



Winter Outlook (2014-2015)

Yamhill County

Winter Weather Planning Meeting

October 23, 2014



Tyree Wilde Warning Coordination Meteorologist National Weather Service Portland, OR







Overview

- Weather Ready Nation
- Tools for Decision Making
- Recap Winter 2013-2014
- Winter Outlook (2014-2015)







Some vehicles are abandoned in Tillamook.





Are you Ready for Winter?

We're hear to help Decision Assistance Building Community Resilience







Working Together → WRN

 A perfect forecast doesn't mean a perfect outcome for the community

"Craig Fugate, FEMA Administrator"

- We must work together to build community resilience
- Weather Ready Nation







Weather-Ready Nation

National Oceanic and Atmospheric Administration



The Weather-Ready Nation initiative is one year old. Since its inception, NOAA has been busy launching new pilot projects, upgrading technology and working with partners to increase the country's resiliency to weather-dependent events







Weather Tools for Decision Making





Being Weather Ready & Staying Informed





 How far out can we tell you about a significant weather/flood event?

5 to 7 Days (Heads up)

24 to 36 hours (Watch)

0 to 12 hours (Warning)



Multi-Media Briefings

Virtual Briefings

Weather-Ready Nation

National Oceanic and Atmospheric Administration





Being Weather Ready Staying Informed

- iNWS
 - cell phone application
 - https://inws.wrh.noaa.gov/user/register

- NWS Webinars
- Email briefings
- YouTube multi-media briefings
- Phone (always welcome)



URGENT - WINTER WEATHER MESSAGE NATIONAL WEATHER SERVICE PORTLAND OR 951 PM PST WED FEB 23 2011 LOW ELEVATION SNOWFALL EXPECTED THROUGH FRIDAY MORNING UNSEASONABLY COLD WEATHER FOR LATE FEBRUARY IS BRINGING SNOW TO LOW ELEVATIONS ACROSS THE FORECAST AREA. A COLDER AIR MASS WILL MOVE INTO THE REGION TONIGHT AND THURSDAY...WITH ACCUMULATING SNOW DOWN TO THE BEACHES AND VALLEY FLOOR THROUGH FRIDAY MORNING Home My Alerts News FAO About Login Register LSiNWS - Interactive NWS ional Weather Service Mobile Decision Support Services (MDSS) **INWS MOBILE ALERTING** Receive customized text message and e-mail alerts for National Weather Service products that you care about Welcome. Recent News. New iNWS Terms of Use Are In Effect InteractiveNWS (INWS) is the home of new mobile and desktop innovations of the National Weather Service, This application suite Text Message Alerts Unlocked for All iNWS Users allows NWS partners to receive National Weather Service products in new and innovative ways, such as text messaging and mobile-enabled webpages. iNWS strives to fulfill our mission of protecting life and property by using new technology to reach out to our customers. warning in this area til 4:15PM EST. iNWS is an experimental service intended for NWS core partners, including emerg Take Shelter Now government agencies only. You are encouraged to complete a short survey on MWS. Check Local Media DOC - NDAA - National Weather Serivce - INWS Version 4 -

