



COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

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WINTER WEATHER 2007 - 2008 FORECAST

Oregon Chapter-American Meteorological Society, Winter Weather Meeting; November 9th, 2007

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Climate prediction tools used:

1. Australian Bureau of Meteorology—ENSO guide (<http://www.bom.gov.au/climate/enso>).
2. Assume La Nina years (100%) and sunspot minima years (25%).
3. Analog Water Years (October 1 to September 30): 1944, 1945, 1950, 1951, 1955, 1956, 1963, 1965, 1968, 1974, 1975, 1976, 1985, 1986, 1989, 1996, 1997, 1999, 2000, and 2006.
4. Multivariable ENSO Index: (<http://www.cdc.noaa.gov/people/klaus.wolter/MEI>)
5. Sea Surface Temperature departure forecasts:
(http://www.cpc.ncep.noaa.gov/products/people/wwang/cfs_fcst/images/glbSSTMonMask.gif)
6. Sunspot data: (ftp://ftp.ngdc.noaa.gov/STP/SOLAR_DATA/SUNSPOT_NUMBERS/MONTHLY).
Late Dr. Landscheidt's Solar Model: (<http://www.john-daly.com/theodor/new-enso.htm>)

Winter 2007 - 2008 Climate Forecast for Portland:

Month:	Temperature (mean monthly):	"Hedge" "	Precipitation (% normal):	"Hedge" "
November	Near Normal (-1.8 to + 1.8 degF)	0.1	Above Normal (110 - 130%)	128%
December	Near Normal (-1.8 to + 1.8 degF)	-0.1	Near Normal (90 - 110%)	90%
January	Near Normal (-1.8 to + 1.8 degF)	0.6	Near Normal (90 - 110%)	109%
February	Near Normal (-1.8 to + 1.8 degF)	-0.8	Near Normal (90 - 110%)	106%
March	Near Normal (-1.8 to + 1.8 degF)	-1.2	Near Normal (90 - 110%)	102%

Snow (% probability): November 35%, December 70%, January 85%, February 70%, March 75%.

Snow (inch): Nov. 0.7 (+/- 2.1), Dec. 1.4 (+/- 2.8), Jan. 3.6 (+/- 9.7), Feb. 0.8 (+/- 1.7), March 1.1.

Water Supply Forecast (Columbia River at The Dalles), January - July 2008, Million-Acre-Feet:

CRITFC (MEI method), updated Nov. 6, 2007: **115.8 MaF** or 108% of normal.

CIG's VIC Hydro model, updated Nov. 6, 2007: **98.2 MaF** or 92% of normal.

NOAA-NWS-NWRFC (ESP method), updated Nov. 6, 2007: **106.3 MaF** or 99% of normal.

VERIFICATION: Winter 2006 – 2007, CRITFC Climate Forecast vs. Observed Data for Portland:

Month:	Temperature (mean monthly):	"Hedge"	Observed	Precipitation (% normal):	"Hedge"	Observed	
November	Near Normal (-1.8 to + 1.8 degF)	0.3	1.6	Below Normal (70 - 90%)	86%	212%	
December	Near Normal (-1.8 to + 1.8 degF)	-0.2	-0.2	Near Normal (90 - 110%)	97%	103%	
January	Near Normal (-1.8 to + 1.8 degF)	1	-1.8	Near Normal (90 - 110%)	95%	54%	
February	Near Normal (-1.8 to + 1.8 degF)	0.2	1.1	Below Normal (70 - 90%)	79%	83%	
March	Near Normal (-1.8 to + 1.8 F)	0.6	2.9	Near Normal (90 - 110%)	91%	87%	
average:		0.4	0.7	average:		90%	108%

WY 2007 Water Resources Forecast (Columbia River at The Dalles):

CRITFC (Kyle's) prediction: 96 MaF (90% of normal).

CIG (UW) prediction: 105.5 MaF (98% of normal).

NOAA-NWS-NWRFC prediction: 98.5 MaF (92% of normal).

The observed, unregulated runoff was 95.7 MaF (January – July).

The best preseason 2006-07 forecast goes to CRITFC.