



# **Tier 2 Drought Response Implementation Plan**

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Drought Shortage  
Allocation Plan for the  
Regional Water System  
Wholesale Customers

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## 1. Introduction

The Tier 2 Drought Response Implementation Plan (the “Plan” or “Tier 2 Plan”) describes the method for allocating the water made available by the San Francisco Regional Water System (“RWS”) among the Wholesale Customers during shortages caused by Drought. This Plan is adopted pursuant to Section 3.11(C) of the Amended and Restated Water Supply Agreement between the City and County of San Francisco and the Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties (the “WSA”).

## 2. Relationship to Water Supply Agreement

The WSA includes a Water Shortage Allocation Plan which, among other things, (a) provides for the allocation of available water between Retail Customers (e.g., retail water customers within the City and County of San Francisco) and the Wholesale Customers collectively during system-wide water shortages of 20 percent or less, (b) contemplates the adoption by the Wholesale Customers of this Plan for allocation of the Wholesale Customers share of available water, (c) commits the SFPUC to implement this Plan, (d) provides for banking of unused allocation, and (e) provides for the transfer of both banked water and shortage allocations between and among the Wholesale Customers and commits the SFPUC to implement such transfers. That plan is referred to as the Tier 1 Plan and is included as Attachment H to the WSA.

The Tier 1 Plan also provides the methodology for determining the Overall Average Wholesale Customer Reduction, expressed as a percentage cutback from prior year’s normal SFPUC purchases, and Overall Wholesale Customer Allocation, in million gallons per day (MGD), both of which are used in determining the final Allocation Factor for each Wholesale Customer. The Overall Average Wholesale Customer Reduction is determined by dividing the volume of water available to the Wholesale Customers (the “Overall Wholesale Customer Allocation” or “Tier 1 Allocation”), shown as a share of available water in Section 2 of the Tier 1 Plan, by the prior year’s normal total Wholesale Customers’ RWS purchases and subtracting that value from one.

## 3. Development Process

Between January 2022 and June 2024, Bay Area Water Supply and Conservation Agency (BAWSCA), supported by Woodard & Curran technical consultants, facilitated negotiations between the Wholesale Customers through a series of meetings, workshops, and workgroups to develop a formula and implementation plan to allocate RWS supplies in the event of shortage caused by a SFPUC declared Drought, as defined in the WSA. These meetings, workshops, and workgroups provided a forum for in-depth discussion of the objectives, mechanics, and policy aspects of the elements of an updated Plan.

The Wholesale Customers began negotiations by reviewing the prior Plan, then discussed and agreed upon four policy principles to lay the foundation for a revised Plan. BAWSCA, with support from Woodard & Curran as the technical consultant team, introduced potential elements of a formula to align with the agreed upon policy principles. In monthly workshops, the Wholesale Customers discussed these options and provided feedback on which elements should be included in the Plan, along with suggested refinements. These workshops, and the discussions, suggestions, and comments expressed by the Wholesale Customers during this process, were the primary forum through which this Plan was developed.

## 4. Plan Policy Principles

The Wholesale Customers collectively developed four policy principles (the “Policy Principles”) to guide the development and performance of the Tier 2 Plan. The Tier 2 Plan and associated Tier 2 Plan Allocation Model were developed in consideration of these policy principles, with the intent to abide by each policy principle while minimizing conflicts between policy principles. The policy principles are summarized below and implemented in Attachment B, Tier 2 Plan Data Sources and Calculations.

1. **Policy Principle #1** - Provide sufficient water for the basic health and safety needs of customers.
2. **Policy Principle #2** - Minimize economic and other adverse impacts of water shortages on customers and the BAWSCA region.
3. **Policy Principle #3** - Provide predictability of drought allocations through consistent and predetermined rules for calculation, while allowing for flexibility to respond to unforeseen circumstances.
4. **Policy Principle #4** - Recognize benefits of, and avoid disincentives for, water use efficiency and development of alternative water supply projects.

## 5. Allocation Formula

Guided by the Policy Principles, the Wholesale Customers developed a specific formula for apportioning the Overall Wholesale Customer Allocation among the individual Wholesale Customers. The Tier 2 Allocation Model requires several inputs to calculate each Wholesale Customer’s allocation. First, Base Period data are collected to be used as inputs in the Tier 2 formula. Next each Wholesale Customer’s allocation is calculated in five steps.

### Base Period Calculations

The Base Period in the Tier 2 Plan is defined as the average of each Wholesale Customer’s two years with the highest volumes of SFPUC purchases from the previous three non-Drought years. A non-Drought year is defined as a full fiscal year (July 1 through June 30) in which the SFPUC has not declared a water shortage emergency, as defined in the WSA. BAWSCA’s Annual Survey, which compiles and publishes data self-reported by the Wholesale Customers, is the primary source for model inputs.

### Tier 2 Plan Allocation Formula Inputs

- **Population:** Each Wholesale Customer’s population as reported in the most recently published Annual Survey and is not tied to Drought or non-Drought year status.
- **Base Period SFPUC Purchases:** The average of each Wholesale Customer’s two years with the highest volumes of SFPUC purchases from the previous three non-Drought years.
- **Base Period Total Potable Water Production:** Total potable production as reported in the Annual Survey.

- **Base Period SFPUC Reliance:** Each Wholesale Customer's Base Period SFPUC Purchases divided by Base Period Total Potable Water Production, expressed as a percentage.
- **Base Period Percent Indoor Demand:** The single lowest month's total potable demand (a proxy for indoor use) divided by the average monthly total potable demand, expressed as a percentage. The resulting percentages are averaged for the two selected Base Period years.
- **Base Period Percent Non-Residential Demand:** Each Wholesale Customer's potable water consumption from the Base Period from all customer categories except residential, divided by the Wholesale Customer's Base Period Total Potable Water Production, expressed as a percentage. The resulting percentages are averaged for the two selected Base Period years.
- **Individual Supply Guarantee (ISG):** Each Wholesale Customer's share of the Supply Assurance, as shown on Attachment C to the WSA, with proxies for Hayward, San Jose, and Santa Clara in order to provide inputs for the Tier 2 Allocation Formula

There are three exceptions to the Base Period Calculations: (1) Coastside County Water District ("Coastside CWD") Base Period SFPUC Purchases and Base Period SFPUC Reliance, (2) Stanford Base Period Percent Indoor Demand, and (3) Stanford Population Calculation.

- (1) Coastside CWD Base Period SFPUC Purchases will be calculated as 94% of its Base Period Total Potable Water Production. Base Period SFPUC Reliance will be fixed at 94%. More information is provided in Attachment B.
- (2) Stanford's Base Period Percent Indoor Demand calculation will exclude demand from the month of December and/or January when the campus is closed and demand is abnormally low.
- (3) Stanford's population is calculated as described in Attachment B.

Furthermore, three Wholesale Customers do not have an ISG and a proxy is used in the Tier 2 Plan: (1) Hayward, (2) San Jose, and (3) Santa Clara. Background on ISG and each ISG proxy is described in Attachment B.

Data sources, methodologies, and equations used to calculate each input are described further in Attachment B.

## Step 0: Establish SFPUC Minimum and Maximum Cutback

The Minimum and Maximum Cutback establish the upper and lower bounds for each Wholesale Customer's final allocation.

No water is allocated in this step. Instead, allocations in subsequent steps are limited such that no Wholesale Customer's final allocation is outside the upper and lower bounds (i.e., above the Minimum Cutback or below the Maximum Cutback) established in this step.

