



# SKYWARN® Spotter News

www.weather.gov/seattle

FALL 2011

NATIONAL WEATHER SERVICE - SEATTLE/TACOMA

## Fall Has Arrived...

Summer started late and finished late. What a nice August and September! But October is here and the days are shorter, nights are longer, leaves are turning color, and the rainy season has begun. Fall is here and our winter storm season is upon us.

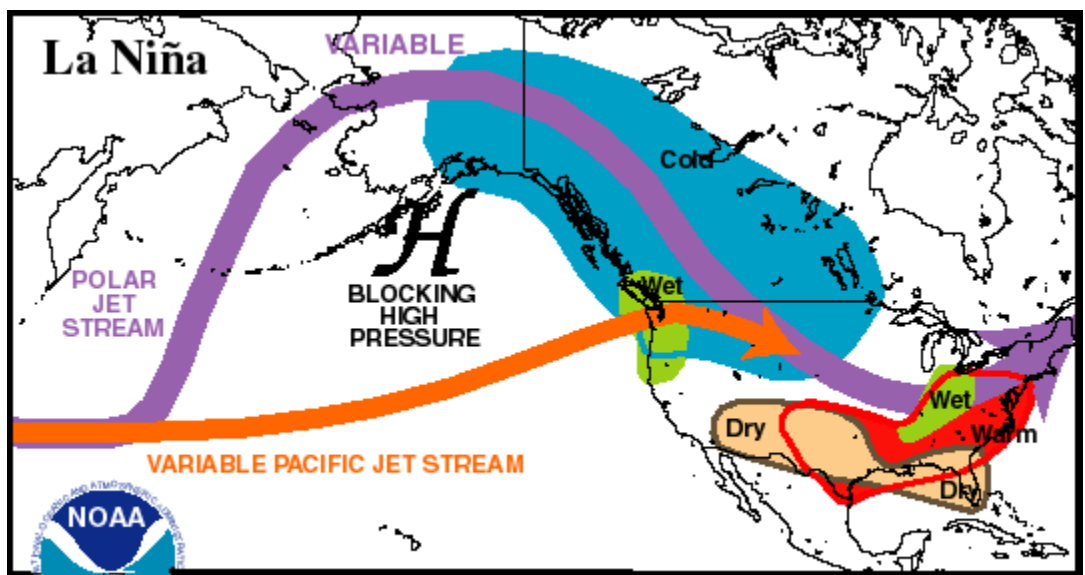
October marks the start of our wind storm season and runs through early March. Our flood season usually begins in November and rolls through February. Mid November is when our lowland snow season can begin and extends into early March. And we have had a taste of all of these events the past few winter seasons.

So, what is the outlook for this winter? We had La Nina last winter – cooler than normal equatorial sea surface temperatures in the central and eastern Pacific. These tropical waters warmed up during the spring and summer, but have been cooling since August for what now appears to be a back-to-back La Nina for this winter season. This means that jet stream at our latitude should steer our share of Pacific weather systems here this season and we are just beginning to see that trend.

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Typical La Niña Weather Pattern



**Spotter  
Training  
coming to  
Island,  
Mason,  
Kitsap and  
Snohomish  
counties**

## Spotter Training Update

Spotter training sessions are planned this fall in Island, Mason, Kitsap, and Snohomish counties as well as for Kent/Federal Way and Tacoma. Training announcements are available now on our web site headline at [www.weather.gov/seattle](http://www.weather.gov/seattle). Also watch your mailbox for training announcements near you. In addition, other training events may be scheduled into early 2012.

The training helps new and veteran spotters, including interested citizens, amateur radio, law enforcement personnel and many others. If you want to attend one of these sessions, please RSVP with your local emergency management. If you wish to arrange spotter training near you, again contact your local emergency management agency. We look forward to seeing you at a training

## WANTED: SPOTTER REPORTS

Many spotters feel their reports may not be important or needed. Oh, contraire!! If you are experiencing strong winds, accumulating snow, or any other spotter report criteria, contact us! These event-driven reports help support warning messages in effect, are reported by the press, help emergency management officials better determine where to deploy their limited resources, encourage people to take action to stay out of harm's way, and verify our warnings. So, don't be shy to contact us when needed !!

## Coastal Radar Now in Service!

The new coastal Doppler weather radar at Langley Hill became operational near the end of September. Langley Hill is about 3 miles east of Copalis Beach on the central Washington coast. You can view the coastal radar output via our web site at [www.weather.gov/seattle](http://www.weather.gov/seattle). You will note that the roughly 125 nautical mile range includes the west entrance of the Strait of Juan de Fuca and a part of Vancouver Island, the mouth of the Columbia River and parts of northwest Oregon, and inland throughout much of southwest Washington and into the south and central Puget Sound region.

