Blue Ridge Thunder

Newsletter of the NWS Blacksburg, VA

Welcome to the spring 2020 edition of 'Blue Ridge Thunder' the biannual newsletter of the National Weather Service (NWS) office in Blacksburg, VA. In this issue you will find articles of interest on the weather and climate of our County Warning Area (CWA) and the people and technologies needed to bring accurate forecasts to the public.

Inside this Issue:

Weather Highlight:

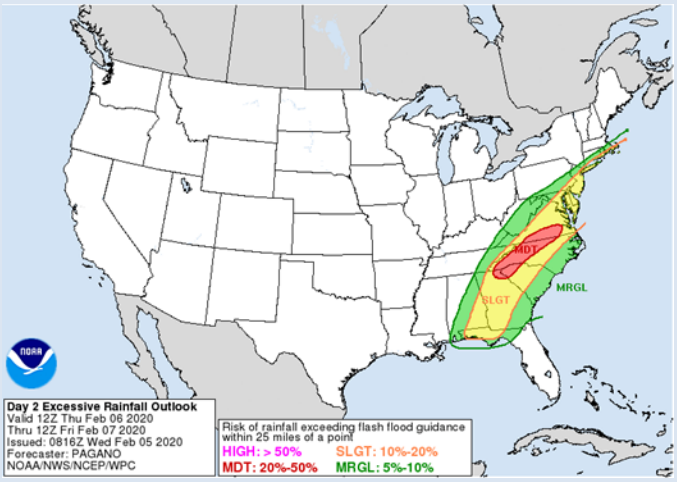
Record February Rain and Flooding

Peter Corrigan, Sr. Service Hydrologist

Flooding once again was the biggest recent weather story as record rainfall over several days in early February led to significant flooding parts of the region. Over two dozen NWS Cooperative sites set all-time February daily rainfall records on February 6th and 7th and two-day records as well. This led to flash and river flooding across parts of the CWA, with the biggest impacts along the Clinch River in the Richlands area of Tazewell County. Numerous evacuations occurred in the Richlands area on the morning of the 7th and many homes and businesses flooded. A state of emergency was declared by the governor of Virginia. Damage in Tazewell County was close to $2 million according to Virginia Departments of Emergency Management and Transportation sources.

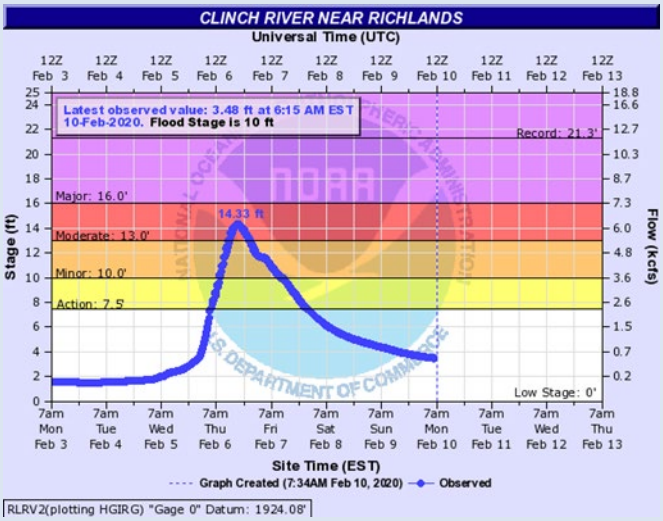
Flooding along the Clinch River at Richlands, VA February 6, 2020 (Photo courtesy of Billy Bowling)

The heavy rain event was reasonably well forecast with the Weather Prediction Center (WPC) issuing a Day 2 Outlook early on February 5th for a Moderate Risk of Excessive Rainfall. The axis of forecast heaviest rain was displaced somewhat to the southeast of the Tennessee River basin (the Clinch River is a headwater basin in this drainage).



WPC Day 2 Excessive Rainfall Outlook Feb. 5, 2020

Nevertheless, a Flood Watch was issued early on February 5th for the southwest mountains and expanded in coverage over the next few days. As the rainfall expanded in coverage from southwest to northeast on the morning of February 6th the first of several Flash Flood Warnings were issued. These warning were actually issued by WFO Raleigh, NC due to an internet outage that occurred overnight at WFO Blacksburg. As stages rose rapidly along the Clinch River a short time later and after consultation with Tazewell County Emergency Management a rare Flash Flood Emergency was issued for that county due to the severe flooding in and around Richlands. The AHPS hydrograph below shows the rapid rise along the Clinch early on February 6th. The crest of 14.33 feet (6205 cfs) was the 9th highest on record and highest since November, 2003 (14.65 ft.). This was above the Moderate flood stage of 13 feet but below Major flood stage of 16 feet.



Clinch River near Richlands, VA

Flooding and flash flooding was widespread across the County Warning Area (CWA) with dozens of stream gages rising above flood stage, some to notable levels. This included the USGS gage on the Dan River near Wentworth (WENN7), which crested at 28.39 feet just below the Major flood stage of 29 feet. It was the highest stage since Hurricane Agnes in June 1972 (31.60 feet) and 2nd highest since records began in 1940. The North Fork Holston River near Saltville (SALV2) also crested at its highest level (11.37 feet) in almost 17 years, since the record flood (15.46 ft.) in November, 2003. The main impacts were reported to be roads flooded, with over 50 roads closed in Smyth County, VA alone. River flooding also occurred along portions of the James, Roanoke, Yadkin and New Rivers, although most of the flooding remained in the Minor category. In Mercer Count, WV a person in a car was rescued from the flooding Bluestone River.

