# The Wilmington Wave

National Weather Service, Wilmington, NC

**Spring/Summer 2021** **Volume XI, Issue I**


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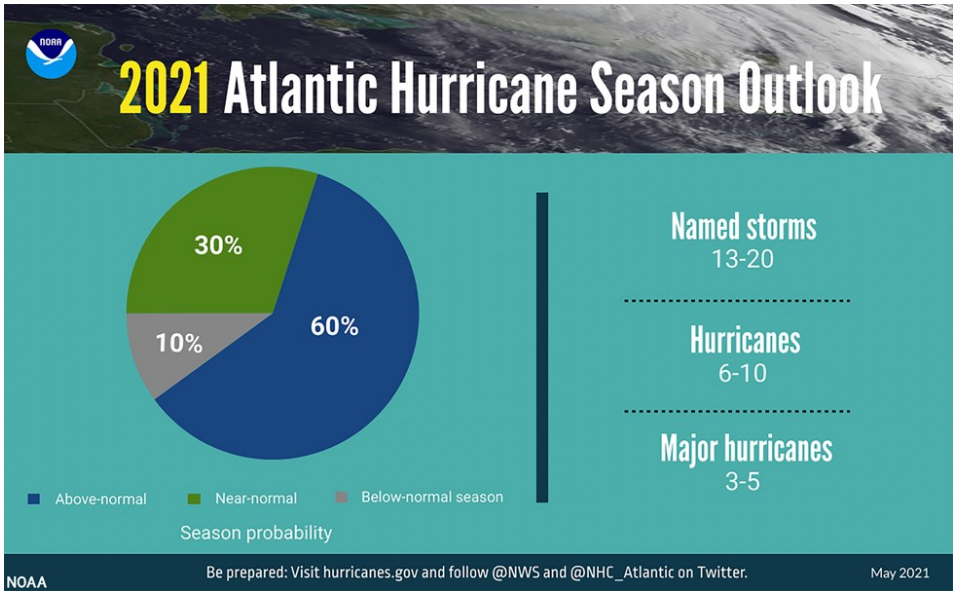
## 2021 Tropical Season Preview

*By Jordan Baker*

After a record-breaking 2020 hurricane season that led to 31 named storms, the National Oceanic and Atmospheric Association's Climate Prediction Center is predicting another above-normal Atlantic hurricane season. For southeastern North Carolina and northeastern South Carolina, it is important to be prepared for the potential for tropical storms and hurricanes all season. While we can never predict what impacts we will have locally this far in advance, be aware of ongoing tropical activity throughout the season. It is also important to pay attention to distant tropical cyclones as they can produce dangerous rip currents from over 500-1,000 miles away. Stay tuned to our social media and weather.gov/beach/ilm surf forecast page for the latest information and forecasts.

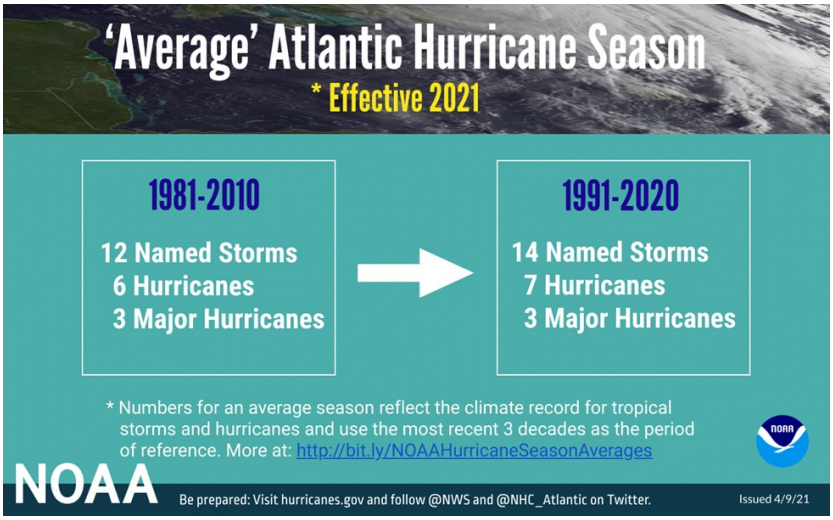



The Climate Prediction Center (CPC) is predicting another above-normal Atlantic hurricane season. Experts do not anticipate the historic level of storm activity seen in 2020. Forecasters predict a 60% chance of an above-normal season, a 30% chance of a near-normal season, and a 10% chance of a below-normal season. NOAA forecasters predict, a likely range of 13 to 20 named storms (winds of 39 mph or higher), of which 6 to 10 could become hurricanes (winds of 74 mph or higher), including 3 to 5 major hurricanes (category 3, 4 or 5; with winds of 111 mph or higher). NOAA provides these ranges with a 70% confidence.

*Continued on page 2….*

**What does "above average" mean?**

Last month, NOAA updated the statistics used to determine when hurricane seasons are above-, near-, or below-average relative to the latest climate record. In previous years (based on a 30-year average from 1981-2010), an average hurricane season produced 12 named storms including 6 hurricanes with winds greater than 74 mph and 3 major hurricanes (winds greater than 110 mph). Based on averages from 1991-2020, the average is now 14 named storms, 7 of which attain hurricane status and 3 of those becoming major hurricanes.




