

TheNorth Coast Observer

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Welcome back to The North Coast Observer, the quarterly newsletter produced by your local National Weather Service Office in Eureka, California. This winter has been especially busy for our office, particularly the latter half of the season. As a result, this newsletter is a page shorter than usual. We hope you'll still find some useful information in its pages, and we look forward to including more content for the summer edition, which will hit the web by mid-June. *Enjoy your spring, and stay safe!*

Upcoming Spring Events	
Date	Event
Mar 1	Meteorological spring begins Growing season begins (zones 101, 103, 109-113)
Mar 10	Daylight Saving Time begins at 2:00 AM
Mar 20	Astronomical spring begins at 2:58 PM
Mar 25-29	Tsunami Preparedness Week
Apr 1	Growing season begins (zones 102, 104-106)
Apr 15	Growing season begins (zones 107 & 108)
Apr 22	Earth Day
May 5-11	Wildfire Awareness Week
May 18-24	Safe Boating Week
May 20-27	Beach Safety Week Cold Water Awareness Week
May 31	National Dam Safety Awareness Day
Jun 1	Meteorological summer begins

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weather.gov/eureka

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Twitter

twitter.com/nwseureka

YouTube

youtube.com/NWSEureka

TORNADO

ACTION

Take shelter immediately in a sturdy structure

HAIL

ACTION

Move indoors away from windows

LIGHTNING

ACTION

Move indoors if you hear thunder

WIND

ACTION

Move indoors away from windows

FLOODING

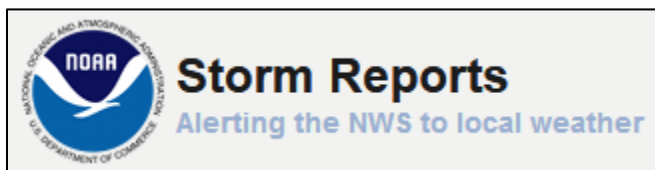
ACTION

Avoid rising creeks and water covered roads

Understanding SEVERE WEATHER HAZARDS

New Method of Submitting Storm Reports

by William Iwasko



The National Weather Service (NWS) office in Eureka, CA is always looking for real time reports of inclement weather from Del Norte, Humboldt, Trinity, and Mendocino Counties. The NWS has just developed a new storm reports tool to allow the general public to submit reports to their local NWS offices in real time. This tool can be accessed by going directly to inws.ncep.noaa.gov/report/, or the site can be found on our homepage (weather.gov/eka) under the current hazards tab and then submit report.

First, select what weather you are observing whether it be hail, snow, flooding, etc.

1

Please select a report type

- Please select a report type
- Tornado
- Funnel Cloud
- Flooding
- Hail
- Wind
- Rainfall
- Snowfall

Once you have selected what is occurring, you can state when it occurred and provide a description of what was happening or the magnitude of what you observed (for example the largest hailstone observed).

2

Time you observed this weather

0420 PM 03/18/2019

Please select a hail size

☒ I'm estimating the hail size

☐ I measured the hail

☐ I don't have a reading, just some details below

Please provide details (if any) of hail damage or depth:



New Method of Submitting Storm Reports (cont.)

by William Iwasko

Next, select the location where you observed the weather. You can do this by allowing your device to provide your current location, searching for an address, or selecting your location from a map.

3

We need the location of your report, but we don't store it permanently, only as a latitude and longitude for the report.

Automatically use your device's location:

Search for your address:

Such as: 123 Main St. Somertown, NJ 10234

Or, you can click your location on the map:

Lastly, you have the option to provide your contact information so that a forecaster could contact you if they need clarification on the report.

4

Here is the information you'll be sending:

Report time: 0420 PM 03/18/2019

Latitude: 38.7031

Longitude: -90.6863

You are reporting: 0.25 Pea sized hail (estimated).

If you wish to provide a name, spotter ID, or contact info, you can do so here.

This is optional, and if provided, will only be used if additional information is needed.

These reports are immediately sent to the forecast office that covers the location that you submitted the report from, so no matter where in the U.S. you are, you can use this tool to submit a report. Reports help to improve the forecasts and warnings that the NWS issues. In addition to this website, you can always send in your reports via our Twitter or Facebook pages by looking up "NWSEureka". We look forward to hearing from you soon!

Winter Weather Summary

December

A series of generally weak weather systems brought numerous days of rain to the area. Despite the number of days with rain, rainfall totals were only 50 to 75 percent of seasonal normals. Temperatures at the coast were generally near normal, while the inland areas saw temperatures a few degrees above normal.