WWUS46 KPOR 240551

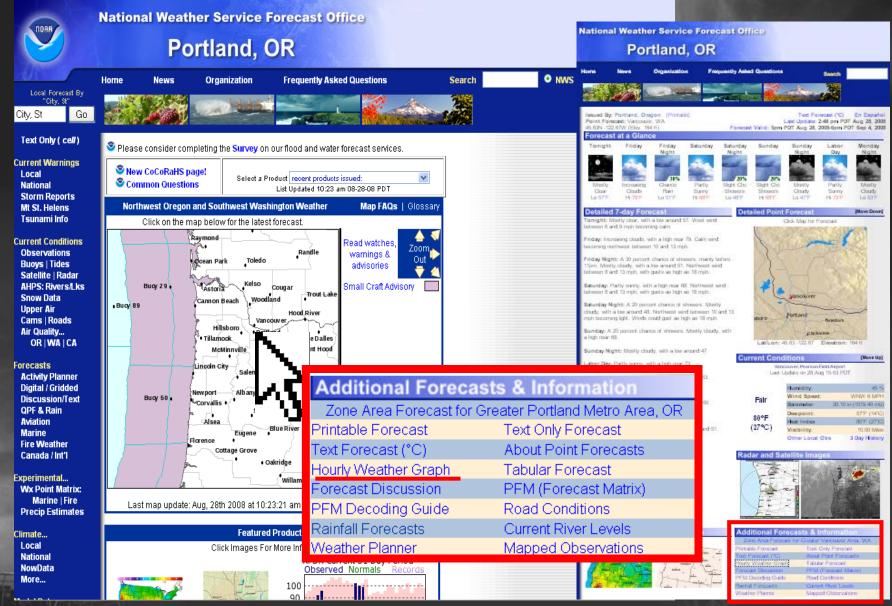
WSWPOR



Point Forecasts



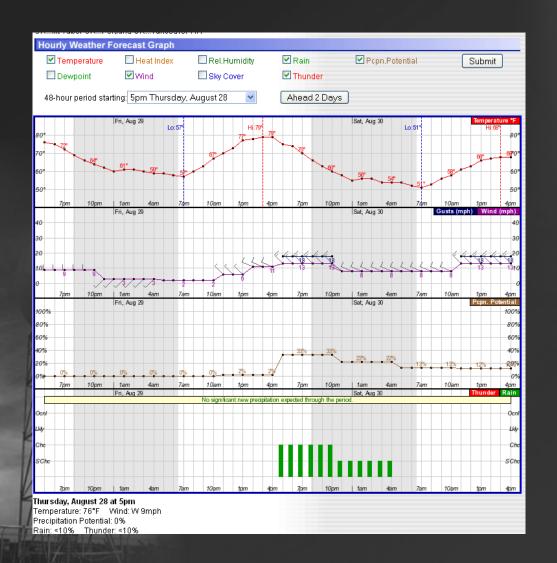
(weather.gov)





Hourly Weather Graphs



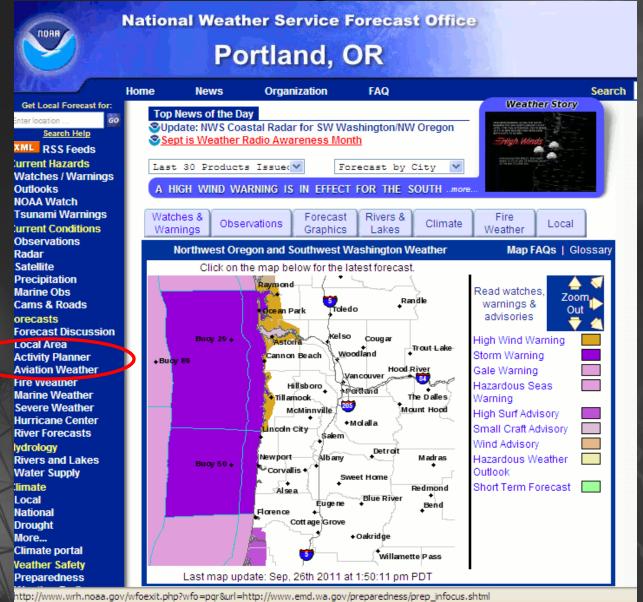


National Weather Service Forecast Office Portland, OR eued By: Portland, Oregon (Proteble Last Update: 2:48 pm PDT Aug 28, 2008 Foreign Valid: Sem POT Aug 28, 2008-Sem POT Sep 4, 2008 inday: Increasing clouds, with a high near 79. Gain wind Finday Night: A 30 parcent chance of shawers, marry before bly cloudy, with a low around ST. Northwest wind steeps as tight as stage the . Aum E1 beach as tight as 18 moh. Saturday: Partly surry, with a high near 68. Northwest wind east 8 and 13 mph, with guida as high as 18 mph. Saturday Night: A 20 percent charcs of showers. Westly Soudy, with a low around 48. Northwest wind between 10 and 13 on becoming light. Winds could guilt as high as 18 min. Sunday Night: Mostly cloudy, with a low around 47. Labor Day: Partly surry, with a high mair 73. Vencouver, Pearson Field Airport Last, Update on 28 Aug 15:10 POT Monday Night: (Violity cloudy, with a low around 53) useday: Partly survey, with a high mor 75 Wind Speed Fuenday Night: Mostly cloudy, with a low around 50 STE (MC Wednesday: Partly surry, with a high miar 74. Wednesday Night: Mostly cloudy, with a low around 51. Visibility. 10.00 NWs 3 Day History Inunday: Partly surery, with a high near 74 Phyrial Forecasts