This graphic captures the changes in Atlantic hurricane season averages from the last three-decade period of 1981-2010 to the most current such period, 1991-2020. The updated averages for the Atlantic hurricane season have increased with 14 named storms and 7 hurricanes. The average for major hurricanes remains unchanged at 3. The previous Atlantic storm averages, based on the period from 1981 to 2010, were 12 named storms, 6 hurricanes, and 3 major hurricanes. Learn more: http://bit.ly/NOAAHurricaneSeasonAverages (Courtesy of NOAA)

**Why Another Above-Normal Season?**

The El Niño-Southern Oscillation (ENSO) is a climate phenomenon that occurs in three phases: El Niño, La Niña, and Neutral. Each phase indicates the equatorial Pacific's sea-surface temperature (SST) compared to normal. El Niño indicates a warming of the equatorial Pacific, La Niña represents below-normal SSTs, while Neutral (as one would expect) indicates near-normal SSTs. These patterns influence winds across the Northern Hemisphere and the associated weather patterns. They are also important indicators on the Atlantic hurricane season. For example, during La Niña (which occurred in 2020), cooler SSTs over the equatorial Pacific lead to weaker trade winds over the tropical Atlantic and weaker environmental wind shear. With less wind shear, tropical systems have less obstacles to overcome as they strengthen. Of course, this isn't the only factor that leads to the above-normal forecast, but is a major player in NOAA's seasonal tropical forecasts.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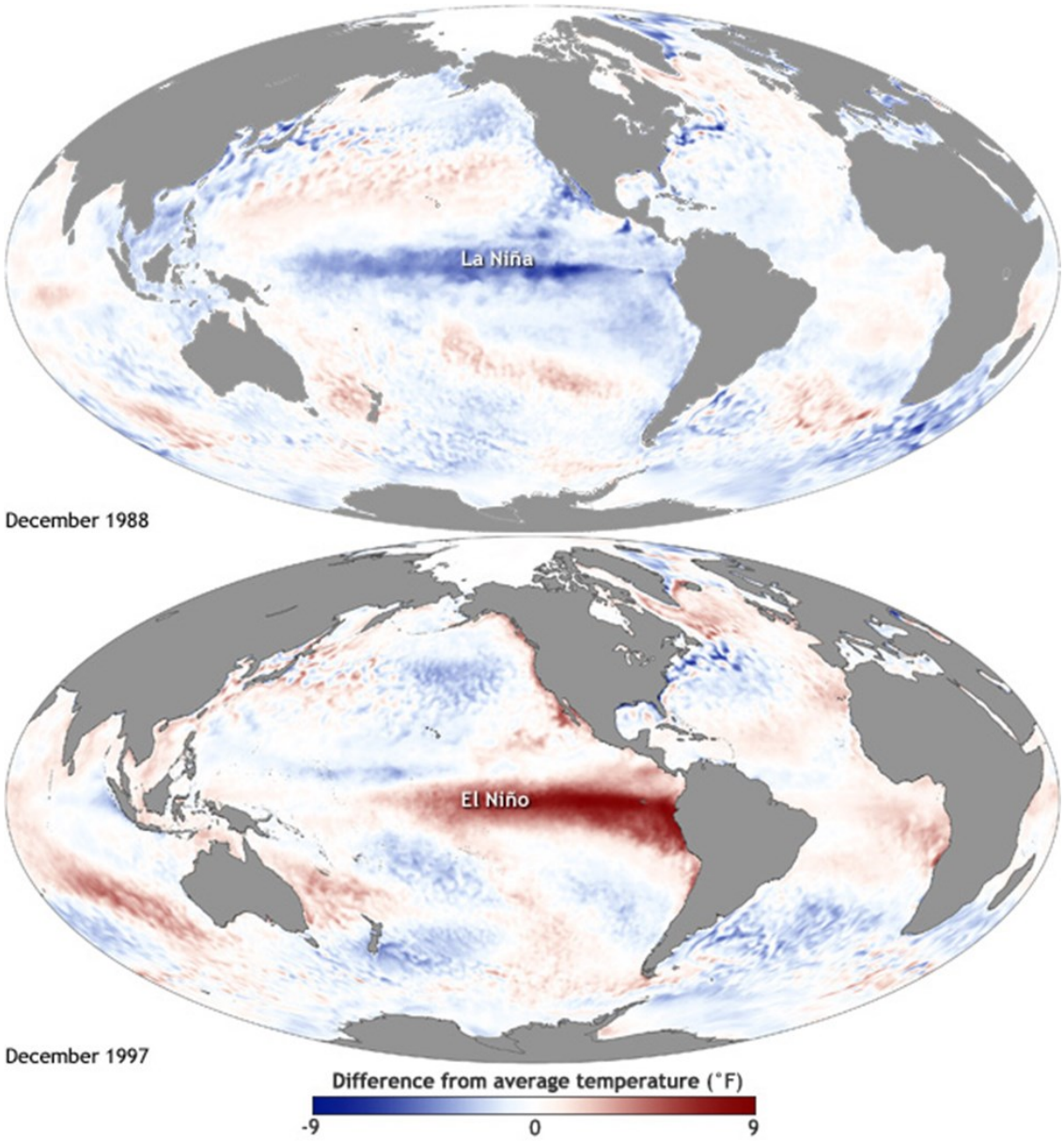



La Nina (top) describes an anomalous cooling of the tropical Pacific SSTs and El Nino (bottom) describes an anomalous warming of the tropical Pacific SSTs. Neutral phase describes a situation in which tropical Pacific SSTs are close to the average. Maps by NOAA Climate.gov, based on data provided by NOAA.