January

January saw a dry start to the month across the area. However, around the 5th, this changed quickly. From the 5th through the 20th, numerous storm systems brought rain, wind and high elevation snow the area. Then, on the 20th, precipitation abruptly stopped and high pressure returned to the area. Temperatures across the area were slightly above normal, warmest during the dry periods. However, these periods also brought chilly overnight temperatures. Rainfall was frequent and heavy at times from the 5th through the 20th, and the normal monthly rain amount fell during these 15 days.

February

February was colder and much wetter than normal across the area. Most locations saw 200% to 250% of normal rainfall. A significant portion of this rainfall came in 5 days, from the 23rd to the 27th, with most stations setting one or more daily rainfall records, and many locations were in the top 5 for wettest Februarys. This rainfall caused significant flooding across much of the area. In addition to this, temperatures were 3 to 8 degrees below normal, and many stations recorded their coldest February in at least 15 to 20 years. Storms brought snow to the inland areas numerous times and even a few times at the coast. On the 10th, Eureka saw accumulating snow for the first time since 2002.

Winter Record Events

Date	Location	Record	Value	Previous Record
Dec 28	Eureka	Min Temp	32	32 in 2006
Jan 19	Crescent City	Rainfall	3.63"	2.45" in 2012
Jan 20	Eureka	Rainfall	2.26"	1.80" in 2012
Jan 26	Crescent City	Max Temp	71	70 in 2011
Feb 10	Eureka	Snowfall	0.5"	0.2" in 1922
Feb 18	Eureka	Min Temp	29	30 in 2006
Feb 25	Eureka	Rainfall	1.66"	1.01" in 1976
"	Ukiah	Rainfall	3.47"	1.50" in 1922
Feb 26	Eureka	Rainfall	2.56"	1.76" in 2010
"	Ukiah	Rainfall	3.13"	2.23" in 1919



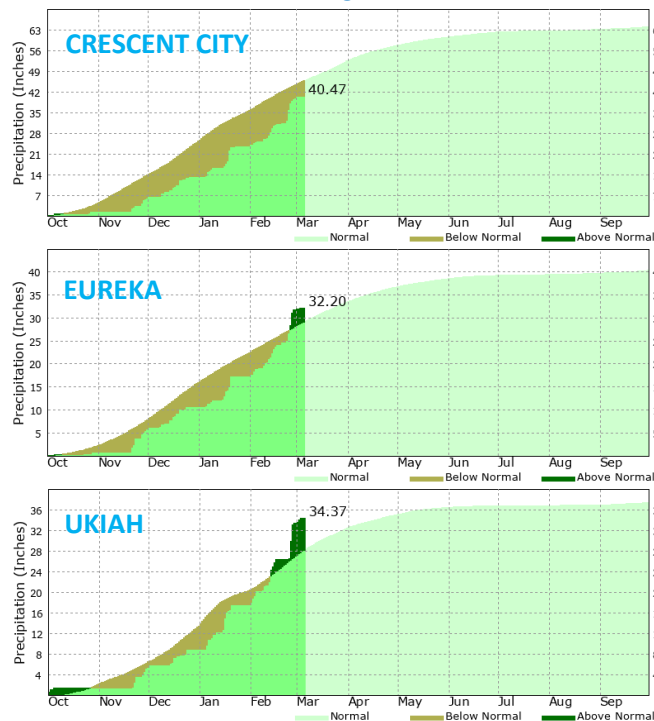
Winter 2018-19 Monthly Climate Comparison

	Crescent City			Eureka			Ukiah		
	Ave Hi	Ave Lo	Total Rain	Ave Hi	Ave Lo	Total Rain	Ave Hi	Ave Lo	Total Rain
Dec	54.4	41.3	7.15	56.4	40.6	4.95	57.4	37.8	3.61
Jan	56.7	43.1	10.26	57.1	41.8	6.67	59.8	39.8	8.53
Feb	49.2	38.0	16.47	50.9	37.5	14.43	52.7	37.4	15.94

temperatures in °F, rainfall in inches

Water Year-to-Date Precipitation Comparison

[click images for links](#)



data through March 5th

Spring Outlook (March-May)

[click images for links](#)

The Climate Prediction Center's winter outlook for NW California is calling for better than even chances of above normal temperatures with the best chances over the northern portion of the area (figure 1 below). Even chances of above and below normal precipitation are forecast (figure 2 below).