NWS All NOAA Go

Activity Planner



Home

National Weather Service Forecast Office

Portland, OR

National Weather

Port

Home

News
Weather Activity Planner for 45 34°N 121 72°W

Point Forecast: 3 Miles NE Government Camp OR

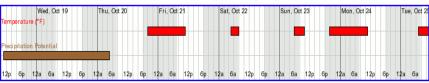
Weather Activity Planner

This interactive forecast display is intended for general planning purposes. Data entered may have been changed for accuracy. Please verify the below data is appropriate. All wind direction information should be entered in a clockwise direction (using compass directions i.e. E, ESE, SE, etc.). Public comments and suggestions are encouraged.

Organization

This application generates products from a digital forecast data base. It is intended to allow a user to define and produce a forecast for general planning purposes only. As any weather or hydrologic event evolves, updated forecasts and warnings are issued by the NWS. Customers are urged to obtain the latest official forecast information prior to engaging in any weather sensitive activity, and to monitor forecasts for updates during such activities.

The Weather Activity Planner is NOT meant to replace a spot forecast request. Weather Activity Planner surface winds are a gridded representation of projected, local surface winds at a 5km or 2.5km resolution. The surface winds returned do NOT account for fuel type, sheltering or slope aspect. Users can select either surface wind speeds or 20 foot winds (lift the 20 foot wind grid is available). If precise wind forecasts are needed, please submit a spot forecast request to your servicing Weather Forecast Office.



Tuesday, October 25 at 6am Temperature: 37 °F

Precipitation Potential: 22%

48-hr Element Meteorogram

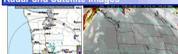
Search for:

Interactive

Element	Min		Max	Element	Min		Max
Temperature (°F)	30	to	36	Surface Wind Speed (mph)		to	
Relative Humidity		to		Sky Cover		to	
Surface Wind Speed (mph)		to		Precipitation Potential	0	to	20

Latitude/Longitude Entry
decimal degrees (i.e. 42.134) or deg min sec (i.e. 42.23.34)
Use "-" (negative sign) in longitude for locations in Western Hemisphere
Latitude: 45.3275 Longitude: -121.7159 Submit

Radar and Satellite Images



Additional Forecasts & Information

International System of Units Forecast Discussio
7-Day Forecast Tabular Forecast
Quick Forecast

PFM (Forecast Matrix) PFM Decoding Guide



Observations



12:55



Get Local Forecast for

Text Only (cell)

Current Warnings Local National Storm Reports **eSpotter** Mt St. Helens Tsunami Info

Current Conditions Observations Buoys | Tides

AHPS: Rivers/Lks **Snow Data** Upper Air CoCoRaHS Cams | Roads OR | WA | CA

orecasts

Activity Planner Digital / Gridded Discussion/Text QPF & Rain QPF & Rain Aviation Aviation Marine Marine **Water Supply** Water Supply **Fire Weather** Fire Weather Canada / Int'l Canada / Int'l

Experimental... xperimental... Wx Point Matrix: Marine | Fire **Precip Estimates Precip Estimates**

Climate... Local Local **National** NowData More... More...

Model Data Graphics Guidance Meteograms

Weather Safety Weather Radio Safety Info SkyWarn™ COOP Prg.



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Text Only (cell)

Current Warnings Storm Reports **eSpotter** Mt St. Helens Tsunami Info

Current Conditions Observations Buoys | Tides Satellite | Radar

AHPS: Rivers/Lks Snow Data Upper Air CoCoRaHS Cams | Roads Air Quality... ORIWAICA

Forecasts

Activity Planner Digital / Gridded Discussion/Text

Wx Point Matrix: Marine | Fire

National NowData

Model Data Graphics Guidance Meteograms

Weather Safety Weather Radio Safety Info SkyWarn™ COOP Prg.