The heaviest rains fell during the 24-hour period ending 700 AM on the 7th, and numerous COOP sites set daily and all-time February rainfall records. Among the February records were Boone 1 SE, NC with 4.35" (old record 3.91" in 1984), Danbury, NC 4.06" (old record 2.27" in 1996), Chatham, VA 3.95" (old record 2.61" in 1984), Eden, NC 3.93" (old record 2.25" in 1984) and Yadkinville, NC 3.91" (old record 2.53" in 1972). Storm total rainfall ranged from 4 to 7 inches over the 3-day period.

Winter 2019-2020 Climate Summary

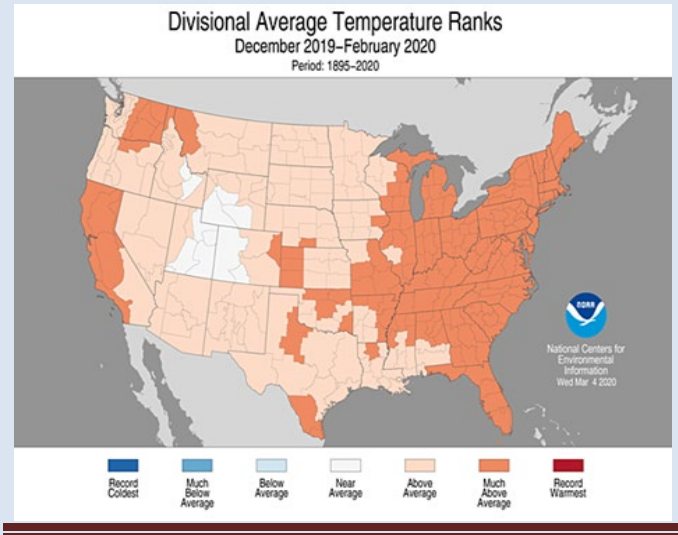
Peter Corrigan, Sr. Service Hydrologist

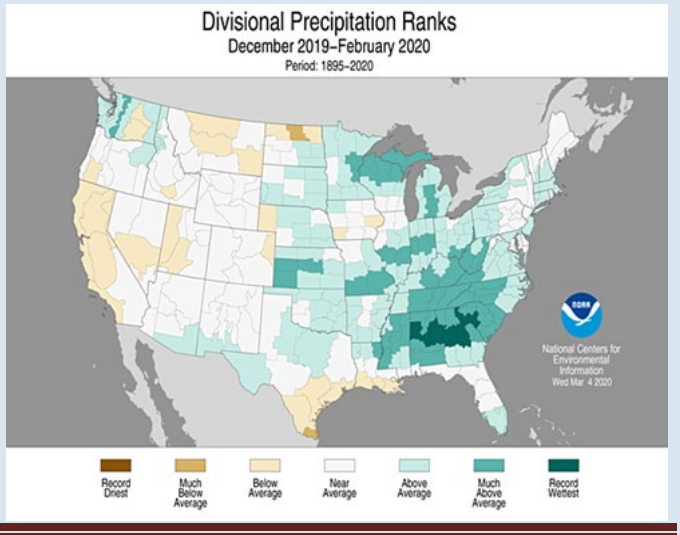
Warm and almost snowless sums up the 'meteorological' winter of 2019-2020 (December 1 – February 29). At the official climate sites, the winter as a whole was the 4th warmest at Lynchburg (data since 1893) and Blacksburg (data since 1952) and 5th warmest at Roanoke (data since 1916), while Danville and Bluefield failed to make the top ten warmest. Not a single low temperature record was set the entire winter at any climate site and no sub-zero temperatures occurred. The table below shows winter season statistics for the five official climate sites in the CWA. Additional data can be found on the NWS RNK Climate web page.

Local Climatological Statistics for winter 2019-2020 (Dec-Feb).

Climate Site	Average Temperature (Anomaly)	Total Precipitation (Anomaly)	Total Snowfall (Normal)	Period of Record
Bluefield, WV	38.3 (+2.1)	9.73 (+1.16)	11.4 (25.3)	1909-2020
Blacksburg, VA	38.2 (+5.1)	11.34 (+2.50)	4.8 (16.2)	1952-2020
Roanoke, VA	42.8 (+4.5)	10.18 (+1.43)	1.6 (14.2)	1912-2020
Lynchburg, VA	42.6 (+5.7)	12.20 (+2.89)	T (10.2)	1893-2020
Danville, VA	43.5 (+4.0)	14.86 (+5.16)	1.6 (9.3)	1916-2020

According to data from NOAA's National Center for Environmental Information the states of Virginia and North Carolina both had their 5th warmest winter in the past 125 years (since 1895) and West Virginia the 4th warmest. Nor did our region bask alone in the warmth. As the map below (left) shows the entire eastern half of the U.S. was in the 'Much Above Average' category for temperatures. Setting aside the planetary climatic trend toward warmer temperatures, the primary reason for the very warm winter was configuration of the Arctic Oscillation which kept arctic air confined to, well the arctic. The upper levels of the atmosphere were dominated by zonal or east-west flow. You might recall that there were few, if any, stories about the 'polar vortex' this winter! Precipitation was also above to much above normal, primarily due to the very wet February.





2020 Atlantic Hurricane Outlook

Ben Gruver, Meteorologist

After a very active and above normal 2019 hurricane season, another near average to above average hurricane season is expected for 2020. This season will be following 18 named storms in the Atlantic basin, six of which were hurricanes, with three obtaining "major" hurricane status. The three major hurricanes this past season were Dorian, Humberto and Lorenzo. 2019 is the fourth consecutive above-normal Atlantic hurricane season. This link shows the storm tracks for the 2019 season. The big story of the 2019 season was Hurricane Dorian, which made landfall in the Bahamas as a Category 5 storm on Saffir-Simpson Hurricane Wind Scale. It went on to make a second landfall along the Outer Banks of North Carolina. Hurricane Dorian is among the upper-echelon of hurricanes in the Atlantic basin in terms of highest sustained wind speeds, with Dorian topping out at 185mph. This is tied with the 1935 Labor Day Hurricane, 1988's Hurricane Gilbert and 2005's Hurricane Wilma. While there were hardly any impacts locally, Dorian devastated Abaco Island and Grand Bahama after slowing down to a completely stationary storm over the islands, battering them for over 24 hours. Daily satellite imagery through Dorian's lifespan can be found here.