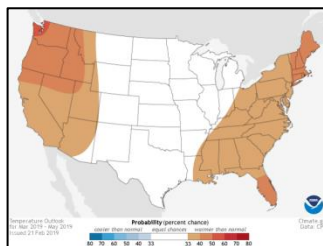


Figure 1 – Temperature Outlook

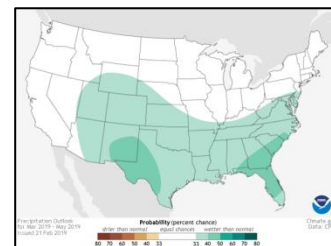


Figure 2 – Precipitation Outlook

Cold & Wet February Across the Area

by Matthew Kidwell



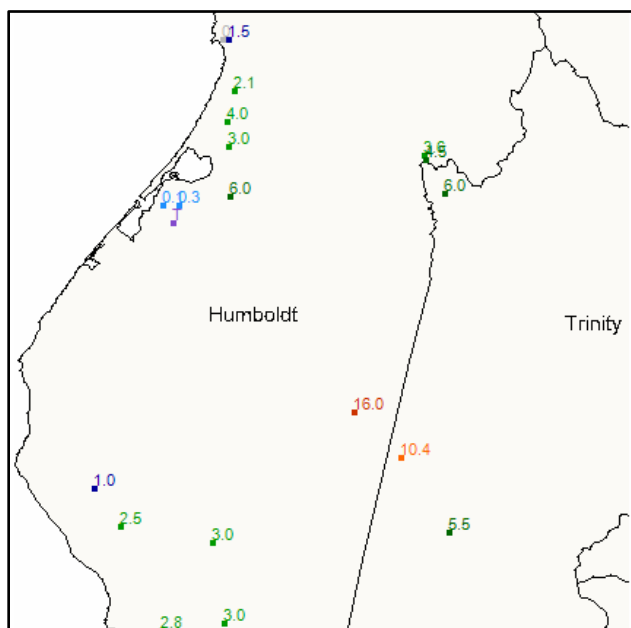
McKinleyville, California on February 10th. Credit: Alex Dodd

Below normal temperatures and above normal rain and snow fell across Northwest California in February as a series of weather systems brought precipitation to the area. Rain fell on all but 5 days in Eureka in February, leading to significantly above normal rainfall across the region.

Many of these weather systems also brought unusually cold air to the region. Late in the evening on February 10th, most of the coastal areas saw accumulating snow. At the NWS office on Woodley Island, only a half inch fell, while McKinleyville saw 2 to 4 inches of snow. Locations farther inland saw significantly higher amounts, with Kneeland reporting over 6 inches of snow and the Ruth Lake area reporting 10 to 16 inches. **Volunteer CoCoRaHS observers were our main source of reliable snow reports and were very important in documenting the event!**

Top 5 coldest Februarys in Eureka

Rank	Value	Year
1	41.3	1887
2	43.4	1911
3	43.6	1894
4	44.1	1917
5	44.2	2019

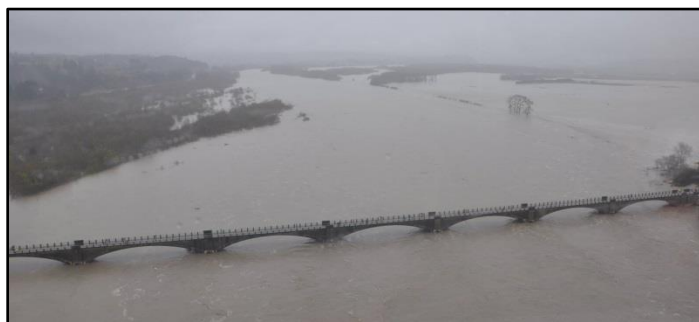


CoCoRaHS snow observations from February 10th, 2019.

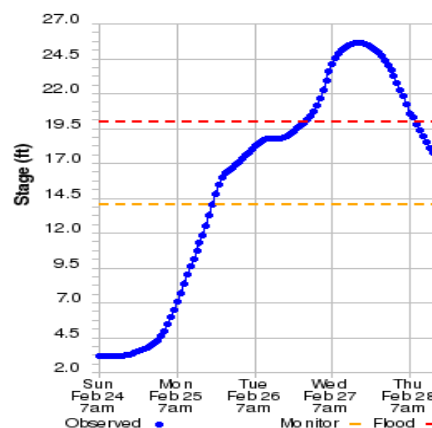
Cold & Wet February Across the Area (continued)

by Matthew Kidwell

Late in the month of February, two back-to-back atmospheric river events brought significant rainfall to the area. Many areas saw the normal amount of rain for the entire month fall in just three to four days. This caused a significant amount flooding on the Eel River, the Russian River, the Navarro River, and other smaller rivers and streams across the area.



