
SENATE COMMITTEE ON NATURAL RESOURCES AND WATER

Senator Henry Stern, Chair

2021 - 2022 Regular

Bill No: SB 1157 **Hearing Date:** April 5, 2022
Author: Hertzberg
Version: February 17, 2022 >
Urgency: No **Fiscal:** Yes
Consultant: Dennis O'Connor

Subject: Urban water use objectives: indoor residential water use

BACKGROUND AND EXISTING LAW

Existing law:

- 1) Establishes a method to estimate the aggregate amount of water that would have been delivered the previous year by an urban retail water supplier if all that water had been used efficiently.
 - a) This estimated aggregate water use is the urban retail water supplier's urban water use objective.
 - b) The method is based on water use efficiency standards and local service area characteristics for that year.
 - c) The annual urban water use objective (WC §10609.20(c)) is the sum of:
 - i) Aggregate estimated efficient indoor residential water use.
 - ii) Aggregate estimated efficient outdoor residential water use.
 - iii) Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use.
 - iv) Aggregate estimated efficient water losses.
 - v) Aggregate estimated water use for approved variances.
 - vi) Potable reuse bonus incentive adjustment
 - vii) By comparing the amount of water actually used in the previous year with the urban water use objective, local urban water suppliers will be in a better position to help eliminate unnecessary use of water; that is, water used in excess of that needed to accomplish the intended beneficial use. (§10609(a))
- 2) Bases the urban water use objective on standards and practices for the following water uses:
 - a) Indoor residential use.
 - b) Outdoor residential use.
 - c) Commercial, industrial, and institutional (CII) water use.
 - d) Water losses.
 - e) Other unique local uses and situations that can have a material effect on an urban water supplier's total water use.
- 3) Establishes the standard for indoor residential water use as follows:
 - a) Until January 1, 2025 – 55 gallons per capita daily (gpcd).
 - b) Beginning January 1, 2025, until January 1, 2030 – 52.5 gpcd or a standard recommended pursuant to 4) below.

- c) Beginning January 1, 2030 – 50 gpcd or a standard recommended pursuant to 4) below.
- 4) Requires the Department of Water Resources (DWR), in coordination with the State Water Resources Control Board (SWRCB), to conduct necessary studies and investigations and may jointly recommend to the Legislature a standard for indoor residential water use that more appropriately reflects best practices for indoor residential water use than the standard described in 3) above.
 - a) A report on the results of the studies and investigations shall be made to the chairpersons of the relevant policy committees of each house of the Legislature by January 1, 2021, and shall include information necessary to support the recommended standard, if there is one.
 - b) The studies and investigations shall also include an analysis of the benefits and impacts of how the changing standard for indoor residential water use will impact water and wastewater management, including potable water usage, wastewater, recycling and reuse systems, infrastructure, operations, and supplies.

In November 2021, DWR submitted a report to the Legislature with DWR's and the SWRCB's recommendation that urban water suppliers maintain the current indoor water use efficiency standard of 55 gpcd to 2025, be reduced to 47 gpcd beginning 2025, and be reduced to 42 gpcd beginning 2030.

PROPOSED LAW

This bill would change the change the standards for indoor residential water use, to reflect those recommended by DWR and the SWRCB. Specifically, it would change the indoor residential water use standards beginning January 1, 2025, to be:

- a) Beginning January 1, 2025, until January 1, 2030 – 47 gpcd.
- b) Beginning January 1, 2030 – 42 gpcd.

ARGUMENTS IN SUPPORT

According to the author, "California is suffering from a cycle of repeated drought and dry conditions. Only six years after the state's last historic drought ended, California is now in the midst of what experts refer to as a "megadrought," with nearly 99% of the state currently experiencing drought conditions. Advances in water efficiency made during the 2012-2016 better prepared us for the current drought conditions, but we must continue on the path of efficiency in face of a near-certain water scarce future.

SB 1157 enhances California's water efficiency by updating statutory indoor residential water use standards to 47 gpcd between 2025 to 2030, and 42 gpcd for 2030 and beyond – as jointly recommended by the Department of Water Resources and the State Water Resources Control Board using analysis of current water usage and best practices. This measure ensures the state continues making strides in water efficiency, which reduces wasteful water usage and improves future water supply reliability, and ultimately makes the state more adaptable and resilient to drought and the impacts of climate change."