Many researchers and academic groups are predicting an above average hurricane season, with the main contributing factor being the lack of El Niño. Colorado State University (CSU), well known for their hurricane outlooks, expects 16 named storms, eight to become hurricanes, and four the reach major hurricane status (Category 3-5 on the Saffir-Simpson Wind Scale). The CSU forecast will be updated in early June and the official NOAA forecast will be issued in late May.

The expected increased hurricane/tropical storm activity appears mainly to be associated with moving away from an El Niño phase to a La Niña phase. El Niño tends to create increased shear over the Atlantic, which is generally not favorable for hurricane development. Also working in favor for an active season has been the lack of winter. This lack of winter has led to mild temperatures, ultimately leading to warmer than average water temperatures, especially in the Caribbean and Gulf of Mexico.

The storm names for the 2020 Atlantic season include: Arthur, Bertha, Cristobal, Dolly, Edouard, Fay, Gonzalo, Hanna, Isaias, Josephine, Kyle, Laura, Marco, Nana, Omar, Paulette, Rene, Sally, Teddy, Vicky, and Wilfred. Hurricane season officially begins on June 1st and ends on November 30th, 2020.

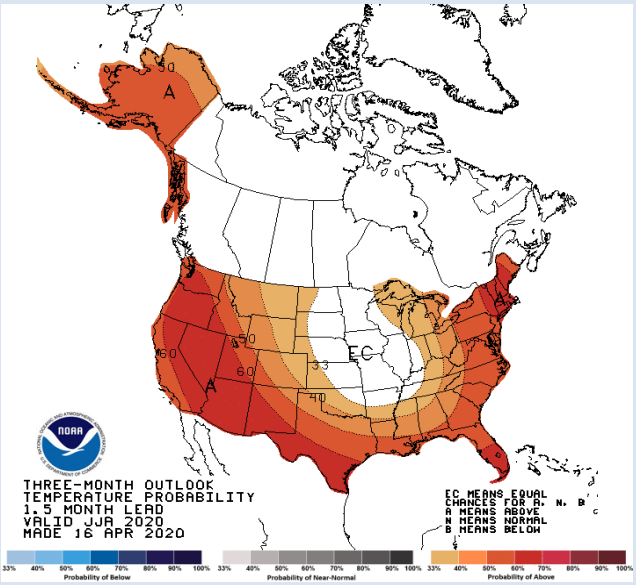
Summer 2020 Outlook: Warmer than Normal Again?

Robert Beasley, Senior Meteorologist

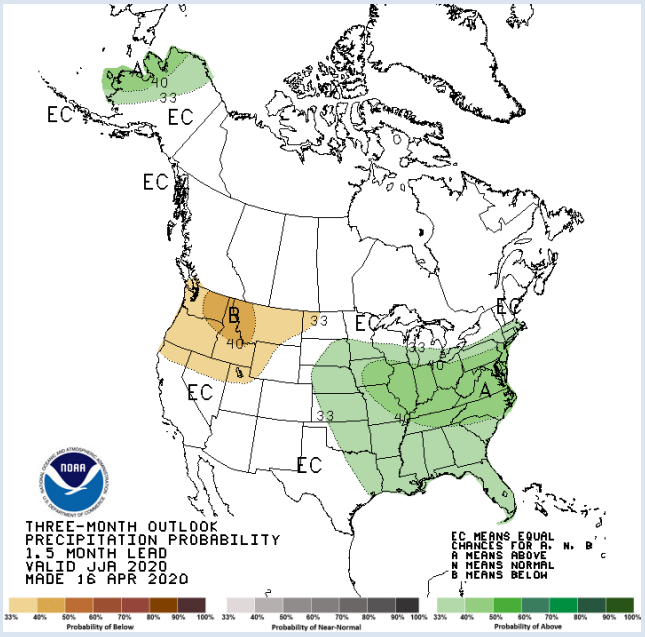
After one of the mildest and least snowy winters in years, residents of the Blacksburg/Roanoke forecast area may be wondering if the upcoming summer will be really hot or perhaps, to compensate for the incredibly mild 2019-2020 winter, might lead to an unusually cool summer. After all, nature often tries to balance itself out over time. As of this writing, April and May to date have averaged well below normal. Much of the last 30 days or more has been dominated by a deep anomalous trough anchored across the eastern U.S., providing northwest flow and transporting polar air from northern latitudes. Can we expect this pattern to persist into summer? The Climate Prediction Center (CPC) of the National Weather Service does not seem to think it will. Instead, the mean position of the upper trough is expected to retrograde west into the Midwest as we head into summer.

So what does science and climatology tell us we might anticipate during the warm season which lies ahead? At this time, there are no large scale features, such as a strong El Niño or La Niña (El Niño Southern Oscillation

– ENSO) to influence the summer pattern. Even if there were a strong ENSO, such large scale global features are believed to have a minimal impact on the summer season. Current forecasts from the CPC indicate that an upper level mean trough will dominate the central U.S. during much of the summer with upper atmospheric ridges along the east and west coasts. Such a pattern would lead to a predominate southwest flow aloft and thus in theory a warmer than normal summer. This same pattern would also result in abundant moisture for showers and thunderstorms as warm, humid air is transported north from the Gulf of Mexico. The antecedent above normal soil moisture from a very wet year to date and continued above normal rainfall into the summer could offset the warming of southwest flow with increased humidity. Humid air is harder to heat than dry air but it is also harder to cool. As a result, the diurnal temperature range is decreased, with warmer overnight lows and but also lower maximum temperatures. The latest outlooks from the CPC are shown below. These forecasts are updated monthly.



