

Documentation for Provisional Data Released as Part of Making Conservation a California Way of Life Proposed Regulation

This document provides context for the provisional data that has been released by the State Water Board as a part of the Making Conservation a California Way of Life rulemaking process. The dataset represents data for 2017-2021 for 396 urban water suppliers. The “Summary Tables” tab summarizes the degree of impact to suppliers for each step of the proposed water use standards, both in terms of the number of suppliers and their respective service area populations. The “Full Data” tab contains all the necessary data points to recreate the calculations outlined in the “Relevant Formulas and Calculations” section below, and the “Averaged Data and Bins” contains population-weighted averages of current use and objective-based budgets, as well as calculations for the degree of impact, as shown in the “Summary Tables” tab.

Notes and Caveats:

- **Data quality disclaimer:** This is the best data available to the Board, at this point. Apart from some of the data used to calculate the Residential Outdoor portion of the objective (landscape area, reference ET, effective precipitation), which were generated by the Department of Water Resources, the data informing this analysis were reported by suppliers to either the State Water Board or the Department of Water Resources. State Water Board staff have worked with suppliers to improve the quality of the data over the last few years. Nonetheless, there may still be errors.
- **Version notes:** See “Notes” tab in the Excel file for what changes have been made in this update.
- The budget volumes shown in the spreadsheet are not the final budgets for 2025, 2030, 2035, and 2040. Rather, they are a demonstration of what the proposed standards for the years 2025, 2030, 2035, and 2040 would yield, relative to an agency’s current service area conditions (current population, residential landscape area, weather, etc.) and reported water use data.
- In the Objective Exploration Tool, an exact number for the bonus incentive data is not included. Rather, users of the tool can specify what percentage of the objective the bonus incentive might represent. Included in this spreadsheet is the State Water Board's best estimate of what the bonus incentive might be, for a handful of suppliers, based on sources such as the Volumetric Annual Report and Urban Water Management Plans.
- This analysis does not account for factors that would facilitate compliance, such as most variances and other regulatory provisions (an example of the pool provision and residential agriculture variance is included as of version 3.0). Nor does it take into consideration the effect of existing conservation programs, which may continue to drive down urban water use, regardless of the proposed regulation. In other words, this analysis represents an upper limit with regards to impacts.
- Budget for CII landscapes associated with dedicated irrigation meters (DIMs): Because Urban Retail Water Suppliers have yet to generate the landscape area data needed to calculate their budgets for CII landscapes with DIMs, estimates of this volume are currently unavailable. The State Water Board assumes, until the landscape area data is available, that this budget would be equivalent to "landscape irrigation deliveries" reported to the State Water Board through the Electronic Annual Report.

- Water Loss Budget: The water loss budget is based on a per-connection or per-system-length standard that are calculated for unique water systems. For urban water suppliers that only manage one water system, this is effectively the same as the standard multiplied by the number of connections or length of system. However, for suppliers that manage multiple water systems, this cannot be easily summarized in the same way. Therefore, the water loss budget is only shown here as an overall volume; the individual components of the standards are not shown in the data table.

Relevant Formulas and Calculations:

The following formulas were applied to each row in the “Full Data” tab of the spreadsheet.

Residential Indoor Water Use (Ri)

- Si = Per capita indoor water use standard
- P = service area population for reporting year $R_i = S_i * P * 365$

Residential Outdoor Water Use (Ro)

- Ii = residential irrigated landscapes
- INI = residential irrigable-not-irrigated landscapes
- Ap = Pool area (has landscape efficiency factor of 1)
- Et = evapotranspiration for reporting year
- Ep = effective precipitation for reporting year
- So = Residential outdoor standard

$$R_o = (I_i + 0.2 * INI) * (E_t - E_p) * S_o * 0.62 + P_a * (E_t - E_p) * 1.0 * 0.62$$

Residential Agriculture Variance (Va)

