

The Weather Watcher

of the Inland Northwest

www.weather.gov/Spokane



INSIDE THIS ISSUE:

Spring Outlook	2
Winter Stats	2
Winter in Review	3
New Web Page	4
GOES 16	4

Spring Flooding of 2017



Near Cheney, WA



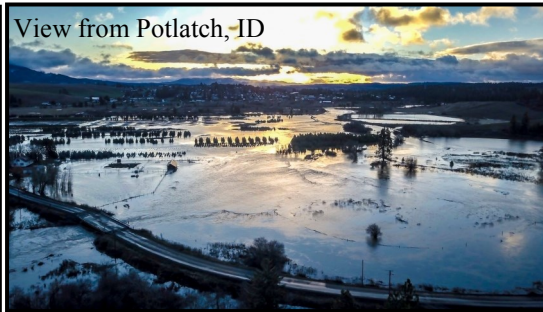
Sinkhole in Grant Co.



Little Spokane River



Highway 5 in Benewah Co.



View from Potlatch, ID

A combination of abundant late winter snow, heavy rain from several wet Pacific storms, and near seasonal temperatures, led to the melting of the low level snow pack, increased runoff and the flooding across southeast Washington and the southern Idaho Panhandle. Reports of flooded fields & roads, sink holes, mud slides and high flows on area rivers have been common in the last several weeks. Anticipate continued issues with flooding as the mountain snow melts and milder spring temperatures arrive. ☀ Katherine Rowden

Editor's Notes

Oh Spring.... Welcome Back! We're sure most are ready for winter to be gone. But we can agree, let's hope for the warm-up to be slow so not to melt our mountain snow too fast and worsen the flooding potential. Spring arrived on March 20th and our days continue to get longer!

We will be transitioning to thunderstorm season soon enough. Reports of hail, gusty winds and heavy downpours will increase. Did you know that hail the size of a quarter or 1 inch in diameter is severe hail? And winds over 57 mph are severe winds?

We are always looking for new ideas, pictures & stories for our publication. Please submit them to nws.spokane@noaa.gov.

This newsletter & past issues are available on the NWS Spokane web page.

The main purpose of this publication is to keep our readers informed about NWS services and programs, and recognize those who help us with our mission, including weather spotters, observers, media, emergency managers, and government agencies.

All articles are written by the NWS staff. A special thanks goes to Katherine Rowden & Jeremy Wolf for their help.

mPING

Want to share your Precipitation Reports in REAL time? No accumulations necessary—just what you are observing. Rain or snow or graupel or wind damage or reduced visibility? It's easy! Download the mPING app on your phone or mobile device and report your precipitation or weather type. We have had great success with these reports in real time weather, and look forward to many future reports. For more information, check out <http://mping.nssl.noaa.gov/> ☀ Robin Fox



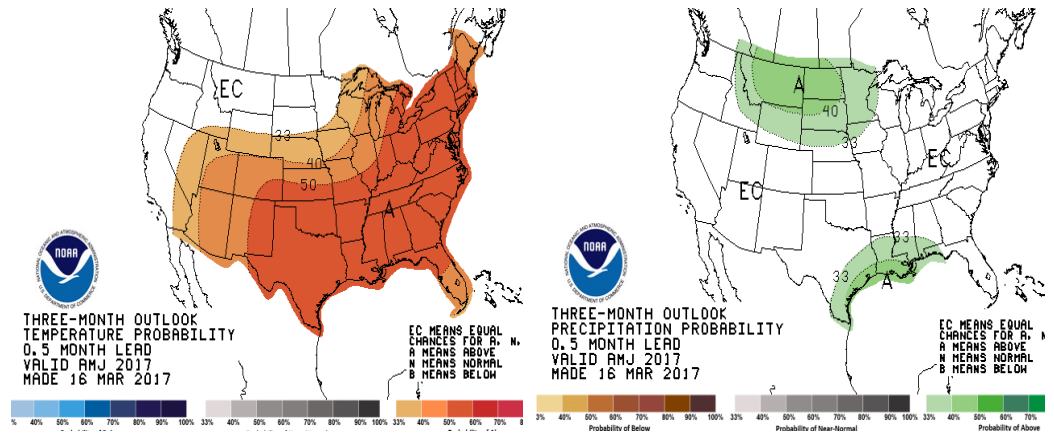
Flood Safety— What you need to know!