Summer (Jun-Aug) Temperature Outlook



Summer (Jun-Aug) Precipitation Outlook

So, if the pattern evolves as expected over the next few weeks leading into summer, we can expect a typically warm but humid summer with above normal rainfall continuing, simply adding to our already wet year (currently one of the top ten wettest years on record for much of the region). Keep in mind that above normal rainfall in the summer often means more afternoon thunderstorms. So be on the lookout for the elements that accompany thunderstorms, namely lightning, heavy rainfall, strong gusty, sometimes damaging winds, and possibly hail. While the predictability of weather conditions in future months decreases the further out in time one looks, it might be a wise idea this summer to keep an umbrella handy and dust off the fans.

New SPC Probabilistic Graphics Now Available

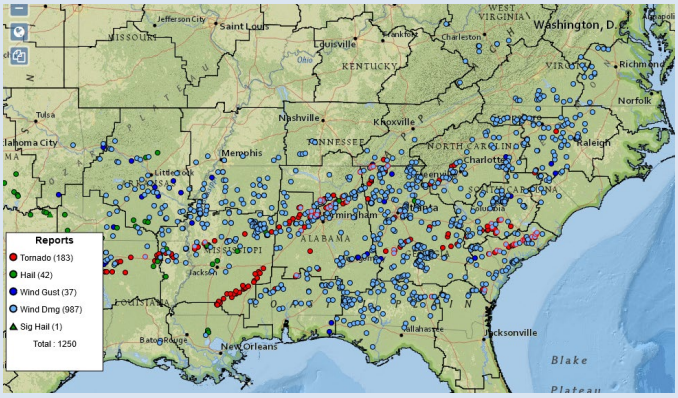
Phil Hysell, Warning Coordination Meteorologist

The Storm Prediction Center (SPC) issues Convective Outlooks to highlight the potential for severe convective weather across the continental United States. These one-day forecasts show five tiers of risk categories (Marginal, Slight, Enhanced,

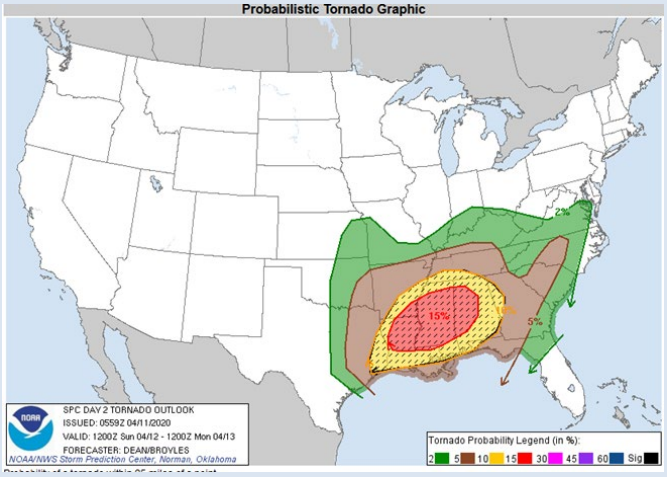
Moderate, and High) for severe thunderstorms for the day 1, 2 and 3 convective outlooks.

Prior to the winter of 2020, probabilistic graphics for individual convective threats (tornado, damaging thunderstorm winds, large hail) were also generated, but only for the day 1 convective outlook. On January 30th, 2020, SPC started generating these individual convective threat images for the day 2 convective outlook.

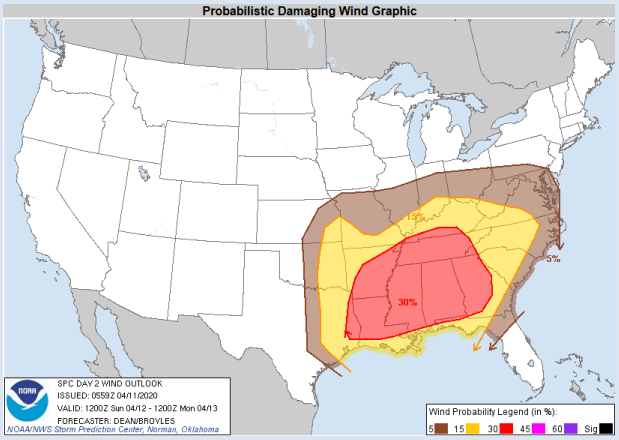
Let us examine an example of the new day 2 individual convective threats graphics for the April 12th, 2020 severe weather outbreak.