**Be Prepared: It Only Takes One!**
While 2021 is expected to be less active than 2020, it is no less important to prepare for potential tropical cyclones. A single storm can cause life-changing damage as this area well-knows from 2018's Hurricane Florence and 2016's Hurricane Matthew (just to name a few).

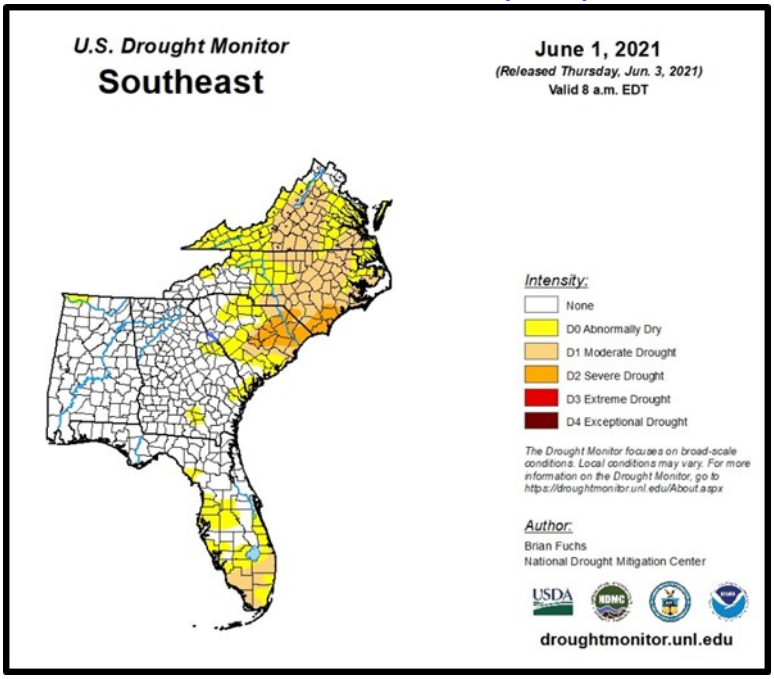
**Resources:**
"NOAA Predicts Another Active Atlantic Hurricane Season" (NOAA)
May 2021 ENSO Update (Climate.gov)
Hurricane Preparedness 2021 (NWS Weather Ready Nation)

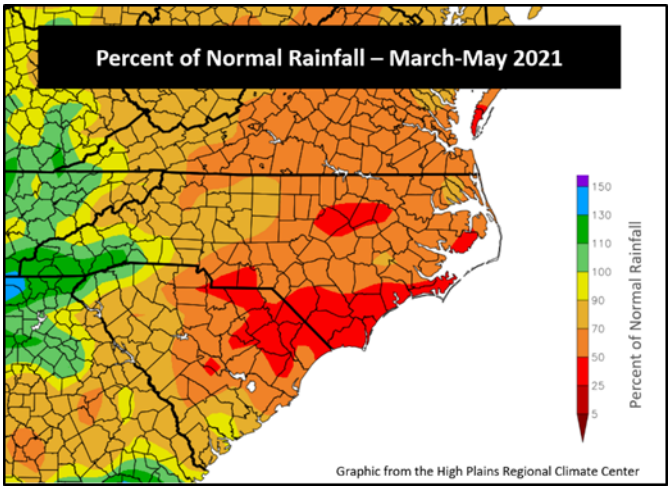
# Drought in the Eastern Carolinas

*By Vicky Oliva*

Due to abnormally dry conditions during Spring months (March-May), most of the eastern Carolinas was in a moderate to severe drought at the start of June. A large part of the Wilmington, NC forecast area had been categorized as a moderate drought since May 11th. Well below normal rainfall the past 3 months led to below normal stream flows and dry soils across the region. Local CoCoRaHs Condition Monitoring reports noted brown lawns, dry ditches that hadn't been dry in years, stress on plants and crops, and need for extra irrigation.

An important impact of the drought conditions was increased fire risk across the area. Low fuel moistures, warming temperatures, and frequent low humidity days had increased wildfire potential during April and May. In fact, NC Forest Service issued a brief burn ban during the start of June on all open burning for 26 counties across southeastern NC due to the increased risk.




Spring 2021 was among the driest springs on record for all four of our climate sites. Wilmington, NC (4.31"), Florence, SC (4.28"), and Lumberton, NC (4.34") were all the 2nd driest springs on record. North Myrtle Beach, SC (5.52") was 3rd driest. Northeast SC and southeast NC only received 25-50% of the normal rainfall between March and May.

