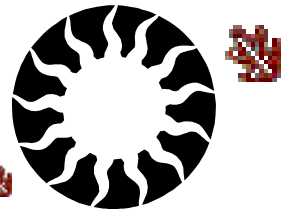


The Weather Watcher

of the Inland Northwest

www.weather.gov/Spokane



La Niña is Developing

NOAA Scientists at the Climate Prediction Center released the latest long term forecast and discussion that hint that La Niña is on its way. Although they can't officially call it 'La Niña' yet, they expect the pattern to continue to develop during the next three months. Nearly all operational dynamic and statistical models favor a La Niña event for the upcoming cold season.

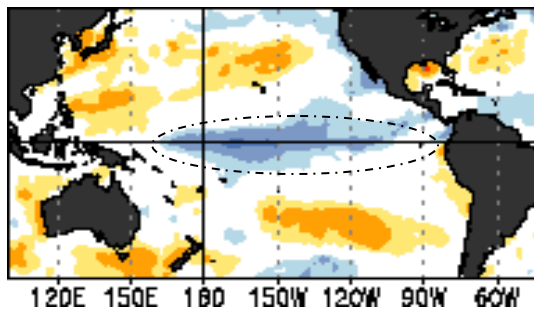
La Niña refers to the periodic cooling of ocean surface temperatures in the central and east-central equatorial Pacific ocean that occurs every three to five years. NOAA declares the onset of a La Niña event when the three month average sea surface temperature departure exceeds -0.5°C (-0.9°F) in the east-central equatorial Pacific (between 5° North and 5° South latitude and 170° and 120° West longitude).

The development of La Niña conditions is supported by increasing cooler sea surface temperatures across the central and eastern equatorial Pacific and stronger-than-average easterly winds across the west central equatorial Pacific. With La Niña developing, seasonal forecasters expect wetter-than-normal conditions in the Pacific Northwest (especially west of the Cascades) and drier-than-normal conditions in the already drought-stricken southwest U.S. this fall.

The long range outlook for the Inland Northwest this autumn indicates a greater than

normal chance of precipitation and near to slightly above normal temperatures through November. So far, the winter outlook looks about the same with a better chance of above normal precipitation extending into January with near normal temperatures. La Niña winters can bring varying weather to the Inland Northwest. The last La Niña episode was in 2000-01. For more information on the long range forecasts and the La Niña, see <http://www.cpc.ncep.noaa.gov> for more details. ☀

Robin Fox



In this map of the Pacific ocean, the area to experience the cooler than normal waters of La Niña lies in the dotted oval and extends off the west coast of South America near the equator toward Indonesia and Australia.

A Thundering Start to the Labor Day Holiday

What a start to the Labor Day weekend with strong winds, hail and heavy rain! After a very long period of little to no precipitation, the rain was likely a welcomed event for many of us. Not so for agencies such as the Bureau of Land Management (BLM), U.S. Forest Service, and Washington State Department of Natural Resources (DNR). The thunderstorms that moved through the region on Friday, August 31st produced abundant lightning. Given how dry conditions had been prior to this event, there was the potential for numerous wildfire starts.

How did these thunderstorms develop? A cold front moving in from the Pacific interacted with an increase in monsoonal moisture from the south. All the ingredients were present for thunderstorms, including moisture, instability and lift. Thunderstorms started Friday afternoon across northeast Oregon and moved north into southeast Washington and north central Idaho. A Severe

Thunderstorm Watch was issued by 2 pm PDT for much of the Columbia Basin and adjacent portions of north Idaho. The first warning was issued for Whitman county just before 6 pm PDT. Severe thunderstorms were issued for Whitman, Adams, Lincoln, Stevens, Spokane, Kootenai, and Bonner counties between 6 and 9 pm. There were many spotter reports, ranging from quarter size hail, winds strong enough to knock down trees and power poles, and heavy rain leading to ponding of water on roadways and ditches.

The National Weather Service would like to thank all of our spotters who called us that night with reports! We received valuable information that helped us make our decisions. Thank you for your help! ☀ Laurie Nisbet

INSIDE THIS ISSUE:

Wx Radio Month	2
Spotter/Coop News	2
Summer Review	3
NWS Open House	4
200th Anniversary	4

Editor's Notes

The seasons are changing and our hot summer will be just a memory and a new entry in the record books. Now is a time to get ready for winter and the cold season.

For spotters and observers, remember to let us know when you get your first snow. Even if it's just a trace or a dusting, we want to know. Just give us a call or send in a report.

It is also a time to get your vehicle geared up for winter weather. Check fluids and make sure they are at proper levels. Make sure your tires are ready for snow and ice.