- Avoid driving through water covered roadways. You don't know how deep the road is or what condition it is in.
- Stay away from fast moving rivers and streams. Water temperatures are still very cold and current is swift.
- It only takes 6" of fast-moving water to knock over an adult. Just 12" of rushing water can carry away a small car.
- Plan ahead and learn about the road conditions before you travel.

Follow NWS Spokane on Facebook and Twitter!

Spring Outlook 2017

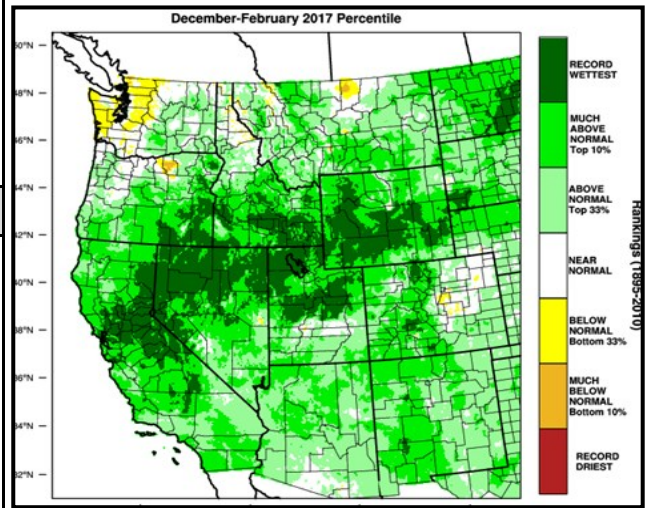
The NWS Climate Prediction Center forecasts that the cool and wet conditions will most likely persist through the end of March. There's the potential for more seasonal temperatures for April and May with still above normal precipitation. Although a glimpse toward the summer months shows a better chance for warmer and drier weather. ☀️ *Robin Fox*