So far, June 2021 has been off to a pretty wet start. In fact, Wilmington's rainfall through June 11th (4.34") has surpassed all of ILM's rainfall during Spring months. The other three climate sites are not too far behind in June's rainfall catching up to Spring totals. Drought conditions have greatly improved for parts of SE NC and NE SC where heavy rain has fallen in June, but other areas still remain relatively dry. If wet trend continues through June, we could see drought conditions eradicated across our area.

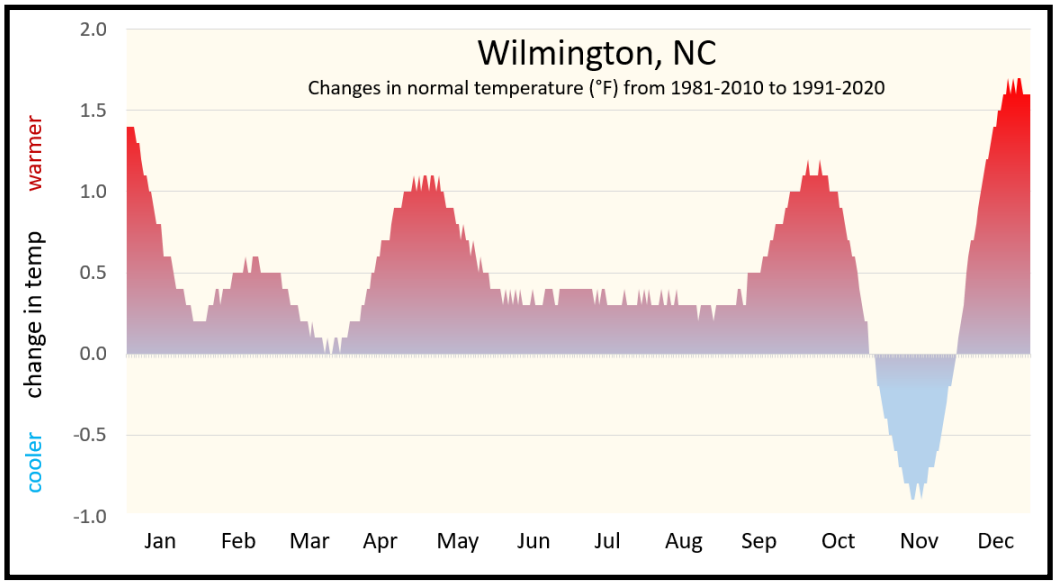
Resources:
US Drought Monitor
NC Drought Management Advisory Council
SC Current Drought Status

# Climate Normals Updated for 1991-2020

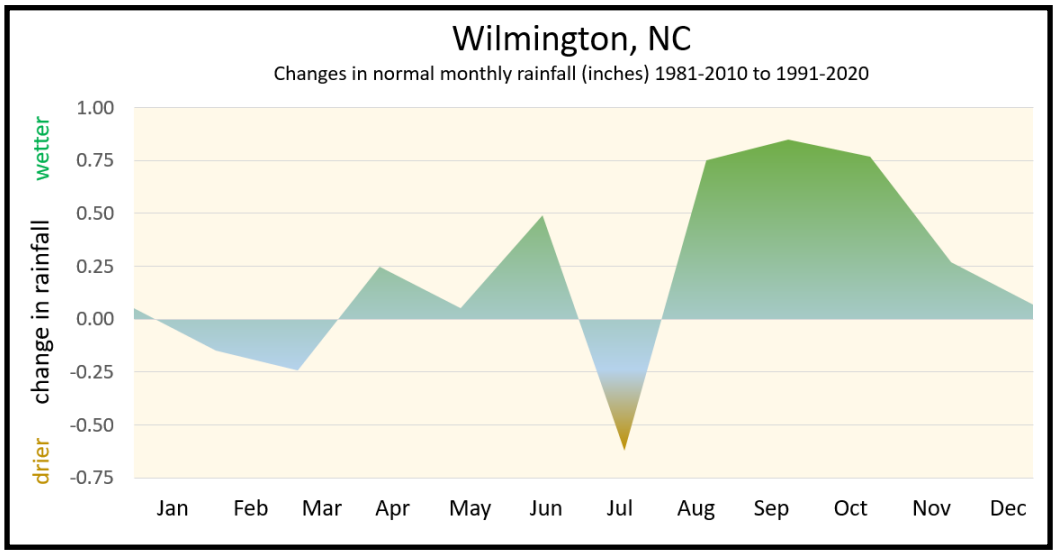
*By Tim Armstrong*

NOAA uses 30 years of observed weather to calculate what is normal for temperatures, rainfall, and snowfall for each city in the nation. These normals are useful to compare one location with another, or to compare daily, monthly, or yearly weather to what typically occurs. Since climate changes over time, these normals are recalculated every ten years.

We've just begun using new **1991-2020** normals which feature some important changes from the old 1981-2010 version. Across eastern North and South Carolina most stations have experienced around half a degree Fahrenheit increase in temperature. The increase in nighttime lows has been larger than the increase in daytime highs. Temperatures have increased in every month of the year except for November.




Changes in rainfall have been small in magnitude and have not all been in the same direction. Among local cities, normal rainfall has increased in Wilmington and Florence but has decreased slightly in Lumberton and North Myrtle Beach. Wilmington's normal annual rainfall now exceeds 60 inches for the first time since this statistic was first calculated over 100 years ago.

