

**City of Benicia**  
**State-Mandated Water Conservation Regulation (aka "Stress Test")**

On May 18, 2016 the State Water Resources Control Board (SWRCB) adopted a new statewide water conservation regulation that will be in effect June 2016 through January 2017. It replaces the percentage reduction-based water conservation standard (Benicia's has been 20%) with a localized "stress test" approach. The "stress test" mandates local water agencies to prove they have sufficient water supplies assuming three more drought years like the last three rainfall years. Water agencies that would not meet this requirement will be required to meet a percentage water conservation standard (e.g. if a water agency has a 10% water supply shortfall, their mandatory conservation standard would be 10%).

The City of Benicia prepared the self-certification of supply reliability for three additional years of drought in accordance with section 864.5 of the revised Drought Emergency Water Conservation (Article 22.5). The City submitted its calculations and certification to the SWRCB before the deadline of June 22, 2016. The results show that the City has more than enough water supplies for the next three years even if the drought continues. The City is slated to have 21,092 acre-feet of water available in 2019, which is almost twice of the City's total demand. The result of City's calculation was -348%. The negative number indicates a surplus and the conservation standard is zero. Therefore the City of Benicia's water conservation standard (i.e. reduction target) has been decreased from 20% to 0%. The "stress test" conservation standards will be in effect through January 2017.

Below are the Water Supply Reliability Self-Certification information that was submitted to the SWRCB and Worksheet 1 with additional data. This information is being provided as required by SWRCB regulations.

Water Supply Reliability Self-Certification

Urban Water Supplier	Benicia City of (510)
Management Contact Name	Graham Wadsworth
Title	Public Works Director

Email	<a href="mailto:gwadsworth@ci.benicia.ca.us">gwadsworth@ci.benicia.ca.us</a>
Telephone	(707) 746-4227
Technical Contact Name	Scott Rovanpera
Title	WTP Superintendent
Email	<a href="mailto:srovanpera@ci.benicia.ca.us">srovanpera@ci.benicia.ca.us</a>
Telephone	(707) 746-4393
2013 Production (in acre-feet)	2,111.2
2014 Production (in acre-feet)	1,684.1
Calculated Annual Potable Water Demand in Acre-feet (AF)	5,823.666 AF
Demand Notes and Comments	Based on the DWR Public Water System Statistics report to use supply and demand from water years 2013, 2014 and 2015
Water Year 2017 Total Available Water Supply	23,812 AF
Water Year 2018 Total Available Water Supply	20,652 AF
Water Year 2019 Total Available Water Supply	26,092 AF
Supply Notes and	Based on the Benicia Source Water Forecast using State Water Project (SWP) and Solano Project availability, with

Comments	accounting for SWP carryover water from unused Table A allocation.
Individual or Aggregate	Individual
Conservation Standard *	-348 %
Higher Conservation Standard	Yes
Step 3.1 Notes and Comments	The City's potable water customers demonstrated an aggressive water conservation campaign in 2014-2016, conserving on average for these three years 25% of water as compared to 2013. The Public Works Department will consider rescinding the Outdoor Water Restrictions, but many consumers have made a continued effort to conserve water.
Uploaded Worksheet #1	<a href="http://www.drinc.ca.gov/DNN/Portals/0/SelfCert/22270117-fd39-4383-b273-c60d93b4da39.xlsx">http://www.drinc.ca.gov/DNN/Portals/0/SelfCert/22270117-fd39-4383-b273-c60d93b4da39.xlsx</a>
Uploaded Certification	<a href="http://www.drinc.ca.gov/DNN/Portals/0/SelfCert/959d913d-b7a0-4693-a4ed-f5fafaf6967e.pdf">http://www.drinc.ca.gov/DNN/Portals/0/SelfCert/959d913d-b7a0-4693-a4ed-f5fafaf6967e.pdf</a>
Uploaded Supporting Analysis & Calculations	<a href="http://www.drinc.ca.gov/DNN/Portals/0/SelfCert/110452bf-be77-47f9-96f6-46bc99ad8a49.xlsx">http://www.drinc.ca.gov/DNN/Portals/0/SelfCert/110452bf-be77-47f9-96f6-46bc99ad8a49.xlsx</a>

\* A negative number indicates a surplus and the Conservation Standard is zero.

# Worksheet 1 : Total available water supply for individual water supplier

## Step 2 of Water Supply Reliability Certification and Data Submission Form

Benicia City of << Enter name of urban water supplier

### User Input Instructions

- (1) Please select units of measure from the dropdown menu.  
 (2) Enter information on available water supplies and supplies committed to other

### LEGEND:

User Input or Selection	
Linked from User Input	

acre feet (AF) << Select units of measure

### Available Water Supplies

Sources of Supply	Name of Provider(s) or Description	Source used in prior	Water Available in		
			WY 2017 *	WY 2018 *	WY 2019
<b>SELF-SUPPLIED</b>					
Surface water: SWP	Solano County Water Agency	Yes	6,020.0	860.0	4,300.0
Surface water: other (describe)	City of Vallejo	Yes	1,100.0	1,100.0	1,100.0
Surface water: other (describe)	Solano Irrigation District	Yes	2,000.0	2,000.0	2,000.0
	Lake Herman (locally owned)	Yes	750.0	750.0	750.0
Other (describe):	Solano Project carryover	Yes	13,942.0	15,942.0	17,942.0
SUBTOTAL of available supplies (in units selected)			23,812.0	20,652.0	26,092.0

### Explanatory Notes

Solano Water Project water varies based on the allocation from the Dept. of Water Resources.

Carryover water varies based on availability of water in the Delta.

\* Any carryover from one year is incorporated in the supply of the following year, as legally allowed.

\*\* Look up Water system number at this link: <https://sdwis.waterboards.ca.gov/PDWW/>

Rows can be inserted to account for other sources of supply (e.g., desalination of brackish water, banked water)

Ⓢ If a source has not been used in prior years, e.g., a new treatment facility will be constructed, supporting documentation must document when the new source will be fully implemented.

### Water Supplies Committed to Other Uses (Not Available)

Other Uses	Describe	Quantity in WY 2017	Quantity in WY 2018	Quantity in WY 2019
Agriculture				
Commercial, industrial or institutional	Valero Refinery	5,000.0	5,000.0	5,000.0
New residential customers				
Transfers				
Other:				
Other:				
SUBTOTAL of supplies not available (in units selected)		5,000.0	5,000.0	5,000.0

The City supplies raw (untreated) water to a local refinery.

TOTAL available water supply (in units selected) 18,812.0 15,652.0 21,092.0

(Subtotal of available supplies minus subtotal of supplies committed to other uses)

>>> Please enter values calculated below in Step 2 of the online form

TOTAL available water supply converted to acre feet	18,812	15,652	21,092
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The City is slated to have 21,092 acre-feet of water available in 2019, which is almost twice of the City's total demand. This equates to a 0% conservation standard.