

# PATTERNS OF CLIMATE, WATER PER CAPITA, WATERGY, & SUN: BELLINGHAM, WA

CLIMATE	AVERAGE HIGH & LOW TEMPERATURES: 1949-2005												Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a>	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
	43.4	47.8	51.1	56.5	62.3	66.8	71.2	71.4	67.0	58.3	49.7	44.6	57.5	°F HIGH
	31.6	33.9	36.0	39.9	45.3	50.4	53.2	53.2	48.1	42.0	36.8	33.3	42.0	°F LOW
	6.3	8.8	10.6	13.6	16.8	19.3	21.8	21.9	19.4	14.6	9.8	7.0	14.2	°C HIGH
-0.2	1.1	2.2	4.4	7.4	10.2	11.8	11.8	8.9	5.6	2.7	0.7	5.6	°C LOW	
HIGHEST TEMP ON RECORD:		96	35.6	July 29, 2009				LOWEST TEMP ON RECORD:		-2	-18.9	Jan 25 & Feb 1, 1950		
		°F	°C	Source: <a href="#">see note #1</a>						°F	°C			

WATER PER CAPITA	AVERAGE RAINFALL: 1949-2005												Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a>	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
	4.58	3.37	3.01	2.61	2.17	1.76	1.18	1.40	1.85	3.51	5.08	4.80	35.32	INCHES
	116.3	85.6	76.5	66.3	55.1	44.7	30.0	35.6	47.0	89.2	129.0	121.9	897.1	mm
	WETTEST YEAR'S RAINFALL:		47.18	1198.4	1971				DRIEST YEAR'S RAINFALL:		22.4	568.2	1952	
		INCHES	mm	Source: <a href="http://wrcc.dri.edu">wrcc.dri.edu</a>						INCHES	mm			
LONGEST PERIOD W/O MEASURABLE PRECIPITATION: 54 days, 6/21-8/13/1960												Source: <a href="#">see note #1</a>		
AREA:		31.7	SQ MILES		POPULATION:		76,130	RAINFALL INCOME:		700	GPCD			
<a href="#">Wikipedia</a>		82	km <sup>2</sup>		Source/Year: <a href="http://www.cob.org">www.cob.org</a> / 2009				2650		¢pcd			

WATERGY	Percentage of overall municipal energy consumption used for water/sewage		37%	MUNICIPAL USE:		100	GPCD
	<a href="http://www.cob.org">www.cob.org</a> , Greenhouse Gas Inventory & Climate Protection Action Plan, May 2007		2005			379	¢pcd
				Source/Year:		<a href="#">see note #2 / 2007</a>	

SUN	LATITUDE:	48.8	WINTER-SOLSTICE SHADOW RATIO:*	1:3.125	ON MAR 21	ON JUN 21	ON SEP 21	ON DEC 21
	Source: <a href="#">Google Earth</a>				0	39N	0	39S
	ELEVATION:	148	FT		0	39N	0	39S
	45	m	<sup>B</sup> # of DEGREES SUN IS ABOVE THE SOUTHERN HORIZON AT NOON:	41	65	41	18	
To find current magnetic declination for location: <a href="http://HarvestingRainwater.com/books/volume1/volume-1-resource-pages-appendix-6/#magdec">HarvestingRainwater.com/books/volume1/volume-1-resource-pages-appendix-6/#magdec</a>								

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

Notes: 1. Jim Ashby, Climatologist, WRCC, phone conversation 9/13/2009 // 2. [www.cob.org](http://www.cob.org), 2008 Water Use Efficiency Program data

A. Rainwater Harvesting for Drylands & Beyond, Vol 1 // B. March 21 = 90-latitude, June 21 = 90-(latitude-23.44), Sept 21 = 90-latitude, Dec 21 = 90-(latitude+23.44)

Available online at: [www.harvestingrainwater.com/watergy-climate/water-conservation-and-climate-overview-data-sheets/](http://www.harvestingrainwater.com/watergy-climate/water-conservation-and-climate-overview-data-sheets/)