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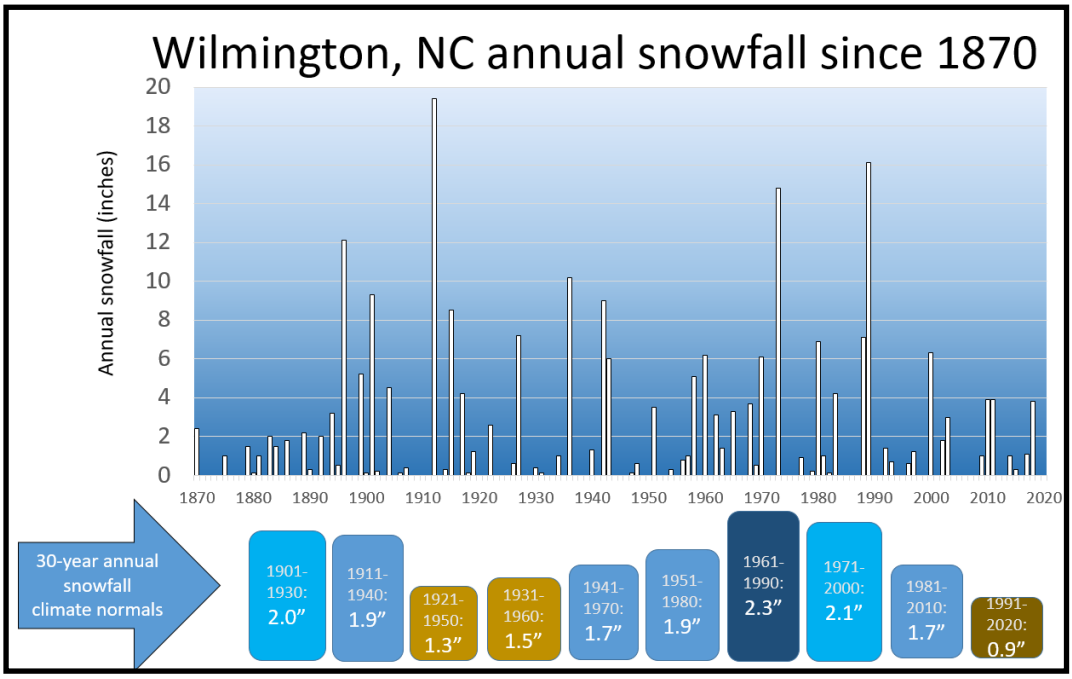
Snowfall averages have also decreased in Wilmington as we lose some our historic snowstorms from the moving 30-year climate record. This loss includes the Christmas Snowstorm of 1989 that dumped over a foot of snow throughout the Cape Fear.




To read more about the recent changes in climate normals and to see the data yourself, go to https://www.weather.gov/ilm/1991-2020ClimateNormals.

# CoCoRaHs Needs You!

Ever wonder how much rain fell during a thunderstorm at your house, or how much snow fell during a winter event? Do you have an interest in weather and would like to help your local community, as well as scientists and others interested in precipitation? Then CoCoRaHs is for you! CoCoRaHs, the Community Collaborative Rain, Hail and Snow Network, is a unique, non-profit, community-based, high density network of individual and family volunteers of all ages and backgrounds, who take daily measurements of rain, hail and snow in their backyards. CoCoRaHs is continuously looking for new volunteers to help expand the national precipitation observation network.

So how can you join CoCoRaHs? It only takes four simple steps: register online at www.cocorahs.org, view online training slideshow, purchase a rain gauge, and record and report observations. Volunteers may obtain an official 4-inch rain gauge through the CoCoRaHS website for about $31 plus shipping. Volunteers post their daily observations on the CoCoRaHs website, or using the free mobile app. Observations are immediately available in map (data.cocorahs.org/cartodb) and table form for scientists and the public to view. The process takes only five minutes a day and gives you the chance to participate in real "hands-on" science. You may be amazed at what you will learn as you become more aware of the weather that impacts you and your neighbors.

# Rip Currents & Surf Forecast

*By Vicky Oliva*

Rip currents are the most frequent cause of weather deaths in the Wilmington NWS forecast area. In 2020, there were **15 surf zone fatalities** in North and South Carolina, **12 of which were attributed to rip currents**. The Carolinas average **8 rip current fatalities** per year, with only **20% of drownings** since 2000 being people from the coastal counties of the Carolinas. See map below for known hometowns of NC & SC rip current fatalities. These stats show the importance of spreading rip current awareness and safety.