- Cra = Residential agriculture volume calculation
- Va = Residential agricultural variance (or special landscape allowance if less than 5% of objective)
- Ara = Residential agriculture landscapes
- Ets = seasonal net evapotranspiration specific to residential agriculture variance
- Etl = calculated landscape efficiency factor specific to residential agriculture variance

$$C_{ra} = A_{ra} * E_{ts} * E_{tl} * 0.62$$

$$\text{If } C_{ra} < 5\% \text{ of } R_o, \text{ then } V_a = A_{ra} * E_{ts} * 1.0 * 0.62$$

$$\text{If } C_{ra} \geq 5\% \text{ of } R_o, \text{ then } V_a = C_{ra}$$

Initial Objective Volume, not including bonus incentive (O_i)

- Ri = Residential indoor budget volume (calculation shown above)
- Ro = Residential outdoor budget volume (calculation shown above)
- Va = Residential Agriculture Variance, when applicable (calculation shown above)
- Co = CII landscapes associated with DIMs (for now, equals reported landscape irrigation) •
- Wrl = real water loss budget

$$O_i = Ri + Ro + Va + Co + Wrl$$

Bonus Incentive (B)

The volume of applicable potable reuse water (PR) that can be added to the budget is capped at 15% of the objective (O_i). Therefore,

- If potable volume \leq 15% of O_i , then $B = PR$
- If potable volume $>$ 15% of O_i , then $B = 0.15 * O_i$

Regulated Demands (RD)

- Rsm = Residential (single and multi-family) use
- Cl = Landscape irrigation
- Lr = real water loss

$$RD = Rsm + Cl + Lr$$

Excluded Demands (ED)

- Ci = CII indoor use (considered to be equivalent to reported CII volume)
- Do = other demands
- Au = Authorized unbilled water
- Al = Apparent water loss

$$ED = Ci + Do + Au + Al$$

Total Potable Use, i.e. Current Use (U)

- RD = regulated demand (calculation shown above)
- ED = excluded demand (calculation shown above) $U = RD + ED$

Initial Total Budget, including Excluded Demands and Bonus Incentive (T_i)

- O_i = objective volume, not including the bonus incentive
- B = bonus incentive
- ED = excluded demand

$$T_i = O_i + B + ED$$

Capping the Total Budget (T_f) to no more than the SBX7-7 Target Plus Process Water and Recycled Water (S_v) (2040 only)

Statute requires that the regulation prevent backsliding from the “20% by 2020” targets suppliers established under SBx7-7. Specifically, it directed that the efficiency standards be set such that the objectives, plus excluded demands (such as CII indoor water use), exceed the savings realized by the SBx7-7 targets. Therefore, the 2040 calculated total budget may be no more than the supplier’s SBX7-7 target, plus any reported process and recycled water included in SBX7-7 compliance documentation (see § 966 (h) of the [proposed regulatory text](#)).

- Sb = Per Capita SBX7-7 Target
- P = Service Area Population

- Pw = Process Water
- Rw = Recycled Water

$$S_v = (S_b * P * 365) + Pw + Rw$$

- If $T_i \leq S_v$, then $T_f = T_i$
- If $T_i > S_v$, then $T_f = S_v$

Calculating the Final Objective (O_f) from the Capped Total Budget (2040 only)

- T_f = Capped Total Budget (calculation shown above)
- ED = Excluded Demands

$$O_f = T_f - ED$$

Calculating the Percent Reduction for the Objective-Based Total, Relative to Average Annual Total Potable Use (Pct_t)

- U = annual potable use, i.e. current use (calculation shown above)
- T_f = Capped Total Budget

$$Pct_t = (T_f - U) / U$$

Note: If Pct_t is greater than 0, it is set to 0 (i.e. no reduction is necessary to meet the objective).

Calculating the Percent Reduction for the Objective, Relative to Average Annual Regulated Demand (Pct_o)

- RD = regulated demand
- O_f = objective based on capped total budget

$$Pct_o = (O_f - RD) / RD$$

Note: If Pct_o is greater than 0, it is set to 0 (i.e. no reduction is necessary to meet the objective).

