven Flow Rates Down

## Showerhead and Faucet Standards

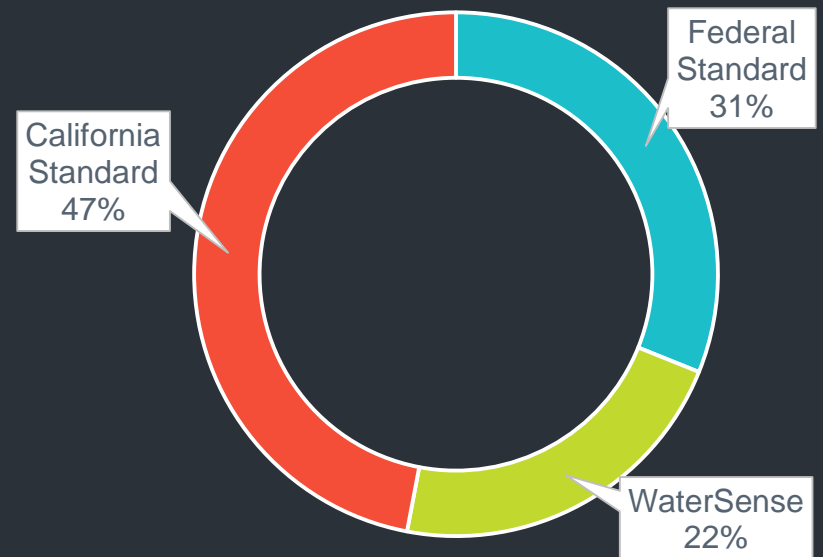


# California is Changing the Market

## Number of Showerheads Available on the Market



## Number of Faucets Available on the Market



# Will Standards Go Lower Than California?

## California will soon have toughest shower head requirements in nation

By BY KURT CHIRBAS AND TAYLOR GOLDENSTEIN AUG 12, 2015 | 1:12 PM | SACRAMENTO



ADVERTISEMENT  
>

## Your health may be at risk from your daily shower

But do not panic: the risk for healthy people is slim to none

13 February 2019 - 08:57

BY TIMESLIVE



[Georgetown Gazette](#), [News](#)

## New water law raises questions/anxiety

By [Dawn Hodson](#)

New legislation signed by Gov. Jerry Brown putting permanent restrictions on how much water people can use has already raised questions and concerns about how it will affect people's quality of life, the cost of water and whether it's a covert attack on the state's water rights system.

## Legionnaires' disease on the rise, and experts not sure why

By Judi Kanne Georgia Health News Feb 28, 2019

# Lower Standards are Good... Right?

Enjoy the ultra high pressure 3" shower head by wassa

Are you still frustrated at low water flow & pressure while taking shower?

Wassa high pressure shower head fix this for you.

The 3 inch face with 45 jets amplify water pressure and provide fantastic water flow.

#3



YOO.MEE High Pressure Handheld Shower Head with Powerful Shower Spray against Low...

★★★★☆ 2,978  
\$20.43 ✓prime

#4



Hydroluxe 1433 Handheld Showerhead & Rain Shower Combo. High Pressure 24 Function 4"...

★★★★☆ 7,713  
\$24.99 ✓prime

Shower Pressure Restrictor Valve | How to Remove Restrictor and ...

