PATTERNS OF CLIMATE, WATER PER CAPITA, WATERGY, & SUN: ALISO VIEJO, CA[1]

CLIMATE

AVERAGE HIGH & LOW TEMPERATURES: 1928-2008 *Source: wrcc.dri.edu*

	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	˚F HIGH
	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	˚F LOW
	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	˚C HIGH
	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	˚C LOW

HIGHEST TEMP ON RECORD: 108 ˚F, 42.2 ˚C, September 26, 1963 *Source: wrcc.dri.edu*

LOWEST TEMP ON RECORD: 20 ˚F, -6.7 ˚C, October 3, 1928

WATER PER CAPITA

AVERAGE RAINFALL: 1928-2008 *Source: wrcc.dri.edu*

	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	INCHES
	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	mm

WETTEST YEAR'S RAINFALL: 28.24 INCHES, 717.3 mm, 1941 *Source: wrcc.dri.edu*

DRIEST YEAR'S RAINFALL: 3.5 INCHES, 87.6 mm, 1953

LONGEST PERIOD W/O MEASURABLE PRECIPITATION: 209 days (2/28 - 9/24/1977) *Source: see note #2*

AREA: 10.2 SQ MILES; *Wikipedia* 26.4 km^2

POPULATION: 41,835 *Source/Year: census.gov / 2009 estimate*

RAINFALL INCOME: 146.3 GPCD; 554 ℓpcd

WATERGY

Note: the percentages below are per energy source, and are not to be combined for percent of total energy consumption.

% of CA's annual electricity consumption used for water-related purposes:3	19%	2005
% of CA's annual natural gas consumption used for water-related purposes:3	32%	2005
# of gallons of diesel fuel used annually in CA for water-related purposes:3	88 mil	2005

MUNICIPAL USE: 185.0 GPCD; 700 ℓpcd *Source/Year: see note # 4 / 2007-8*

SUN

LATITUDE: 34 *Source: Google Earth*

ELEVATION: 370 FT; 112.8 m

WINTER-SOLSTICE SHADOW RATIO:* 1:1.54

	ON MAR 21	ON JUN 21	ON SEP 21	ON DEC 21
[A] DEGREES N or S of DUE E THE SUN RISES:	0	30N	0	30S
[A] DEGREES N or S of DUE W THE SUN SETS:	0	30N	0	30S
[B] # of DEGREES SUN IS ABOVE THE SOUTHERN HORIZON AT NOON:	57	80	57	33

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

**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 the Laguna Beach, CA, weather station // 2. Jim Ashby, WRCC Service Climatologist 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 & waste-water // 4. www.fullerton.edu/cdr/profilesv14n1.pdf, data for Aliso Viejo (in Moulton Niguel WD) on p 2. A. & B. Rainwater Harvesting for Drylands & Beyond, Vol 1

Available online at: www.harvestingrainwater.com/watergy-climate/water-conservation-and-climate-overview-data-sheets/