Population-Weighted Average Data

The data in the "Averaged Data and Bins" tab is a population-weighted average of the corresponding columns in the "Full Data" tab. For example,

Average Annual Potable Total Use = $SUMPRODUCT(\text{Annual Potable Total Use, Service Area Population}) / SUM(\text{Population})$

This step is performed once the full budgets have been calculated; calculated averaged budgets using averaged intermediate quantities (such as average evapotranspiration) will result in different budget values.

Data Dictionary: All Data Tab

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Agency ID	Department of Water Resources	Numerical ID used to label agency	A
Agency	N/A	Name of agency	B
Year	N/A	Year that the Electronic Annual Report fields, effective precipitation value, and evapotranspiration value correspond to.	C
Service Area Population	Electronic Annual Report	Reported in Section 3 of the Electronic Annual Report, pursuant to the California Codes of Regulations §64412. Determination of Persons Served. Does not include seasonal visitors.	D
Median Household Income	State Water Board	Median household income in California based on the 2021 5-year American Community Survey data, as analyzed by the State Water Board's 2023 Needs Assessment Report. Systems with multiple PWSIDs per DWR ID were weighted by service area population.	E
Hydrologic Region	Department of Water Resources	A geographical region defined by a common water source and/or common hydrological properties.	F
Annual SBX7-7 Target, in Gallons per Capita Daily (GPCD)	Department of Water Resources	Annual SBX7-7 20% demand reduction in per capita demand.	G
Annual SBX7-7 Target Plus Process Water And Recycled Water, in Gallons	Department of Water Resources	Annual SBX7-7 20% demand reduction with the inclusion of reported process water and recycled water, in gallons.	H

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Annual Volume of Residential (Single and Multi-Family) Use, in Gallons	Electronic Annual Report	Reported in Section 6 of the Electronic Annual Report, (B) Single-Family Residential: Single-family detached dwellings. If a Homeowner’s Association individually meters households, report those deliveries in this category. (C) Multi-Family Residential: Apartments, condominiums, town houses, duplexes, mobile home and trailer parks. If a Homeowner’s Association has a single master meter, report those deliveries in this category. Link to EAR Help Tips: EAR Help Tips (ca.gov)	I
Annual Volume of Landscape Irrigation, in Gallons	Electronic Annual Report	Reported in Section 6 of the Electronic Annual Report, (F) Landscape Irrigation: Parks, play fields, cemeteries, median strips, golf courses. Link to EAR Help Tips: EAR Help Tips (ca.gov)	J
Annual Volume of Commercial, Institutional, and Industrial Use (CII), in Gallons	Electronic Annual Report	Reported in Section 6 of the Electronic Annual Report, (E) Commercial/Institutional: Commercial water users such as retail establishments, office buildings, laundries, campgrounds, gas stations; and institutional water users such as schools, prisons, hospitals, dormitories, nursing homes, hotels (D) Industrial: All manufacturing establishments, such as factories, assembly plants, and other manufacturing industries Link to EAR Help Tips: EAR Help Tips (ca.gov)	K
Annual Volume of Other Use, in Gallons	Electronic Annual Report	Reported in Section 6 of the Electronic Annual Report, (G) Other: Fire suppression, street cleaning, line flushing, construction meters, temporary meters. Link to EAR Help Tips: EAR Help Tips (ca.gov)	L
Annual Average Volume of Real Water Loss, in Gallons	Water Loss Audit	Physical water leaks from a storage system (i.e. tanks, transmission, distribution mains)	M