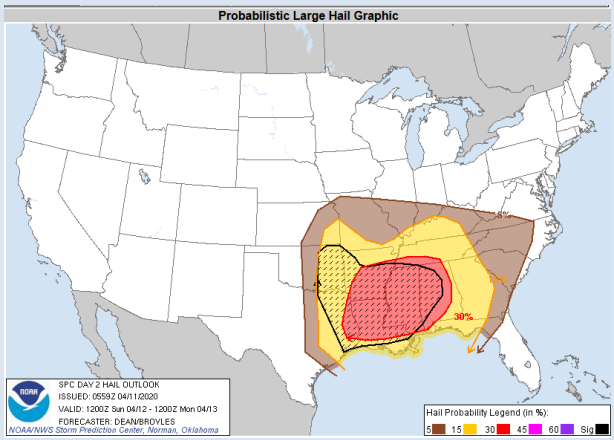
Severe Weather Reports – April 12, 2020



Day 2 Probabilistic Tornado Graphic (issued 2 AM EDT April 11, 2020)



Day 2 Probabilistic Damaging Wind Graphic (issued 2 AM EDT April 11, 2020)



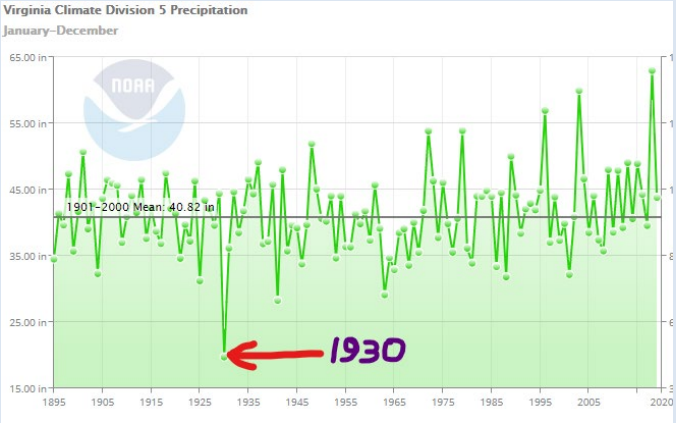
Day 2 Probabilistic Damaging Hail Graphic (issued 2 AM EDT April 11, 2020)

So what is new here? The big change is that these probability maps for individual convective threats are issued 24-48 hours before the event, accurately highlighted the areas at risk for tornadoes, damaging winds and large hail. This product can serve as a helpful tool to anticipate the threat for severe weather. Click here for SPC latest convective outlooks. For more information about convective outlooks, including the definitions of risk categories and associated probabilities, visit this site.

Climate in Focus: The Historic Drought of 1930

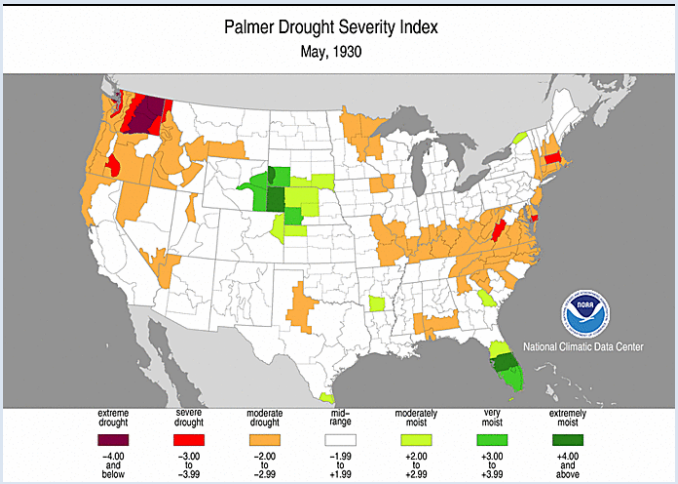
Peter Corrigan, Sr. Service Hydrologist

People enjoy commemorating anniversaries! In the weather world big snowstorms, hurricanes, floods and tornado outbreaks are often 'celebrated' or at least acknowledged on such dates. Few, if any living however, may remember that 90 years ago, 1930 was the driest year on record in nearly all of both Virginia and West Virginia (not North Carolina). So how dry was 1930? The chart below from NOAA's Climate at a Glance website shows the annual rainfall from 1895 through 2019 for VA Climate Division (CD) 5, the Central Mountains, which includes Roanoke City and six counties. The average of 19.75 inches is easily the driest year on record and is just under half of the long-term annual average of 40.82 inches. In only two other years (1941 and 1963) did under 30 inches of rain fall in an entire year!



Both VA CD 6 (SW Mountains) and CD 3 (Western Piedmont) were also driest in 1930 by a considerable margin. In West Virginia CD 3 (Southern) also was by far the driest in 1930 at 24.23". Only a handful of climate and COOP sites extend back as far as 1930 (with complete data) but 1930 stands out as the record driest. This includes Rocky Mount, VA (data back to 1894) at 29.09 inches, Wytheville, VA at 21.36" (data to 1893), Lynchburg, VA at 19.83", Mt. Airy, NC (data to 1893) at 19.76 inches and White Sulphur Springs, WV (data to 1921) with an incredible 15.88 inches, the lowest precipitation total at any COOP site for one year with no missing days.

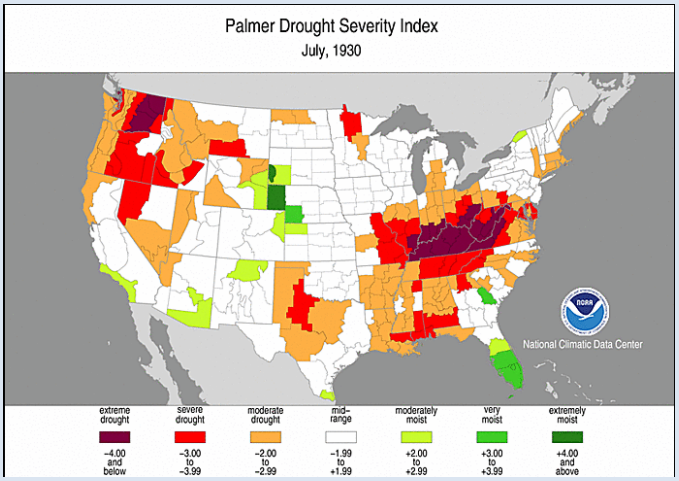
At the state level, 1930 is also unrivaled for its aridity. The state average in West Virginia for 1930 was 25.3 inches; only one other year was even below 35 inches (1904 with 34.51 inches). In Virginia the state average for 1930 was 24.74 inches, also easily the driest, with 1941 in 2nd place at 31.15 inches. With extended dryness of course, the other D-word usually follows: Drought. The 1930 drought seems to be recognized as the worst in the history of Virginia (or at least the 'instrument' history) according to several sources. Other severe droughts have occurred in Virginia, with the most notable from 1938-42, 1962-71, 1999-2002 and even the 'flash drought' just last year. One of the longest-calculated measures of drought is the Palmer Drought Severity Index (PDSI), which combines temperature, precipitation and soil moisture. In May, 1930 the drought was just getting underway with the PDSI showing Moderate Drought (see figure below) across much of Virginia, West Virginia and North Carolina.