**Minimum Cutback:** Each Wholesale Customer will contribute to meeting the Overall Average Wholesale Customer Reduction by taking a Minimum Cutback from its Base Period SFPUC

Purchases (up to its ISG or proxy). This establishes the upper limit of each Wholesale Customer's potential final allocation. The Minimum Cutback, expressed as a percentage, is equal to 1/3 times the Overall Average Wholesale Customer Reduction, but no less than 5%.

**Maximum Cutback:** The Maximum Cutback establishes the lower limit of each Wholesale Customer's potential final allocation. The Maximum Cutback, expressed as a percentage, is equal to 1.5 times the Overall Average Wholesale Customer Reduction. The Maximum Cutback is calculated from each Wholesale Customer's Base Period SFPUC Purchases (up to its ISG, or proxy).

**Step 1 Override Exception:** If a Wholesale Customer's allocation in Step 1 exceeds the upper limit established by the Minimum Cutback at 1/3 times the Overall Average Wholesale Customer Reduction, the Wholesale Customer's Minimum Cutback will be reduced, but the Minimum Cutback will be no less than 5%.

Calculations and an example of the Step 1 Override Exception are provided in Attachment B.

## Step 1: Efficient Residential Allocation

Step 1 allocates water on a residential per capita basis, based on the State Indoor Water Use Efficiency Standard<sup>1</sup> and the portion of each Wholesale Customer's water demand met by the RWS.

The per capita efficient residential volume, in gallons, will align with the State Residential Indoor Water Use Efficiency Standard, established as 47 gallons per capita per day (GPCD) through 2029 and 42 GPCD beginning in 2030. This step multiplies the per-capita volume by each Wholesale Customer's Population and Base Period SFPUC Reliance to determine the total amount of supply allocated to each Wholesale Customer in this step.

## Step 2: Non-Residential Base Allocation

Step 2 allocates water based on each Wholesale Customer's estimated non-residential indoor/base demand.

To calculate non-residential indoor/base demand, each Wholesale Customer's Base Period SFPUC Purchases are multiplied by:

- Base Period Percent Indoor Demand
- Base Period Percent Non-Residential Demand
- Non-Residential Base Allocation Factor – this is equal to one minus 50% of the Overall Average Wholesale Customer Reduction.
  - For example, in a 20% Overall Average Wholesale Customer Reduction, the Non-Residential Base Allocation Factor will be 90% ( $1 - (20\% \div 2)$ ) of each Wholesale Customer's non-residential indoor/base demand.

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<sup>1</sup> SB 1157, signed into law in September 2022, established the standard for efficient indoor residential water use be 47 gallons per capita per day ("GPCD"), lowering to 42 GPCD in 2030.

### **Step 3: SFPUC Maximum Cutback Reserve**

The Maximum Cutback establishes the lower limit for each Wholesale Customer's final allocation. See Step 0 for more information.

No water is allocated in this step. Instead, this step calculates the gap between each Wholesale Customer's allocation after Step 2 and the lower limit of its potential final allocation. This step then reserves the sum of the gap for all Wholesale Customers from the Overall Wholesale Customer Allocation for Step 5. This Maximum Cutback Reserve ensures, after other steps are applied, that sufficient water is available in the final step to provide that each Wholesale Customer's final allocation is equal to, or greater than, the lower limit of its potential allocation established by the Maximum Cutback.

### **Step 4: Seasonal Allocation**

Step 4 allocates water based on estimated seasonal purchases from the RWS.

The inverse of each Wholesale Customer's Base Period Percent Indoor Demand (1 - % Indoor Demand) is used to estimate percent seasonal demand, which is then multiplied by Base Period SFPUC Purchases to estimate each Wholesale Customers' SFPUC seasonal purchases. Each Wholesale Customer's estimated SFPUC seasonal purchases are multiplied by the Seasonal Cutback Factor to establish each Wholesale Customer's Seasonal Allocation.

The Seasonal Cutback Factor is calculated based upon the Overall Wholesale Customer Allocation remaining to be allocated after Step 2. Of the remaining Overall Wholesale Customer Allocation after Step 2 (less the Maximum Cutback Reserve), 50% is allocated through the Seasonal Minimum Allocation Step. The detailed methodology for calculating the Seasonal Cutback Factor is described in Attachment B.

### **Step 5: SFPUC Purchases and ISG-Based Allocation**

Step 5 allocates the water remaining after Step 4 to get agencies as close to the "Target Allocation" as possible. Each Wholesale Customer's Target Allocation is based on a weighted share of two-thirds Base Period SFPUC Purchases and one-third ISG (or proxy) while ensuring each agency's final allocation is between the Minimum and Maximum Cutback limits.

The detailed methodology for calculating the Base Period SFPUC Purchases and ISG weighted allocation is described in Attachment B.

## **6. Plan Implementation**

The Tier 2 Plan applies when, and only when, the SFPUC declares a Drought that has is a system-wide water shortage of 20 percent or less. The Tier 2 Plan applies only to water acquired and distributed by the SFPUC to the Wholesale Customers through the WSA and has no effect on water obtained by a Wholesale Customer from any source other than the SFPUC.

### **Shortages Greater than 20 Percent**

In no way should it be construed that the Wholesale Customers relieve the SFPUC of its obligations established in the Level of Service goals adopted in the Water System Improvement

Program (“WSIP”), including the level of service goal to “meet dry-year delivery needs while limiting drought rationing to a maximum 20 percent system-wide reduction water service during extended droughts” (2023 Amended and Updated LOS Goals and Objectives, SFPUC Resolution No. 23-0210, adopted November 28, 2023, updating the Resolution No. 08-0200, adopted October 30, 2008). Should conditions occur that result in system-wide shortages greater than 20%, the provisions in WSA Section 3.11(C) apply. The Tier 2 Plan calculations may be used during discussions with the SFPUC on how to implement reductions above 20% with the Wholesale Customers and for planning purposes only to estimate potential Wholesale Customer allocations for system-wide shortages greater than 20% (e.g., to inform efforts such as Urban Water Management Plans).

## **BAWSCA Role in Plan Implementation**

In accordance with the WSA, upon the SFPUC’s declaration or reconfirmation of a water shortage emergency, BAWSCA will calculate and provide the SFPUC with each Wholesale Customer’s individual percentage share of the amount of water allocated to the Wholesale Customers collectively.

In the event that shortage conditions change and the SFPUC takes action to declare an increase or decrease to the system-wide shortage level, BAWSCA will recalculate the Tier 2 Plan and submit new Allocation Factors to the SFPUC. When rerunning the Tier 2 calculations, the Base Period will not change to provide predictability (Policy Principle #3). The only inputs that will change are the Overall Wholesale Customer Allocation and population, if a more recent Annual Survey has been published.

If the appropriate base period data, as specified in this Plan, are not available when BAWSCA initially calculates the Tier 2 Allocation Factors, the Base Period may be updated. However, BAWSCA may only provide the SFPUC with updated Allocation Factors if the Commission takes action to declare or reconfirm a shortage condition.

Each year, BAWSCA will provide the Wholesale Customers with a review of the Tier 2 Plan. The annual review will include:

- Calculation of each Wholesale Customer’s Allocation Factor for regional shortages of 10% and 20% for the current Base Period, based upon the most recent published BAWSCA Annual Survey;
- Review of Base Period data used to develop the calculations.

## **7. Plan Term**

The term of the Tier 2 Plan will be the same as the WSA term and may be extended by the written agreement of all the Wholesale Customers. The Tier 2 Plan negotiators chose to coordinate the Plan term with WSA term in order to avoid simultaneous renegotiation of these related agreements. Pursuant to WSA Section 2, the WSA expires on June 30, 2034. In December 2031, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the WSA for five years, through June 30, 2039. Between January 1, 2032 and June 30, 2032, any Wholesale Customer may accept the SFPUC’s offer to extend the Term by providing a written notice of extension to the SFPUC. If the WSA is extended, the Tier 2 Plan

shall expire on December 31, 2034, unless extended by the written agreement of all Wholesale Customers. The Wholesale Customers will meet to review and potentially negotiate amendments to the Tier 2 Plan between July 2032 and June 2034.

