The Winter In Review

2017 - 2018

National Weather Service Pendleton, Oregon

Winter 2017-1018 Climate Summary

The climate summary for the winter 2017-2018 will be reviewed below. This past winter can be summarized as near normal, with a weak to moderate La Niña. The coldest and snowiest period was at the end of December with a significant snowstorm and very cold temperatures due to an arctic intrusion. There was also some light snow at the end of February into the first day of March. The lowest minimum temperature at the Pendleton Airport (NWS office) was 1 degree above zero on Christmas Eve morning. This is in second place from La Grande which had a low of -7 degrees F. However, after this cold snap in December, the rest of the winter was near normal except for the last week of February.



Christmas Day Snowstorm December, 2017

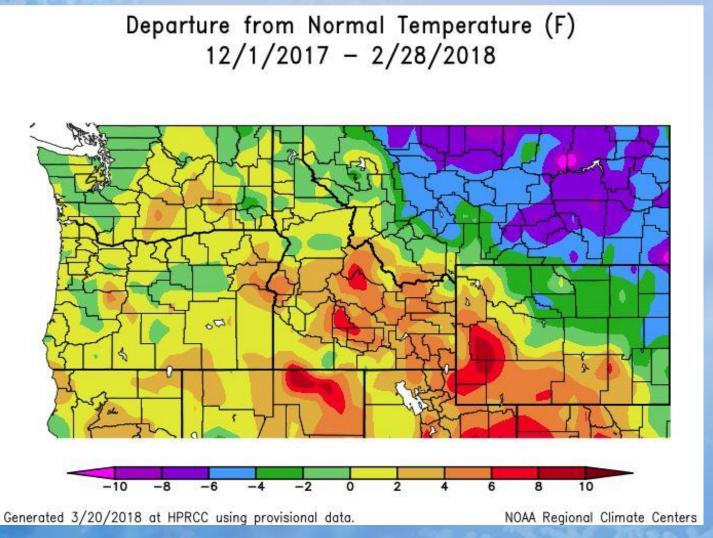


Christmas Eve Snowstorm December, 2017



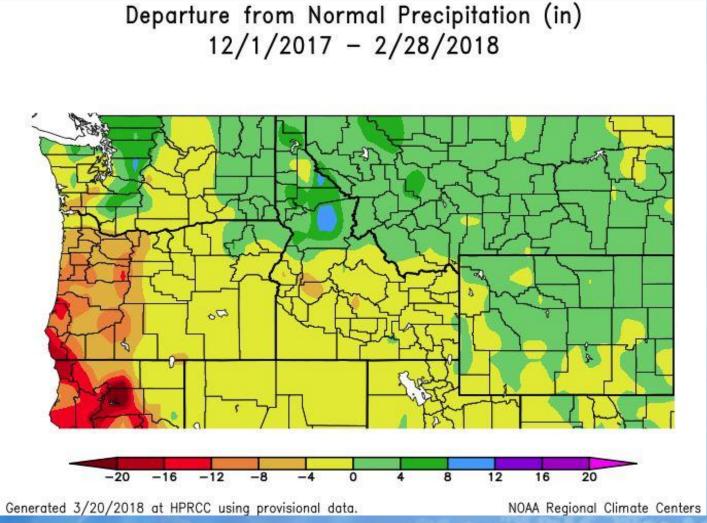
Burst of snow at the end of February, 2018

Departure from Normal Temperatures



As the map shows, the forecast area and most of the Pacific Northwest had near to above normal temperatures for the winter season Dec – Feb 2017-2018.

Departure from Normal Precipitation



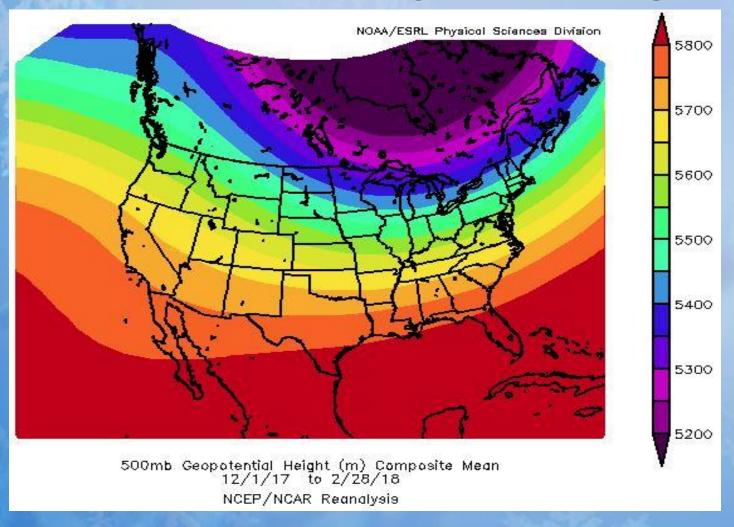
As the map shows, most of the Pacific Northwest and CWA had near to slightly below normal precipitation for the winter season Dec – Feb, 2017-2018.

Winter 2017 – 2018 Totals & Averages for Select Cities

| Station | Max T | Max T Avg | Min T | Min T Avg | Avg T | Precip Total | Snow Total |
|-------------|-------|--------------|-------|--------------|-------|-----------------|---------------|
| Yakima | 69 | 45.1 | 11 | 27.5 | 36.4 | 1.45 | 1.7 |
| Kennewick | 66 | 44.3 | 16 | 31.6 | 37.9 | 2.65 | 4.5 |
| Walla Walla | 67 | 43.6 | 8 | 32.3 | 38.0 | 6.73 | 10.7 |
| The Dalles | 67 | 45.8 | 12 | 31.0 | 38.4 | 3.31 | 10.5 |
| Redmond | 70 | 44.5 | -5 | 21.6 | 33.1 | 0.60 | 3.6 |
| Pendleton | 65 | 43.1 | 1 | 29.3 | 36.2 | 3.55 | 14.4 |
| La Grande | 63 | 41.4 | -7 | 25.0 | 33.3 | 5.48 | 9.0 |

These temperatures and averages and total precipitation/snowfall indicate a warmer and drier than normal winter season 2017 - 2018. However, departure of averages are not available for the three month period (Dec, Jan & Feb).