PDSI – May, 1930

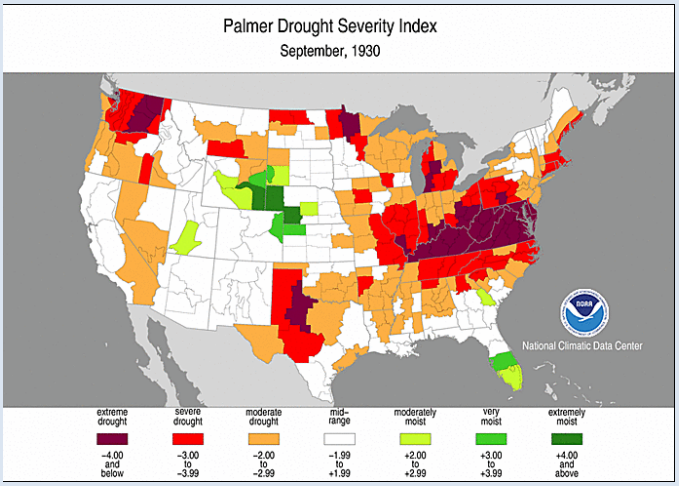
As the summer of 1930 progressed the drought intensified, reaching Severe to Extreme conditions across the mountains of VA and WV by July (figure below). The summer (Jun-Aug) of 1930 was the driest on record at both Roanoke and Lynchburg with 4.54" and 3.89", respectively. These amounts

are roughly 33 percent of normal summer rainfall.



PDSI – July 1930

By September (figure below) the entire states of Virginia and West Virginia (and Kentucky) were in the Extreme category, a very unusual occurrence for the region.



PDSI – September 1930

Interestingly, the 1930 Atlantic hurricane season was the 2nd least active on record (after 1914) with only three tropical storms and only Florida was affected in the U.S. Hence, there was no drought relief from that source, which is often an underappreciated benefit of tropical storms in this region. Also with drought came heat—September, 1930 was the warmest September on record at Roanoke (75.7°F), barely higher than September 2019 (also in the midst of a short, but intense drought). Another interesting aspect of this drought was the status of the often cited El Niño/Southern Oscillation (ENSO). According to the NOAA Physical Sciences Laboratory, the period from 1929-1932 was one of the longest El Niño events on record dating back to 1871.

What were the impacts of the drought of 1930 (which actually lasted well into 1931)? Available newspaper accounts are scarce but according to a Loudon County, VA history site, the drought was terrible. The county was described as a 'barren waste, not seen since the drought of 1816-1817.' Large rivers (the Potomac, Rappahanock and Rapidan) were reduced to a trickle. A Virginia Climate Office article comparing historic droughts mentions a front-page story from the Richmond Times Dispatch from August 13, 1930 on the drought impact on bootleggers in western VA! Below is a headline from the Staunton, VA News-Leader:

The Staunton News-Leader

STAUNTON, VA., TUESDAY MORNING, AUGUST 5, 1930

New Heat Wave Sears Drought-Stricken Area; Farmers Beg for Work

Regions East of Mississippi River Again in Grip of Intense Heat; Dire Predictions Are Made Regarding Continuation of Rainless Season.

Washington, Dec. 4.—(AP)—A new heat wave seared the drought-stricken regions east of the Mississippi today as dire predictions arose regarding the result expected if the rainless season continues.

Lewis J. Taber, master of the National Grange, returned to Washington after a ten-day visit to the affected areas in the Middle West, and told President Hoover that if rain does not fall within thirty days the drought would become a major catastrophe. He described the situation as "more serious than the nation understands."

The farm leader suggested special freight rates in the areas hardest hit and that credit facilities be extended to the utmost.

Meantime, Chairman Legge, of the federal farm board, said in a radio address from Chicago that the drought threatened live-

Temperature at 100 Mark

The second highest temperature of the summer was recorded yesterday on the official thermometer of Observer J. M. Stiffey, when the reading reached 100 degrees shortly after two o'clock and remained at 100 for the ensuing two hours.

Only once has this high record been beaten, and that was early in July when the thermometer reached 102 for a brief time.

For the present, heat sufferers are pinning their faith in the Washington prediction of rain today. Last night there was not much sign of rain as yet.

Fighters Suffer From Heat Coping With Forest Fire

Fire Warden Charles Swortzel and a group of volunteer forest-fire fighters were engaged the whole of yesterday and far into the night in attempting to check one of the worest forest fires that has broken out in the county during the recent period of trouble.

Driven to Desperation by Crop Failure, More Than 200 Farm Hands and Tenant Farmers Petition County Commissioners for Work.