For any questions or comments on the newsletter, please contact Robin or Kerry at (509) 244-0110 extension 223 or email nws.spokane@noaa.gov.

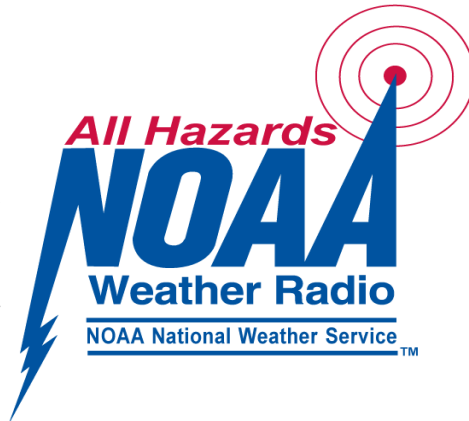
The main purpose of this publication is to keep our readers informed about our services and programs, and to recognize those who help us with our mission, including weather spotters, co-op observers, media, and emergency management.

All articles are written by the NWS staff. A special thanks to Ron Miller, Kerry Jones, Laurie Nisbet, and Robert Bonner for their help.

September is NOAA Weather Radio Awareness Month

NOAA Weather Radio All Hazards (NWR), also known as NOAA Public Alert Radio, is a powerful safety tool. NWR is a nationwide network of radio stations whose broadcasts are tailored to the specific needs of the local listeners. NWR broadcasts include NWS forecasts, watches, warnings, and other weather information 24-hours a day. In conjunction with federal, state and local Emergency Managers, and other public officials, NWR broadcasts warning and post-event information for non-weather related hazards such as earthquakes, volcanic eruptions, large-scale hazardous material releases, and 911 telephone outages.

Recently, President Bush issued an executive order to upgrade the Emergency Alert System (EAS) and expand use of weather radios in households, businesses, schools, and through various types of personal electronic devices such as PDAs. Once alerted by the initial EAS message via their NWR receiver, people will often turn to broadcasters for further information. As we all know, emergencies can occur anytime and weather radios are specifically designed to serve as a 24/7 "all-



hazards" warning system.

September's awareness campaign is a partnership between Washington State Emergency Management, broadcasters, and the NWS. Throughout the month, cost-saving consumer incentives are offered by a number of weather radio manufacturers and retailers. The incentives and additional information about NWR are available through the campaign's host web site from Washington State Emergency Management at www.emd.wa.gov. Check out the "Where to Get Weather Radios?" link and you will find each retailer's weather radio models with specific features and prices. There is emphasis on the EAS programmable "SAME" weather radios. These models permit one to select which county and what warning events they want to immediately receive. The hearing and visually impaired also can get these warnings by connecting weather radios with alarm tones to other kinds of attention-getting devices like strobe lights, pagers, bed-shakers, PCs, and text printers. ☼ *Kerry Jones*

Spotter News

Despite the lack of severe weather episodes, we received some terrific spotter reports over the past several months. We would like to recognize some of your valuable reports. Keep up the good work!

- 6/04 @ 5:35 pm: Frequent lightning, heavy rain with visibility down to less than 1/4 mile. *Benewah #13*
- 6/04 @ 5:45 pm: Winds estimated 25-30 mph with 0.35" of rain in less than 30 minutes. *Lincoln #23*
- 6/24 @ 1:55 pm: Pea size hail covering the ground. *Chelan #6*
- 6/24 @ 5:55 pm: Wind gust to 65 mph. *Kootenai #7H*
- 6/29 @ 6:45 pm: Winds to 60 mph, trees on houses and cars, worst damage seen in a long time. *Bonner #39H*
- 8/06 @ 2:15pm: Pouring rain. Temp dropped from 84° to 71°. *Grant #17*
- 8/31 @ 6:05pm: Wind gust to 30 mph with higher gusts and dust. Branches down. *Whitman #50*
- 8/31 @ 7:30 pm: Quarter size hail and winds to 30 mph. *Spokane #207*

Thanks for your support and dedication in reporting severe and hazardous weather. Remember you are "the eyes and ears" of the NWS. ☼ *Robin Fox*



Coop Corner

Just a few reminders as we approach the colder months. Make sure you prepare your rain gauge for the snow and freezing temperatures. It is also a good time to review the proper format to report snow depth and snow fall in your daily reports!

Real-time observations are more valuable to NWS forecasters than those mailed at the end of the month. There are two ways to send your data real-time, either by the internet (WXCoder) or the phone (IVROCS). If you are interested in participating, let me know by email: Robert.bonner@noaa.gov or call the office.