A dedication ceremony was held on September 29th with Senator Maria Cantwell, Congressman Norm Dicks and other dignitaries on hand including the NWS Director Jack Hayes.

The coastal radar joins the Camano Island, Portland, Spokane and Pendleton Doppler radars in covering Washington. The Olympics blocked much of the Camano Island radar signal from reaching the coastal region, and higher coastal mountain terrain blocked the Portland radar signal as well. So the new coastal radar covers the coastal region and extends well offshore, giving forecasters a new observational tool as Pacific weather systems approach the coast and move onshore. The radar will play a role in fine-tuning short-term forecasts and warnings, particularly regarding a storm's intensity with wind and precipitation.

The coastal radar also had new dual-polarization technology installed. In fact by the end of October, all five WA Doppler weather radars will have this new technology. What is dual-pol? Current Doppler weather radars send signals out horizontally. Dual-pol sends both horizontal and vertical signals, providing a more 3-D view of the precipitation targets. Enhanced dual-pol radar products include anticipated better precipitation estimates as well as where the rain/snow elevation is.

For much more about dual-polarization, visit [www.wdtb.noaa.gov/courses/dualpol/outreach/](http://www.wdtb.noaa.gov/courses/dualpol/outreach/)



Senator Maria Cantwell speaks at the dedication ceremony along with Congressman Norm Dicks (left) and NWS Director Jack Hayes (right)



Langley Hill radar, KLGX

**La Nina  
conditions  
are forecast  
this winter.  
Are you  
ready for La  
Nina?**

## Fall cont...

Cont from page 1...The National Weather Service Climate Prediction Center's latest outlook for the Pacific NW currently indicates the odds on temperatures will become cooler in early 2012 and precipitation for this fall and winter has increased odds on wetter than average conditions – typical for La Nina. La Nina's tend to produce healthy mountain snow packs. This year's may get off to a slow start thanks to mild temperatures this fall, but then the snow should pile up in early 2012.

Last year's La Nina involved some of the coldest tropical sea surface temperatures in the last 60 years. This season's is not expected to be as cool as last winter season. The seasonal outlooks are updated on the third Thursday of each month. Monitor our web page at [www.weather.gov/seattle](http://www.weather.gov/seattle) for the latest outlook.

So, what does a La Nina winter mean for us? Historically, La Nina winters have brought us an active winter season with a variety of wind storms, floods and lowland snow events. When compared to El Nino (warmer sea surface temperatures) and 'neutral' winters, La Ninas rank a close number two for Atmospheric River (aka - Pineapple Express) flood events, and number one for strong damaging wind storms and lowland snow events. We may not get any of these events, but the odds are in favor of at least one if not many significant weather events and they can occur at any time this winter. The best time for an atmospheric river or wind storm is this fall, while lowland snow event prime time would be early in 2012.

As a weather spotter, now is the time to prepare your home and business, and brush up on your winter weather reporting criteria. Ensure your rain gauge is clean, free of obstructions like trees and structures, and ready to go. Ensure your anemometer is in good operating order. If you do not have an anemometer, have your Beaufort scale handy. In addition, ensure your snow boards and marking flags are ready to be placed in an unobstructed location, usually near your rain gauge. When prepared, you'll be ready to report any heavy rainfall amounts, strong winds and snow amounts. To top it off, fall is our secondary maximum for thunderstorms during the year.