National Weather Service Mesonet Observations

Click on Station for Tim

56 51

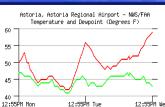
-Quick Zooms-

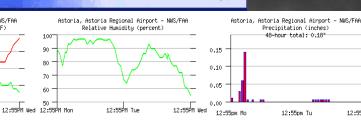
Warrenton

Cannon

56

Long Beach





Weather Conditions for:

Astoria, Astoria Regional Airport, OR (KAST) Elev: 10 ft; Latitude: 46.15694; Longitude: -123.88250

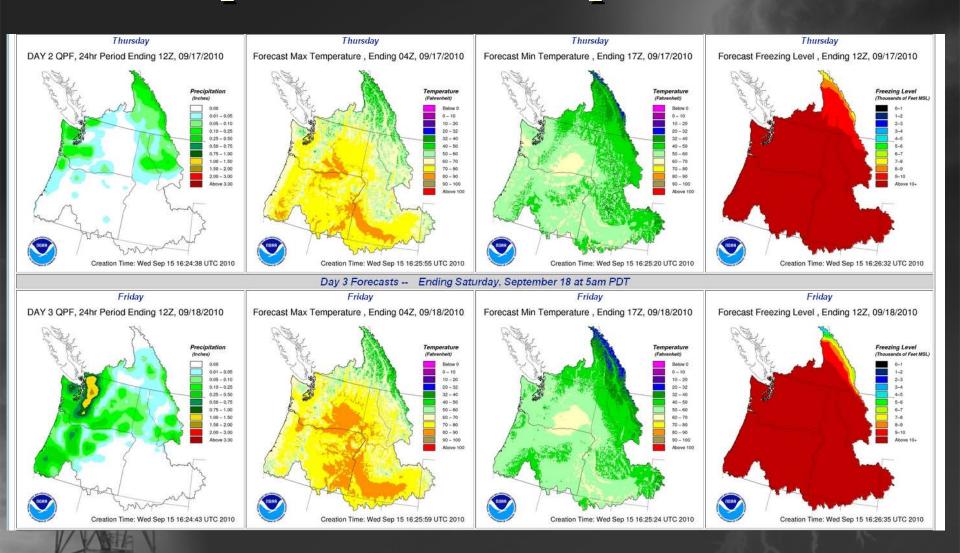
Wed, 09 Nov 1:40 pm (PST) Most Recent Observation: Wed, 09 Nov 12:55 pm PST (PST)

350					- 1													
	Time	Temp		Relative			Visibility	WX	Clouds	Sea Level				Precip				
3					Directio						_	Pressure						
1	(PST)	(f)	(f)	(%)	-0-		(miles)		OVCOAF	(mb)		(inches)	(inches)	(inches)	(inches)	(inches)	Temp	Temp
	09 Nov 12:55 pm PST		43		ESE	10	10.00		OVC045	1021.5	30.17	30.168						
	09 Nov 11:55 am PST		44		ESE	8	10.00		OVC043	1022.0	30.18	30.178						
	09 Nov 10:55 am PST		44		ESE	8	10.00		BKN041 OVC060	1022.4	30.19	30.188						
9	09 Nov 9:55 am PST	55	46		ESE	12	10.00		FEW043 BKN060	1022.3	30.19	30.188					55	51
	09 Nov 8:55 am PST	54	45		ESE	7	10.00		BKN040 BKN050	1022.3	30.19	30.188						
1/0	09 Nov 7:55 am PST	52	45		ESE	8	10.00		FEW049	1022.2	30.19	30.188						
	09 Nov 6:55 am PST	52	45		ESE	6	10.00		OVC049	1021.8	30.18	30.178						
	09 Nov 5:55 am PST	52	46		SE	7	10.00		SCT038 OVC045	1021.9	30.18	30.178						
	09 Nov 4:55 am PST	51	47		ESE	7	10.00		OVC030	1021.8	30.18	30.178						
53	09 Nov 4:44 am PST	52	46		ESE	7	10.00		OVC030		30.18	30.178						
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A	09 Nov 2:55 am PST	51	46		ESE	7	10.00		OVC026	1021.9	30.18	30.178						
灣	09 Nov 1:55 am PST	51	46		ESE	8	10.00		OVC026	1022.0	30.18	30.178						
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/5	08 Nov 2:55 am PST	44	43	96	SE	3	10.00		FEW055	1023.9	30.24	30.238						
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耐	08 Nov.12:55 am PST	46	45		SSE	5	.10.00				30.26	30.258		T				