Winter 2017 – 2018 Average 500 MB Heights



This image shows that there was an overall ridge over the Pacific Northwest and forecast area (CWA). This resulted in an overall above average heights for the region for the season.

ZCZC PDXLSRPDT
NWUS56 KPDT 252359
PRELIMINARY LOCAL STORM
REPORT...SUMMARY
NATIONAL WEATHER SERVICE PENDLETON
OR
357 PM PST MON DEC 25
2017

..TIME... ...EVENT... ...CITY LOCATION...

..DATE... ...MAG.... ..COUNTY LOCATION..ST.. ...SOURCE....

..REMARKS..

0350 AM SNOW TIETON 46.70N

120.75W

12/25/2017 E1.0 INCH YAKIMA WA PUBLIC

0350 AM SNOW HERMISTON 45.83N

119.28W

12/25/2017 E3.0 INCH UMATILLA OR PUBLIC

0350 AM SNOW MILTON-FREEWATER 45.93N 118.39W 12/25/2017 E2.0 INCH UMATILLA OR PUBLIC

0357 AM HEAVY SNOW 1 NNW PENDLETON 45.69N 118.82W

12/25/2017 M4.1 INCH UMATILLA OR OFFICIAL NWS OBS

SINCE SUNDAY AFTERNOON. Heavy Snow
on Christmas
Day early in
the Morning
and on
Christmas Eve



| 0530 AM 121.25W | SNOW | 7 E | MOSIER | 45.6 | 8N | | |
|---------------------|------------|---------|----------|---------|--------|-----------|--|
| 12/25/201 | 17 E3.0 IN | CH K | LICKITAT | WA | PUBLIC | | |
| | | | | | | | |
| ST | 'ILL SNOW | VING. | | | | | |
| | | | | | | | |
| 0530 AM | HEAVY | SNOW | PENDLE | TON | 45.67N | 118.82W | |
| 12/25/201 | 17 M4.5 IN | ICH U | MATILLA | OR | NWS EM | PLOYEE | |
| | | | | | | | |
| Ol | N THE SO | UTH | | | | | |
| HILL. | | | | | | | |
| | | | | | | | |
| 0630 AM | HEAVY | SNOW | E PENDI | LETON | 45.671 | N 118.82W | |
| 12/25/201 | 17 M5.0 IN | ICH U | MATILLA | OR | NWS EM | PLOYEE | |
| | | | | | | | |
| 0700 AM 119.29W | SNOW | RIC | HLAND | 46. | 29N | | |
| 12/25/201 | 17 M2.5 IN | ICH B | ENTON | WA | COCORA | HS | |
| | | | | | | | |
| 24 | HOUR AC | CCUMULA | TION | | | | |
| | | | | | | | |
| 0700 AM | SNOW | 12 S | SW CANY | ON CITY | 44.23N | 119.04W | |
| 12/25/201 COCORA | | ICH G | RANT | OR | | | |
| | | | | | | | |
| 24 | HOUR AC | CCUMULA | TION | | | | |
| | | | | | | | |

Heavy Snow on Christmas Day early in the Morning and on Christmas Eve



| ۱ | | | | | | | | |
|---|----------------------|-----------|----------|---------|--------|-----------|----------|-------|
| | 0700 AM 120.53W | SNOW | YAK | KIMA | 46.59 | N | | |
| | 12/25/201 | 7 M2.1 IN | CH Y | AKIMA | WA | | | |
| | COCORAI | HS | | | | | | |
| ĕ | | | | | | | | |
| | 24 | HOUR AC | CUMULA' | TION | | | | |
| | 0720 AM 117.92W | SNOW | 9 N | ELGIN | 45.69 | DΝ | | |
| | 12/25/201 COCORAF | | CH U | NION | OR | | | |
| | | | | | | | | |
| | 24 | HOUR AC | CUMULA' | TION | | | | |
| | | | | | | | | |
| | 0730 AM 120.01W | SNOW | SUN | INYSIDE | 46. | 32N | | |
| | 12/25/201 | 7 E2.0 IN | CH Y | AKIMA | WA I | PUBLIC | | |
| | | | | | | | | |
| | RE | PORT FRO | OM FACE | BOOK | | | | |
| | | | | | | | | |
| | 0730 AM | HEAVY | SNOW | UMATILI | .A | 45.91N 11 | 9.33W | |
| | 12/25/201 | 7 E5.0 IN | CH UN | MATILLA | OR | PUBLIC | | |
| | | | | | | | | |
| ١ | RE Monday | | A FACEBO | OK. NEW | SNOW A | CCUMULA | TION THI | ROUGH |
| | MO | ORNING. | | | | | | |
| | 0744 AM 120.17W | SNOW | 2 NI | NE COND | ON | 45.26N | | |
| | 12/25/201 COCORAI | | CH G | ILLIAM | OR | | | |
| | | | | | | | | |
| | 24 | HOUR AC | CUMULA' | TION | | | | |
| | | | | | | | | 100 |

Heavy Snow on Christmas Day early in the Morning and on Christmas Eve



Significant Weather Events – January 11th, 2018

ZCZC PDXLSRPDT

NWUS56 KPDT 120026

PRELIMINARY LOCAL STORM REPORT

NATIONAL WEATHER SERVICE PENDLETON OR

426 PM PST THU JAN 11 2018

..TIME... ...EVENT... ...CITY LOCATION... ...LAT.LON...