FROSTY Life  
YouTube - Aug 9, 2017

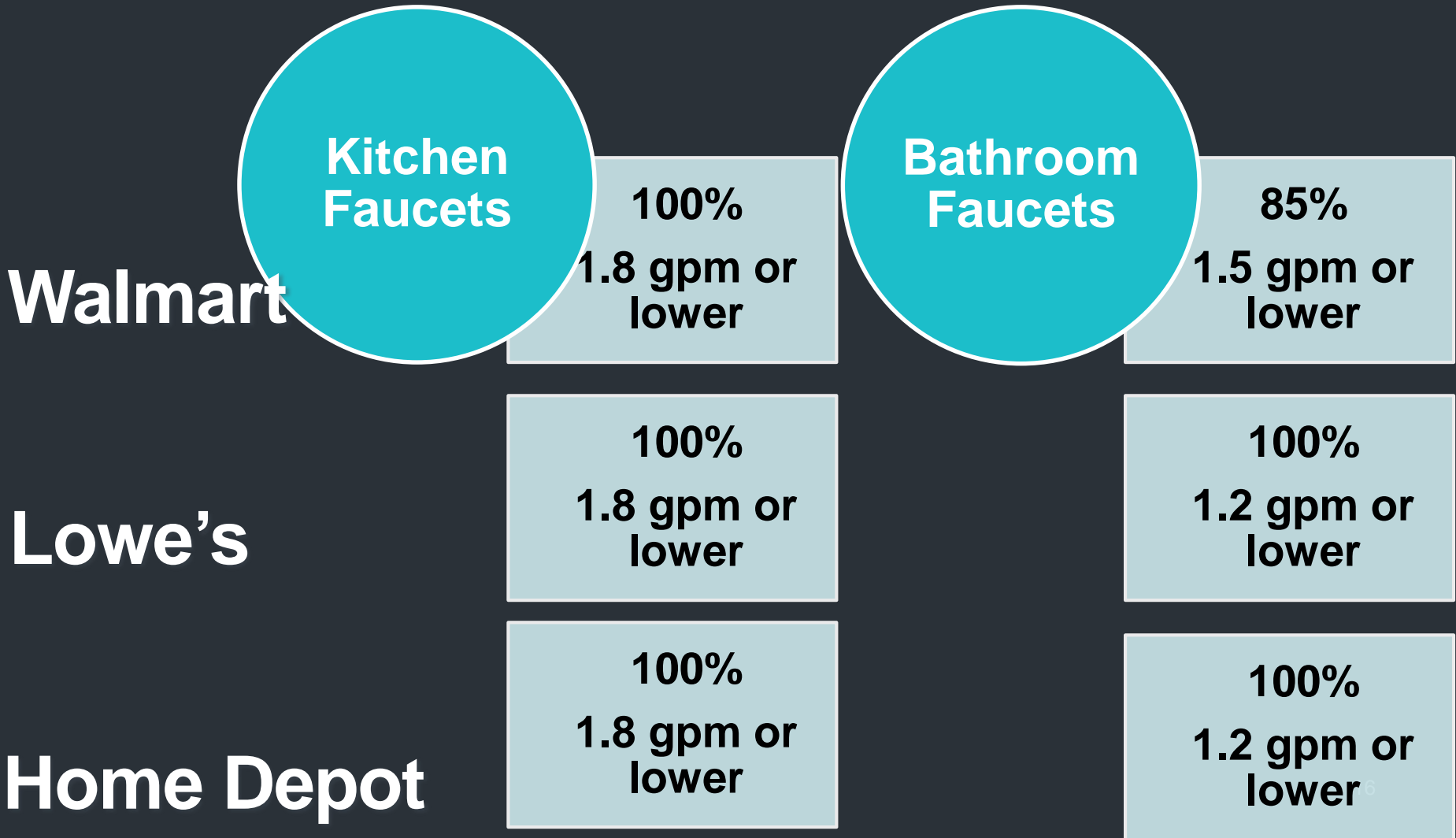
How To Remove a Water Restrictor from a Showerhead

Drain Help  
YouTube - May 30, 2017

Delta shower head -- removing the flow restrictor -- PUSH don't pull

Oak Cliff Video  
YouTube - May 2, 2017

# Retail Faucets on Northwest Shelves





# Where does that leave the market?



## Showerheads:

- The market is offering products at 1.8 gpm to meet the California standard, however it does not appear to be moving lower than 1.8 any time soon.
- 2.5 gpm showerheads are not going away