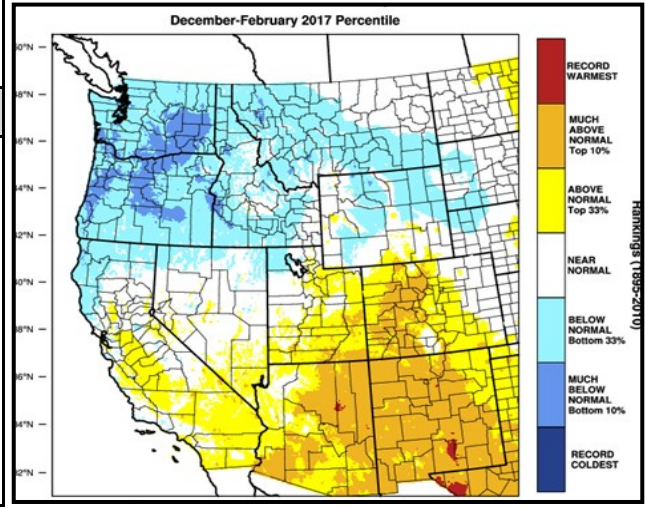
Winter Weather Statistics

Wenatchee Water Plant	Dec	Jan	Feb	Total
Avg High Temp	32.7	27.4	35.9	32.0
Departure from Norm	-2.1	-8.5	-7.5	-6.0
Avg Low Temp	20.5	18.2	22.2	20.3
Departure from Norm	-4.7	-7.2	-5.5	-5.8
Total Precip	0.60	1.84	1.71	4.15
Departure from Norm	-0.93	+0.51	+0.71	+0.29
Total Snowfall	9.0	9.5	14.0	32.5
Departure from Norm	+2.3	+5.5	+11.3	+19.1
Lewiston Airport	Dec	Jan	Feb	Total
Avg High Temp	34.6	31.5	44.3	36.8
Departure from Norm	-4.9	-10.1	-2.2	-2.5
Avg Low Temp	22.7	20.8	29.9	24.5
Departure from Norm	-5.3	-8.8	-1.0	-5.0
Total Precip	1.59	0.81	1.97	4.37
Departure from Norm	+0.62	-0.27	+1.21	+1.56
Total Snowfall	19.7	6.7	8.0	34.4
Departure from Norm	+16.2	+4.3	+5.9	+26.4
Spokane Airport	Dec	Jan	Feb	Total
Avg High Temp	29.2	27.0	36.0	30.7
Departure from Norm	-3.0	-7.4	-3.6	-4.7
Avg Low Temp	16.9	13.4	22.5	17.6
Departure from Norm	-5.6	-11.3	-3.9	-6.9
Total Precip	1.49	1.85	4.39	7.73
Departure from Norm	-0.81	+0.06	+3.06	+2.31
Total snowfall	19.0	13.5	19.8	52.3
Departure from Norm	+4.4	+2.1	+13.0	+19.5

This winter finished colder than normal and slightly wetter than normal. The cold was most pronounced in the Columbia Basin which finished in the bottom 10% for winter mean temperature. The wettest conditions occurred to our south with parts of California into Wyoming having the wettest winter on record. ☀️ *Jeremy Wolf*



WINTER PRECIPITATION



WINTER TEMPERATURES

2016-17 Winter in Review

We have gone through a season of changes since October with the full force of winter. After a record wet October, and one of the warmest November's on record, some may have wondered what kind of winter we would have. Well let's take a look.

December started off relatively quiet with weaker storms bringing occasional rounds of light snow. The weather pattern then turned much more active as colder air from Canada met a strong Pacific jet stream ushering in storms from the west. Lewiston was hit especially hard with 19.7" of snow, making it the snowiest December on record! The first storm tracked into Oregon but a band of heavy snow set up on the north side of the storm giving Lewiston 7.6" on and 15th. Arctic air then surged south on the 16th & 17th bringing temperatures down to near or slightly below zero for most towns. Colder spots include -12°F for Pullman and Coeur d'Alene, -11°F in Republic, -10°F in Mazama, and -7°F in Spokane. On the 19th and 20th a stronger storm brought widespread moderate to heavy snow along the East Slopes of the Cascades with 17" in Stehekin and 14" in Mazama, as well as NE Washington and the Idaho Panhandle with 8" in Newport. Windy conditions also occurred in some spots with gusts of 54 mph in Lewiston, 46 mph in Pullman and 43 mph in Spokane. On the 23rd a stalled front brought heavy snow from the Palouse up through NE Washington with 8" in Clayton, 7" in Worley, and 4-6" in the Spokane area. Across SE Washington into the southern Panhandle, 2-5" of snow fell with 7" in Nez Perce. Another storm on the 26th and 27th brought 2-5" of snow and windy conditions once again for the Palouse and Spokane area.

January was very winter-like with the first half of the month featuring periods of very cold temperatures as arctic air again invaded the region from the 2nd through the 6th and again from the 12th through the 16th. Deer Park dropped to -19°F on the 5th with -13°F in Newport. In between these periods of very cold generally dry conditions, Pacific moisture entered the picture bringing snow on New Years Day, and again from the 7th through the 9th. The New Years Day snow brought variable totals as cold, unstable air moved overhead. Mission Ridge south of Wenatchee was especially hard hit with 39" of snow. The Loon Lake, Elk, Sacheen Lake and Diamond Lake areas of NE Washington were a second winner with 9-12" of snow. After more snow fell from the 7th through the 9th, strong north winds down the Okanogan Valley into the Moses Lake area created significant drifting snow resulting in the closure of Highway 2 between Coulee City and Waterville. As the Inland NW transitioned out of the deep freeze, a significant shot of precipitation entered the region from the southwest on the 17th and 18th. This brought a wide variety of weather

including snow, freezing rain, and sleet. The Columbia Basin was hardest hit where an ice storm brought freezing rain with accumulations up to 0.75".