Supporters also raise a number of other points, including:

- “Water efficiency programs help reduce the cost of water services to customers and mitigate rate increases. Studies have shown that most urban water conservation and efficiency measures are less expensive than new water-supply options and are the most cost-effective ways to meet current and future water needs. A 2018 study by the Alliance for Water Efficiency found that Los Angeles Department of Water and Power conservation programs between 1990 and 2016 avoided roughly \$11 billion in water costs. Customer bills were 27% lower than they otherwise would have been.”
- “Some water agency ‘affordability’ concerns appear to be based on a misunderstanding of how the new water objectives will be applied. Individual customers are NOT required to meet the indoor residential water efficiency standard. The law gives water agencies complete flexibility to meet its overall water efficiency objective through any combination of leak reductions and improved indoor and outdoor efficiency measures.”
- “Other water agency ‘affordability’ concerns appear to suggest that the Legislature should adopt a less-efficient water standard because it would be too much of a burden for agencies to ensure that their water rates and programs are equitable. These arguments should be rejected as inconsistent with the Human Right to Water.”

ARGUMENTS IN OPPOSITION

A coalition of water agencies take exception to DWR’s report and its recommendations. They raise a number of points, including:

“While a study was completed, the analysis of adverse impacts and other relevant information, including affordability and changing populations and patterns, were not quantitatively considered; nor did they inform the final recommendations.”

“The California Water Efficiency Partnership estimated during the regulatory process that the ‘the total anticipated cost range for reasonably complying with a 2030 standard in which all providers achieve a residential indoor per capita volume of 42 GPCD by 2030 is likely between \$2.8 and \$4.6 billion.’ While the indoor residential water use standard is only one component of the overall water use objective, given the separately enforceable component of water loss, it is anticipated that public water agencies will need to make significant additional investments to reduce indoor residential use to meet the overall objective. Ultimately this substantial financial investment will only save 354,000 acre feet of water per year over the current 2030 standard – approximately half a percent of statewide water use.”

“In addition to these direct costs, there will be substantial secondary costs. The Final Report indicates that the adverse impacts to wastewater and recycled water providers could be significant. A few examples of potential impacts include increased sewer gas production, accelerated rate of corrosion of pipes and manholes, increased occurrences of sewer blockages and overflows, degradation of wastewater influent quality, and reductions in recycled water quantity. Mitigating these impacts will require considerable investment.”

“For these reasons, this coalition has serious concerns regarding the 2030 standard SB 1157 would implement and requests amendments that would require quantitative analysis of these impacts prior to the implementation of the 2030 standard. Without these amendments, we respectfully request your ‘No, vote when the bill is heard in the Senate Committee on Natural Resources and Water.”

COMMENTS

Rationale for Selecting the Proposed Joint Recommendations. Quoting from the report to the legislature, DWR the SWRCB “jointly believe the proposed recommendations reflect:

- That Californians have become more efficient over time. The current median water use of 48 gpcd is well below the 2020 standard in statute.
- Efficient use.
- Best practices.
- That water use efficiency is often less expensive than developing new water supplies and may help to ensure equitable and affordable access to water.
- That water use efficiency reduces greenhouse gas emissions and improves the resilience of urban areas to future water supply challenges.
- The need for a reasonable path to a feasible and impactful 2030 standard.
 - * This standard recognizes the efforts, investments, and conservation achievements already made by California suppliers and their customers.
 - * The overall water use objective is calculated by combining the indoor residential standard, the outdoor residential standard, the large landscape areas (CII) standard, the water loss standard, variances, and a bonus incentive. Suppliers retain discretion for how they will meet their overall water use objective.
 - * Half of suppliers are on track to be at or below 44 gpcd by 2030 with passive conservation only. Estimates of Supplier water use are expected to be even lower when including active conservation.
 - * Suppliers have time to plan, develop partnerships and programs, and support conservation as a way of life.”

The Specific Recommendations. Again, quoting from the report:

2020: 55 gpcd (No Change in the Current Statute). Our agencies do not recommend changing the 2020 standard. This is because a 2020 standard would be in effect for only one year (2024). In addition, this reflects our recognition of the financial strain the pandemic has created for many suppliers.