..DATE... ...MAG.... ..COUNTY LOCATION..ST.. ...SOURCE....

..REMARKS..

0403 PM HEAVY SNOW 9 SW SKI BLUEWOOD 45.98N 117.95W

01/11/2018 M10.0 INCH WALLOWA OR MESONET

THE MILK SHAKES SNOTEL RECORDED 10 INCHES OF SNOW

ACCUMULATION IN UNDER 24 HOURS. ELEVATION 5580 FEET.

0403 PM HEAVY SNOW 3 NNW SKI BLUEWOOD 46.12N 117.85W

01/11/2018 M11.0 INCH COLUMBIA WA MESONET

THE TOUCHET SNOTEL REPORTED 11 INCHES OF SNOW ACCUMULATION IN UNDER 24 HOURS. ELEVATION 5530 FEET.

0403 PM HEAVY SNOW 8 SSW RIMROCK 46.55N 121.17W

01/11/2018 M11.0 INCH YAKIMA WA MESONET

THE GREEN LAKE SNOTEL RECORDED 11 INCHES OF SNOW ACCUMULATION IN UNDER 24 HOURS. ELEVATION 5920 FEET.

0403 PM HEAVY SNOW 6 NNW GLENWOOD 46.10N 121.33W

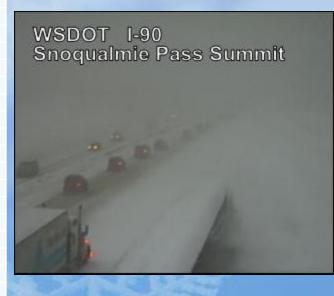
DIAMBNO BIDGE SNOTEL BEGORDED 17 INCHES

01/11/2018 M16.0 INCH YAKIMA

BUMPING RIDGE SNOTEL RECORDED 16 INCHES OF SNOW ACCUMULATION SINCE 7 PM THE PRIOR DAY. ELEVATION 4610 FEET.

WA MESONET

Heavy Snow on the Cascade East Slopes & Wallowa County.



Significant Weather Events – January 19th, 2018

ZCZC PDXLSRPDT

NWUS56 KPDT 191601

PRELIMINARY LOCAL STORM REPORT

NATIONAL WEATHER SERVICE PENDLETON OR 801 AM PST FRI JAN 19 2018

..TIME... ...EVENT... ...CITY LOCATION... ...LAT.LON...
..DATE... ...MAG.... ..COUNTY LOCATION..ST....SOURCE....

..REMARKS..

0600 AM SNOW 3 N JOSEPH 45.39N 117.23W

01/19/2018 M2.5 INCH WALLOWA OR TRAINED SPOTTER

0745 AM SNOW SE JOSEPH 45.35N 117.22W

01/19/2018 M4.5 INCH WALLOWA OR TRAINED SPOTTER

4.5 INCHES FELL IN 14 HRS.

Moderate to heavy snow in Wallowa County



Significant Weather Events – January 26th, 2018

ZCZC PDXLSRPDT

NWUS56 KPDT 270215

PRELIMINARY LOCAL STORM

REPORT

NATIONAL WEATHER SERVICE PENDLETON

OR

613 PM PST FRI JAN 26 2018

..TIME... ...EVENT... ...CITY LOCATION...

...LAT.LON...

..DATE... ...MAG.... ..COUNTY LOCATION..ST.. ...SOURCE....

..REMARKS..

0600 PM HEAVY SNOW SW EASTON 47.23N 121.18W 01/26/2018 M11.5 INCH KITTITAS WA TRAINED

SPOTTER

SINCE 10AM THIS MORNING

0600 PM HEAVY SNOW 7 NNW EASTON 47.32N 121.25W 01/26/2018 M16.0 INCH KITTITAS WA TRAINED SPOTTER

ACCUMULATION OVER THE LAST 26 HOURS

Heavy Snow on the Cascade East Slopes



Significant Weather Events – January 26th, 2018 (Continued)

ZCZC PDXLSRPDT NWUS56 KPDT 272349

PRELIMINARY LOCAL STORM REPORT...SUMMARY

NATIONAL WEATHER SERVICE PENDLETON OR 349 PM PST SAT JAN 27 2018

..TIME... ...EVENT... ...CITY LOCATION... ...LAT.LON... ..DATE... ...MAG.... ..COUNTY LOCATION..ST.. ...SOURCE....

..REMARKS..

0600 PM HEAVY SNOW SW EASTON 47.23N 121.18W

01/26/2018 M11.5 INCH KITTITAS WA TRAINED SPOTTER

SINCE 10AM THIS MORNING

0731 PM HEAVY SNOW 5 ENE EASTON 47.25N 121.06W

01/26/2018 M8.0 INCH KITTITAS WA DEPT OF HIGHWAYS

ACCUMULATION SINCE THIS MORNING AND STILL SNOWING. ELEVATION 2250 FT.

0740 PM HEAVY SNOW 2 SSE SNOQUALMIE PASS 47.39N 121.39W

01/26/2018 M20.0 INCH KITTITAS WA TRAINED SPOTTER

ACCUMULATION OVER THE LAST 36 HOURS. STILL SNOWING. ELEVATION 2568 FT.