Eel River at Fernbridge on February 27th. Credit: Humboldt County OES

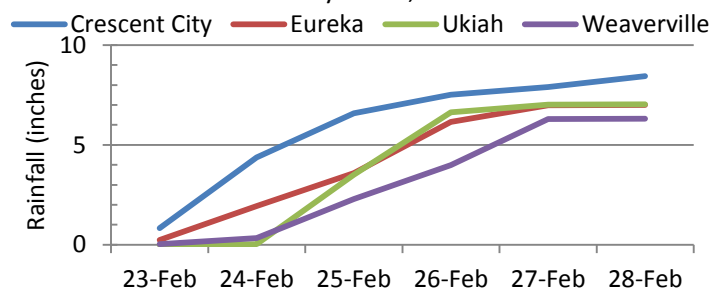


Eel River at Fernbridge river level, February 24-28

Overall for the month, most locations saw nearly double their normal rainfall. Very high snow amounts were reported as well. For example, at around 2700 feet in elevation near Ruth Lake, a CoCoRaHS observer reported 41 inches of snowfall. While there aren't climatological records for this station, it was undoubtedly an unusual event.

Storm Total Cumulative Rainfall

February 23-28, 2019



Astronomy Corner

by Scott Carroll

As spring arrives, the nights are getting shorter, and temperatures are gradually getting warmer. Additionally, more clear nights are expected as the frequency of storm systems affecting the area decreases and we transition into the dry season. The exceptions are coastal locations and interior valleys, where nighttime low clouds and fog periodically obscure spring skies. Cool nights and occasional cold snaps make it important to dress warmly when venturing outside at night.



A good source of sky cover forecasts is our [graphical forecast](#). Sky cover and other forecast elements can also be displayed by selecting a point-and-click forecast from the area map on our [homepage](#), then clicking the Hourly Weather Forecast graph (low on the right hand side of the page) or clicking on Tabular Forecast in the Additional Forecasts and Information section.

Spring Moon Phases					
March		April		May	
●	6 th	●	5 th	●	4 th
☾	14 th	☾	12 th	☾	11 th
●	20 th	●	19 th	●	18 th
☾	27 th	☾	26 th	☾	26 th

Spring Night Sky Calendar	
Date	Event
Mar 1	Moon-Saturn conjunction
Mar 2	Moon-Venus conjunction
Mar 14	Mercury inferior conjunction
Mar 20	Spring equinox at 2:38 PM
Mar 26	Moon-Jupiter conjunction
Mar 28	Moon-Saturn conjunction
Apr 1	Moon-Venus conjunction
Apr 2	Moon-Mercury conjunction
Apr 8	Moon-Mars conjunction
Apr 16	Mercury-Venus conjunction
Apr 22	Lyrid meteor shower maximum
Apr 23	Moon-Jupiter conjunction
Apr 25	Moon-Saturn conjunction
May 2	Moon-Venus conjunction
May 5	Eta Aquarid meteor shower maximum
May 7	Moon-Mars conjunction
May 20	Moon-Jupiter conjunction
May 22	Moon-Saturn conjunction

moon phase and event information courtesy of NASA

Rain, Snow, & Hail Observers Always Needed

by Scott Carroll

The National Weather Service is always looking for volunteers interested in participating in the **CoCoRaHS** (Community Collaborative Rain, Hail, and Snow Network) program. Rain, snow, and hail measurements from local volunteers help us verify our forecasts and warnings, provide useful information for flood forecasting, and give us ground truth in normally data sparse areas. Daily data can be entered via either a website or a smart phone app. This data makes its way into a local text product, the [CoCoRaHS Precipitation Summary](#), issued locally during the early to mid-morning.



For more information on the national CoCoRaHS program, click [here](#). For specific questions regarding the NWS Eureka program, email [Matthew Kidwell](#), local CoCoRaHS coordinator.

Did You Know?

There are almost 1,000 active CoCoRaHS observers in the state of California alone? We're always looking for new volunteers!



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