If the SFPUC is not willing to extend the term of the WSA, or the Wholesale Customers decline the offer to extend the term of the WSA, the term of the Tier 2 Plan shall be automatically extended for two additional years through December 31, 2036 to allow for more time for the Wholesale Customers to meet to review and potentially negotiate amendments to the Tier 2 Plan between July 2034 and June 2036.

Sample schedules described above are provided in the table below.

<b>Date</b>	<b>Extension of WSA with Limited Negotiated Changes</b>	<b>Parties must renegotiate WSA Terms</b>
Dec 2031	SFPUC indicates willingness to extend term of WSA for 5 years	SFPUC indicates willingness to extend term of WSA for 5 years
Jan - Jun 2032	Wholesale Customers <u>accept</u> offer to extend term of WSA	Wholesale Customers <u>decline</u> offer to extend term of WSA
Jul 2032 - Jun 2034	Wholesale Customers meet to review, extend and potentially negotiate amendments to the Tier 2 Plan	SFPUC and Wholesale Customers negotiate amendments to WSA
Jul 2034 – Jun 2036		Wholesale Customers meet to review and potentially negotiate amendments to the Tier 2 Plan

## Attachment A: List of Abbreviations and Definitions

### Abbreviations

**BAWSCA** – Bay Area Water Supply and Conservation Agency

**GPCD** – gallons per capita per day

**ISG** – Individual Supply Guarantee

**MGD** – million gallons per day

**RWS** – San Francisco Regional Water System

**SFPUC** – San Francisco Public Utilities Commission

**WSA** – Amended and Restated Water Supply Agreement between the City and County of San Francisco and the Wholesale Customers in Alameda, San Mateo and Santa Clara Counties

**WSIP** – Water System Improvement Program

### Definitions

**Allocation Factor** – Each Wholesale Customer's portion of the Overall Wholesale Customer Allocation, expressed as a percent.

**Base Period** – The average of each Wholesale Customer's two years with the highest volumes of SFPUC purchases from the previous three non-Drought years.

**BAWSCA Annual Survey** – An annual survey of the Wholesale Customers, conducted by BAWSCA, to update key service area information including actual and projections of Wholesale Customer water demand and population.

**Drought** – “[a] water shortage caused by lack of precipitation, as reflected in resolutions of the Commission calling for voluntary or mandatory water rationing based on evaluation of water stored or otherwise available to the Regional Water System, whether or not the Commission declares a water shortage emergency pursuant to Water Code §§ 350 et seq., as amended from time to time.” (WSA, *Attachment A*)

**Individual Supply Guarantee** – “[each] Wholesale Customer's share of the Supply Assurance, as shown in Attachment C [to the WSA].” (WSA, *Attachment A*)

**Overall Average Wholesale Customer Reduction** – The percent cutback from Base Period SFPUC Purchases, calculated by dividing the Overall Wholesale Customer Allocation by the sum of the Wholesale Customer's Base Period SFPUC Purchases.

**Overall Wholesale Customer Allocation or Tier 1 Allocation** – The volume of water available to the Wholesale Customers from the RWS.

**Regional Water System** – “[the] water storage, transmission and treatment system operated by the SFPUC in Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo and San Francisco counties, including projects constructed under the WSIP, but excluding Direct Retail and Direct Wholesale assets.” (WSA, *Attachment A*)

**SFPUC Purchases** – For the purposes of the Tier 2 Plan, SFPUC Purchases are defined as the volume of water purchased by and delivered to a Wholesale Customer for use within its service area. SFPUC Purchases specifically exclude (1) **In-Lieu Water**, which is Regional Water System water pursuant to the WSA and the Regional Groundwater Storage and Recovery Project Operating Agreement and (2) **Imputed Sales**, both defined in the WSA, Attachment A.

**Supply Assurance** – “[the] 184 MGD maximum annual average metered supply of water dedicated by San Francisco to public use in the Wholesale Service Area (not including San Jose and Santa Clara) in the 1984 Agreement and Section 3.01 of this Agreement.” (WSA, *Attachment A*)

**Tier 1 Plan or Tier 1 Shortage Plan** – “[the] Water Shortage Allocation Plan (Attachment H) adopted by the SFPUC and the Wholesale Customers in conjunction with this Agreement [the WSA] describing the method for allocating water between the SFPUC and the Wholesale Customers collectively for shortages of up to 20% of deliveries from the Regional Water System, as amended from time-to-time.” (WSA, *Attachment A*)

**Tier 2 Plan or Tier 2 Drought Response Implementation Plan** – The method of apportioning the Tier 1 Allocation among the 26 Wholesale Customers.

**Tier 2 Plan Allocation Model** – The Excel-based tool used for applying the Tier 2 Plan allocation methodology and determining each Wholesale Customer's Allocation Factor.

**Wholesale Customers** – “[the] 26 water customers identified in Section 1.02 [of the WSA] that are contracting for purchase of water from San Francisco pursuant to [the WSA].” (WSA, *Attachment A*)

## Attachment B: Tier 2 Plan Data Sources and Calculations

### BAWSCA Annual Survey

Each year, BAWSCA conducts an annual survey of its members in order to update key BAWSCA service area information including population, current and projected water use, and climatology. BAWSCA begins collecting data in October of each year. The Wholesale Customers submit data through BAWSCA's Water Conservation Database. Between approximately January and March, BAWSCA reviews the Wholesale Customers' submissions for potential errors and works with Wholesale Customers to confirm and finalize the data. The final report is published around March of each year for the fiscal year ending the previous June 30<sup>th</sup>.

Base Period inputs will use data published in the Annual Surveys from the previous three non-Drought years. Depending on when the SFPUC declares a shortage emergency, the most recent non-Drought year's Annual Survey may not be finalized and published. If the most recent non-Drought year's Annual Survey is not available, the Base Period inputs will use data from the three most recent non-Drought year's published in Annual Surveys.

### Base Period

The Tier 2 Plan uses historical SFPUC purchases, total potable water production, monthly potable production, potable consumption by customer category, and population for Steps 0 through 5. These values are established using a historical base period with established water supply and delivery data.

The Base Period for all inputs except population is defined as the average from the highest two years of SFPUC Purchases over the most recent three non-Drought years. The selection of Base Period is unique to each Wholesale Customer. Two example agencies are provided in the table below, where the data associated with the highest two years are highlighted.

Previous Non-Drought Year	Agency A		Agency B	
	SFPUC Purchases	Percent Non-Residential	SFPUC Purchases	Percent Non-Residential
Year 1	2.50	70%	5.90	58%
Year 2	2.75	69%	6.20	56%
Year 3	2.40	67%	6.10	55%
Calculation	$(2.50 + 2.75)$ 2	$(0.70 + 0.69)$ 2	$(6.20 + 6.10)$ 2	$(0.56 + 0.55)$ 2
Average of Highest Two Years	<b>2.63</b>	<b>70%</b>	<b>6.15</b>	<b>55.5%</b>

### Coastside CWD Special Provisions for Base Period Calculations

Coastside CWD Base Period SFPUC Purchases will be calculated as 94% of its Base Period Total Potable Water Production. Base Period SFPUC Reliance will be fixed at 94%.