**What is a rip current?**

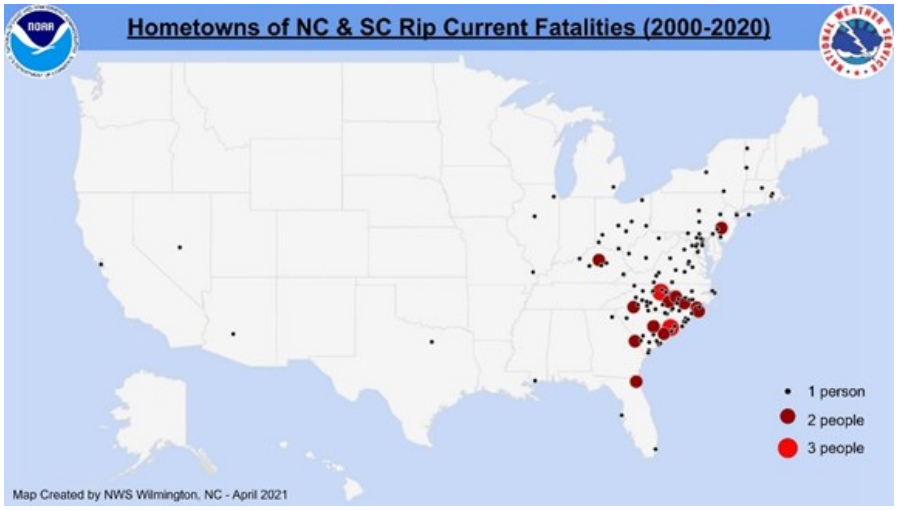
- ✓ Rip currents are fast flowing channels of water that extend from close to the shoreline through the surf and past the breaking waves.
- ✓ Strong rips can reach speeds faster than an Olympic swimmer!
- × Rip currents will not pull you under the water, but will carry you away from shore.

**How do you spot a rip current?**

- ✓ Easiest to spot rip currents from an elevated position overlooking the beach.
- ✓ Rip currents may look darker, muddy, or choppier than surrounding areas.
- ✓ Look for areas where waves are not breaking.

**How do you escape a rip current?**

- ✓ Swim parallel to the shoreline to escape the current, and then swim back to shore at an angle away from the rip.
- ✓ If you become exhausted, tread water or float and get the attention of people onshore




If you see someone caught in a rip current, immediately notify a lifeguard or beach patrol. If you have to enter the water, **be sure to take something that floats with you**. Sadly, some rip current victims are bystanders who drown making an attempted rescue without taking precautions.

Remember to never swim alone at the beach and always try to swim near lifeguards. Heed warning flags, signs, and verbal commands of lifeguards and local law enforcement. Avoid swimming near jetties and piers, as rip currents commonly develop near these structures. Don't swim in the ocean at night.

Many other hazards exist year-round at North and South Carolina beaches. These include heat, lightning, rough surf, environmental hazards, and biological hazards such as jellyfish and sharks. Being informed about these hazards prior to going to beach can help keep you and your family safe. For a great article on the various dangers at the beach and tips to stay safe, visit the NOAA Beach Safety Story Map: https://www.noaa.gov/stories/story-map-play-it-safe.

*Continued on page 8….*

One of the best ways to keep you and your family safe while visiting the beach is to **Know Before You Go**. Be sure to check the local NWS Surf Forecast for the beach before going to see if any hazards will be present. At Wilmington, NC NWS, we issue our Surf Forecast three times a day - in the morning by 5:30am, an update at 11am, and in the evening by 8:30pm (for the next day's forecast).

The product is broken up into 5 sections - one for each coastal county in our area. It includes a detailed forecast that every user should be aware of before visiting the beach, including rip current risk, ultraviolet exposure risk, and surf height, as well as the weather forecast for the area.

There are several ways you can access the current Surf Forecast this summer before going to the beach. One way is go to weather.gov/beach/ilm to view current rip risks and click for more detail. Another way is to search for "NWS ILM SRF" in your web browser. Our main webpage also has a link to all recent text products.

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NCZ106-010245-
COASTAL PENDER-
INCLUDING THE BEACHES OF SURF CITY AND TOPSAIL ISLAND
1036 AM EDT MON MAY 31 2021

...MODERATE RISK OF RIP CURRENTS IN EFFECT UNTIL 8 PM EDT THIS
EVENING...

.REST OF TODAY...
RIP CURRENT RISK*...........MODERATE.
SURF HEIGHT.................1 TO 3 FEET.
THUNDERSTORM POTENTIAL**....NONE.
WATERSPOUT RISK**...........NONE.
UV INDEX**..................VERY HIGH.
WATER TEMPERATURE...........IN THE LOWER 70S.
WEATHER.....................SUNNY.
HIGH TEMPERATURE............IN THE MID 70S.
WINDS.......................NORTHEAST WINDS AROUND 10 MPH.
TIDES...
   TOPSAIL INLET............HIGH AT 12:30 PM EDT.
REMARKS.....................MODERATE NORTH TO SOUTH LONGSHORE CURRENT.

.TUESDAY...
RIP CURRENT RISK*...........LOW.
SURF HEIGHT.................AROUND 2 FEET.
THUNDERSTORM POTENTIAL**....NONE.
WATERSPOUT RISK**...........NONE.
WEATHER.....................SUNNY.
HIGH TEMPERATURE............IN THE UPPER 70S.
WINDS.......................NORTHEAST WINDS AROUND 10 MPH, BECOMING
                            EAST IN THE AFTERNOON.
TIDES...
   TOPSAIL INLET............LOW AT 07:26 AM EDT.
                            HIGH AT 01:35 PM EDT.
REMARKS.....................NONE.