Precipitation & Temp Forecasts





How High will the River Get?



Advanced Hydrologic Prediction Services



Current Warnings Local National Storm Reports

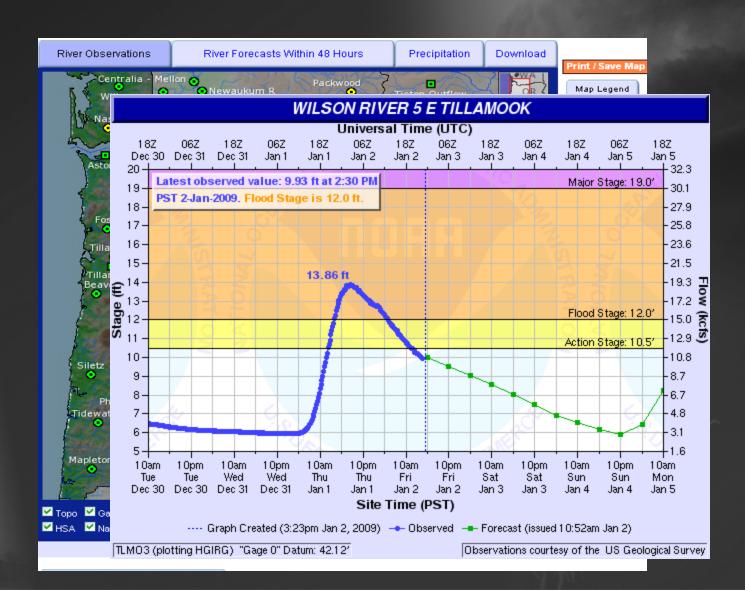
Mt St. Helens Tsunami Info

Current Conditions Observations Buoys | Tides Satellite | Radar

AHPS: Rivers/Lks Snow Data Upper Air Cams | Roads Air Quality... OR | WA | CA

Forecasts

Activity Planner
Digital / Gridded
Discussion/Text
QPF & Rain
Aviation
Marine
Fire Weather
Canada / Int'l





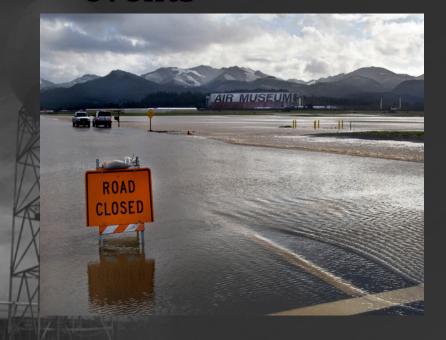
The Future



Building a Weather-Ready Nation

• Building Community Resilience

 Working with <u>you</u> to prepare for and respond to significant weather / flood events







Decision Support Services



Virtual Briefings

Impact based Warnings

IMET Services

Multi-Media Briefings Exercises with Customers

EWARN & iNWS

Wx Story

Seasonal Workshops

IRIS – Customer Impacts Digital
Database
(NDFD)