Coastside CWD's high variability in SFPUC purchases from year to year, the California Coastal Commission limitations on growth in its service area, and geographical and hydrological isolation set it apart from other Wholesale Customers. Uniquely among the Wholesale Customers, Coastside CWD does not have interties with other Wholesale Customers or agencies. Additionally, it has junior rights on local surface water supplies. To ensure resiliency, Coastside CWD must maximize its use of Denniston Creek in normal years to provide evidence to the State in its ongoing case to perfect its water rights. This results in low RWS purchases in non-drought years, which are the source of each Wholesale Customer's Base Period. The Coastside CWD special provisions for Base Period SFPUC Purchases ensure its dry year reliance on the RWS is reflected in the Tier 2 Plan.

### Minimum Cutback Factor

The minimum cutback factor is used to establish the upper limit at or below which each Wholesale Customer's final allocation will be. The minimum cutback factor is equal to 1/3 times the Overall Average Wholesale Customer Reduction, expressed as a percentage. Base Period SFPUC Purchases (up to ISG or proxy) are multiplied by 1 minus the minimum cutback factor. An example equation is provided below.

$$\text{Wholesale Customer final allocation upper limit} = \text{Base Period SFPUC Purchases} \times (1 - (1/3 \times \text{Overall Average Wholesale Customer Reduction}))$$

### Step 1 Override Exception

If a Wholesale Customer's allocation in Step 1 (Efficient Residential Allocation) is greater than the upper limit of its potential allocation established by the Minimum Cutback, the Step 1 allocation will override. However, no Wholesale Customer's final cutback will be less than 5%.

For example, in a 20% Overall Average Wholesale Customer Reduction, the Minimum Cutback will be 6.67% ( $20\% \times 1/3$ ). An example Wholesale Customer's calculation is provided below.

Base Period SFPUC Purchases	5.0 MGD
Minimum Cutback Factor	- 6.67%
Upper Limit of Potential Final Allocation	4.67 MGD

  

Population	101,000
Base Period SFPUC Reliance	100%
Residential Efficient Allocation	47 GPCD
Step 1 Allocation	4.75 MGD

The example agency's final cutback will be 5.1% as calculated below:

$$4.75 \text{ mgd} / 5.0 \text{ mgd} - 1 = -5.1\%$$

### Maximum Cutback Factor

The maximum cutback factor is used to establish the lower limit at or above each Wholesale Customer's final allocation. The maximum cutback factor is equal to 1.5 times the Overall Average Wholesale Customer Reduction, expressed as a percentage. Base Period SFPUC

Purchases (up to ISG or proxy) are multiplied by 1 minus the minimum cutback factor. An example equation is provided below.

$$\begin{aligned} \text{Wholesale Customer final allocation lower limit} \\ = \text{Base Period SFPUC Purchases} \\ \times (1 - (1.5 \times \text{Overall Average Wholesale Customer Reduction})) \end{aligned}$$

## Efficient Residential Volume

The Tier 2 Plan uses a per-capita volume, in gallons, to calculate each Wholesale Customer's Efficient Residential Allocation (Step 1 of the Allocation Model). The per-capita volume is 47 gallons per capita per day through 2029 and 42 GPCD beginning in 2030, consistent with the State of California Indoor Residential Water Use Standard for 2025 established by SB 1157.

## SFPUC Reliance

For agencies with multiple potable water sources, the Tier 2 Plan calculates SFPUC Reliance by dividing each agency's Base Period SFPUC Purchases by Base Period Total Potable Water Production, expressed as a percentage. SFPUC Reliance is used in Step 1 to calculate multi-source agency's Residential Efficient Allocation met by the RWS.

## Population

The Tier 2 Plan uses population reported in the most recently published Annual Survey to calculate each Wholesale Customer's Efficient Residential Allocation in Step 1.

BAWSCA reviews data submitted for the Annual Survey and works with agencies to ensure the information is correct before making it public. As part of this annual review, BAWSCA will flag any agencies that have reported population increases greater than 5%. BAWSCA will first confirm with the agency that there are no reporting errors. If the reported data are correct, BAWSCA will include a note to all agencies during the annual review of the Tier 2 Plan.

## Stanford University Population Calculation

Stanford has historically reported its population in the BAWSCA Annual Survey using data from the Stanford Office of Institutional Research & Decision Support, which annually documents population based on student enrollment and data from human resources. This number captures all students (undergraduate and graduate), post-docs, faculty, and staff that are employed and work on campus. The population report does not directly capture residential population that is not enrolled or employed (significant others or dependents). However, it would include a daytime population component. Stanford reviewed several population sources and calculation methods including census data. Based on review of the available sources for population information, Stanford proposed, and the BAWSCA agencies agreed, to utilize a formula that captures student and faculty/staff residential population. This new approach would eliminate the inclusion of daytime staff and faculty who do not live on campus.

The formula takes the Office of Institutional Research & Decision Support data and uses only the "Total Students" and adds a multiplier of 2.57 people per residence (single and multi-family) for the faculty/staff housing area.

Stanford Population = (Faculty/Staff Housing Residences x 2.57) + ("Total Students" from Population Report)

## Percent Indoor Demand

For each Base Period year, percent indoor demand is calculated by dividing each Wholesale Customer's lowest month of potable production by the Wholesale Customer's average monthly potable production. The two resulting percentages are averaged together. An example equation is provided below, where  $Y_1$  and  $Y_2$  represent the two Base Period years.

$$\% \text{ Indoor Use} = \frac{\frac{\text{Lowest Month Production, } Y_1}{\text{Average Monthly Production, } Y_1} + \frac{\text{Lowest Month Production, } Y_2}{\text{Average Monthly Production, } Y_2}}{2}$$

## Percent Seasonal Demand

Percent seasonal demand is calculated as the inverse of percent indoor demand.

$$\text{Percent Seasonal Demand} = 1 - \% \text{ Indoor Demand}$$

## Percent Non-Residential Demand

For each Base Period year, percent non-residential demand is calculated by first dividing each Wholesale Customer's potable water consumption from all residential customer categories by the Wholesale Customer's total annual potable production. The resulting percentage is subtracted from one to calculate the inverse and thus captures all non-residential demands including non-revenue water and dedicated irrigation meters<sup>2</sup>. The two resulting percentages from the two Base Period years are averaged together. An example equation is provided below, where  $Y_1$  and  $Y_2$  represent the two Base Period years.

$$\% \text{ NR Use} = \frac{(1 - \frac{\text{Residential Use, } Y_1}{\text{Potable Production, } Y_1}) + (1 - \frac{\text{Residential Use, } Y_2}{\text{Potable Production, } Y_2})}{2}$$

## Individual Supply Guarantee (ISG)

### Use of ISG in the Tier 2 Plan

Each Wholesale Customer's ISG is used in the Tier 2 Plan calculations with proxies for Hayward, San Jose and Santa Clara, in order to provide inputs for the Tier 2 Allocation Formula. See WSA, Attachment C for a current list of ISG values.

Hayward's de facto ISG (22.1 MGD) is used in place of permanent ISG for the purposes of the Tier 2 Plan calculations. This figure is used in WSA, Attachment D, to determine whether Hayward's increased use requires pro-rata reduction of remaining Wholesale Customers' ISG.

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<sup>2</sup> Prior to FY 22-23, all consumption recorded under the dedicated irrigation sector in the Water Conservation Database is assumed to be non-residential. Starting in FY 22-23, Wholesale Customers were given the option to separate out residential vs. non-residential dedicated irrigation consumption.

San Jose and Santa Clara's temporary and interruptible contract amounts (4.5 MGD each) are used in place of ISG for the purposes of the Tier 2 Plan calculations.