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Annual Average Volume of Apparent Water Loss, in Gallons	Water Loss Audit	Erroneous meter readings, data errors, or unauthorized consumption such as theft.	N
Annual Average Volume of Authorized Unbilled Water, in Gallons	Water Loss Audit	Water that is not formally billed and not paid for, such as fire flows or water main flushing.	O
Annual Average Real Water Loss Budget, in Gallons	State Water Board	The sum of per-water-system water loss budgets, each of which is defined either in terms of number of service connections or the length of the system.	P
Measured Residential Irrigated Landscape Area, in Square Feet	Department of Water Resources	“Irrigable Irrigated Area” is residential area of healthy vegetation where the vegetation appears to be in growth, not senesced, and is foliated. The area is presumed to be maintained and managed through active irrigation, comprising an irrigated hydrozone. Non-vegetative features may be included.	Q
Measured Residential Irrigable-Not-Irrigated Landscape Area, in Square Feet	Department of Water Resources	“Irrigable Not Irrigated Area” is residential area that is not currently being irrigated, but was irrigated in the past, or may be managed with irrigation in the future.	R
Measured Pool Area, in Square Feet	Department of Water Resources	Square footage of residential pools, spas, or similar water features in service area, as measured by Department of Water Resources satellite analysis.	S
Annual Evapotranspiration, in Inches/Year	Department of Water Resources	The amount of water transpired by plants, retained in plant tissues, and evaporated from plant tissues and surrounding soil surfaces.	T
Annual Effective Precipitation, in Inches/Year	Department of Water Resources	That portion of precipitation stored in the root zone that is available for plant evapotranspiration. This includes precipitation stored in the soil before and during the growing season.	U

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Residential Agriculture Area, in Square Feet	Department of Water Resources	Land on which agricultural use is occurring and that is associated with a service connection the supplier categorizes as residential.	V
Seasonal Net Evapotranspiration, in Inches/Year (For Residential Agriculture)	Department of Water Resources	Net reference evapotranspiration for a supplier's service area growing season, in inches per year.	W
Seasonal Landscape Efficiency Factor (For Residential Agriculture)	Department of Water Resources	The average regional crop coefficient divided by the average regional irrigation efficiency. See proposed regulation text section 968(g)(3) for more information.	X
Calculated 2025 Residential Indoor Budget, in Gallons	State Water Board	The residential indoor budget for 2025, based on service area population and an indoor water use standard of 47 gallons per capita daily.	Y
Calculated 2025 Residential Outdoor Budget, in Gallons	State Water Board	The residential outdoor budget for 2025, based on measured irrigated landscape area with a 20% irrigable-not-irrigated buffer, effective precipitation, evapotranspiration, and a landscape efficiency factor of 0.80. Also includes pool area with a landscape efficiency factor of 1.	Z
Calculated 2025 Residential Agriculture Variance, in Gallons	State Water Board	An example of a variance. This value is based on agriculture area with either a landscape efficiency factor of 1.0 (if calculated variance is less than 5% of the 2025 outdoor budget) or a Department-provided landscape efficiency factor (if calculated variance is 5% or more of the 2025 outdoor budget).	AA
Calculated 2030 Residential Indoor Budget, in Gallons	State Water Board	The residential indoor budget for 2030, based on service area population and an indoor water use standard of 42 gallons per capita daily.	AB

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Calculated 2030 Residential Outdoor Budget, in Gallons	State Water Board	The residential outdoor budget for 2030, based on measured irrigated landscape, effective precipitation, evapotranspiration, and a landscape efficiency factor of 0.80. Also includes pool area with a landscape efficiency factor of 1.	AC
Calculated 2030 Residential Agriculture Variance, in Gallons	State Water Board	An example of a variance. This value is based on agriculture area with either a landscape efficiency factor of 1.0 (if calculated variance is less than 5% of the 2030 outdoor budget) or a Department-provided landscape efficiency factor (if calculated variance is 5% or more of the 2030 outdoor budget).	AD
Calculated 2035 Residential Indoor Budget, in Gallons	State Water Board	The residential indoor budget for 2035, based on service area population and an indoor water use standard of 42 gallons per capita daily.	AE
Calculated 2035 Residential Outdoor Budget, in Gallons	State Water Board	The residential outdoor budget for 2035, based on measured irrigated landscape, effective precipitation, evapotranspiration, and a landscape efficiency factor of 0.63. Also includes pool area with a landscape efficiency factor of 1.	AF
Calculated 2035 Residential Agriculture Variance, in Gallons	State Water Board	An example of a variance. This value is based on agriculture area with either a landscape efficiency factor of 1.0 (if calculated variance is less than 5% of the 2035 outdoor budget) or a Department-provided landscape efficiency factor (if calculated variance is 5% or more of the 2035 outdoor budget).	AG
Calculated 2040 Residential Indoor Budget, in Gallons	State Water Board	The residential indoor budget for 2040, based on service area population and an indoor water use standard of 42 gallons per capita daily.	AH
Calculated 2040 Residential Outdoor Budget, in Gallons	State Water Board	The residential outdoor budget for 2040, based on measured irrigated landscape, effective precipitation, evapotranspiration, and a landscape efficiency factor of 0.55. Also includes pool area with a landscape efficiency factor of 1.	AI