0700 AM SNOW 2 WNW BEND 44.08N 121.35W 01/27/2018 M2.8 INCH DESCHUTES OR COCORAHS

24 HOUR COCORAHS REPORT, ALL SNOW FELL AFTER 10 PM.

ELEVATION 3786 FEET.

Heavy Snow on the Cascades East Slopes & Central OR.



Significant Weather Events – January 27th, 2018

0700 AM SNOW 2 WNW SISTERS 44.30N 121.59W 01/27/2018 E2.5 INCH DESCHUTES OR COCORAHS

24 HOUR COCORAHS REPORT. ALL SNOW FELL AFTER 10 PM. ELEVATION 3235 FEET.

0733 AM SNOW 9 N ELGIN 45.69N 117.92W 01/27/2018 M2.0 INCH UNION OR CO-OP OBSERVER

24 HOUR COCORAHS REPORT. ELEVATION 2873 FEET.

0800 AM SNOW 11 NNW NACHES 46.88N 120.79W 01/27/2018 M2.5 INCH YAKIMA WA COCORAHS

24 HOUR COCORAHS REPORT

0830 AM HEAVY SNOW NW EASTON 47.23N 121.18W 01/27/2018 M10.0 INCH KITTITAS WA CO-OP OBSERVER

24 HR SNOWFALL 10 INCHES...TOTAL SNOW DEPTH 26 INCHES...MELTED SNOW/RAIN 0.73 INCH. EASTON DAM.

0900 AM SNOW TIETON 46.70N 120.75W 01/27/2018 M3.0 INCH YAKIMA WA PUBLIC

OVERNIGHT ACCUMULATION. REPORT FROM FACEBOOK.

0900 AM HEAVY SNOW 7 NNW EASTON 47.32N 121.25W 01/27/2018 M20.0 INCH KITTITAS WA TRAINED SPOTTER

STORM TOTAL 48 HR SNOWFALL 20 INCHES...2 OF THOSE INCHES FELL PAST 12 HRS. CURRENTLY 33 DEGREES AND NOT SNOWING.

Heavy Snow on the Cascade East Slopes, North Central OR & NE Oregon.



Significant Weather Events – January 27th, 2018 (Continued)

| 0900 AM | HEAVY SI | NOW SV | W EASTON | | 47.23N 121.18 | W |
|-----------|-------------|------------|------------|---------|---------------|----------|
| | | | | | | |
| 01/27/201 | 8 M15.5 IN | CH KIT | TITAS | WA TI | RAINED SPO | TTER |
| | | | | | | |
| TO | TAL ACCU | MULATION | N SINCE 10 | AM FRII | DAY. 7.5 INCI | HES FROM |
| 10 | | | | | | |
| AM | I UNTIL 4 P | M, 4 INCHI | ES FROM 4 | PM TO 7 | ' PM AND AN | OTHER 4 |
| | | | | | | |
| INO | CHES OVE | RNIGHT. | | | | |
| | | | | | | |

1000 AM SNOW N TROUT LAKE 46.00N 121.53W

01/27/2018 M4.5 INCH KLICKITAT WA TRAINED SPOTTER

RECEIVED 4.5 INCHES
OVERNIGHT.

0700 AM SNOW 6 ESE PAULINA 44.10N 119.85W

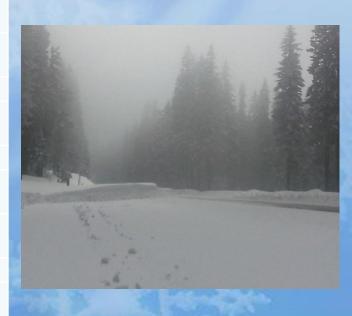
CROOK

01/27/2018 M1.5 INCH

24 HOUR COCORAHS REPORT. ELEVATION 3952 FEET.

OR COCORAHS

Heavy Snow on the Cascade East Slopes & North Central Oregon.



Significant Weather Events

During the month of February, 2018, there were several wind events and several moderate to heavy snow events. These are summarized in the tables below of/from Local Storm Reports (LSRs) of the most significant events.

February 17th, 2018 High Wind Event

PRELIMINARY LOCAL STORM REPORT...SUMMARY NATIONAL WEATHER SERVICE PENDLETON OR 326 PM PST SUN FEB 18 2018

..TIME... ...EVENT... ...CITY LOCATION... ...LAT.LON...
..DATE... ...MAG.... ..COUNTY LOCATION..ST.. ...SOURCE....
..REMARKS..

1258 PM NON-TSTM WND GST 11 S CELILO 45.48N 120.95W 02/17/2018 M62.00 MPH WASCO OR MESONET

0127 PM NON-TSTM WND GST 13 WSW MIKKALO 45.38N 120.46W 02/17/2018 E90.00 MPH GILLIAM OR MESONET

0131 PM NON-TSTM WND GST 1 SE MARYHILL 45.68N 120.80W 02/17/2018 M68.00 MPH SHERMAN OR MESONET

0140 PM NON-TSTM WND GST 4 NW WEST RICHLAND 46.36N 119.46W 02/17/2018 M68.00 MPH BENTON WA MESONET

0154 PM NON-TSTM WND GST W IONE 45.50N 119.83W 02/17/2018 M60.00 MPH MORROW OR MESONET

ZCZC PDXLSRPDT

0157 PM NON-TSTM WND DMG 1 NNE SISTERS 44.30N 121.54W 02/17/2018 DESCHUTES OR TRAINED SPOTTER

TRAINED SPOTTER REPORTED A 2 FEET IN DIAMETER TREE BLOWN OVER WITH WINDS ESTIMATED AT ABOVE 50 MPH AND GUSTS NEAR 70. A SECOND TREE, SPLIT AT THE TOP WHERE THE DIAMETER MEASURED AROUND 1 1/2 FEET IN DIAMETER.