.OUTLOOK...
THE RISK FOR RIP CURRENTS COULD INCREASE WEDNESDAY OR THURSDAY AS
SOUTHEASTERLY SWELLS ARRIVE.
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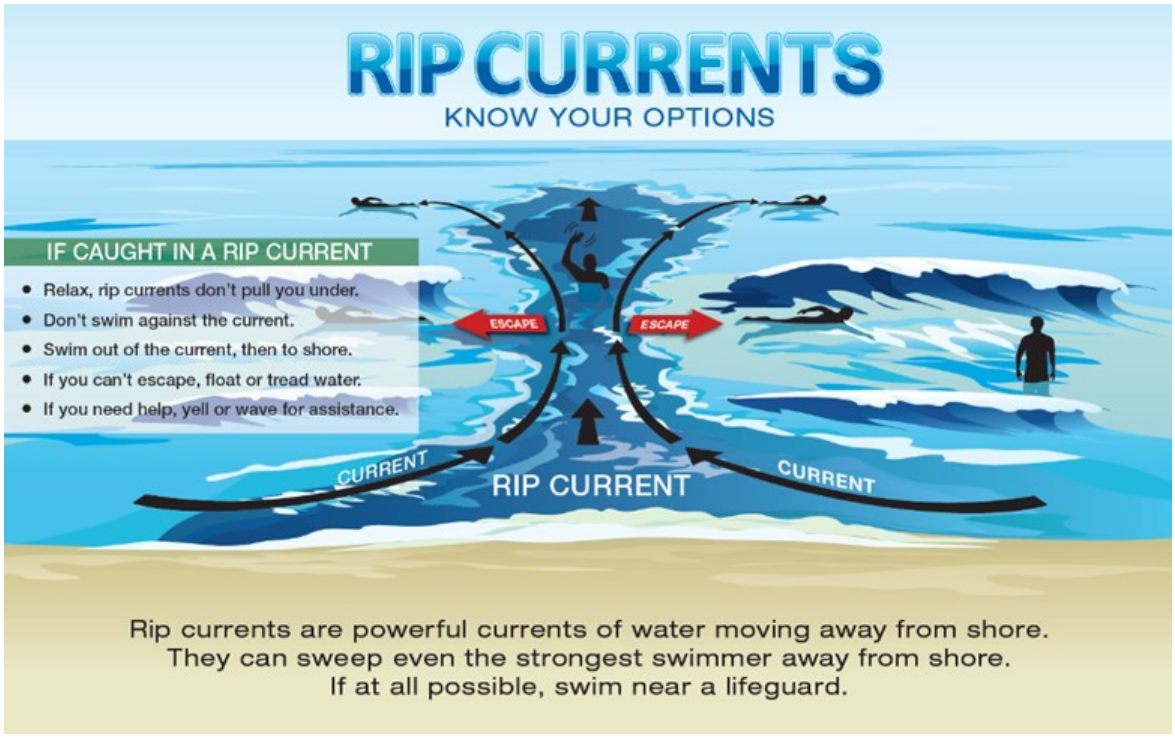