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Calculated 2040 Residential Agriculture Variance, in Gallons	State Water Board	An example of a variance. This value is based on agriculture area with either a landscape efficiency factor of 1.0 (if calculated variance is less than 5% of the 2040 outdoor budget) or a Department-provided landscape efficiency factor (if calculated variance is 5% or more of the 2040 outdoor budget).	AJ
Annual Use Equivalent to Objective (Regulated Demands), in Gallons	State Water Board	The sum of residential (single and multifamily), landscape irrigation, and real water loss (includes potable and non-potable).	AK
Objective Volume Based on 2025 Standards, in Gallons	State Water Board	The sum of the 2025 residential indoor and outdoor budgets, landscape irrigation, and the water loss budget.	AL
Objective Volume Based on 2030 Standards, in Gallons	State Water Board	The sum of the 2030 residential indoor and outdoor budgets, landscape irrigation, and the water loss budget.	AM
Objective Volume Based on 2035 Standards, in Gallons	State Water Board	The sum of the 2035 residential indoor and outdoor budgets, landscape irrigation, and the water loss budget.	AN
Objective Volume Based on 2040 Standards, in Gallons	State Water Board	The sum of the 2040 residential indoor and outdoor budgets, landscape irrigation, and the water loss budget.	AO
Annual Water Use Volume For Which Standards Are Not Set (Excluded Demands), in Gallons	State Water Board	The sum of CII, authorized unbilled water, apparent water loss, and other water use.	AP
Annual Volume of Potential Current Potable Reuse Water, in Gallons	State Water Board	Potable reuse water includes water produced through both direct potable reuse and indirect potable reuse systems.	AQ
Bonus Incentive Volume, Capped by 2025 Objective Volume, in Gallons	State Water Board	Either the potable reuse volume or 15% of the 2025 objective volume, whichever is less.	AR
Bonus Incentive Volume, Capped by 2030 Objective Volume, in Gallons	State Water Board	Either the potable reuse volume or 15% of the 2030 objective volume, whichever is less.	AS
Bonus Incentive Volume, Capped by 2035 Objective Volume, in Gallons	State Water Board	Either the potable reuse volume or 15% of the 2035 objective volume, whichever is less.	AT

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Bonus Incentive Volume, Capped by 2040 Objective Volume, in Gallons	State Water Board	Either the potable reuse volume or 15% of the 2040 objective volume, whichever is less.	AU
Annual Total Use, in Gallons	State Water Board	The sum of regulated demands and excluded demands.	AV
Total Demand Based on 2025 Standards, in Gallons	State Water Board	The sum of the 2025 objective, the 2025 bonus incentive, and the excluded demand volumes.	AW
Total Demand Based on 2030 Standards, in Gallons	State Water Board	The sum of the 2030 objective, the 2030 bonus incentive, and the excluded demand volumes.	AX
Total Demand Based on 2035 Standards, in Gallons	State Water Board	The sum of the 2035 objective, the 2035 bonus incentive, and the excluded demand volumes.	AY
Total Demand Based on 2040 Standards, in Gallons	State Water Board	The sum of the 2040 objective, the 2040 bonus incentive, and the excluded demand volumes.	AZ
Total Demand Based on 2040 Standards, Capped by SBX7-7 Plus Process and Recycled, in Gallons	State Water Board	The 2040 objective-based total demand or the SBX7-7 volume plus process and recycled water, whichever is less.	BA
Objective Based on 2025 Standards, Plus Bonus Incentive, in Gallons	State Water Board	The 2025 objective plus the bonus incentive.	BB
Objective Based on 2030 Standards, Plus Bonus Incentive, in Gallons	State Water Board	The 2030 objective plus the bonus incentive.	BC
Objective Based on 2035 Standards, Plus Bonus Incentive, in Gallons	State Water Board	The 2035 objective plus the bonus incentive.	BD
Objective Based on 2040 Standards, Plus Bonus Incentive, in Gallons	State Water Board	The 2040 objective plus the bonus incentive.	BE
Adjusted Objective Based on 2040 Standards (Capped Objective-Based Total Demand, Minus the Excluded Demands), in Gallons	State Water Board	The capped 2040 total budget minus the excluded demands.	BF