Internet

IPAWS

Commercial Mobile Alert System





What happened last winter? Winter Recap

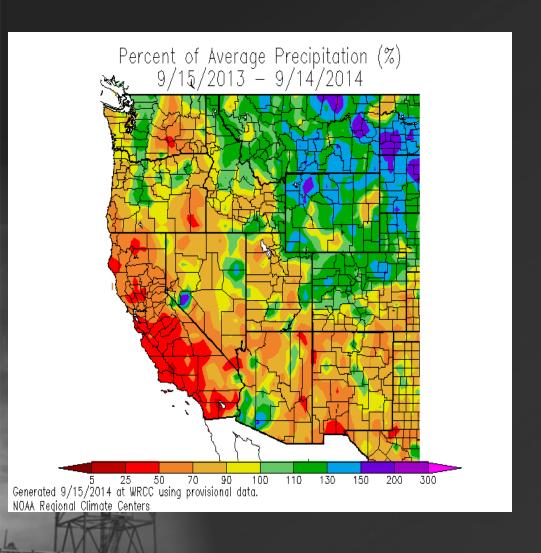
2013-2014







Recap - Winter 2013-14



- Precipitation -
 - Cascades: near normal
 - Coast: 70-90% of normal
 - Valley: 70-80% of normal
- Mountain snow
 - Slightly below normal north Cascades
 - Much below normal south Cascades

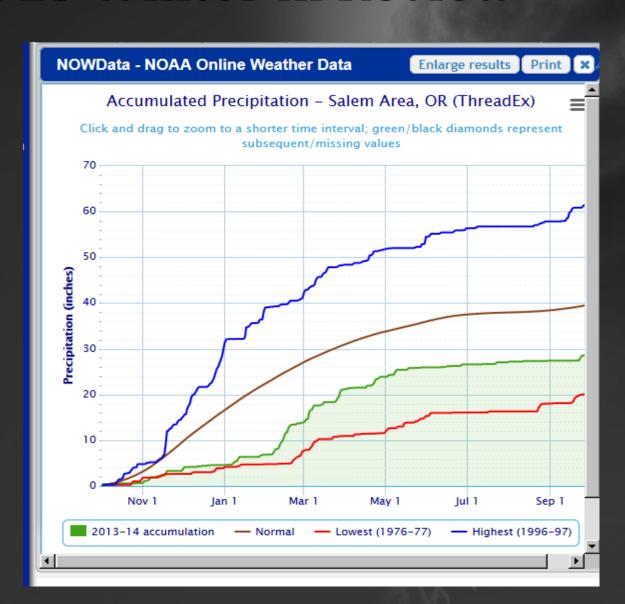




2012-2013 Winter in Review

Astoria rainfall

Oct 2013-Sep 2014





But we had this!

• Feb 6-9 snow & ice storm













How about this Winter?