Kendrick and Julietta were also hard hit with up to 0.50" of ice. The Spokane area saw a wintry mix while mostly snow occurred in the northern valleys and Cascades. This storm resulted in numerous slide-offs and accidents, including a closure of Interstate 90 in the Columbia Basin near Vantage, and over 4th of July Pass in the Idaho Panhandle. Quieter weather occurred for the remainder of the month. After a brief warm-up, colder air returned for the end of the month with even light snow in some areas. A localized band of heavy snow hit St. John and Colfax with 4-6" of snow.

February remained active with much wetter than normal conditions with periods of snow, rain, and freezing rain. Spokane had its 2nd wettest February with 4.39" of precipitation. Bonners Ferry had its 2nd snowiest February with 44.3". The first active period occurred from the 3rd through the 6th as cold air from Canada once again collided with moist air from the Pacific. Spokane recorded its heaviest snow of the season on the 3rd and 4th with 8.6". Bonners Ferry stayed on the cold side of this storm with an impressive 30" of snow! The next storm on the 8th resulted in warm moist air overriding cold air with snow changing to freezing rain with 0.25" of ice at Spokane with 0.50" in Coeur d'Alene and Springdale. Areas further north got snow with 6" in Northport and another 9" in Bonners Ferry. In the Cascades, all of this precipitation fell as snow. From the 3rd through the 9th snow amounts include 56" in Stehekin, 25" in Plain and Mazama, 12-15" Wenatchee, and 9" Okanogan. Elsewhere warmer weather on the 9th brought rain. However the prolonged cold winter and frozen rivers resulted in ice jams on the St. Joe River with water over roads in Calder. Widespread light freezing rain occurred during the morning of the 15th from the Cascades to the Idaho Panhandle creating very icy roadways. Then warmer air resulted in several rounds of rain through the 20th. A combination of rain/snow melt led to several road washouts in SE Spokane county. Hangman/Latah Creek reached minor flood stage early on the 17th. The pattern turned colder to finish out the month. A small system hit the Lewiston area early on the 27th with 4" of snow. The last few days of the month bands of heavy snow showers set up with 10" in Naples and 12-15" in Saint Maries. ☀ *Jeremy Wolf*



Frozen Lake Coeur d'Alene—January 2017

Remember your Spring Spotter Checklist

Tornado or Funnel Cloud

Hail: pea size or larger

Strong Winds:
30mph+ or damage

Reduced Visibility:
under a mile due to fog, snow...

Heavy Rain:
Showery: 1/2" + in 1hr
Steady: 1"+ in 12hr/1.5"+ in 24hr

Snow:
2"+ valleys & 4"+ mountains

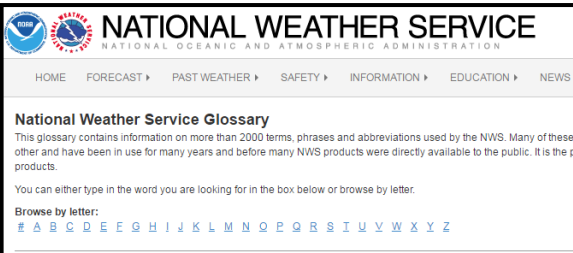
Any Flooding

Any Mixed Precipitation

Travel Problems or Damage:
due to severe/hazardous weather

New NWS web page

The NWS web page will be getting a new look. This new version is tentatively set to launch on April 4, 2017. The page will have a more uniform and standardized look with other NWS pages in the country. It will have a mobile-ready landing page. If you use any bookmark for your point & click forecast, prepare that they will need to be redone after the launch date. In addition, you will be able to create a widget app for your smartphone that will allow you to see your forecast at a touch of a button. For more details on the new page, please visit <https://forecast-v3.weather.gov/documentation?redirect=legacy> ☀️ *Robin Fox*



Images from GOES 16



Images from the new geostationary weather satellite, GOES 16 have been released for public viewing. This data is preliminary and non-operational at this time. For more details & see more, see <http://www.goes-r.gov/> ☀️

Watch : Conditions are favorable for severe or hazardous weather around the watch area.
CAUTION—Watch the Sky!

Warning : Severe or hazardous weather is likely or is occurring in the warned area.
DANGER—ACT NOW!

The Weather Watcher Of the Inland Northwest



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

Trivia: How many times has the Spokane River reached a Moderate Flood Level or greater?