2025: 47 gpcd (5.5 gpcd Less than the Current Statute). To assess the suitability of standards, it is important to estimate what water use will be in the future. When estimating future water use, it is informative to consider trends in water use over time. The main trend has been declining indoor residential water use at a rate of approximately 0.4 to 0.9 percent per year. The lower end of this range reflects passive conservation and the higher end of this range reflect both active and passive conservation, where:

- * “Active” conservation measures such as education and outreach, residential and commercial water audits, and rebates.
- * “Passive” water use reductions such as those driven by plumbing codes, SB 407, and turnover given the expected lifetime of fixtures and appliances.

By 2025, 54 percent of Suppliers would be below the recommended standard of 47 gpcd considering only passive conservation. If indoor residential water use continues dropping with active conservation efforts, the number of suppliers below the 2025 recommended standard of 47 gpcd could be even higher. As noted above, suppliers retain discretion for how they will meet their overall water use objective. They may also be eligible for the bonus incentive or to pursue variances.

2030: 42 gpcd (8 gpcd Less than the Current Statute). From 2030 onward, the Department and the State Water Board recommend an indoor residential standard of 42 gpcd. As with the recommendation for the 2025 standard, the 2030 recommendation takes into consideration future use.

By 2030, 39 percent of Suppliers would be below the recommended standard of 42 gpcd considering only passive conservation. If indoor residential water use continues dropping with active conservation efforts, the number of suppliers below the 2030 recommended standard of 42 gpcd could be even higher. As noted above, suppliers retain discretion for how they will meet their overall water use objective. They may also be eligible for the bonus incentive or to pursue variances.”

Any Collaborating Analysis? Quoting the Pacific Institute, “The Pacific Institute analyzed data reported by water suppliers in their Electronic Annual Reports (EARs) for 2017 through 2019 to get a sense of how water suppliers would stack up with the new standards. The EAR is an annual survey of public water systems that collects water-system information, including water use by sector.