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
2040 Objective-Based Total Capped at Values Set by SBX77-7?	N/A	Yes/No field. States whether or not the total demand based on 2040 standards (Column AV) was capped to the volume of the SBX7-7 volumetric target plus process and recycled water (Column H).	BG

Data Dictionary: Averaged Data and Bins

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Agency ID	Department of Water Resources	Numerical ID used to label agency	A
Agency	N/A	Name of agency	B
Average Service Area Population	Electronic Annual Report	A 5-year average of Service Area Population (Column D of the Full Data tab).	C
Median Household Income	State Water Board	Median household income in California based on the 2021 5-year American Community Survey data, as analyzed by the State Water Board's 2023 Needs Assessment Report . Systems with multiple PWSIDs per DWR ID were weighted by service area population.	D
Hydrologic Region	Department of Water Resources	A geographical region defined by a common water source and/or common hydrological properties	E
Annual SBX7-7 Target, in Gallons per Capita Daily (GPCD)	Department of Water Resources	Annual SBX7-7 20% demand reduction in per capita demand.	F
Average Annual Total Water Use, in Gallons	State Water Board	Population-weighted average of Annual Total Use, in Gallons (Column AV of the Full Data tab), i.e. the averaged sum of regulated and excluded demands.	G
Average Total Demand Based on 2025 Standards, in Gallons	State Water Board	Population-weighted average of Total Demand Based on 2025 Standards (Column AW of the Full Data tab).	H
Average Total Demand Based on 2030 Standards, in Gallons	State Water Board	Population-weighted average of Total Demand Based on 2030 Standards, (Column AX of the Full Data tab).	I
Average Total Demand Based on 2035 Standards, in Gallons	State Water Board	Population-weighted average of Total Demand Based on 2035 Standards, (Column AY of the Full Data tab).	J

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Average Total Demand Based on 2040 Standards, in Gallons	State Water Board	Population-weighted average of Total Demand Based on 2040 Standards, (Column AZ of the Full Data tab).	K
Average Total Demand Based on 2040 Standards, Capped by SBX7-7 Plus Process and Recycled, in Gallons	State Water Board	Population-weighted average of Total Demand Based on 2040 Standards, Capped by SBX7-7 Plus Process and Recycled, in Gallons (Column BA of the Full Data tab), i.e. the average of the capped total demand based on 2040 standards.	L
Average Annual Use Equivalent to Objective (Regulated Demands), in Gallons	State Water Board	Population-weighted average of Annual Use Equivalent to Objective, in Gallons (Column AK of the Full Data tab), i.e. the averaged sum of residential, landscape irrigation, and water loss.	M
Average Objective Based on 2025 Standards, Plus Bonus Incentive, in Gallons	State Water Board	Population-weighted average of Objective Based on 2025 Standards, Plus Bonus Incentive, in Gallons (Column BB of the Full Data tab).	N
Average Objective Based on 2030 Standards, Plus Bonus Incentive, in Gallons	State Water Board	Population-weighted average of Objective Based on 2030 Standards, Plus Bonus Incentive, in Gallons (Column BC of the Full Data tab).	O
Average Objective Based on 2035 Standards, Plus Bonus Incentive, in Gallons	State Water Board	Population-weighted average of Objective Based on 2035 Standards, Plus Bonus Incentive, in Gallons (Column BD of the Full Data tab).	P
Average Objective Based on 2040 Standards, Plus Bonus Incentive, in Gallons	State Water Board	Population-weighted average of Objective Based on 2040 Standards, Plus Bonus Incentive, in Gallons (Column BE of the Full Data tab).	Q