February 17th, 2018 High Wind Event - Continued

0200 PM NON-TSTM WND GST 5 WSW SHANIKO 44.99N 120.85W 02/17/2018 M60.00 MPH WASCO OR MESONET 0215 PM NON-TSTM WND GST 6 SW BASIN CITY 46.54N 119.24W 02/17/2018 M60.00 MPH FRANKLIN WA MESONET 0215 PM NON-TSTM WND GST 1 NW HEPPNER 45.36N 119.56W 02/17/2018 M63.00 MPH MORROW OR MESONET 0215 PM NON-TSTM WND GST 1 NNE SISTERS 44.30N 121.54W 02/17/2018 M66.00 MPH DESCHUTES OR MESONET 0223 PM NON-TSTM WND GST 4 WSW ALDERDALE 45.82N 120.00W 02/17/2018 M65.00 MPH KLICKITAT WA MESONET 0225 PM NON-TSTM WND GST 2 S ROOSEVELT 45.72N 120.21W 02/17/2018 M58.00 MPH GILLIAM OR MESONET 0227 PM NON-TSTM WND GST 1 E HERMISTON 45.83N 119.26W 02/17/2018 M64.00 MPH UMATILLA OR ASOS 0233 PM NON-TSTM WND GST 4 NE LYLE 45.73N 121.22W 02/17/2018 M60.00 MPH KLICKITAT WA MESONET 0237 PM NON-TSTM WND GST E GOODNOE HILLS 45.75N 120.47W 02/17/2018 M62.00 MPH KLICKITAT WA MESONET 0308 PM NON-TSTM WND GST 1 N CITY OF THE DALLES 45.62N 121.17W 02/17/2018 E63.00 MPH KLICKITAT WA ASOS

February 17th, 2018 High Wind Event - Continued

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0316 PM HIGH SUST WINDS 2 NNW PENDLETON
                                             45.70N 118.83W
02/17/2018 M48.00 MPH
                     UMATILLA
                                   OR ASOS
0317 PM NON-TSTM WND DMG 1 NW UMATILLA
                                              45.92N 119.34W
02/17/2018
                 UMATILLA
                              OR TRAINED SPOTTER
     NUMEROUS POWER OUTAGES DUE TO STRONG WINDS
0318 PM NON-TSTM WND GST 4 SSW FOSSIL
                                          44.94N 120.23W
02/17/2018 M61.00 MPH
                                   OR MESONET
                      WHEELER
0354 PM NON-TSTM WND GST 3 WSW KOOSKOOSKIE
02/17/2018 M72.00 MPH
                     UMATILLA
                                   OR MESONET
&&
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This event was mainly a wind event which occurred over much of central and north central Oregon and south central Washington. It resulted in many occurrences of high winds with downed trees and power outages. There was some light precipitation with this event's cold front, but the main impacts were due to high winds with a strong, but relatively dry cold front. This was followed a day later with a modified arctic push on the 18th that produced mainly just light snow across the forecast area. The areas that did receive snowfall only measured mostly less than an inch except for a few isolated areas of several inches, which did not meet advisory or warning criteria.

February 24-25 Heavy Snow Event over the area mountains From central Oregon to the Northeast Blue Mountains:

PRELIMINARY LOCAL STORM REPORT...SUMMARY NATIONAL WEATHER SERVICE PENDLETON OR 636 AM PST SUN FEB 25 2018

..TIME... ...EVENT... ...CITY LOCATION... ...LAT.LON...
..DATE... ...MAG.... ..COUNTY LOCATION..ST.. ...SOURCE....
..REMARKS..

0600 AM SNOW 4 NW MEACHAM 45.55N 118.47W 02/24/2018 M3.0 INCH UMATILLA OR TRAINED SPOTTER

ACCUMULATION OVERNIGHT

0600 AM SNOW 2 WNW SISTERS 44.30N 121.59W 02/24/2018 M2.3 INCH DESCHUTES OR COCORAHS

0651 AM SNOW 1 WSW CITY OF THE DALLE 45.59N 121.20W 02/24/2018 M2.5 INCH WASCO OR TRAINED SPOTTER

ACCUMULATION OVERNIGHT

0700 AM SNOW 1 S BEND 44.05N 121.31W 02/24/2018 M3.6 INCH DESCHUTES OR COCORAHS

0710 AM SNOW 2 SW GOLDENDALE 45.80N 120.84W 02/24/2018 M3.0 INCH KLICKITAT WA CO-OP OBSERVER

0730 AM SNOW SSW TROUT LAKE 46.00N 121.53W 02/24/2018 M2.9 INCH KLICKITAT WA COCORAHS

0800 AM SNOW 1 SSW SNOWDEN 45.82N 121.36W 02/24/2018 M5.0 INCH KLICKITAT WA CO-OP OBSERVER

0815 AM SNOW 9 N ELGIN 45.69N 117.92W 02/24/2018 M5.8 INCH UNION OR COCORAHS

February 24-25 Heavy Snow Event over the area mountains From central Oregon to the Northeast Blue Mountains - Continued

0900 AM HEAVY SNOW 1 WSW SKI BLUEWOOD 46.08N 117.85W 02/24/2018 M10.0 INCH COLUMBIA WA TRAINED SPOTTER

ACCUMULATION SINCE LAST NIGHT

0924 AM HEAVY SNOW 5 NNE LA GRANDE 45.39N 118.07W 02/24/2018 M5.3 INCH UNION OR TRAINED SPOTTER

3.5 INCHES OVERNIGHT THROUGH 7 AM, 5.3 INCHES TOTAL

0930 AM SNOW 1 NW EASTON 47.24N 121.19W 02/24/2018 M8.0 INCH KITTITAS WA CO-OP OBSERVER

24 HOUR ACCUMULATION

1200 PM HEAVY SNOW 5 SW SPOUT SPRINGS 45.70N 118.11W 02/24/2018 M12.0 INCH UMATILLA OR MESONET

THE HIGH RIDGE SNOTEL REPORTED 12 INCHES OF SNOW ACCUMULATION SINCE MIDNIGHT. ELEVATION 4920 FEET.