## Faucets:

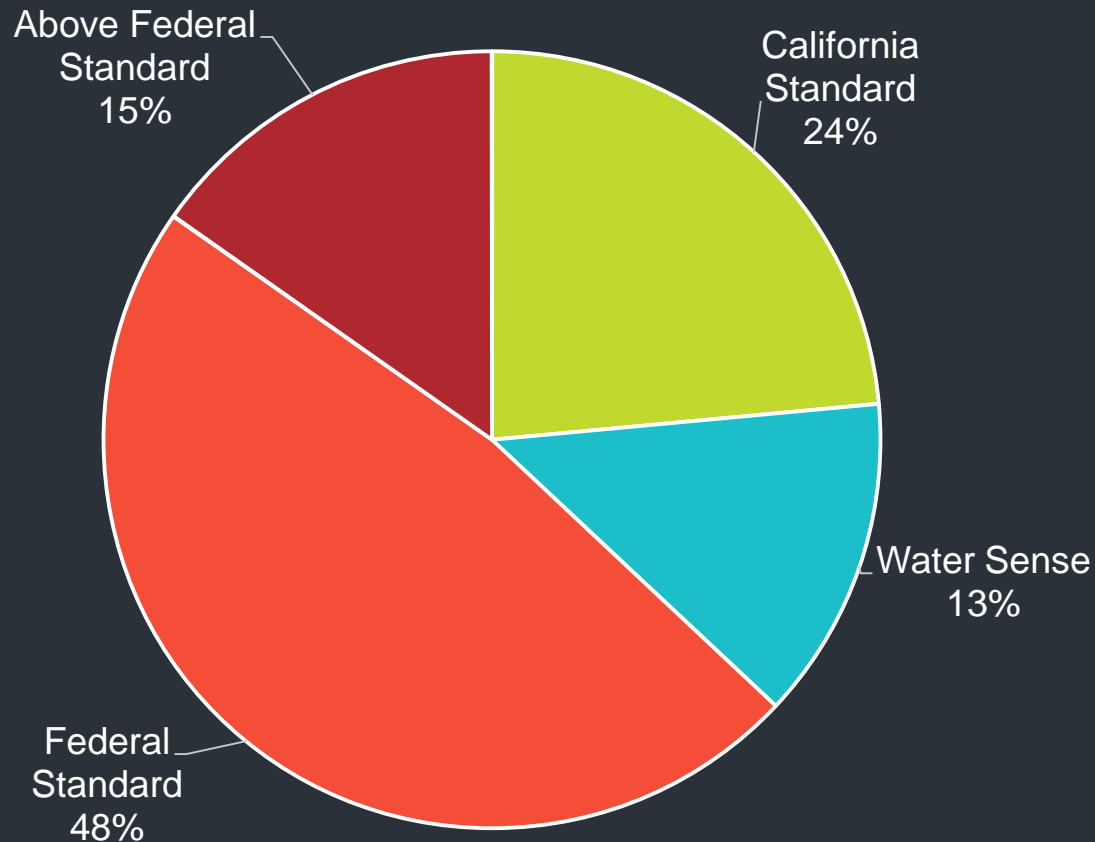
- Manufacturers, market organizations, and consumers all seem to fine with meeting at the CA standard.

**Are homes  
already  
saturated with  
efficient  
fixtures?**



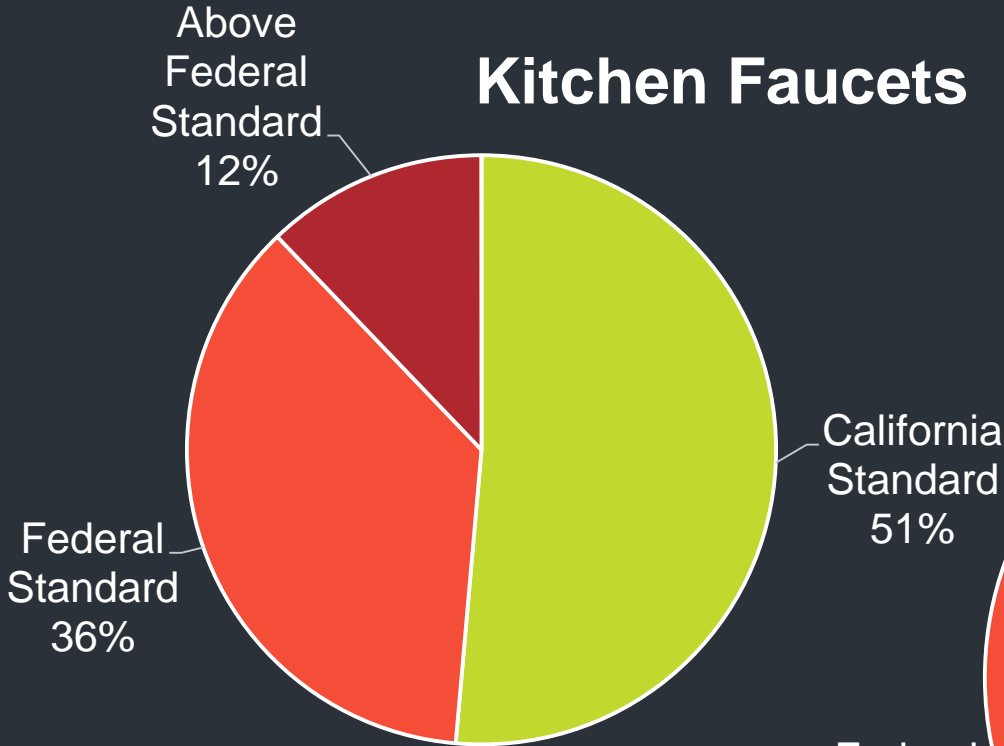
# Still a lot of opportunity!

