



Public Services Director

CITY OF SAN BRUNO

PUBLIC SERVICES DIRECTOR
ADMINISTRATION AND ENGINEERING

Summary of SFPUC Potable Water Demand and San Bruno Groundwater Supply Reliability Assumptions for Three Additional Years of Drought for the San Bruno Water Service Area

San Bruno has prepared this memorandum to summarize calculations made to comply with California Code of Regulations (“CCR”) Article 22.5 – *Drought Emergency Water Conservation Regulations* and in particular CCR Section 864.5. – *Self-Certification of Supply Reliability for Three Additional Years of Drought* (collectively “Drought Regulations”). The Drought Regulations require San Bruno to determine the water conservation standard to be used in lieu of the previous 8% water conservation standard. The methodology for the determination of the new water conservation standard is established in the Drought Regulations and is calculated as follows:

- (1) The total potable water demand for each of the next three years will be the average annual total potable water production for the years 2013 and 2014
- (2) Water supply during each of the next three years is equivalent to the hydrologic conditions during water years 2013-2015

The total potable water demand in the San Bruno service area for calendar years 2013 and 2014 is shown in the table below. The total water potable demand is based on purchases from San Francisco Public Utilities Commission (“SFPUC”) and adjusted for water purchased from other agencies.

Total Potable Water Demand		
CY 2013	CY 2014	Average 2013 - 2014
1,341 MG	1,207 MG	1,274 MG
4,115 AF	3,704 AF	3,909 AF

AF = acre feet
CY = calendar year
MG = million gallons

On 9 June 2016, the SFPUC provided a memorandum the anticipated available supply from the Regional Water System to the SFPUC customer agencies.¹ For the purposes of this forecast, SFPUC assumed

¹ Memorandum to SFPUC Wholesale Customers, State Water Resources Control Board Self-Certification of Supply Reliability for Three Additional Years of Drought and Update to Final Water Supply Availability Estimate, dated 9 June 2016.

that the hydrologic conditions for the next three years will be the same as those for 2013, 2014, and 2015, with respect to annual flows. Additional details regarding the assumptions used in SFPUC’s analysis of available supply over the next three years are available on the SFPUC website.²

Based on SFPUC’s analysis, the available water supply is anticipated to be greater than demand for three additional years of drought. In the third year, available water supply for the Regional Water System is 982 thousand acre feet (“TAF”) and the demand is anticipated to be 241 TAF.

The projected supply availability for 2017 through 2019, based on the analysis provided by SFPUC for the City of San Bruno is shown below.

Projected Supply (SFPUC)		
Water Year 2017	Water Year 2018	Water Year 2019
583 MG	583 MG	583 MG
1,789 AF	1,789 AF	1,789 AF

AF = acre feet
MG = million gallons

The projected supply availability for 2017 through 2019, based on the analysis provided by North Coast County Water District (NCCWD) for the City of San Bruno is shown below.

Projected Supply (NCCWD)		
Water Year 2017	Water Year 2018	Water Year 2019
16 MG	16 MG	16 MG
50 AF	50 AF	50 AF

AF = acre feet
MG = million gallons

In addition to water supplied by SFPUC, San Bruno also utilizes groundwater to meet potable demands. San Bruno’s projected groundwater supply availability for 2017 through 2019 is estimated based upon historical daily production of 2.3 MGD use of groundwater and is shown below in water years.

Projected Supply (Groundwater)		
Water Year 2017	Water Year 2018	Water Year 2019
839.5 MG	839.5 MG	839.5 MG
2,576 AF	2,576 AF	2,576 AF

AF = acre feet
MG = million gallons

The difference between the projected supply and demands determines San Bruno’s new water conservation standard. To the extent there is insufficient supply to meet demand, the water conservation standard is set at the percent reduction necessary so available supplies are adequate to meet demands. The table below summarizes the water supply and demand and associated excess water supply availability.

Average Projected Demands (2013 – 2014)	3,909 AF
Projected Supply	4,415 AF
Excess Available Water Supply	506 AF

² <http://sfwater.org/modules/showdocument.aspx?documentid=9287>

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Based upon the projected supplies and demands, it is estimated that San Bruno will have approximately -13% greater water supply available than the estimated water demand. Based upon the requirements of the Drought Regulations, San Bruno's target water use reduction is zero (0) percent.