1200 PM HEAVY SNOW 3 NNW SKI BLUEWOOD 46.12N 117.85W 02/24/2018 M10.0 INCH COLUMBIA WA MESONET

THE TOUCHET SNOTEL REPORTED 10 INCHES OF SNOW ACCUMULATION SINCE MIDNIGHT. ELEVATION 5530 FEET.

1200 PM HEAVY SNOW 9 SW SKI BLUEWOOD 45.98N 117.95W 02/24/2018 M9.0 INCH WALLOWA OR MESONET

THE MILK SHAKES SNOTEL REPORTED 9 INCHES OF SNOW ACCUMULATION SINCE MIDNIGHT. ELEVATION 5580 FEET.

February 24-25 Heavy Snow Event over the area mountains From central Oregon to the Northeast Blue Mountains - Continued

1210 PM HEAVY SNOW 2 SSW CAMP SHERMAN 44.44N 121.66W 02/24/2018 M7.0 INCH OR TRAINED SPOTTER **IEFFERSON** 12 HOUR ACCUMULATION 0138 PM SNOW TOLLGATE 45.78N 118.11W 02/24/2018 M7.0 INCH UMATILLA OR PUBLIC SNOW ACCUMULATION SINCE LAST NIGHT. STILL SNOWING. ELEVATION 5077 FEET. 0138 PM HEAVY SNOW 1 WSW SKI BLUEWOOD 46.08N 117.85W 02/24/2018 M15.0 INCH COLUMBIA WA TRAINED SPOTTER 2 INCHES OVERNIGHT, 13 INCHES SINCE 445 AM. &&

This event was mainly a sharp modified arctic cold front which brought light to moderate snow to the forecast area, but the main impacts were the influx of significant arctic cold air. Over the next couple of days of these last days of February, temperatures dropped to near or below record low temperatures which will be listed in a few slides. For the remainder of the month daytime highs were a bit below normal, with near record cold night time lows and mainly light snow events.

Some Record Cold Temperatures for February In the Forecast Area

Some record high temperatures occurred at the beginning of the month, but most of the record were record lows during the latter half of February

February 1st record highs

| STATION | | PREVIO | US | NEV | W R | ECC | ORDS |
|------------|------|---------|------|------|--------|------|------|
| | REC | CORD/YE | ١R | RECC | RD E | BEG. | AN |
| | | | | | | | |
| REDMOND, O | ЭR | 65 / | 1976 | 65 | (TIED) | 194 | 1 |
| THE DALLES | , OR | 59 / | 2015 | 62 | | 192 | 29 |
| YAKIMA, WA | | 58 / | 1982 | 63 | | 190 | 9 |

February 3rd record highs

| STATION | | PREVIOUS | NE' | W REC | ORDS |
|------------|------|-----------|-------|---------|------|
| | REC | CORD/YEAR | RECO | ORD BEC | GAN |
| | | | | | |
| THE DALLES | , OR | 60 / 19 | 67 63 | 1929 | |
| YAKIMA, WA | | 61 / 19 | 62 66 | 1909 | |

February 5th record highs

| | | | _ | | | | | |
|------------|------|--------|------|------|----|------|------|--|
| STATION | I | PREVIO | US | NEV | W | REC | ORDS | |
| | RECO | RD/YE | λR | RECO | RD | BEG | AN | |
| | | | | | | | | |
| THE DALLES | , OR | 57 / | 1958 | 60 | | 1929 | | |
| YAKIMA, WA | | 58 / | 1991 | 61 | | 1909 | | |

February 8th record highs

| | | 9 | | |
|-----------------|------------|----------|--------|-----------|
| STATION | PREVIOU | JS NEV | W I | RECORDS |
| RE | CORD/YEA | R RECC | ORD I | BEGAN |
| | | | | |
| *LA GRANDE(CI | TY), OR 63 | 3 / 2015 | 63 (TI | ED) 1887 |
| *PRINEVILLE, O | R 64 | 1 / 1996 | 66 | 1897 |
| *SISTERS, OR | 59 | 9 / 2006 | 66 | 1958 |
| *GOLDENDALE | , WA 55 | 5 / 2015 | 62 | 1905 |
| *SATUS PASS, WA | A 5: | 3 / 1974 | 53 (T | IED) 1967 |
| YAKIMA,WA | 58 | 8 / 1995 | 64 | 1909 |



Some Record Temperatures for February In the Forecast Area

Some record low temperatures for the latter half of February

February 21st record lows

| STATION | PREVIO | US | NE | W | RECO | ORDS | |
|----------------|--------|--------|------|------|------|--------|--|
| REC | ORD/YE | AR | RECC | RD | BEG | AN | |
| | | | | | | | |
| *LA GRANDE(CIT | Y), OR | 12 / | 2006 | 10 | | 1887 | |
| *LONG CREEK, O | R | 9 / | 1975 | 7 | | 1908 | |
| *MORO, OR | | 7 / 1 | 1918 | 3 | | 1897 | |
| THE DALLES, OR | | 16 / 3 | 1993 | 16 (| TIED |) 1929 | |
| *BICKLETON, WA | | 6/ | 1957 | 5 | | 1927 | |
| *WHITMAN MISSI | ON, WA | 18 / 2 | 2010 | 17 | | 1962 | |