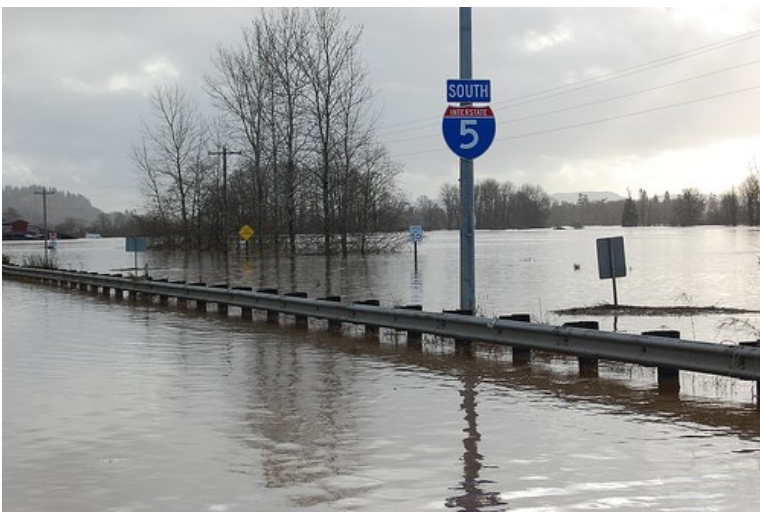
While you are preparing, do you have your minimum three-day preparedness kit for each person ready in case you need to evacuate for a flood event, or the power goes out for an extended period of time? In the wake of recent major disasters around the U.S. and the world this year, having a mobile preparedness kit is essential for each family member and business employee, and you may need those supplies for far more than just three days as demonstrated by recent major hurricanes and tsunamis. For complete information about preparedness kits and what to have in them, refer to [www.redcross.org](http://www.redcross.org) or [www.emd.wa.gov](http://www.emd.wa.gov), or pick up a preparedness kit brochure at your local Red Cross chapter or emergency management office. Have a safe winter and we look forward to your weather spotter reports this season!

# Spotter Trivia

If this winter is forecast to have increased odds on above average precipitation, what does average precipitation mean? Match up the total for October, November, and December average precipitation for these locations in western Washington. The answers will appear elsewhere in Skywarn Spotter News. This one is not easy. Good luck !!

Oct/Nov/Dec Normal Precip Total

|                        |       |
|------------------------|-------|
| Forks                  | 30.75 |
| Port Angeles           | 20.48 |
| SeaTac Airport         | 10.71 |
| Glacier Ranger Station | 47.26 |
| Olympia                | 14.97 |
| Longmire - Mt Rainier  | 26.25 |



I-5 underwater near Centralia,  
Dec 2007

# SKYWARN Recognition Day

This year's Skywarn Recognition Day is Saturday, December 3rd. This annual nationwide event held on the first Saturday in December has been around since the 1990s.

NWS Seattle will once again participate using the K7MMI repeater system in western Washington at 147.20 MHz along with HF and other channels and means. Look for more information on this event from your local amateur radio managers as the date grows closer.

And as a reminder, during major weather events as well as during exercises and other major hazard events like a major earthquake, NWS Seattle, WX7SEA, is permitted to use the K7MMI repeater system since it covers nearly all of western Washington and has the capability to connect to eastern Washington.

Additional information found here: [www.wrh.noaa.gov/mtr/hamradio](http://www.wrh.noaa.gov/mtr/hamradio)



# Time to Clean Your Rain Gauge!

Each rain droplet has a microscopic dust or dirt nucleus. After a period of time, the microscopic nuclei collection looks like a bathtub ring near the bottom of the gauge. It only takes a few minutes to clean the gauge and helps produce more accurate precipitation measurements.

Pour some bleach and hot water into the gauge or measuring tube. Allow it to sit for a while, then rinse it with hot water. That's all there is to it! If the sediment and green "stuff" persists, it may take a few more rounds of soaking and cleaning.

Another cleaning alternative is to use denture cleaning tablets and warm water. Soak for a few hours, rinse out, and it will look practically brand new and ready for this winter!

## CoCoRaHS Update

Thanks again to all the CoCoRaHS spotters across the region. We now have over 860 registered "CoCoRaisins" across WA. Way to go! Our goal is 5000 observers across the state. We look forward to meeting new volunteers in the months to come!

Our wet season is here and we need more rainfall reporters across the region. Your data is valuable to us here at NWS. We use CoCoRaHS reports to study precipitation variability across our geographically diverse area. Your lowland snowfall reports were crucial last winter, especially Nov 22nd. Your reports also help verify the radar algorithms and precipitation estimates...including the new coastal radar (see article on page 3).

If you haven't done so already, please check out [www.cocorahs.org](http://www.cocorahs.org) for more information about the CoCoRaHS program. There's no limit to the number of observers...so join today!



# National Weather Service Seattle

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## Climate Newsletter

The Office of the Washington State Climatologist produces a monthly weather summary that is available online or by email. Check out the summer review. To view OWSC's latest newsletter please visit:

[www.climate.washington.edu/newsletter](http://www.climate.washington.edu/newsletter)

## Feedback!

Your feedback is wanted! Please let us know ...

What would you like to see in future Skywarn newsletters?

Additional spotter training?

CoCoRaHS training?

Comments or questions?

Contact [jeff.michalski@noaa.gov](mailto:jeff.michalski@noaa.gov)

## Trivia Question Answers

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