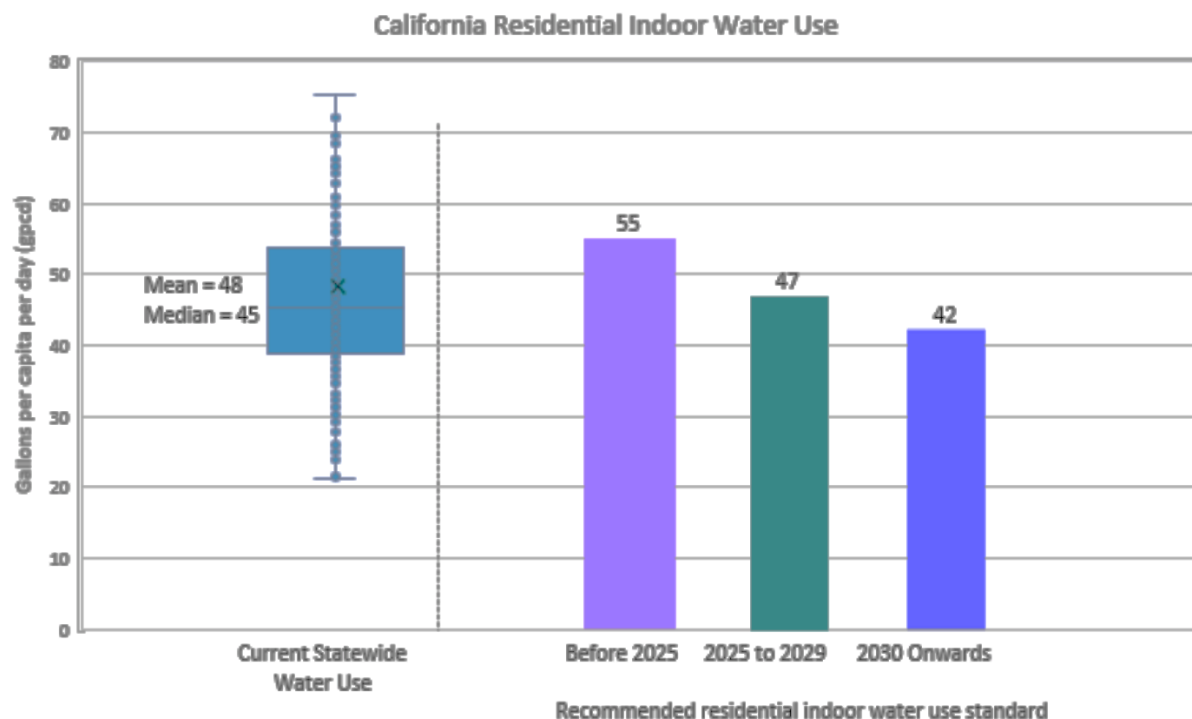


Figure 1: Current statewide residential indoor water use and new recommended standards for 2025 and beyond. Note: Outliers that were “outside of the whiskers” are not shown in the figure.

(<https://pacinst.org/with-another-dry-year-looming-california-moves-to-set-new-urban-water-use-standards/> Last accessed 3/26/22)

“Figure 1 shows current indoor residential water use and the recommended water use standards. Current residential indoor use is shown as a box-and-whisker plot. Between 2017 and 2019, indoor residential water use averaged 48 gpcd (shown as an ‘X’ in the blue box), with a median value of 45 gpcd (shown as the dotted line near the middle of the blue box). For 75% of water suppliers, indoor water was 54 gpcd or less (as indicated by the top of the blue box). For 25% of water suppliers, it was 39 gpcd or less between 2017 and 2019 (as indicated by the bottom of the blue box). The upper and lower ‘whiskers’ point to the upper and lower extremes in the data.”

“These data show that 78% of water suppliers were already below the current indoor standard of 55 gpcd between 2017 and 2019. Likewise, 56% of suppliers were below the 2025 standard of 47 gpcd, and 37% were below the 2030 standard of 42 gpcd.”

Related Bills.

AB 1434 (Friedman, 2021) would also have amended the indoor residential standards. That bill did not meet the house of origin deadline. The table below compares the indoor residential use standard under current law, AB 1434, and this bill.

Comparison of Indoor Residential Water Use Standards (gpcd)

<u>Year</u>	<u>Current Law</u>	<u>AB 1434</u>	<u>SB 1157</u>
Until 2025	55	48	55
Beginning 2025	52.5	45	47
Beginning 2030	50	40	42

SUGGESTED AMENDMENTS: None

SUPPORT

- | | |
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| California Coastkeeper Alliance | Mono Lake Committee |
| Clean Water Action | Natural Resources Defense Council (NRDC) |
| Climate Resolve | Pacific Institute |
| Community Water Center | Planning and Conservation League |
| Environmental Working Group | Sierra Club California |
| Los Angeles Alliance for a New Economy | South Yuba River Citizens League |
| Los Angeles Waterkeeper | SPUR |

OPPOSITION

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| Amador Water Agency | Carmichael Water District |
| Association of California Water Agencies | Carpinteria Water District |
| California Association of Sanitation Agencies | City of Roseville |
| California Municipal Utilities Association (CMUA) | City of Santa Rosa |
| California Water Association | Coastside County Water District |
| Calleguas Municipal Water District | Cucamonga Valley Water District |
| Camrosa Water District | Desert Water Agency (DWA) |
| | East Orange County Water District |
| | East Valley Water District |
| | Eastern Municipal Water District |

El Dorado Irrigation District
El Toro Water District
Elsinore Valley Municipal Water District
Fresno Metropolitan Flood Control
District
Humboldt Bay Municipal Water District
(HBMWD)
Indian Wells Valley Water District
Inland Empire Utilities Agency
Irvine Ranch Water District
Mesa Water District
Northern California Water Association
Olivenhain Municipal Water District
Orange County Sanitation District
Otay Water District
Padre Dam Municipal Water District
Palmdale Water District
Placer County Water Agency

Rancho California Water District
Regional Water Authority
Rowland Water District
San Juan Water District
Santa Fe Irrigation District
Serrano Water District
Tahoe City Public Utility District
Tuolumne Utilities District
Upper San Gabriel Valley Municipal
Water District
Valley Center Municipal Water District
Valley County Water District
Vista Irrigation District
Walnut Valley Water District
Watereuse
West Kern Water District
Western Municipal Water District
Yorba Linda Water District

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