Thank you for your dedication and support on providing daily weather observations and a running climate record for the Inland Northwest! ☼ *Bob Bonner*

NWS Spokane

Meteorologist In Charge

John Livingston

Administrative Assistant
Meg Layh

Warning Coordination Meteorologist

Kerry Jones

Science Operations Officer

Ron Miller

Data Acquisition Program Manager

Robert Bonner

Service Hydrologist

Royce Fontenot

Information Technology Officer

Todd Carter

Lead Forecasters

Jon Fox
Matt Fugazzi
Bob Tobin
Greg Koch
Paul Bos

General Forecasters

Robin Fox
Rocco Pelatti
Laurie Nisbet
Jeremy Wolf
Jeffrey Coté
Mike Fries Ellie Kelch

Hydro-Meteorological Technicians & Intern

Stan Savoy Milt Maas
Verne Ballard
Steve Bodnar

Electronic System Analyst

Dwight Williams

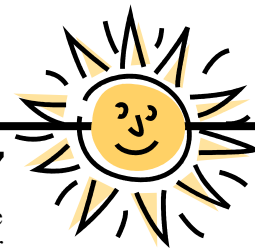
Electronic Technicians

Paul Kozsan Ray Grant

Facilities Technician

Mike Belarde

SPOTTER REPORTS: please call the NWS at (509) 244-0435
Or send Online at <http://espotter.weather.gov>



One Hot Summer in 2007

OK, so how hot was it? The summer of 2007 will go down in the records as one of the hotter summers in the Inland Northwest, or will it? Comparing it to other summers is often the best way to put it all in perspective.

JUNE: The summer actually started off rather mild. Temperatures in June were very close to those for an average June, although it was a bit warmer than usual in Lewiston. The month started off downright hot, with temperatures in the 90s for the first few days which was about 20 degrees warmer than normal for that time of year. But as usual in early June, the heat didn't last and more moderate temperatures returned for the bulk of the month. Instead of temperatures, it was the continuation of dry weather that was the noteworthy aspect. After a disappointing spring, there was still a chance for June rainfall to make up for the recent dry spell. Unfortunately it was not the case. Most locations had less than half of their normal rainfall for the month. The rainfall was also spotty rather than widespread, so the precipitation numbers tended to be a bit deceiving. In contrast to last summer's active thunderstorm season, this year's was rather lacking. The only notable event for June was on the last day of the month. Strong thunderstorms caused wind damage in the Idaho Panhandle from Coeur d'Alene up to the Canadian border. Golf ball-sized hail was also reported southeast of Lewiston!

JULY: The heat arrived in earnest. It's typically the pattern around here that the consistent hot weather of summer

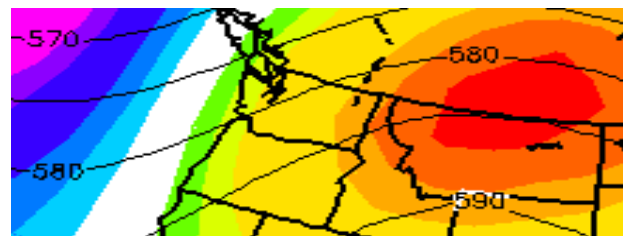
doesn't start until after the 4th of July. This year, it was a day or two early. Temperatures for the mid-summer holiday were in the 90s, and reached the triple digits in most places on the 5th. The heat subsided a bit after a few days but returned quickly. This time, it broke with mainly dry thunderstorms on the 13th. Wind gusts from these storms reached 53 mph at the Spokane International Airport. For the remainder of the month daytime readings typically reached the 90s, but the extreme heat wasn't seen again. For the month overall, July 2007 was the 2nd hottest month (any month of the year) ever for both Spokane and Lewiston, bested only by July 1906. While the number of 90+ degree days at Spokane this year (16) was much higher than normal (9), it was well below the record of 20 days in 1985.

AUGUST: An analysis of hot Julys showed that not all Augusts follow suit. In fact, just the opposite often occurs. Hot Julys are more often followed by near or below normal Augusts. This was the case for 2007. In fact, it was cooler than the past four Augusts. There were only 3 hot spells in the month, each lasting only a couple of days. A very cool air mass on the 20th and 21st kept daytime temperatures below 70° at nearly every location, a welcome relief from the summer heat. This event also brought some much-needed rainfall to the area. Precipitation amounts ranged from just a few hundredths in the Cascades to nearly one-half inch at Ritzville and La Crosse. Another round of rainfall arrived on the last day of the month. This time strong thunderstorms accompanied the rain. Hail and strong winds were felt over many communities of extreme eastern Washington and the Idaho Panhandle.

