

PATTERNS OF CLIMATE, WATER PER CAPITA, WATERGY, & SUN: SAN JUAN CAPISTRANO, CA¹

| | | | | | | | | | | | | | | | | |
|---------|--|------|------|---------|------|------|----------------|------|------|------------------------------|------|------|---------|--|--------------|--|
| CLIMATE | AVERAGE HIGH & LOW TEMPERATURES: 1928-2008 <i>Source: wrcc.dri.edu</i> | | | | | | | | | | | | | | | |
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL | | | |
| | 65.1 | 66.1 | 67.1 | 69.0 | 70.9 | 73.1 | 76.5 | 78.1 | 77.5 | 74.5 | 70.4 | 66.1 | 71.2 | | | |
| | 43 | 44.1 | 45.8 | 48.4 | 53.0 | 56.1 | 59.3 | 59.6 | 58.2 | 53.7 | 47.5 | 43.4 | 51.0 | | | |
| | 18.4 | 18.9 | 19.5 | 20.6 | 21.6 | 22.8 | 24.7 | 25.6 | 25.3 | 23.6 | 21.3 | 18.9 | 21.8 | | | |
| | 6.1 | 6.7 | 7.7 | 9.1 | 11.7 | 13.4 | 15.2 | 15.3 | 14.6 | 12.1 | 8.6 | 6.3 | 10.6 | | | |
| | HIGHEST TEMP ON RECORD: 108 °F | | | 42.2 °C | | | Sept. 26, 1963 | | | LOWEST TEMP ON RECORD: 20 °F | | | -6.7 °C | | Oct. 3, 1928 | |
| | <i>Source: wrcc.dri.edu</i> | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|--|------|-----------------------------|------|------|------|------|------|------------------------------------|------|------|---------|--|--|------|
| WATER PER CAPITA | AVERAGE RAINFALL: 1928-2008 <i>Source: wrcc.dri.edu</i> | | | | | | | | | | | | | | | |
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | ANNUAL | | | |
| | 2.47 | 2.79 | 2.02 | 0.98 | 0.25 | 0.10 | 0.02 | 0.07 | 0.27 | 0.46 | 1.25 | 1.92 | 12.60 | | | |
| | 62.7 | 70.9 | 51.3 | 24.9 | 6.4 | 2.5 | 0.5 | 1.8 | 6.9 | 11.7 | 31.8 | 48.8 | 320.0 | | | |
| | WETTEST YEAR'S RAINFALL: 28.24 INCHES | | | 717.3 mm | | | 1941 | | | DRIEST YEAR'S RAINFALL: 3.5 INCHES | | | 87.6 mm | | | 1953 |
| <i>Source: wrcc.dri.edu</i> | | | | | | | | | | | | | | | | |
| LONGEST PERIOD W/O MEASURABLE PRECIPITATION: 209 days (2/28-9/24/1977) <i>Source: see note #2</i> | | | | | | | | | | | | | | | | |
| AREA: 14.30 SQ MILES | | POPULATION: 35,142 | | RAINFALL INCOME: 244.1 GPCD | | | | | | | | | | | | |
| <i>Wikipedia</i> 37.0 km ² | | <i>Source/Year: census.gov / 2009 estimate</i> | | 924 ‡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:3 | | 19% | | 2005 | | MUNICIPAL USE: 180.0 GPCD | |
| | % of CA's annual natural gas consumption used for water-related purposes:3 | | 32% | | 2005 | | 681 ‡pcd | |
| | # of gallons of diesel fuel used by annually in CA for water-related purposes:3 | | 88 mil | | 2005 | | <i>Source/Year: see note # 4, 2009</i> | |

| | | | | | | |
|--|---|--|-----------|-----------|-----------|-----------|
| SUN | LATITUDE: 33 | WINTER-SOLSTICE SHADOW RATIO:* | ON MAR 21 | ON JUN 21 | ON SEP 21 | ON DEC 21 |
| | <i>Source: Google Earth</i> | 1:1.54 | 0 | 29N | 0 | 29S |
| | ELEVATION: 123 FT | ^A DEGREES N or S of DUE E THE SUN RISES: | 0 | 29N | 0 | 29S |
| | 37.5 m | ^B # of DEGREES SUN IS ABOVE THE SOUTHERN HORIZON AT NOON: | 57 | 81 | 57 | 33 |
| <i>To find current magnetic declination for location: HarvestingRainwater.com/books/volume1/volume-1-resource-pages-appendix-6/#magdec</i> | | | | | | |

*Object height:length of shadow cast at noon (Dec 21's is longest noontime shadow of year). *Source: Rainwater Harvesting for Drylands & Beyond, Vol 1 or 2*

Notes: 1. All rainfall & climate data are from Laguna Beach, CA, as SJC does not have its own weather station // 2. Jim Ashby, Service Climatologist, WRCC, via phone 5/5/2010 // 3. CA Energy Commission, Final Staff Report on CA's Water-Energy Relationship, 2005. These figures include energy consumption for supply & treatment, ag use, end-users & wastewater // 4. Pacificprogressive.com, 7/15/2009, for South Coast (Region 4). A. & B. Rainwater Harvesting for Drylands & Beyond, Volume 1