## **Background on ISG**

San Francisco has a perpetual legal obligation and commitment (Supply Assurance) to deliver 184 MGD to the 24 permanent Wholesale Customers collectively. The Supply Assurance is subsequently allocated among the 24 permanent Wholesale Customers through Individual Supply Guarantees (ISG), which represent each Wholesale Customer's share of the 184 MGD Supply Assurance. San Jose and Santa Clara are not included in San Francisco's Supply Assurance obligation; rather each has a temporary and interruptible water supply contract with San Francisco. Through the WSA and its individual contracts with San Jose and Santa Clara, San Francisco has many requirements to plan for water supply development and analyze the sufficiency of water supply to San Jose and Santa Clara. For example, San Francisco must complete a CEQA review and provide at least a 10-year notice of interruption.

## **Hayward does not have an Individual Supply Guarantee**

San Francisco and Hayward entered into a water supply contract on February 9, 1962 (the "1962 contract") which provided that San Francisco would supply Hayward with all water supplemental to water controlled by Hayward, in sufficient quantity to supply the total water needs of Hayward's service area "on a permanent basis." This 1962 contract remains the Individual Water Sales Contract between San Francisco and Hayward. Due to the terms of this ongoing contract, Hayward does not have an ISG. If Hayward's purchases exceed 22.1 MGD for three consecutive years, the remaining 23 Wholesale Customer's ISG will be reduced on a pro rata (WSA, Attachment D).

Currently, the sum of the 23 Wholesale Customers fixed ISG is 161.9 MGD.

184 MGD Supply Assurance - 161.9 MGD = 22.1 MGD water available for Hayward purchases  
(i.e., Hayward's "de facto" ISG)

Hayward's proxy ISG for the purpose of the Tier 2 Plan is 22.1 MGD.

## **San Jose and Santa Clara do not have an Individual Supply Guarantee**

During the term of the 1984 Settlement Agreement, San Francisco provided water to San Jose and Santa Clara on a temporary and interruptible basis, pursuant to SFPUC Resolution No. 85-0256. The SFPUC has contracted to supply a combined annual average of 9 MGD to San Jose and Santa Clara (4.5 MGD each) through 2028. The 9 MGD allocated to San Jose and Santa Clara is not included in the Supply Assurance. San Francisco will decide whether to make San Jose and Santa Clara permanent customers by December 31, 2028. (WSA, Sec. 4.05)

San Jose and Santa Clara's proxy ISG for the purpose of the Tier 2 Plan is 4.5 MGD each.



### July 2024 Model Concept - Efficient Res Allocation + Non-Res Base Allocation + Seasonal Allocation + Base SFPUC Purchases/ISG-Based Allocation - Variable Base Year

Model Set-up/Assumptions	Base Years
Allocation Year/Projection Year	FY24-25
<b>Tier 1 Shortage Allocation (mgd)</b>	114.20
Base Period SFPUC Purchases (mgd)	134.34
<b>Overall Reduction from Base Period Required</b>	-15.0%
<b>SFPUC Maximum Cutback Factor</b>	-22.5%
<b>SFPUC Minimum Cutback Factor</b>	-5.0%
<b>Non-Residential Base Allocation %</b>	92.5%
<b>Step 5 Reserved % of Remaining Tier 1 Allocation (less Step 3 Reserved) after Step 2</b>	50%
<b>Unreserved % of Remaining Tier 1 Allocation (less Step 3 Reserved and Step 5 Reserved) After Step 2</b>	50%
<b>Seasonal Allocation %</b>	7.9%
<b>Step 5 ISG Weighting</b>	33%
<b>Step 5 Base SFPUC Purchases Weighting</b>	67%
<b>Residential Efficient Allocation (R-GPCD)</b>	47.0
<b>Adjustment % for SFPUC Minimum Cutback, if efficient residential allocation is greater than minimum cutback</b>	95%
<b>Effective Date for Model Run (update for testing only)</b>	12/16/2024

#### Instructions:

1. Adjust **aqua** cells in OVERVIEW tab to adjust model parameters. If there are errors in the inputs, an error message will appear in Columns E-F.
2. View allocation calculations and results in "Tier 2 Allocation" and "Agency Charts" tabs.

Calculation Steps for July 2024 Model Concept:	
0. SFPUC Minimum Cutback	a. Calculate Minimum Cutback from Lesser of Base Period SFPUC Purchases and ISG (Lesser of Base Period SFPUC Purchases and ISG $\times [1 + SFPUC \text{ Minimum Cutback Factor}]$ )
	b. Calculate Efficient Residential Allocation (population $\times$ per capita allocation $\times$ % SFPUC reliance)
	c. Determine if Minimum Cutback is greater than the Efficient Residential Allocation
	d. If Efficient Residential Allocation is greater than the Minimum Cutback, an agency's cutback may be no less than 5%
1. Efficient Residential Allocation	a. Calculate Efficient Residential Allocation (population $\times$ per capita allocation)
	b. Account for % SFPUC Reliance
	c. Provide Efficient Residential Allocation
2. Non-Residential Base Allocation	a. Incorporate Estimated % Indoor Use (see glossary for definition and calculation of % Indoor Use)
	b. Incorporate % Non-Residential Use
	c. Calculate Non-Residential Base Allocation (% Indoor Use $\times$ % Non-Residential Use $\times$ Base Period SFPUC Purchases $\times$ Non-Residential Indoor Allocation %)
	d. Add Non-Residential Base Allocation to the Step 1 Allocation
3. Calculate Potential SFPUC Maximum Cutback (Base Period SFPUC Purchases $\times [1 + SFPUC \text{ Maximum Cutback Factor}]$ )	a. Calculate Potential SFPUC Maximum Cutback (Base Period SFPUC Purchases $\times [1 + SFPUC \text{ Maximum Cutback Factor}]$ )
	b. Reserve the sum of the potential SFPUC Maximum Cutback need for Step 5 (Maximum Cutback Reserve)
4. Seasonal Allocation	a. Determine % Seasonal Use (1 - % Indoor Use)
	b. Calculate seasonal SFPUC Purchases (Base Period SFPUC Purchases $\times$ % Seasonal Use)
	c. Calculate Seasonal Allocation (seasonal SFPUC Purchases $\times$ Seasonal Allocation %)
	d. Add the Seasonal Allocation to the Step 2 Allocation
5. Base Period/ISG-Based Allocation	a. Calculate weighted average of Base Period SFPUC Purchases and ISG, up to Minimum Cutback
	b. Calculate Weighted Share of total Tier 1 Allocation to Wholesale Customers (agency weighted average Base Period SFPUC Purchases/ISG $\div$ total Wholesale Customer weighted average $\times$ Tier 1 Allocation)
	c. Calculate the gap between Step 4 allocation and the lesser of 1) weighted share, or 2) Minimum Cutback
	d. Allocate remaining supplies, except Maximum Cutback Reserve, among agencies with a gap, proportionately to gap, up to the Minimum Cutback
	e. Confirm allocation meets Maximum Cutback Reserve up to Maximum Cutback
	f. Allocate remaining supplies among agencies with a gap, proportionately to gap, up to the Minimum Cutback



Allocation Year/Projection Year	FY24-25
Most Recent Annual Survey Data Year	FY22-23

No water is allocated in this step  
Establishes the upper limit of each agency's final allocation