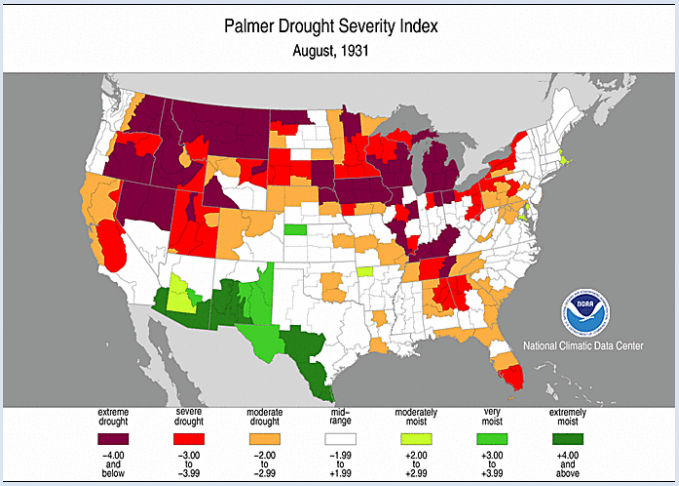
Wilmington, O., Aug. 4.—(AP)—Driven to desperation by failure of their crops because of the drought, more than 200 Clinton county farmers appealed to the county commissioners for work today to enable them to buy food for their families.

After listening to their pleas, the commissioners ordered that $100,000 worth of road work, contemplated for later in the season, be started immediately and the men put to work.

For ten days the farmers had been appealing to the commissioners individually for work, and received promise of work when road improvements were started later. Today they came en masses in rattletrap automobiles and on foot. They chose E. R. Hayes, secretary of the Wilmington Automobile club, as their spokesman. He led them to the courthouse.

The USGS in a report on Historic Droughts in VA called the 1930-32 drought the worst in the state's recorded history with a recurrence interval up to 80 years. The intensity of the hydrologic drought is revealed by looking at long-term records from the USGS gage on the Greenbrier River at Alderson, which has data back to 1896. The annual flow for 1930 at this gage was 685 cubic feet per second (cfs) which is easily the lowest on record and only about 1/3 of the annual average flow (source: USGS). The daily average flow on the Greenbrier River reached an all-time minimum of 26 cfs on August 11, 1930 and again on October 1-2, 1930.

So what finally ended the drought? The drought was ameliorated somewhat by a wet July 1931, but the subsequent August was very wet (although not due to any tropical system). At Roanoke, it was the 3rd wettest August on record at 10.01 inches which removed all drought from Virginia and nearly all of West Virginia (see figure below). Yet there was still a return to dry conditions and renewed drought in 1932, although not to the levels seen in 1930.



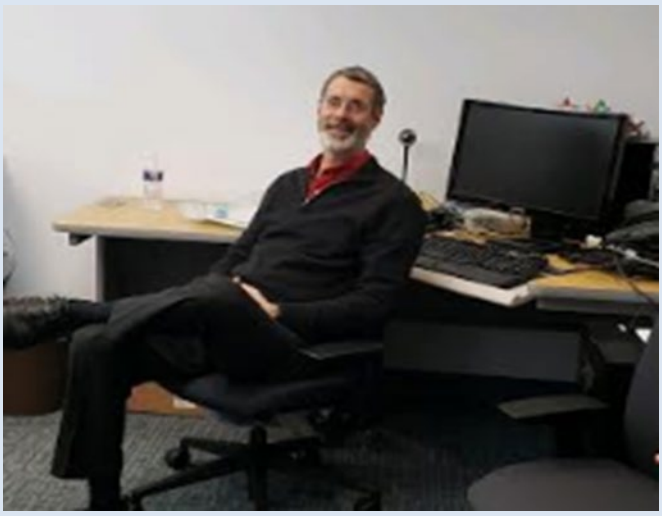
PDSI – August, 1931

Recent WFO RNK Staff Changes

There have been some very big changes in personnel at NWS Blacksburg over roughly the past few months, most notably our intrepid leader Meteorologist-in-Charge (MIC) and brilliant Information Technology Officer (ITO).

Dave Wert

On January 3, 2020 Dave Wert, MIC at WFO RNK since 2003, retired after 36 years of Federal Service.



Dave Wert

Dave was hired on with the NWS in 1983, serving his first four years as a Meteorologist Intern at several locations: WSO JFK International Airport, NY; WSO Newark, NJ; WSFO New York City; and WSO Syracuse, NY. with varying responsibilities which included taking and transmitting surface observations, preparing flight folders/providing flight briefings, issuing local warnings, providing NOAA Weather Radio broadcasts, operating the WSR-57 and WSR-74 radars, and manning the public service desk.

In 1987, Dave was selected as a General Forecaster at WSFO Philadelphia, PA, and worked there for three years before being selected as the first Norman Risk Reduction Liaison Manager in 1990.

Primary responsibilities were to serve as the chief liaison between WFO Norman, OK and regional and national tiger teams evaluating prototype systems, technologies, services, and methodologies prior to duplication across the NWS in its Modernization and Restructuring – including the WSR-88D and a pre-AWIPS prototype – while also working shifts approximately 25% of the time as Senior Forecaster.

In 1992, was selected as Deputy MIC at WFO Omaha/Valley, and in 1994, was selected as the first MIC at the spin-up office in North Platte, NE. During the next eight years, worked on several regional and national tiger teams enhancing various aspects of NWS operational performance and administrative service. In 2003, was selected to be the MIC at WFO Blacksburg, VA, and served in that position for the past 17 years while continuing to work on regional and national teams, including serving as Team Lead for the Eastern Regional Leadership Development Program (ERLDP) and serving as a Certified Myers-Briggs (MBTI) practitioner - administering MBTI assessments for ERLDP classes and numerous WFOs across the Eastern Region. While in the NWS, he experienced a broad evolution of technologies, communications, and service – from Difax, teletype, typewriters, AFOS, WWII-era radars, and Intel 80286 processors with a clock speed of 6 MHz – to AWIPS, ASOS, WSR-88D, and overclocked processors.

