

City of Paso Robles
Water Conservation Standard and Supply Self-Certification
(CCR Title 23 Section 864.5)

Overview

In accordance with Title 23, Section 864.5 of California Code of Regulations, the City of Paso Robles (City) has evaluated the City's supply reliability and has identified the conservation standard the City will be required to meet through January of 2017 using the methodology prescribed by the State Water Board. This water conservation standard applies to City water customers and is effective June 1, 2016 through February 2017.

Water Conservation Under Newly-adopted Drought Emergency Regulation (May, 2016)

A supplier's water conservation standard is defined as the percentage by which the supplier's total potable water supply is insufficient to meet the total potable water demand at the end of an assumed three additional years of drought, based on the following assumptions:

- Precipitation for water years 2017, 2018 and 2019 will be the same as it was in water years 2013, 2014, and 2015
- Customers' total water use (demand) for the next three years will be equivalent to average potable water production in calendar years 2013 and 2014

The City projects the water supply available to the City in water years 2017, 2018, and 2019 under the conditions prescribed by the State Water Board will exceed the projected demand as prescribed (6,634 AFY). As such, the City's water conservation standard will be to maintain total water production in the City's service area at or below 2013 production for the same months.

Evaluation of the City's available water supply sources is described in the following paragraphs. For purposes of this submittal and certification process, the supply amounts projected according to the State's methodology represent and reflect supplies available to the City from each source in water years 2017, 2018, and 2019 under the specific circumstances prescribed by the State Water Board, but do not reflect or impose limits on the City's groundwater or other water rights, nor do they reflect the City's water supply planning projections developed in accordance with other applicable laws.¹

Evaluation of Supplies

The City has evaluated the availability of potable water from each of its three existing water sources (Salinas River Wells, Treated Nacimiento Water, and Paso Robles Groundwater Basin Wells) under the conditions and assumptions prescribed by the State Water Board. For supply sources where the amount of historical, current, and planned future use are unknown (e.g. groundwater basins) the State requires that suppliers estimate the total annual potable water supply for WY2017, 2018, and 2019 according to specific assumptions. The State suggests that suppliers take into account likely drawdown during the three-year projection period, corresponding changes in groundwater elevation, and potential effects the decrease in groundwater elevation would have on the ability of the supplier to pump groundwater. Finally, the State requires that the projected groundwater quantities reflect the amounts of water available without addition of new wells or completion of treatment projects that would fall outside the three-year projected period (WY17-WY-19).

¹ See, e.g., City of Paso Robles 2015 Urban Water Management Plan.

**City of Paso Robles
Water Conservation Standard and Supply Self-Certification
(CCR Title 23 Section 864.5)**

Paso Robles Groundwater Basin Supply

The City used the following approach for estimating supply available from the City’s Paso Robles Groundwater Basin wells.

Estimated decline in water table

Changes in groundwater elevations were reviewed to estimate the potential drawdown during the three-year projection period, assuming hydrological conditions would be identical to water years 2013, 2014, and 2015. Using a composite of static water levels for the City’s Basin wells, a decline of approximately 29 feet is estimated to have occurred between October 2012 (beginning of water year 2013) and September 2015. Per State Water Board guidance, it was assumed the same amount of decline would occur during water years 2017, 2018, and 2019, relative to current water year elevations.

Estimated reductions in basin well capacity

Reductions in Basin well capacities were estimated for individual wells assuming a 29 foot decline in static water level. It is estimated that production from the City’s basin wells may decrease by 6 to 9% as a result of a 29-foot decline in the water table. Reductions of 10% were conservatively applied to all of the City’s basin wells relative to their estimated capacity for the current water year. For simplicity it was assumed that this reduced capacity would apply during each year of the three-year projection period. Since the total projected decline in the water table of 29 feet would be more likely to occur gradually over a three-year period, total production over the three-year period would be greater.

Table 1: Estimated Groundwater Supply Available Water Year 2017 through 2019.

Estimated Decline in Basin water level	
Estimated Change in Basin Water Table, October 2012 - Sept 2015:	-29 feet
Estimate of Basin well supply available	
Lowest estimated capacity reduction in basin wells:	6%
Highest estimated capacity reduction in basin wells:	9%
Assumed capacity reduction in basin wells:	10%
Total estimated Basin well capacity available (WY2016):	8,300 AFY
Assumed capacity available for WY 2017, 2018, and 2019:	7,470 AFY

In accordance with direction from the State Water Board, the City has assumed that no new basin wells would be constructed during the subject water years for the purposes of increasing production beyond current levels. The City has conservatively assumed that no improvements to existing City basin wells (e.g. lowering pumps, pump modification or replacements) would occur for the purpose of maintaining or increasing production capacity from existing wells under the prescribed conditions. Although past and future use of the groundwater basin by other pumpers could affect groundwater levels and production capacity of the City’s groundwater wells, accounts of past and estimated future use of the basin by other users are not included in the State Water Board’s prescribed methodology or posted guidelines.

Salinas River Water Supply

During water years 2013 – 2015 the City’s Salinas River wells were capable of producing the maximum permitted amounts of 4,600 AF on an annual basis. The composite water level decline was approximately 7 feet during this period. This level of decline was estimated to have a negligible effect

City of Paso Robles
Water Conservation Standard and Supply Self-Certification
(CCR Title 23 Section 864.5)

on production capacity from the City’s Salinas River wells (approximately 2% reduction estimated). As such, the City projects that the Salinas River wells would be capable of producing near the annually permitted amount of 4,600 AFY under the conditions prescribed by the State Water Board and described above. For the purposes of this evaluation the City has conservatively estimated a 10% reduction in production relative to the City’s annually permitted pumping for each year of the planning period.

Table 2: Estimated Salinas River Supply Available Water Year 2017 through 2019.

Estimated Decline in Salinas wells	
Estimated Change in Basin Water Table, October 2012 - Sept 2015:	-7 feet
Estimate of Basin well supply available	
Estimated capacity reduction in Salinas River wells:	2%
Assumed capacity reduction in basin wells:	10%
Total estimated Basin well capacity (WY2016):	5,900 AFY
Permitted diversion (annual)	4,600 AFY
Assumed capacity available for WY 2017, 2018, and 2019:	4,140 AFY

Nacimiento Supply

The City receives water from Lake Nacimiento via the Nacimiento Water Project (NWP). San Luis Obispo County is the Wholesaler of NWP water and through coordination with Monterey County Regional Water Agency, has provided the following estimates of water that would be available to the City of Paso Robles in the subject water years.

Table 3: Estimated Lake Nacimiento Supply Available Water Year 2017 through 2019.

Nacimiento Water Project Participant	Entitlement	WY 2017 Available	WY 2018 Available	WY 2019 Available
Paso Robles	6,488 AF	6,488 AF	4,111 AF	6,488 AF

Via San Luis Obispo County Emergency Regulation Water Supply Calculations June, 15, 2016:

<http://slocountywater.org/site/Flood%20Control%20and%20Water%20Conservation%20District%20Zones/pdf/SWRCB%20Emergency%20Regulation%20-%203%20Year%20Water%20Supply%20Estimate.pdf>

The Nacimiento supply amounts projected to be available consist of potable water amounts that the City is currently able to utilize directly for potable water from the City's Water Treatment Plant (WTP) and the City’s recovery well. The City could operate the WTP and recovery well continuously, yielding approximately 2,688 AFY from the WTP and 269 AFY from the recovery well, or 2,957 AFY total for water years 2017 through 2019.