Relevant Base Period Data							0. Establish SFPUC Minimum Cutback					1. Efficient Residential Allocation					
Agency	Selected Base Year 1	Selected Base Year 2	Base Period SFPUC Purchases (mgd)	Base Period Reliance on SFPUC	ISG (mgd)	Total Potable Production (mgd)	Lesser of Base Period SFPUC Purchases and ISG (mgd)	SFPUC Minimum Cutback (mgd)	SFPUC Maximum Cutback (mgd)	Is efficient residential allocation greater than minimum cutback?	Adjusted SFPUC Minimum Cutback, if efficient residential allocation is greater than	0. Effective SFPUC Minimum Cutback (mgd)	Population	% Potable Demand Reliance on SFPUC	Allocation based on efficient residential indoor use (mgd)	Efficient Residential Allocation	1. Efficient Residential (mgd)
Alameda CWD	2021	2020	8.63	22%	13.76	39.32	8.63	8.20	6.69	<input type="checkbox"/>	8.20	344,000	22%	16.17	3.55	<b>3.55</b>	
Brisbane	2019	2020	0.65	100%	0.98	0.65	0.65	0.62	0.50	<input type="checkbox"/>	0.62	4,851	100%	0.23	0.23	<b>0.23</b>	
Burlingame	2020	2019	3.45	100%	5.23	3.45	3.45	3.28	2.67	<input type="checkbox"/>	3.28	31,080	100%	1.46	1.46	<b>1.46</b>	
Coastside	2021	2019	1.69	94%	2.18	1.80	1.69	1.61	1.31	<input type="checkbox"/>	1.61	18,890	94%	0.89	0.83	<b>0.83</b>	
CWS - Total	2021	2020	29.23	95%	35.68	30.62	29.23	27.77	22.66	<input type="checkbox"/>	27.77	262,704	95%	12.35	11.78	<b>11.78</b>	
Daly City	2020	2019	3.84	64%	4.29	6.00	3.84	3.64	2.97	<input type="checkbox"/>	3.64	107,000	64%	5.03	3.22	<b>3.22</b>	
East Palo Alto	2020	2019	1.57	100%	3.46	1.57	1.57	1.49	1.21	<input type="checkbox"/>	1.49	29,519	100%	1.39	1.39	<b>1.39</b>	
Estero	2020	2021	4.32	100%	5.90	4.32	4.32	4.10	3.35	<input type="checkbox"/>	4.10	37,443	100%	1.76	1.76	<b>1.76</b>	
Hayward	2021	2019	14.26	100%	22.10	14.26	14.26	13.55	11.06	<input type="checkbox"/>	13.55	159,800	100%	7.51	7.51	<b>7.51</b>	
Hillsborough	2021	2020	2.66	100%	4.09	2.66	2.66	2.53	2.06	<input type="checkbox"/>	2.53	11,592	100%	0.54	0.54	<b>0.54</b>	
Menlo Park	2019	2020	3.09	100%	4.46	3.09	3.09	2.94	2.40	<input type="checkbox"/>	2.94	20,319	100%	0.95	0.95	<b>0.95</b>	
Mid-Peninsula	2020	2021	2.63	100%	3.89	2.63	2.63	2.50	2.04	<input type="checkbox"/>	2.50	30,159	100%	1.42	1.42	<b>1.42</b>	
Millbrae	2019	2020	1.92	100%	3.15	1.92	1.92	1.83	1.49	<input type="checkbox"/>	1.83	20,666	100%	0.97	0.97	<b>0.97</b>	
Milpitas	2020	2021	5.67	67%	9.23	8.49	5.67	5.39	4.40	<input type="checkbox"/>	5.39	81,067	67%	3.81	2.54	<b>2.54</b>	
Mountain View	2021	2020	7.78	87%	12.46	8.90	7.78	7.40	6.03	<input type="checkbox"/>	7.40	81,501	87%	3.83	3.35	<b>3.35</b>	
North Coast	2021	2020	2.39	100%	3.84	2.39	2.39	2.27	1.85	<input type="checkbox"/>	2.27	37,082	100%	1.74	1.74	<b>1.74</b>	
Palo Alto	2021	2020	9.95	100%	16.58	9.95	9.95	9.45	7.71	<input type="checkbox"/>	9.45	68,624	100%	3.23	3.23	<b>3.23</b>	
Purissima Hills	2021	2020	1.82	100%	1.62	1.82	1.62	1.54	1.26	<input type="checkbox"/>	1.54	7,350	100%	0.35	0.35	<b>0.35</b>	
Redwood City	2020	2021	8.62	100%	10.93	8.62	8.62	8.19	6.68	<input type="checkbox"/>	8.19	90,928	100%	4.27	4.27	<b>4.27</b>	
San Bruno	2020	2021	0.93	30%	3.25	3.09	0.93	0.89	0.72	<input type="checkbox"/>	0.89	43,910	30%	2.06	0.62	<b>0.62</b>	
San Jose	2019	2020	4.27	99%	4.50	4.29	4.27	4.05	3.31	<input type="checkbox"/>	4.05	43,036	99%	2.02	2.01	<b>2.01</b>	
Santa Clara	2020	2021	3.25	20%	4.50	16.27	3.25	3.09	2.52	<input type="checkbox"/>	3.09	132,476	20%	6.23	1.24	<b>1.24</b>	
Stanford	2020	2019	1.43	100%	3.03	1.43	1.43	1.36	1.11	<input type="checkbox"/>	1.36	20,000	100%	0.94	0.94	<b>0.94</b>	
Sunnyvale	2021	2020	9.47	54%	12.58	17.68	9.47	8.99	7.34	<input type="checkbox"/>	8.99	156,317	54%	7.35	3.93	<b>3.93</b>	
Westborough	2020	2019	0.80	100%	1.32	0.80	0.80	0.76	0.62	<input type="checkbox"/>	0.76	13,486	100%	0.63	0.63	<b>0.63</b>	
<b>Total</b>			<b>134.34</b>		<b>193.02</b>	<b>196.04</b>		<b>134.14</b>				<b>1,853,800</b>		<b>87.13</b>	<b>60.49</b>		
Allocated																<b>60.49</b>	
Unallocated																<b>53.71</b>	
Reserved																<b>0</b>	