February 23rd record lows

| STATION | PREVIO | US 1 | NEW | RECORDS | |
|----------------|------------|----------|-------|---------|--|
| RE | CORD/YEA | AR RE | ECORD | BEGAN | |
| | | | | | |
| *HEPPNER, OR | 12 | 2 / 1910 | 9 | 1889 | |
| *JOHN DAY(CIT | Y), OR 12 | / 2015 | 5 | 1891 | |
| *LA GRANDE(CI | ΤΥ), OR 18 | 3 / 2015 | 13 | 1887 | |
| *LONG CREEK, | OR 9 | / 1960 | 1 | 1908 | |
| MEACHAM, OR | 3 | / 2003 | -2 | 1929 | |
| *PELTON DAM, | OR 12 | / 1960 | 6 | 1958 | |
| PENDLETON(AR | PT), OR 19 | / 2015 | 12 | 1934 | |
| *PENDLETON(E | S), OR 15 | 5 / 2015 | 6 | 1932 | |
| REDMOND, OR | 10 | / 2015 | -5 | 1941 | |
| THE DALLES, OF | R 20 | / 2015 | 13 | 1929 | |
| *GOLDENDALE, | WA 14 | / 1910 | 1 | 1905 | |
| WALLA WALLA, | WA 20 | / 1957 | 19 | 1930 | |
| YAKIMA,WA | 16 | / 1993 | 11 | 1909 | |

February 27th record lows

| STATION | PREVIO | OUS N | IEW | RECORDS |
|------------|------------|----------|------|---------|
| | RECORD/YE | AR REC | CORD | BEGAN |
| | | | | |
| *LA GRANDE | (CITY), OR | 7 / 1996 | 6 | 1887 |
| МЕАСНАМ, С | OR -4 / | 1962 -1 | 10 | 1929 |



Significant Weather Events – Dec 2017 – Feb 2018

During the month of March, 2018, there were several smaller events and two larger events. The larger event Local Storm Reports are shown below. The first one was a heavy snow event during the first two days day of the month while the second was a high wind event, which was later in the month.

PRELIMINARY LOCAL STORM REPORT...SUMMARY NATIONAL WEATHER SERVICE PENDLETON OR 102 PM PST FRI MAR 02 2018

..TIME... ..EVENT... ...CITY LOCATION... ...LAT.LON...
..DATE... ...MAG... ..COUNTY LOCATION..ST.. ...SOURCE....
..REMARKS...

0200 PM HEAVY SNOW 18 ENE SENECA 44.21N 118.64W 03/01/2018 E5.0 INCH GRANT OR MESONET

LAKE CREEK SNOTEL. SINCE 10 PM WEDNESDAY.

0300 PM HEAVY SNOW 13 SW MITCHELL 44.43N 120.33W 03/01/2018 E7.0 INCH CROOK OR MESONET

SINCE 0300 THIS MORNING. OCHOCO MEADOWS SNOTEL

0400 PM HEAVY SNOW 6 ESE PAULINA 44.10N 119.85W 03/01/2018 M4.5 INCH CROOK OR COCORAHS

4.5 INCHES SNOW FELL FROM 2 PM TO 4 PM

0417 PM HEAVY SNOW 7 ENE PAULINA 44.18N 119.84W 03/01/2018 M6.0 INCH CROOK OR TRAINED SPOTTER

6 INCHES SNOW FELL FROM 1430 PM TO 1617 PM. VIA SOCIAL MEDIA REPORT.

1220 PM HEAVY SNOW 7 NNE LOSTINE 45.59N 117.37W 03/02/2018 M7.0 INCH WALLOWA OR TRAINED SPOTTER

7 INCHES OF SNOW SINCE YESTERDAY AFTERNOON

1235 PM HEAVY SNOW 1 SSE JOSEPH 45.34N 117.22W 03/02/2018 M5.0 INCH WALLOWA OR TRAINED SPOTTER

RECEIVED 5 INCHES OF SNOW SINCE YESTERDAY AFTERNOON.

This is a list of Local Storm Reports (LSRs) during a heavy snow event on The 1st and 2nd of March. Most of the Snow fell over Grant, Crook and Wallowa counties of Oregon (i.e. Central and northeast Oregon).



Photo by Johnny Blagg

Significant Weather Events – High Winds on March 27th, 2018

This was a high wind event which took place on March 27th, 2018

PRELIMINARY LOCAL STORM
REPORT
NATIONAL WEATHER SERVICE PENDLETON
OR

844 AM PDT WED MAR 28 2018

".TIME... ".EVENT... "..CITY LOCATION... ".LAT.LON...
".DATE... "..MAG... ".COUNTY LOCATION..ST. ...SOURCE...
"REMARKS..

1010 AM NON-TSTM WND GST 4 SW HARRAH 46.36N 120.60W 03/27/2018 M55 MPH YAKIMA WA MESONET

MESONET STATION AR622, 4 SW HARRAH.

0715 PM NON-TSTM WND GST 4 ENE RUFUS 45.73N 120.65W 03/27/2018 M54 MPH SHERMAN OR MESONET

MESONET STATION ODT17, 4 ENE RUFUS.

1130 AM NON-TSTM WND GST 1 WNW KENNEWICK 46.22N 119.20W 03/27/2018 M54 MPH BENTON WA MESONET

MESONET STATION HVSTA, 1 WNW KENNEWICK.