Winter Outlook 2014-2015

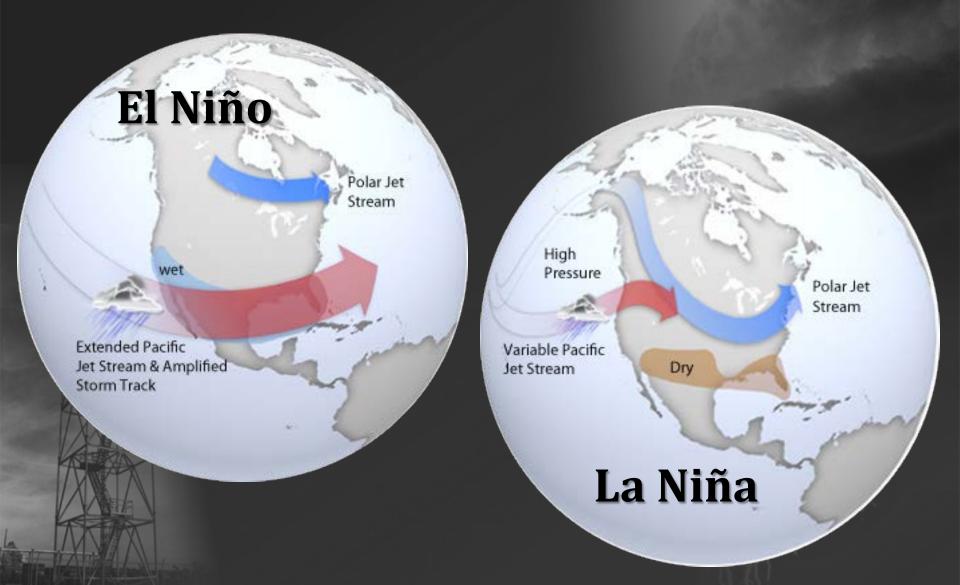








El Niño vs. La Niña







DEATHER SECTION OF THE PROPERTY OF THE PROPERT

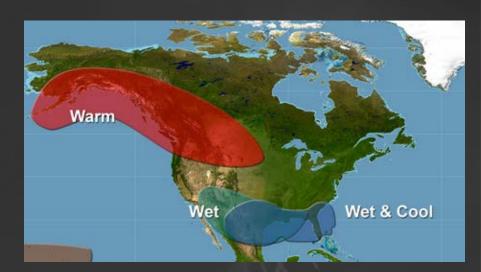
La Niña

- Cooler than average waters in the central and eastern tropical Pacific
- Cooler temperatures with an increase in precipitation.



El Niño

- Warmer than average waters in the central and eastern tropical Pacific
- Warmer temperatures and a decrease in precipitation



Winter Conditions



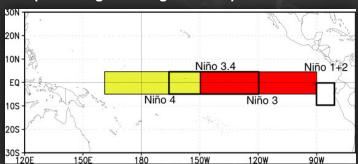
ENSO Status



- Neutral conditions
- Neutral conditions since Autumn 2012
- Expected to transition to weak El Niño



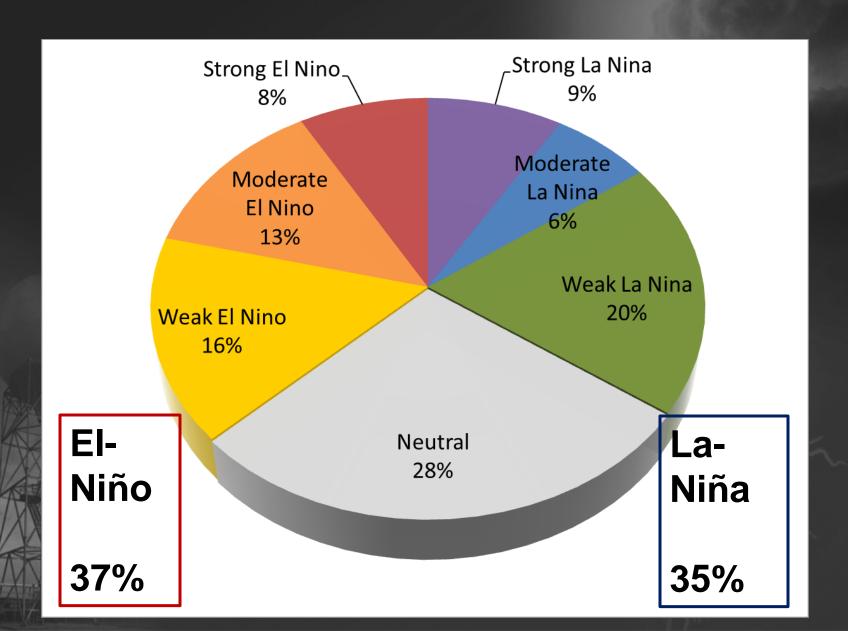
Map showing NINO regions in Equatorial Pacific