Agency	2. Non-Residential Base Allocation				3. SFPUC Maximum Cutback "Reserve"			4. Seasonal Allocation				5. Base SFPUC Purchases/ISG-Based Allocation with Minimum Cutback			Target Allocation	First Iteration of Base Per Allocation
	Estimated % Indoor Use	% Non-Residential Use	Non-Residential Base Allocation (mgd)	2. Non-Residential Base Allocation (mgd)	SFPUC Maximum Cutback (mgd)2	Does Step 2 Allocation Meet Cutback?	SFPUC Maximum Cutback Shortfall (mgd)	% Seasonal Use	Seasonal SFPUC Purchases (mgd)	Seasonal Allocation (mgd)	4. Seasonal Allocation (mgd)	Weighted Average of Base Period SFPUC Purchases (up to ISG) and ISG (mgd)	Weighted Share of Tier 1 Allocation (mgd)	Lesser of Weighted Share and Minimum Cutback Allocation (i.e., Target Allocation)		
Alameda CWD	69%	41%	2.22	<b>5.77</b>	6.69	<input type="checkbox"/>	0.92	31%	2.71	0.22	<b>5.99</b>	10.33	7.68	7.68	1.69	0.31
Brisbane	66%	68%	0.27	<b>0.50</b>	0.50	<input type="checkbox"/>	0.01	34%	0.22	0.02	<b>0.51</b>	0.76	0.56	0.56	0.05	0.01
Burlingame	73%	40%	0.93	<b>2.39</b>	2.67	<input type="checkbox"/>	0.28	27%	0.93	0.07	<b>2.46</b>	4.04	3.00	3.00	0.54	0.10
Coastsdie	64%	46%	0.47	<b>1.30</b>	1.31	<input type="checkbox"/>	0.01	36%	0.60	0.05	<b>1.35</b>	1.85	1.38	1.38	0.03	0.01
CWS - Total	61%	30%	5.02	<b>16.80</b>	22.66	<input type="checkbox"/>	5.85	39%	11.26	0.89	<b>17.69</b>	31.36	23.32	23.32	5.62	1.05
Daly City	88%	23%	0.73	<b>3.64</b>	2.97	<input checked="" type="checkbox"/>	0.00	12%	0.46	0.04	<b>3.64</b>	3.99	2.96	2.96	0.00	0.00
East Palo Alto	79%	18%	0.21	<b>1.49</b>	1.21	<input checked="" type="checkbox"/>	0.00	21%	0.33	0.03	<b>1.49</b>	2.19	1.63	1.49	0.00	0.00
Esterio	63%	45%	1.13	<b>2.89</b>	3.35	<input type="checkbox"/>	0.46	37%	1.58	0.13	<b>3.01</b>	4.84	3.60	3.60	0.59	0.11
Hayward	72%	45%	4.33	<b>11.85</b>	11.06	<input checked="" type="checkbox"/>	0.00	28%	3.95	0.31	<b>12.16</b>	16.85	12.53	12.53	0.37	0.07
Hillsborough	36%	9%	0.08	<b>0.62</b>	2.06	<input type="checkbox"/>	1.44	64%	1.70	0.14	<b>0.76</b>	3.13	2.33	2.33	1.57	0.29
Menlo Park	53%	63%	0.94	<b>1.90</b>	2.40	<input type="checkbox"/>	0.50	47%	1.47	0.12	<b>2.01</b>	3.54	2.63	2.63	0.62	0.12
Mid-Peninsula	68%	27%	0.45	<b>1.87</b>	2.04	<input type="checkbox"/>	0.18	32%	0.86	0.07	<b>1.93</b>	3.05	2.27	2.27	0.33	0.06
Millbrae	76%	36%	0.49	<b>1.46</b>	1.49	<input type="checkbox"/>	0.03	24%	0.46	0.04	<b>1.49</b>	2.33	1.73	1.73	0.24	0.04
Milpitas	78%	51%	2.08	<b>4.62</b>	4.40	<input checked="" type="checkbox"/>	0.00	22%	1.23	0.10	<b>4.72</b>	6.85	5.09	5.09	0.37	0.07
Mountain View	66%	43%	2.04	<b>5.39</b>	6.03	<input type="checkbox"/>	0.65	34%	2.64	0.21	<b>5.60</b>	9.33	6.94	6.94	1.34	0.25
North Coast	80%	24%	0.42	<b>2.16</b>	1.85	<input checked="" type="checkbox"/>	0.00	20%	0.48	0.04	<b>2.20</b>	2.87	2.13	2.13	0.00	0.00
Palo Alto	61%	38%	2.11	<b>5.34</b>	7.71	<input type="checkbox"/>	2.37	39%	3.90	0.31	<b>5.65</b>	12.14	9.03	9.03	3.38	0.63
Purissima Hills	38%	12%	0.07	<b>0.42</b>	1.26	<input type="checkbox"/>	0.84	62%	1.13	0.09	<b>0.51</b>	1.62	1.21	1.21	0.70	0.13
Redwood City	68%	34%	1.81	<b>6.08</b>	6.68	<input type="checkbox"/>	0.60	32%	2.80	0.22	<b>6.31</b>	9.38	6.98	6.98	0.67	0.13
San Bruno	78%	29%	0.20	<b>0.82</b>	0.72	<input checked="" type="checkbox"/>	0.00	22%	0.21	0.02	<b>0.84</b>	1.70	1.26	0.89	0.05	0.01
San Jose	69%	62%	1.68	<b>3.69</b>	3.31	<input checked="" type="checkbox"/>	0.00	31%	1.33	0.11	<b>3.79</b>	4.34	3.23	3.23	0.00	0.00
Santa Clara	73%	50%	1.10	<b>2.35</b>	2.52	<input type="checkbox"/>	0.17	27%	0.88	0.07	<b>2.42</b>	3.66	2.72	2.72	0.31	0.06
Stanford	63%	45%	0.38	<b>1.32</b>	1.11	<input checked="" type="checkbox"/>	0.00	37%	0.53	0.04	<b>1.36</b>	1.96	1.46	1.36	0.00	0.00
Sunnyvale	69%	42%	2.54	<b>6.48</b>	7.34	<input type="checkbox"/>	0.86	31%	2.98	0.24	<b>6.71</b>	10.49	7.80	7.80	1.09	0.20
Westborough	73%	26%	0.14	<b>0.76</b>	0.62	<input checked="" type="checkbox"/>	0.00	27%	0.22	0.02	<b>0.76</b>	0.97	0.72	0.72	0.00	0.00
<b>Total</b>		<b>31.83</b>	<b>91.90</b>		<b>103.98</b>		<b>15.18</b>		<b>44.87</b>	<b>3.56</b>	<b>95.38</b>	<b>153.57</b>	<b>114.20</b>	<b>113.58</b>	<b>19.56</b>	<b>3.64</b>
Allocated					<b>91.90</b>				<b>91.90</b>			<b>95.38</b>				
Unallocated					<b>22.30</b>				<b>22.30</b>			<b>18.82</b>				
Reserved					<b>0</b>				<b>15.18</b>			<b>15.18</b>				



