

**CITY OF VALLEJO**  
**SWRCB-Mandated Water Supply Stress Test Simulation - Three-Year Continued Drought**

Updated  
7/20/2016

Supply Source (All Quantities in Acre Feet)	Normal Supply	2016 Available Supply	2017 Available Supply (1)	2018 Available Supply (1)	2019 Available Supply (1)
Solano Project (Lake Berryessa) (2)	14,600	14,600	14,600	13,870	13,870
Solano Project (Lake Berryessa) Carryover (3)	0	22,563	0	0	0
State Water Project (via NBA) (4)	5,600	4,200	1,960	280	1,400
State Water Project (via NBA) Carryover (5)	0	2,249	0	0	0
Vallejo Permit (Delta via NBA) (6)	17,287	17,287	17,287	9,945	9,945
Lakes (Madigan/Frey) (7)	400	400	400	400	400
Total Water Supply Available	37,887	61,299	34,247	24,495	25,615
Total Potable Water Demand (8)			19,262	19,262	19,262
Total Raw Water Demand (9)			4,571	4,571	4,571
Supply Surplus / (Deficiency)			10,414	662	1,782
Percent Conservation Required (10)			0%	0%	0%

**Notes:**

- 1) Mandated assumption approach is to assume similar hydrologic years as follows: 2017 = 2013, 2018 = 2014, and 2019 = 2015.
- 2) Solano Project Entitlement of 14,600 AF is assumed voluntarily reduced by 5 percent in 2018 and 2019 as per the Solano Project Member's Agreement as to Drought Measures and Water Allocation dated March 1, 1999.
- 3) Solano Project Carryover in 2016 is 20,404 AF. It is not included in projected supply in 2017 or beyond.
- 4) State Water Project allocation of 4,200 AF in 2016 is 75% of the base annual allocation of 5,600 AF. Assumed SWP allocations for 2017 through 2019 are 35%, 5%, and 25% respectively to match actual allocations in 2013 through 2015.
- 5) State Water Project Carryover in 2016 is 2,249 AF. It is not included in projected supply in 2017 or beyond.
- 6) Vallejo Permit Water is licensed for 22,800 AF; however it is restricted to 17,287 AF by current DWR contract. This supply was curtailed in 2014 from June 1 through November 2; available supply has been calculated at the contract-restricted flow rate over the remaining 210 days in the year. Reduced supply is included for 2019.
- 7) Lakes Madigan and Frey are a two-lake storage system with a combined safe yield of 400AF.
- 8) Potable Water Demand is the average of 2013 and 2014 released to system numbers from the Fleming Hill and Green Valley WTPs, and includes American Canyon potable water deliveries totaling 2,074 AF (108 AF avg in 2013-2014, plus available potable balance of 1,966 AF per 1996 agreement).
- 9) Raw Water Demand includes in-City deliveries, and "wholesale" deliveries to American Canyon, Benicia, and Travis AFB.
- 10) Water supplies are adequate to meet demand under the test criteria. Although required conservation is 0% the City of Vallejo will continue to implement a Water Conservation Program to assist its customers to use water efficiently.

Water Supply Reliability Summary  
City of Vallejo

	Solano Project (Berrypressa)	State Water Project (NBA)	Vallejo Permit (Delta via NBA)	Lakes (Madigan/Fry)	Total Annual Allocation in Acre Feet
Maximum Water Entitlement/Safe Yield in AF	14,600	5,600	17,287	400	37,887

	Year 2013 MG	Year 2014 MG	Annual Avg MG	Annual Avg AF
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Fleming Hill & Lakes Demand (Avg 2013 & 2014)      5,906      5,366      5,636      17,296 Includes 108 AF, American Canyon treated water

American Canyon Treated Available (2)      641      1,966

Total Treated Water      19,262

Raw Water Customer Demand (Avg 2013 &14 Actual)	Year 2013 MG	Year 2014 MG	Annual Avg MG	Annual Avg AF
City of Benicia (raw)	359	359	359	1,100
American Canyon (raw) (1)	163	326	245	750
Hiddenbrook GC & all COV Raw Water Accts	289	228	259	793
Travis AFB - (raw)	649	607	628	1,927
Total Raw Water	1,460	1,520	1,490	4,571
Total Avg Demand (2013/14)				Annual Avg AF 23,833

(1) 2013 includes 500 AF of raw water per agreement and 2014 includes 500 AF for basic agreement + Emergency 500 AF raw water for total of 1000 AF.

(2) Treated water available under 1996 agreement with AC (Total 2,074 AF) - Amount shown is available balance in HCF, less actual demand recorded in Fleming Hill treated. Lake Curry entitlement not included in total water volume due to no conveyance facilities.