Dave's retirement plans include spending relaxed time with friends and family, enjoying the outdoors, pursuing hobbies and passions such as disc golf, hiking, camping, paramotoring, working on the home mini-farm, and most of all - enjoying the weather as a kid again – by chasing storms, and sitting at home during a snowstorm with absolutely no thought of the work that will be piling up at the office. Here are Dave's parting words:

"This has been a wonderful journey with so many wonderful colleagues and partners that I consider to be dear friends - who demonstrated trust, respect, patience, and grace to help me along the way. To all, I wish Godspeed, and my most heartfelt, humble, and sincere gratitude".

Paul Jendrowski

Paul retired from the ITO position on April 25, 2020 after 30+ years of government service.

Paul Jendrowski

Paul's early career was heavily involved in the radar program (especially NEXRAD), while the latter part more focused on all things AWIPS, but of course he has been involved in many others areas as well as an ITO and prior to that a SOO for several years. He has served the local needs of this office with excellence, while at the same time providing significant input as a member of regional and national teams, and also helping other offices with local troubleshooting and guidance.

Here is just a short review of his career, which surely leaves out many important details:
Paul started as a COOP student at TDL (now MDL) while a Penn State undergraduate, working on an interactive color radar display for WSR-57 radars. He received his Master's in Meteorology from the University of Maryland and then returned to TDL for a few years.

He then left the NWS to work for six years at UNISYS Corp. during the development phase of NEXRA. When NEXRAD became operational, Paul returned

to the NWS at the WSR-88D Operations Support Facility (now the ROC) in Norman, OK in the Applications Branch. He was then selected as the first Science and Operations Officer (SOO) at the Pittsburgh, PA WFO in the early 90s. There he began work on the AMBER program with Bob Davis as a software tool to utilize radar precipitation estimates to monitor flash flood potential on the small basin scale. He then became the SOO in Honolulu, HI. During his six or so years there, Paul was awarded an individual DOC Gold Medal for work on AMBER and for AWIPS integration in Pacific Region.

Paul was selected as the ITO in Blacksburg, VA in 2002 and in his 18 years in this position he has not only served this office with excellence, but has served on several regional and national teams related to AWIPS and AWIPS II, developed additional local applications, helped create the Software Collaboration Portal (SCP), and provided significant guidance and expertise at the national level regarding aspects of the migration to AWIPS II

There is no question Paul's knowledge and expertise will be missed greatly, but so will his work ethic, service-oriented attitude, push for efficiency, as well as his sense of humor.

Mike Belanger

We bid adieu to Electronics Technician (El Tech) Mike Belanger who will be returning to his home state of Maine. Mike will remain in the NWS family however, as he becomes an El Tech at the Gray WFO (Portland area) office. Mike arrived at WFO RNK about two years ago in early 2018, and his bio can be found in the Spring 2018 Blue Ridge Thunder newsletter. Despite his fierce allegiance to all sports teams New England, Mike was a great addition to the office with a tremendous sense of humor and comedic timing (he might have a 2nd career there!). He was also an invaluable member of the ET staff, coming up to speed on NWS systems quickly and performing repairs at the radar, ASOS, river gages and NOAA Weather Radio in remote locations and often at inconvenient times.

Erik Taylor

On the positive side of the ledger, WFO RNK is pleased to welcome a new meteorologist to the staff, Erik Taylor. He comes to us having most recently worked at WMAR-TV in Baltimore as the Evening Meteorologist and Weather Producer.

Originally from Pemberton, NJ (Philly suburbs) he is no stranger to all 4 seasons of weather. In fact, his original interest in meteorology was sparked at the age of 5 when a tornado hit his small childhood town. Erik graduated from Rutgers State University (Go Scarlet Knights!) where he majored in meteorology and plant science. Prior to Baltimore, he worked in Charleston, WV where he was the Morning Meteorologist for WVNS in Beckley/Bluefield and Weekend Meteorologist for WOWK. During his time at both stations he was active in the community and in with weather educational outreach. Erik also worked in Jackson, Tennessee at WBBJ-TV where he got his full taste of severe weather. While working in West Tennessee he learned news reporting alongside presenting his local forecast. He also worked at the West Tennessee Agricultural Center maintaining research plots and horticultural influences around the campus. While a little far from home, Erik is looking looks forward to the NWS, learning from coworkers, and continued involvement in the community. In his spare time he loves hiking, exploring new places locally and abroad, running, working out, watching football and checking out the local brewery scene.

Weather Safety 101 and SKYWARN

Spring and summer bring with them warm temperatures and outdoor activities along with the possibility of a whole range of weather hazards including severe storms, tornadoes, flooding and lighting. The NWS Weather Safety web page provides a wealth of information on all types weather and water hazards. If you are interested in helping the NWS in storm spotting and verification consider participating in the SKYWARN program. In addition the NWS can always use new rain/snow observers for the CoCoRaHS network, especially in West Virginia!

Severe Weather reporting

Trained spotters or the public should report the following to the NWS via Social Media (Twitter/Facebook) or SKYWARN: 1-800-221-2856.

- **Tornadoes or funnel clouds**
- **Wind damage, such as structural damage or trees/power lines down.**
- **Measured or estimated wind gusts of 50 MPH or greater**
- **Hail of any size**
- **Water flowing over a road**
- **Creeks or streams leaving their banks**

Don't be Lazy, Report Severe Weather!


Blue Ridge Thunder
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1750 Forecast Dr.Blacksburg, VA 24060
Visit us on the web: www.weather.gov/rnk
Follow us on Twitter and Facebook
For questions/comments on Blue Ridge Thunder
Please contact the editor