Thus, while July was no doubt one of the hottest months ever, the accompanying June and August were actually quite normal. The result is a less-than-noteworthy average temperature for the three months of summer. When looking at the average temperature of just July and August (the true summer months in the Inland Northwest), the summer of 2007 ranks 13th hottest at both Spokane and Lewiston. The recent hot summer of 1998 still stands out as a much hotter summer than this year. ☀ *Ronald Miller* See more at <http://www.wrh.noaa.gov/otx/events.php>

Summer Weather Statistics

Wenatchee Airport	Jun	Jul	Aug	Total
Avg High Temp	77.2	91.5	84.5	84.4
Departure from Norm	+1.5	+4.8	-1.6	+1.6
Avg Low Temp	54.9	65.0	59.6	59.8
Departure from Norm	-1.0	+5.2	-0.1	+1.4
Total Precip	0.003	Trace	0.04	0.07
Departure from Norm	-0.61	-0.30	-0.31	-1.22
Lewiston Airport	Jun	Jul	Aug	Total
Avg High Temp	80.4	95.8	88.7	88.3
Departure from Norm	+3.5	+8.2	+1.1	+4.3
Avg Low Temp	54.2	64.8	58.3	59.1
Departure from Norm	+0.04	+5.8	-1.0	+2.1
Total Precip	0.76	0.04	0.37	1.17
Departure from Norm	-0.40	-0.68	-0.38	-1.46
Spokane Airport	Jun	Jul	Aug	Total
Avg High Temp	73.8	89.8	81.8	81.8
Departure from Norm	-0.1	+7.3	-0.8	+2.1
Avg Low Temp	50.6	61.5	55.0	55.7
Departure from Norm	+1.4	+6.9	+0.5	+2.9
Total Precip	0.59	0.43	0.57	1.59
Departure from Norm	-0.59	-0.33	-0.11	-1.03



This is a weather map for the average 500 mb level during the month of July. It shows a strong ridge over the region. This ridge translated to warmer than normal temperatures in July for eastern Washington, north Idaho, and much of Montana.

**Answer: 108° set twice!
Once 7/26/1928 and again 8/4/1961**

Remember your Autumn Spotter Checklist

First snow of the season

Funnel Cloud or Tornado

Hail— pea size or larger

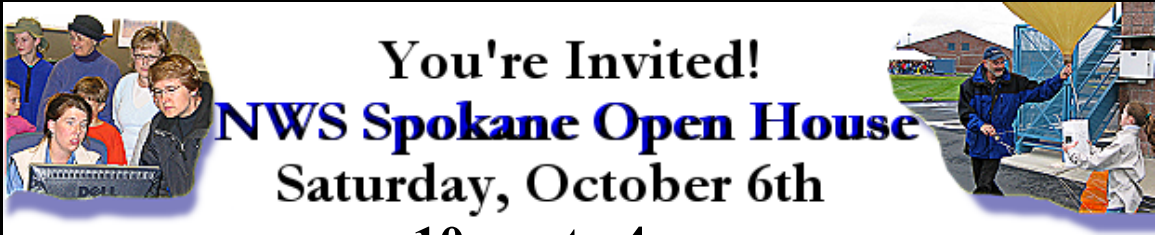
Strong Winds— 30 mph+ or damage

Flooding—of any kind

Reduced Visibility — under a mile due to rain, dust or fog, etc.

**Heavy Rain— Showery— 1/2+” an hour
Steady Rain- 1” in 12 hrs
or 1.5”+ in 24 hrs**

Travel Problems or Any Damage due to hazardous weather.



You're Invited!
NWS Spokane Open House
Saturday, October 6th
10 am to 4 pm

Calling all observers, spotters, users of weather data, and weather enthusiasts! You are invited to a **National Weather Service Open House!** It's scheduled for Saturday, Oct. 6th from 10 am to 4 pm. It is a free event with plenty of parking available and refreshments! Our office is located just west of Airway Heights, about 2.5 miles north on Rambo Road. If you have any questions, just contact us.

Come and tour our facility and...

- See the only weather radar in the Inland Northwest
- Meet the staff including forecasters and technicians
- Watch a weather balloon launch and other demonstrations
- See educational weather displays and instruments
- Learn how a weather forecast is created
- And much, much more....

Weather...when you need it the most!



NOAA celebrates 200 years of science, service, and stewardship in the United States. In 1807, President Thomas Jefferson founded the U.S. Coast and Geodetic Survey—the first of many physical science agencies to service America. For more information and history on this event, see the 200 year web site at <http://celebrating200years.noaa.gov/>

The Weather Watcher

Of the Inland Northwest



National Weather Service
2601 N Rambo Rd
Spokane, WA 99224
(509)-244-0110



Trivia: What is the all-time high temperature in Spokane?