0501 PM NON-TSTM WND GST HERMISTON MUNICIPAL AIR 45.83N 119.26W

03/27/2018 M51 MPH UMATILLA OR ASOS

ASOS STATION HRI, HERMISTON MUNICIPAL AIRPORT.

Even though High Wind Events have a criteria of wind gusts of 58 mph or more, the conditions of this event was mainly strong wind gusts that were just shy of a High Wind event, but sustained winds could, and probably were greater than 40 mph or greater at times, which also meets High Wind event criteria.



Observed Max & Min Temperatures for the Winter Season December 2017 – February 2008

| Location | Highest Maximum Temperature | Lowest Minimum Temperature |
|-----------------|-----------------------------|----------------------------|
| Pendleton, OR | 65 | 1 |
| Redmond, OR | 70 | -5 |
| Pasco, WA | 66 | 11 |
| Yakima, WA | 69 | 11 |
| Walla Walla, WA | 67 | 8 |
| Bend, OR | 65 | -5 |
| Ellensburg, WA | 61 | 6 |
| Hermiston, OR | 65 | 5 |
| John Day, OR | 70 | 5 |
| La Grande, OR | 63 | -7 |
| The Dalles, OR | 67 | 12 |
| MT Adams BS WA | 5.9 | 2 |

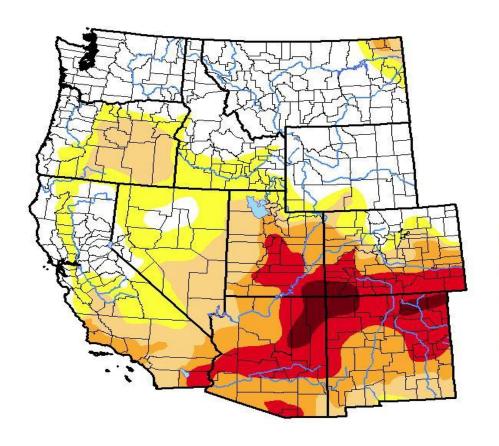
MT Adams RS WA There was not much of a change in maximum temperatures, but lowest minimum temperatures were considerably warmer than February.

Observed Precipitation and Snowfall for the Winter Season December 2017 – February 2008

| Location | Total Monthly Precip | Total Snowfall |
|-----------------|----------------------|----------------|
| Pendleton. OR | 3.55 " | 14.4 |
| Redmond, OR | 0.6 | 3.6 |
| Pasco, WA | 2.25 | 4.0 |
| Yakima, WA | 1.45 | 1.7 |
| Walla Walla, WA | 6.73 | 10.7 |
| Bend, OR | 1.21 | 4.5 |
| Ellensburg, WA | 1.78 | M |
| Hermiston, OR | 2.42 | T |
| John Day, OR | 1.17 | 11.9 (co op) |
| La Grande, OR | 5.48 | 9.0 |
| The Dalles, OR | 3.31 | 10.5 |
| Mt Adams RS, WA | 15.0 | 27.0 |

Post Winter Season 2017-2018 Drought Monitor

U.S. Drought Monitor
West



April 24, 2018

(Released Thursday, Apr. 26, 2018) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--------------------------------------|-------|-------|-------|-------|-------|------|
| Current | 38.60 | 61.40 | 43.93 | 28.11 | 14.37 | 2.47 |
| Last Week 04-17-2018 | 38.36 | 61.64 | 43.43 | 27.83 | 13.69 | 1.70 |
| 3 Month s Ago 01-23-2018 | 40.25 | 59.75 | 38.41 | 17.68 | 0.00 | 0.00 |
| Start of Calendar Year | 48.76 | 51.24 | 29.03 | 8.60 | 1.52 | 0.00 |
| Start of Water Year 09-26-2017 | 55.72 | 44.28 | 21.01 | 8.72 | 5.30 | 2.17 |
| One Year Ago 04-25-2017 | 81.90 | 18.10 | 3.82 | 0.16 | 0.00 | 0.00 |

Intensity:

D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brad Rippey
U.S. Department of Agriculture







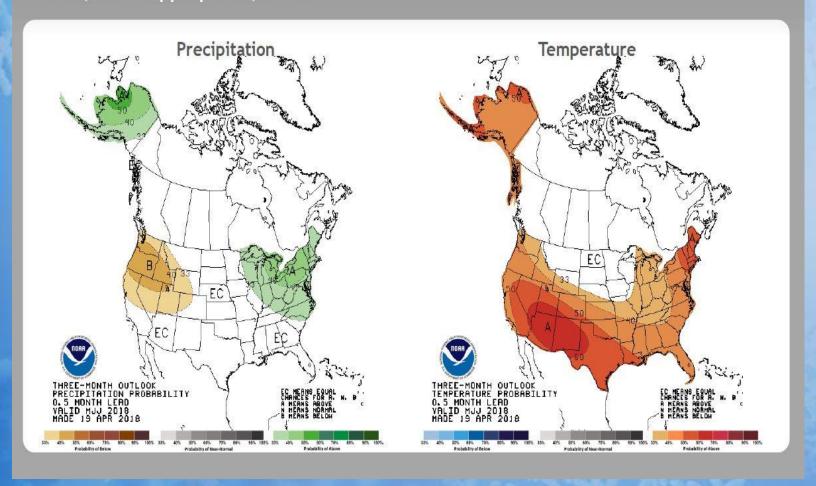


http://droughtmonitor.unl.edu/

The map shows that Oregon has a moderate drought, but Washington is normal at this time, after the winter season 2017 – 2018.

USA Seasonal Temperature/Precipitation Outlook – Spring 2018

The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.



During the spring season, the maps show below normal precipitation and above normal temperatures due to the current ENSO status.



Thank You!