

# PATTERNS OF CLIMATE, WATER PER CAPITA, WATERGY, & SUN: PASO ROBLES, CA

CLIMATE	AVERAGE HIGH & LOW TEMPERATURES: <b>1894 - 2010</b> <small>Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a></small>													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
	60.4	63.5	67.3	73.0	79.4	86.9	92.7	92.6	88.7	80.3	69.3	61.2	76.3	°F HIGH
	33.0	36.4	38.5	40.1	43.8	47.7	50.3	49.7	47.2	41.9	35.8	32.3	41.4	°F LOW
	15.8	17.5	19.6	22.8	26.3	30.5	33.7	33.7	31.5	26.8	20.7	16.2	24.6	°C HIGH
0.6	2.4	3.6	4.5	6.6	8.7	10.2	9.8	8.4	5.5	2.1	0.2	5.2	°C LOW	
HIGHEST TEMP ON RECORD:		<b>117</b>	<b>47.2</b>	<b>August 13, 1933</b>				LOWEST TEMP ON RECORD:		<b>0</b>	<b>-17.8</b>	<b>January 6, 1913</b>		
		°F	°C	<small>Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a></small>						°F	°C			

WATER PER CAPITA	AVERAGE RAINFALL: <b>1894 - 2010</b> <small>Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a></small>													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
	3.48	3.07	2.44	1.01	0.36	0.05	0.02	0.05	0.17	0.62	1.37	2.54	15.18	INCHES
	88.4	78.0	62.0	25.7	9.1	1.3	0.5	1.3	4.3	15.7	34.8	64.5	385.6	mm
	WETTEST YEAR'S RAINFALL:		<b>29.19</b>	<b>741.4</b>	<b>1941</b>				DRIEST YEAR'S RAINFALL:		<b>4.24</b>	<b>107.7</b>	<b>1947</b>	
		INCHES	mm	<small>Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a></small>						INCHES	mm			
LONGEST PERIOD W/ NO MEASURABLE PRECIPITATION: <b>202 days (2/28 - 9/18/1997)</b> <small>Source: <a href="#">see note #1</a></small>														
AREA:	<b>19.9</b>	SQ MILES		POPULATION:	<b>28,677</b>	RAINFALL INCOME:		<b>502</b>	GPCD					
<small>Wikipedia</small>	<b>51.5</b>	km <sup>2</sup>		<small>Source/Year: <a href="http://census.gov/2009/est">census.gov/2009/est</a></small>				<b>1898</b>	¢pcd					

WATERGY	<i>Note: the percentages below are per energy source, and are not to be combined for percent of total energy consumption.</i>											
	% of CA's annual electricity consumption used for water-related purposes: <sup>2</sup>		<b>19%</b>	<b>2005</b>	MUNICIPAL USE:		<b>188</b>	GPCD				
	% of CA's ann'l natural gas consumption used for water-related purposes: <sup>2</sup>		<b>32%</b>	<b>2005</b>			<b>712</b>	¢pcd				
# of gallons of diesel fuel used annually in CA for water-related purposes: <sup>2</sup>		<b>88 mil</b>	<b>2005</b>	<small>Source/Year: <a href="#">see note #3 / 2010</a></small>								

SUN	LATITUDE:	<b>35.5</b>	WINTER-SOLSTICE SHADOW RATIO:*		ON MAR 21	ON JUN 21	ON SEP 21	ON DEC 21
	<small>Source: <a href="http://Google Earth">Google Earth</a></small>		<b>1: 1.66</b>	^ DEGREES N or S of DUE E THE SUN RISES:	<b>0</b>	<b>29N</b>	<b>0</b>	<b>29S</b>
	ELEVATION:	<b>858</b>	FT	^ DEGREES N or S of DUE W THE SUN SETS:	<b>0</b>	<b>29N</b>	<b>0</b>	<b>29S</b>
		<b>261.6</b>	m	<sup>B</sup> # of DEGREES SUN IS ABOVE THE SOUTHERN HORIZON AT NOON:	<b>55</b>	<b>78</b>	<b>55</b>	<b>31</b>

To find current magnetic declination for location: [HarvestingRainwater.com/books/volume1/volume-1-resource-pages-appendix-6/#magdec](http://HarvestingRainwater.com/books/volume1/volume-1-resource-pages-appendix-6/#magdec)

\*Object height:length of shadow cast at solar noon (Dec 21's is longest noontime shadow of year). The ratio is 1:x, where x = 1/(tangent(90-(latitude+23.44)))

Notes: 1. Michelle Breckner, Service Climatologist, WRCC, via phone 3/22/2011 // 2. CA Energy Commission, Final Staff Rpt on CA's Water-Energy Relationship, 2005. These data include consumption for supply & treatment, ag use, end-users & wastewater // 3. This includes residential, commercial, industrial & unaccounted-for water. Residential-only gpcd is 133. Keith Larson, Water Conservation Manager, City of Paso Robles Public Works Dept, via phone 3/21/2011.

A. R'water Harvesting for Drylands & Beyond, Vol 1, or [www.esrl.noaa.gov/gmd/grad/solcal/](http://www.esrl.noaa.gov/gmd/grad/solcal/) // B. RWHDB Vol 1, or Mar 21: 90-latitude, Jun 21: 90-(lat - 23.44), Sep 21: 90-lat, Dec 21: 90-(lat + 23.44)