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Average Adjusted Objective Based on 2040 Standards (Capped Objective-Based Total Demand, Minus the Excluded Demands), in Gallons	State Water Board	Population-weighted average of Adjusted Objective Based on 2040 Standards (Capped Objective-Based Total Demand, Minus the Excluded Demands), in Gallons (Column BF of the Full Data tab), i.e. the capped 2040 total demand minus excluded demands.	R
Estimated effect of 2025 standards on total water use, given data limitations	State Water Board	Percent difference between Average Total Demand Based on 2025 Standards, in Gallons (Column H) and Average Annual Total Water Use, in Gallons (Column G)	S
2025 Standards Effects on Total Use Bin	State Water Board	Categorical variable based on percent difference calculated in Column S	T
Estimated effect of 2030 standards on total water use, given data limitations	State Water Board	Percent difference between Average Total Demand Based on 2030 Standards, in Gallons (Column I) and Average Annual Total Water Use, in Gallons (Column G)	U
2030 Standards Effects on Total Use Bin	State Water Board	Categorical variable based on percent difference calculated in Column U	V
Estimated effect of 2035 standards on total water use, given data limitations	State Water Board	Percent difference between Average Total Demand Based on 2035 Standards, in Gallons (Column J) and Average Annual Total Water Use, in Gallons (Column G)	W
2035 Standards Effects on Total Use Bin	State Water Board	Categorical variable based on percent difference calculated in Column W	X
Estimated effect of 2040 standards on total water use, given data limitations	State Water Board	Percent difference between Average Total Demand Based on 2040 Standards, Uncapped by SBX7-7 Plus Process and Recycled, in Gallons (Column L) and Average Annual Total Use, in Gallons (Column G)	Y
2040 Standards Effects on Total Use Bin	State Water Board	Categorical variable based on percent difference calculated in Column Y	Z

Data Field Name	Main Data Source	Description of Data Field	Column in Tab
Reductions needed to meet the objective based on 2025 standards, relative to the subset of urban uses subject to standards	State Water Board	Percent difference between Average Objective Based on 2025 Standards, in Gallons (Column N) and Average Annual Use Equivalent to Objective (Regulated Demands), in Gallons (Column M).	AA
2025 Objective Reductions Bin	State Water Board	Categorical variable based on percent difference calculated in Column AA.	AB
Reductions needed to meet the objective based on 2030 standards, relative to the subset of urban uses subject to standards	State Water Board	Percent difference between Average Objective Based on 2030 Standards, in Gallons (Column O) and Average Annual Use Equivalent to Objective (Regulated Demands), in Gallons (Column M).	AC
2030 Objective Reductions Bin	State Water Board	Categorical variable based on percent difference calculated in Column AC.	AD
Reductions needed to meet the objective based on 2035 standards, relative to the subset of urban uses subject to standards	State Water Board	Percent difference between Average Objective Based on 2035 Standards, in Gallons (Column P) and Average Annual Use Equivalent to Objective (Regulated Demands), in Gallons (Column M).	AE
2035 Objective Reductions Bin	State Water Board	Categorical variable based on percent difference calculated in Column AE.	AF
Reductions needed to meet the objective based on 2040 standards, relative to the subset of urban uses subject to standards	State Water Board	Percent difference between Average Adjusted Objective Based on 2040 Standards (Capped Objective-Based Total Demand, Minus the Excluded Demands), in Gallons (Column R) and Average Annual Use Equivalent to Objective (Regulated Demands), in Gallons (Column M).	AG
2040 Objective Reductions Bin	State Water Board	Categorical variable based on percent difference calculated in Column AG.	AH