ENSO Occurrence

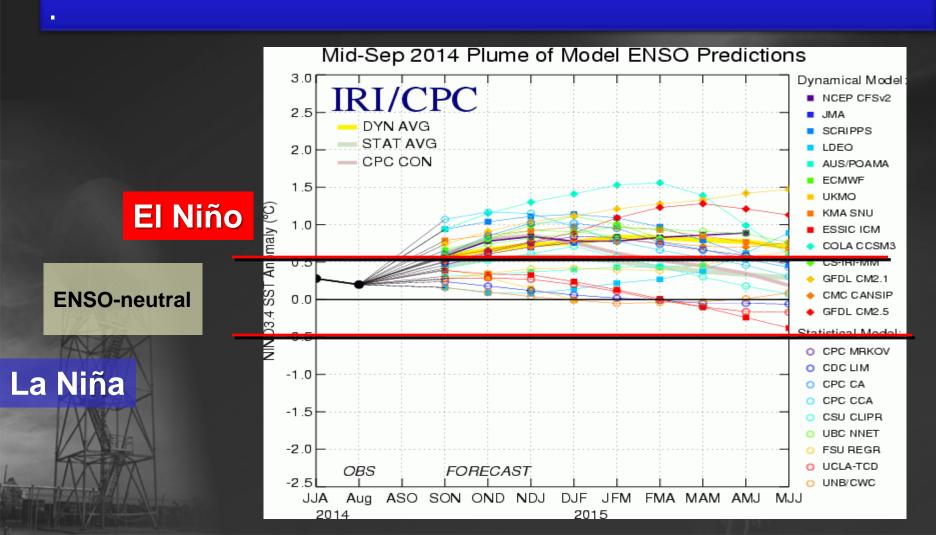






Climate Model Predictions

Climate models predict a weak El-Nino will develop in the Oct-Dec 2014 time frame and persist into the early winter of 2015



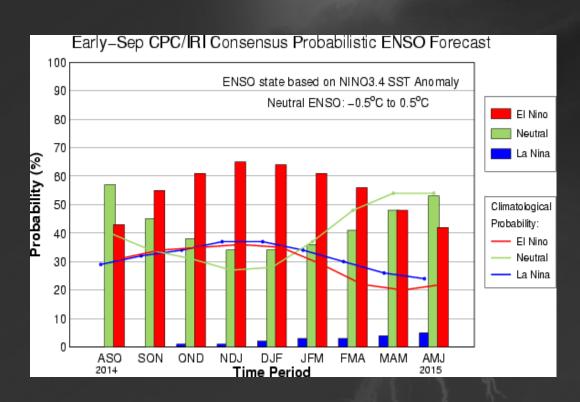




ENSO Projections

- Neutral conditions currently
- Forecast is for weak El-Nino to develop later this fall
- The chance of El-Niño is at 60-65%

Climate Prediction Center / International
Research Institute for Climate and Society
Consensus Probabilistic ENSO Forecast







Winter Outlook Dec 2014 - Feb 2015

Temperature

Precipitation



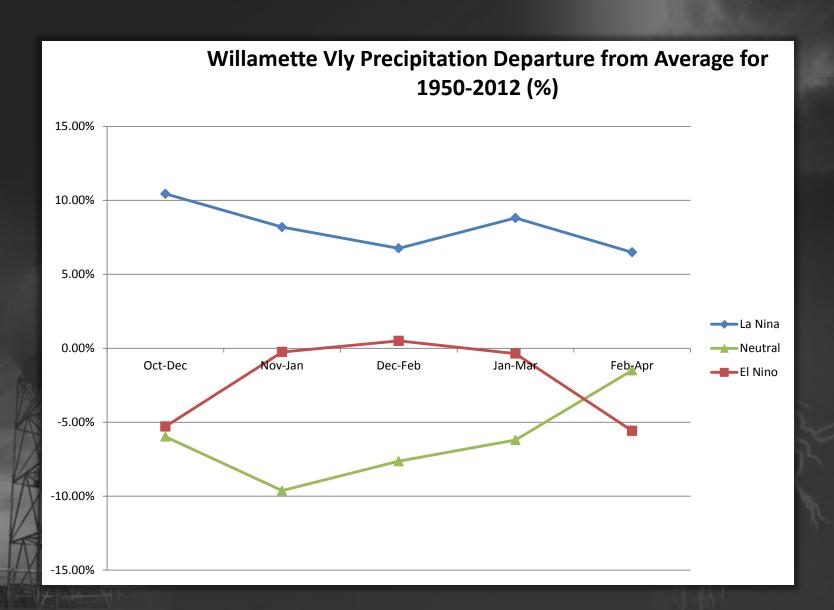








Willamette Valley Precipitation







In Summary

- ENSO Neutral conditions continue
- Chance of El Niño developing is at 60-65% this winter
- Can expect this Fall/Winter to be (on average):
 - Temperature: 40-50 % chance of above average
 - Precipitation: 30 % chance of below average
 - Snowpack: Likely below average

As always, be prepared for the any type of extreme weather Mother Nature sends our way in Oregon this winter!



Questions?



POC: Tyree Wilde, NWS Portland tyree.wilde@noaa.gov 503-326-2340 x223