Agency	First Iteration of Target Based Allocation (mgd)	Maximum Cutback			Second Iteration of Base Period/ISG-Based Allocation			Third Iteration of Base Period/ISG-Based Allocation					Final Allocation (mgd)	Cutback Percentage	Allocation Factor
		Does Step 5 Initial Allocation Meet SFPUC Maximum Cutback?	Maximum Cutback (mgd)	Initial Step 5 Allocation with Maximum Cutback (mgd)	Target Allocation Based Gap (mgd)3	Target Based Allocation 2 (mgd)	Second Iteration of Target Based Allocation (mgd)	Equal or Greater than Weighted Share/Minimum Cutback	Target Allocation Based Gap 3 (mgd)	Third Iteration of Target Based Allocation (mgd)	5. Weighted Share/ Maximum Cutback Based Allocation (mgd)				
Alameda CWD	6.30	<input type="checkbox"/>	0.39	6.69	0.99	0.88	7.57	<input type="checkbox"/>	0.11	0.00	7.57	7.57	12.3%	6.6%	
Brisbane	0.52	<input checked="" type="checkbox"/>	0.00	0.52	0.04	0.04	0.56	<input type="checkbox"/>	0.00	0.00	0.56	0.56	13.8%	0.5%	
Burlingame	2.56	<input type="checkbox"/>	0.11	2.67	0.33	0.29	2.97	<input type="checkbox"/>	0.04	0.00	2.97	2.97	14.0%	2.6%	
Coastsideside	1.35	<input checked="" type="checkbox"/>	0.00	1.35	0.02	0.02	1.38	<input type="checkbox"/>	0.00	0.00	1.38	1.38	18.8%	1.2%	
CWS - Total	18.74	<input type="checkbox"/>	3.91	22.66	0.66	0.59	23.24	<input type="checkbox"/>	0.07	0.00	23.24	23.24	20.5%	20.4%	
Daly City	3.64	<input checked="" type="checkbox"/>	0.00	3.64	0.00	0.00	3.64	<input checked="" type="checkbox"/>	0.00	0.00	3.64	3.64	5.0%	3.2%	
East Palo Alto	1.49	<input checked="" type="checkbox"/>	0.00	1.49	0.00	0.00	1.49	<input checked="" type="checkbox"/>	0.00	0.00	1.49	1.49	5.0%	1.3%	
Estero	3.12	<input type="checkbox"/>	0.23	3.35	0.25	0.22	3.57	<input type="checkbox"/>	0.03	0.00	3.57	3.57	17.3%	3.1%	
Hayward	12.23	<input checked="" type="checkbox"/>	0.00	12.23	0.30	0.27	12.50	<input type="checkbox"/>	0.03	0.00	12.50	12.50	12.4%	10.9%	
Hillsborough	1.05	<input type="checkbox"/>	1.01	2.06	0.27	0.24	2.30	<input type="checkbox"/>	0.03	0.00	2.30	2.30	13.6%	2.0%	
Menlo Park	2.13	<input type="checkbox"/>	0.27	2.40	0.24	0.21	2.61	<input type="checkbox"/>	0.03	0.00	2.61	2.61	15.7%	2.3%	
Mid-Peninsula	2.00	<input type="checkbox"/>	0.05	2.04	0.23	0.20	2.24	<input type="checkbox"/>	0.03	0.00	2.24	2.24	14.9%	2.0%	
Millbrae	1.54	<input checked="" type="checkbox"/>	0.00	1.54	0.19	0.17	1.71	<input type="checkbox"/>	0.02	0.00	1.71	1.71	11.1%	1.5%	
Milpitas	4.79	<input checked="" type="checkbox"/>	0.00	4.79	0.30	0.27	5.06	<input type="checkbox"/>	0.03	0.00	5.06	5.06	10.8%	4.4%	
Mountain View	5.85	<input type="checkbox"/>	0.19	6.03	0.90	0.80	6.84	<input type="checkbox"/>	0.10	0.00	6.84	6.84	12.2%	6.0%	
North Coast	2.20	<input checked="" type="checkbox"/>	0.00	2.20	0.00	0.00	2.20	<input checked="" type="checkbox"/>	0.00	0.00	2.20	2.20	7.7%	1.9%	
Palo Alto	6.28	<input type="checkbox"/>	1.44	7.71	1.31	1.17	8.88	<input type="checkbox"/>	0.15	0.00	8.88	8.88	10.8%	7.8%	
Purissima Hills	0.64	<input type="checkbox"/>	0.62	1.26	0.00	0.00	1.26	<input checked="" type="checkbox"/>	0.00	0.00	1.26	1.26	30.9%	1.1%	
Redwood City	6.43	<input type="checkbox"/>	0.25	6.68	0.29	0.26	6.95	<input type="checkbox"/>	0.03	0.00	6.95	6.95	19.5%	6.1%	
San Bruno	0.85	<input checked="" type="checkbox"/>	0.00	0.85	0.04	0.04	0.88	<input type="checkbox"/>	0.00	0.00	0.88	0.88	5.5%	0.8%	
San Jose	3.79	<input checked="" type="checkbox"/>	0.00	3.79	0.00	0.00	3.79	<input checked="" type="checkbox"/>	0.00	0.00	3.79	3.79	11.1%	3.3%	
Santa Clara	2.47	<input type="checkbox"/>	0.05	2.52	0.20	0.18	2.70	<input type="checkbox"/>	0.02	0.00	2.70	2.70	16.9%	2.4%	
Stanford	1.36	<input checked="" type="checkbox"/>	0.00	1.36	0.00	0.00	1.36	<input checked="" type="checkbox"/>	0.00	0.00	1.36	1.36	5.0%	1.2%	
Sunnyvale	6.92	<input type="checkbox"/>	0.42	7.34	0.47	0.41	7.75	<input type="checkbox"/>	0.05	0.00	7.75	7.75	18.1%	6.8%	
Westborough	0.76	<input checked="" type="checkbox"/>	0.00	0.76	0.00	0.00	0.76	<input checked="" type="checkbox"/>	0.00	0.00	0.76	0.76	5.0%	0.7%	
<b>Total</b>	<b>99.02</b>		<b>8.92</b>	<b>107.95</b>	<b>7.04</b>	<b>6.25</b>	<b>114.20</b>		<b>0.79</b>	<b>0.00</b>	<b>114.20</b>	<b>114.20</b>			
Allocated	99.02			107.95			114.20				114.20				
Unallocated	0.00			6.25			0.00				0.00				
Reserved	15.18			0.00			0.00				0.00				



Instructions: Copy/paste the table below into the "Historical Saves" tab, columns A through F.						
Agency	Agency	Allocation Year (FY)	Allocation Year (integer)	Final Allocation (mgd)	Cutback Percentage	Allocation Factor
Alameda CWD	Alameda CWD	FY24-25	2025	7.57	12%	7%
Brisbane	Brisbane	FY24-25	2025	0.56	14%	0%
Burlingame	Burlingame	FY24-25	2025	2.97	14%	3%
Coastside	Coastside	FY24-25	2025	1.38	19%	1%
CWS - Total	CWS - Total	FY24-25	2025	23.24	20%	20%
Daly City	Daly City	FY24-25	2025	3.64	5%	3%
East Palo Alto	East Palo Alto	FY24-25	2025	1.49	5%	1%
Estero	Estero	FY24-25	2025	3.57	17%	3%
Hayward	Hayward	FY24-25	2025	12.50	12%	11%
Hillsborough	Hillsborough	FY24-25	2025	2.30	14%	2%
Menlo Park	Menlo Park	FY24-25	2025	2.61	16%	2%
Mid-Peninsula	Mid-Peninsula	FY24-25	2025	2.24	15%	2%
Millbrae	Millbrae	FY24-25	2025	1.71	11%	1%
Milpitas	Milpitas	FY24-25	2025	5.06	11%	4%
Mountain View	Mountain View	FY24-25	2025	6.84	12%	6%
North Coast	North Coast	FY24-25	2025	2.20	8%	2%
Palo Alto	Palo Alto	FY24-25	2025	8.88	11%	8%
Purissima Hills	Purissima Hills	FY24-25	2025	1.26	31%	1%
Redwood City	Redwood City	FY24-25	2025	6.95	19%	6%
San Bruno	San Bruno	FY24-25	2025	0.88	5%	1%
San Jose	San Jose	FY24-25	2025	3.79	11%	3%
Santa Clara	Santa Clara	FY24-25	2025	2.70	17%	2%
Stanford	Stanford	FY24-25	2025	1.36	5%	1%
Sunnyvale	Sunnyvale	FY24-25	2025	7.75	18%	7%
Westborough	Westborough	FY24-25	2025	0.76	5%	1%
<b>Total</b>						
<b>Allocated</b>						
<b>Unallocated</b>						
<b>Reserved</b>						

Instructions: Copy/paste the table below into the "Historical Saves" tab, columns A through F.			
Input Category	Value	Allocation Year (FY)	Allocation Year (integer)
Allocation Year/Projection Year	FY24-25	FY24-25	2025
Tier 1 Shortage Allocation (mgd)	114.20	FY24-25	2025
Overall Reduction from Base Period Required	-15%	FY24-25	2025
SFPUC Maximum Cutback Factor	-22%	FY24-25	2025
SFPUC Minimum Cutback Factor	-5%	FY24-25	2025
Non-Residential Base Allocation %	93%	FY24-25	2025
Step 5 Reserved % of Remaining Tier 1 Allocation (less Step 3)	50%	FY24-25	2025
Unreserved % of Remaining Tier 1 Allocation (less Step 3)	50%	FY24-25	2025
Seasonal Allocation %	8%	FY24-25	2025
Step 5 ISG Weighting	33%	FY24-25	2025
Step 5 Base SFPUC Purchases Weighting	67%	FY24-25	2025
Residential Efficient Allocation (R-GPCD)	47.0	FY24-25	2025
Adjustment % for SFPUC Minimum Cutback, if efficient	95%	FY24-25	2025