## Showerheads

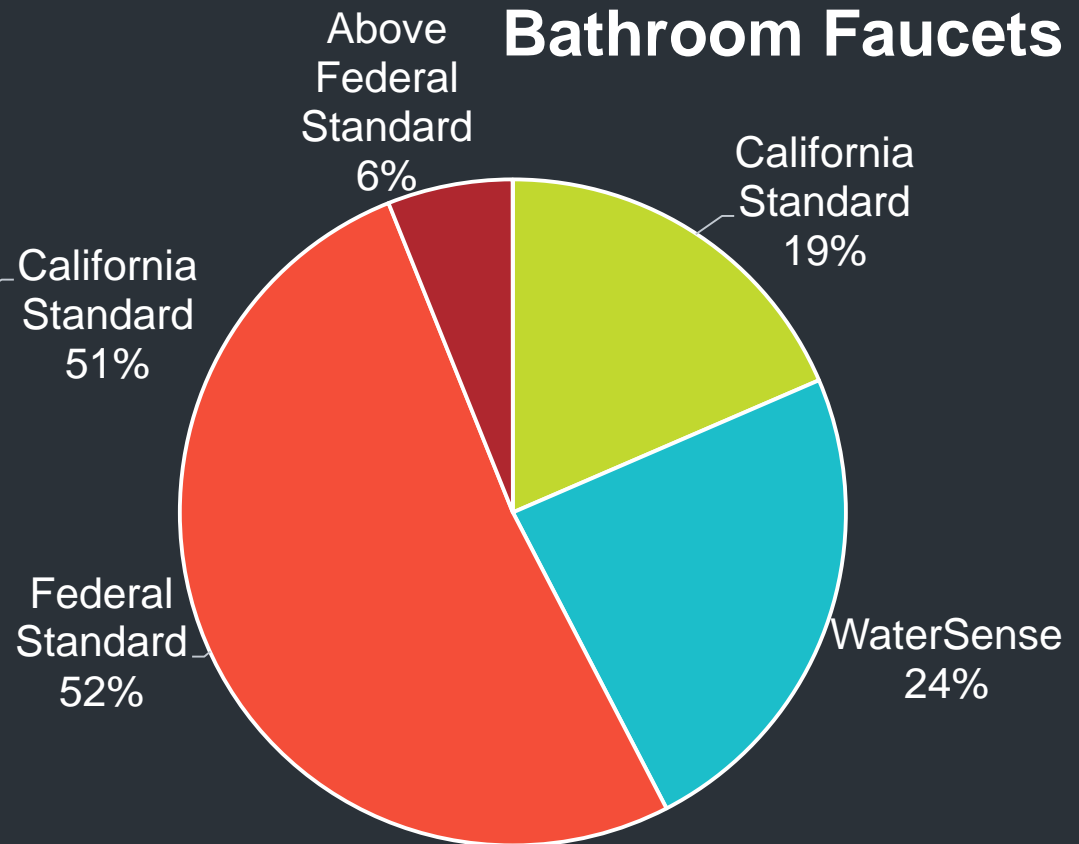


# Still a lot of opportunity!

## Kitchen Faucets

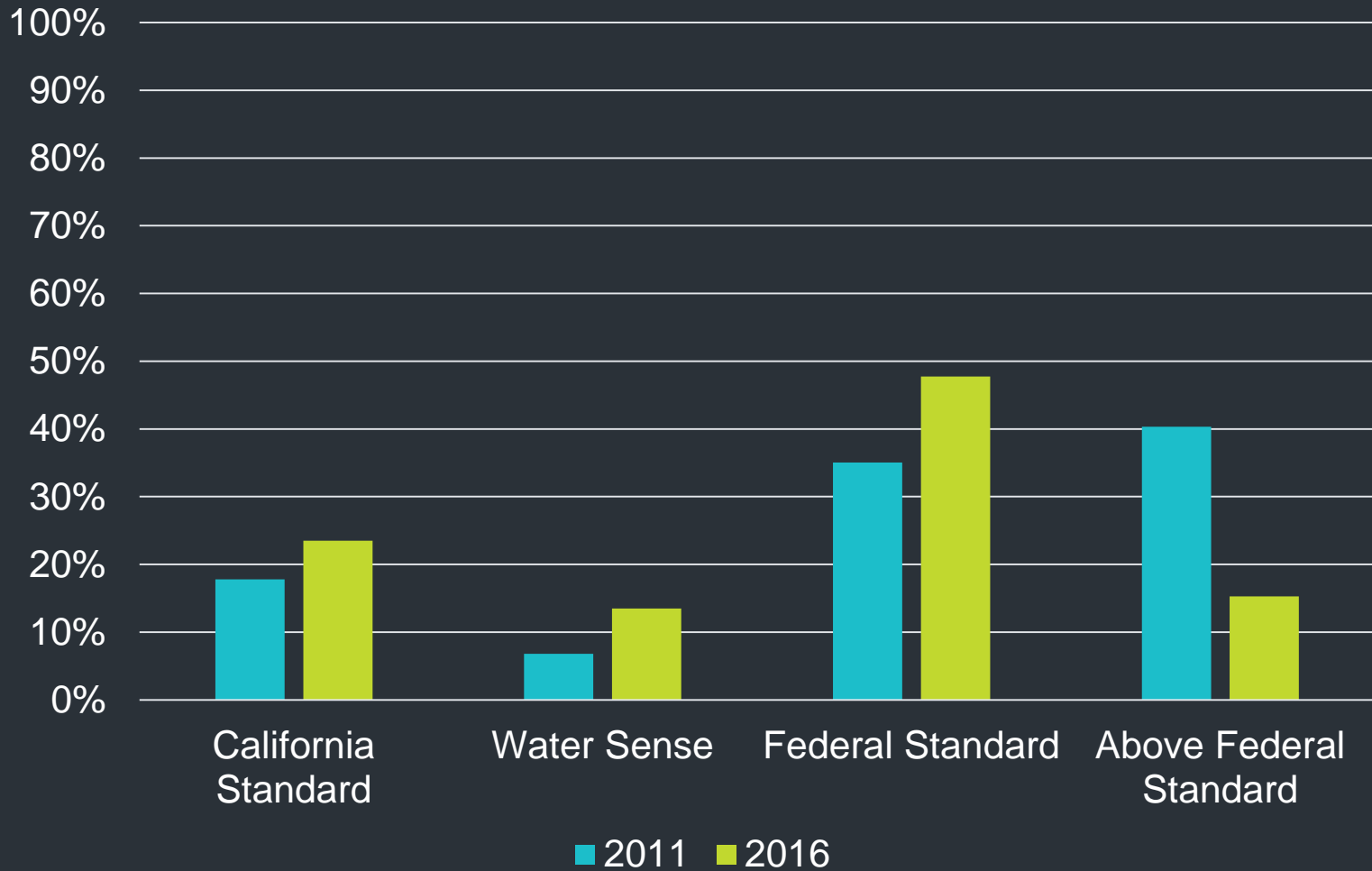


## Bathroom Faucets



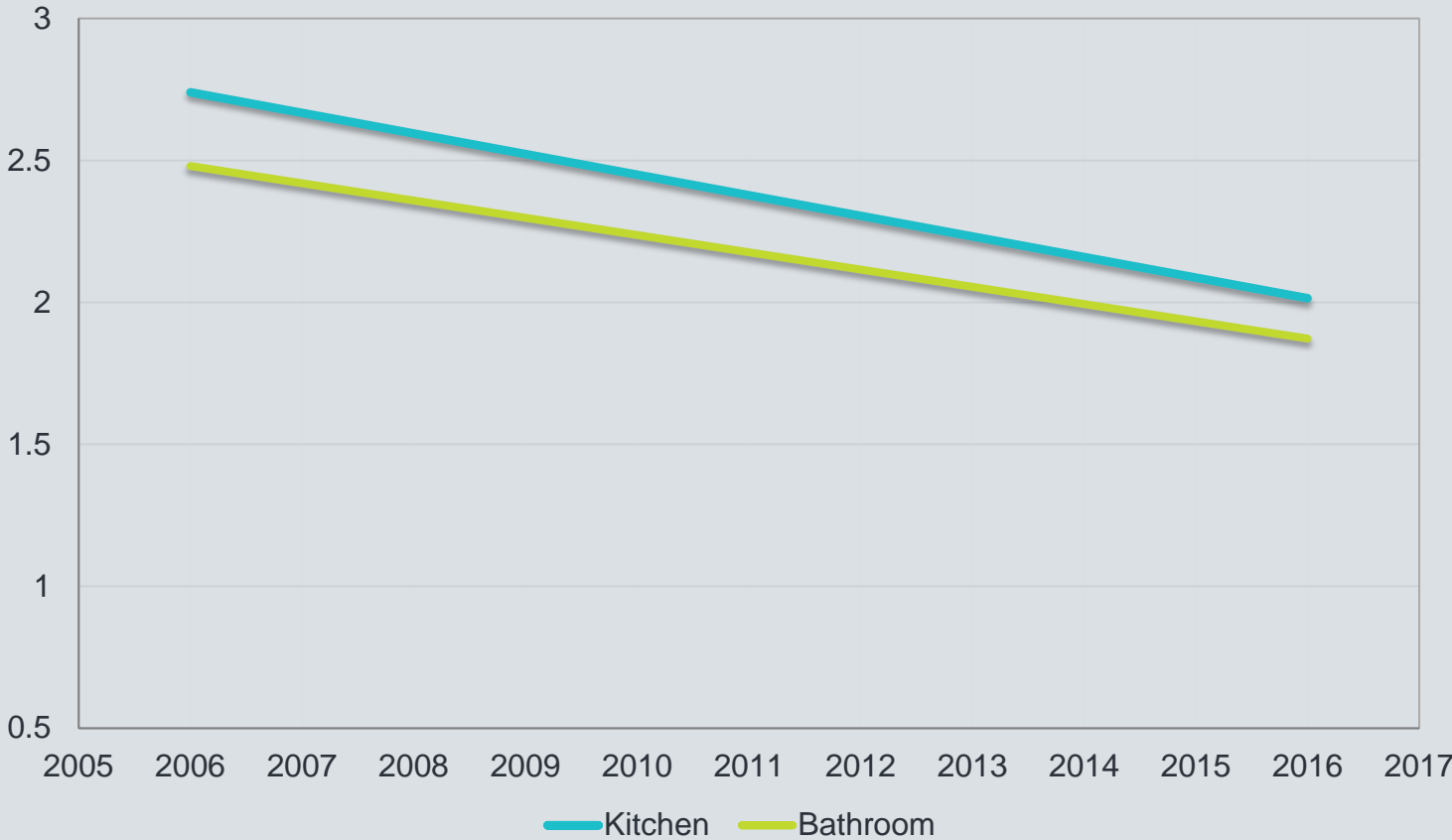
# NW Residential Showerhead Stock

## Change in NW Showerhead Rated Flow Rates

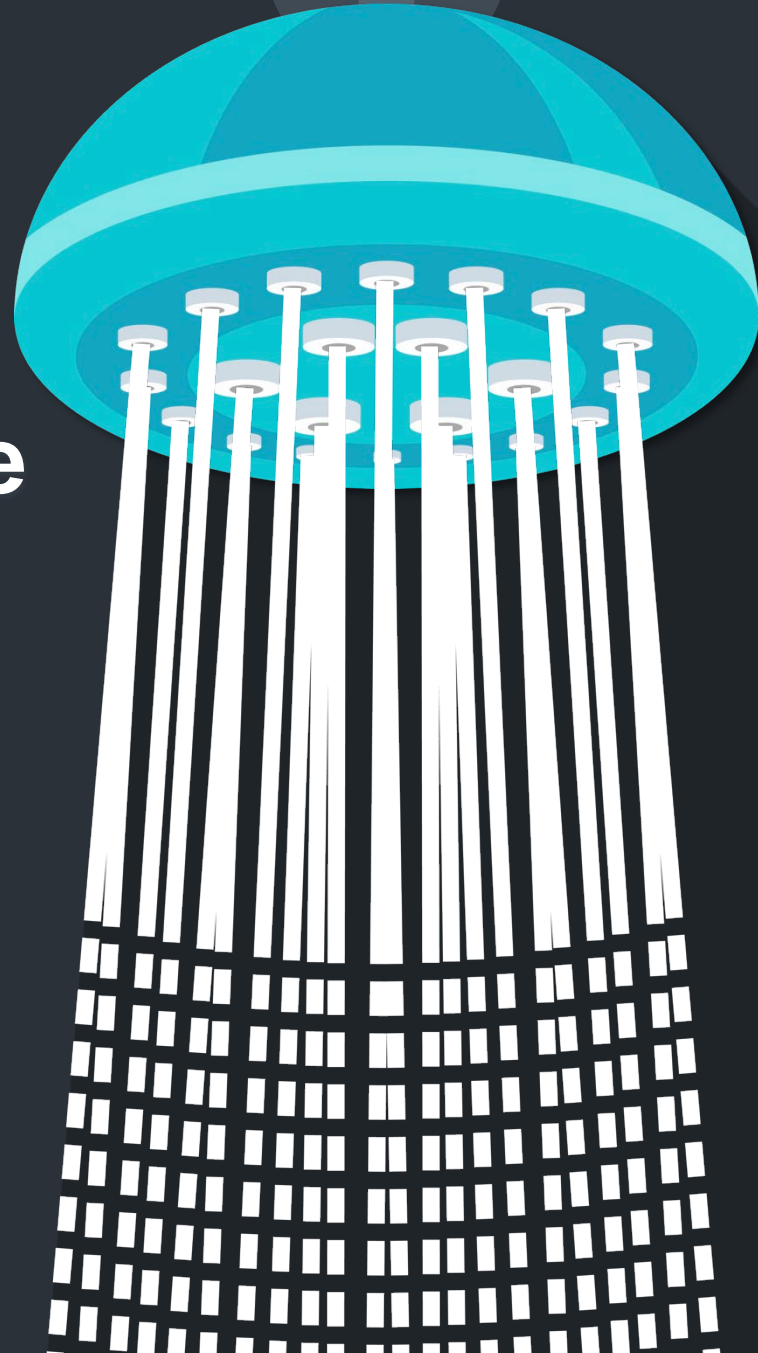


# NW Residential Faucet Stock

## Change in Rated Flow Rates 2006-2016



**How do we  
continue to save  
hot water?**

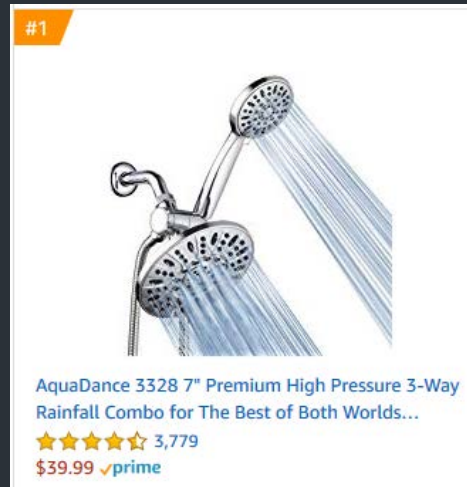


# How Do We Get People to Replace Their Old Showerheads and Faucets?

What people have



What people want



What utilities are giving them



Performance! Features! Rainfall! Spa-like Experience!



# Are there other opportunities to explore?



- 1. Thermostatic Mixing Valves**
- 2. Thermostatic Shutoff Valve**
- 3. Distribution System Improvements**
- 4. Smaller pipe sizes designed for current water consumption rates**
- 5. Better pipe distribution systems –**
  - design bathrooms closer to the water heater
  - Insulate pipes
- 6. Properly-controlled Recirculation Pumps**
- 7. Instantaneous/On Demand Hot Water**



# Questions?

## Contact

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