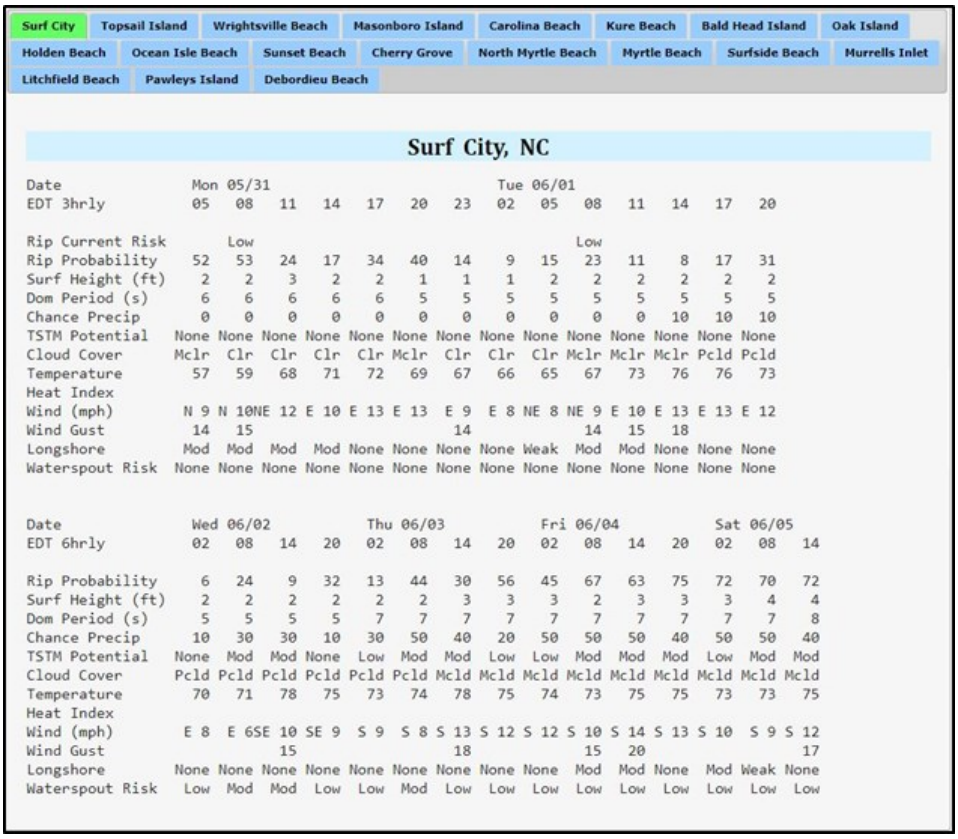
# Experimental Surf Forecast Matrix

*By Vicky Oliva*

On May 27th of this year, NWS Wilmington announced the availability of a new product: the **Experimental Surf Forecast Matrix**! Since 2003 NWS Wilmington NC, and numerous other coastal NWS offices, has issued daily Surf Zone Forecasts (SRF) during local beach seasons. While this has been an invaluable forecast product for alerting beach-goers of potential hazards, it only provides one forecast per county surf zone per day to represent the worst conditions expected during daytime hours. However, surf zone conditions occur 24/7, are constantly changing, and can vary across even short distances of coastline. The purpose of the Experimental Surf Forecast Matrix project is to add temporal and spatial resolution to our local surf forecast for NE SC and SE NC beaches.

With recent improvements in wave modeling and rip current forecasting, including the new rip current probabilistic model tied to the Nearshore Wave Prediction System (NWPS), there is increased ability to add detail to the current SRF product. The Experimental Surf Forecast Matrices include Rip Probabilities directly from the aforementioned probabilistic model. This model predicts the probabilities of hazardous rip currents occurring, with values calculated from 0-100% hourly through 144 hours. In addition to rip currents, the matrices also include increased temporal and spatial forecasts for other local hazards such as high surf and strong longshore currents.

The local Experimental Surf Forecast Matrix will provide a 6-day forecast for 19 local beaches, with three-hourly forecasts the first 2 days and six-hourly forecasts days 3-6, and include similar forecast variables as the operational SRF product. The matrices can be found online at www.weather.gov/ilm/surfmatrices, with tabs available for each individual local beach's forecast. We're excited for the potential future of this project and we welcome any and all feedback to its usefulness during this experiment (feedback link here). The Experimental Surf Forecast Matrix will be available at least through the end of the 2021 local beach season (October 31st).



Surf City | Topsail Island | Wrightsville Beach | Masonboro Island | Carolina Beach | Kure Beach | Bald Head Island | Oak Island
Holden Beach | Ocean Isle Beach | Sunset Beach | Cherry Grove | North Myrtle Beach | Myrtle Beach | Surfside Beach | Murrells Inlet
Litchfield Beach | Pawleys Island | Debordieu Beach

**Surf City, NC**

| Date | Mon 05/31 | | | | | | | Tue 06/01 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDT 3hrly | 05 | 08 | 11 | 14 | 17 | 20 | 23 | 02 | 05 | 08 | 11 | 14 | 17 | 20 |
| Rip Current Risk | | Low | | | | | | | | Low | | | | |
| Rip Probability | 52 | 53 | 24 | 17 | 34 | 40 | 14 | 9 | 15 | 23 | 11 | 8 | 17 | 31 |
| Surf Height (ft) | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| Dom Period (s) | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Chance Precip | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 10 |
| TSTM Potential | None | None | None | None | None | None | None | None | None | None | None | None | None | None |
| Cloud Cover | Mclr | Clr | Clr | Clr | Clr | Mclr | Clr | Clr | Clr | Mclr | Mclr | Mclr | Pcld | Pcld |
| Temperature | 57 | 59 | 68 | 71 | 72 | 69 | 67 | 66 | 65 | 67 | 73 | 76 | 76 | 73 |
| Heat Index | | | | | | | | | | | | | | |
| Wind (mph) | N 9 | N 10 | NE 12 | E 10 | E 13 | E 13 | E 9 | E 8 | NE 8 | NE 9 | E 10 | E 13 | E 13 | E 12 |
| Wind Gust | 14 | 15 | | | | | 14 | | | 14 | 15 | 18 | | |
| Longshore | Mod | Mod | Mod | Mod | None | None | None | None | Weak | Mod | Mod | None | None | None |
| Waterspout Risk | None | None | None | None | None | None | None | None | None | None | None | None | None | None |

| Date | Wed 06/02 | | | | Thu 06/03 | | | | Fri 06/04 | | | | Sat 06/05 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDT 6hrly | 02 | 08 | 14 | 20 | 02 | 08 | 14 | 20 | 02 | 08 | 14 | 20 | 02 | 08 | 14 |
| Rip Probability | 6 | 24 | 9 | 32 | 13 | 44 | 30 | 56 | 45 | 67 | 63 | 75 | 72 | 70 | 72 |
| Surf Height (ft) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 4 |
| Dom Period (s) | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| Chance Precip | 10 | 30 | 30 | 10 | 30 | 50 | 40 | 20 | 50 | 50 | 50 | 40 | 50 | 50 | 40 |
| TSTM Potential | None | Mod | Mod | None | Low | Mod | Mod | Low | Low | Mod | Mod | Mod | Low | Mod | Mod |
| Cloud Cover | Pcld | Pcld | Pcld | Pcld | Pcld | Pcld | Mcld | Mcld | Mcld | Mcld | Mcld | Mcld | Mcld | Mcld | Mcld |
| Temperature | 70 | 71 | 78 | 75 | 73 | 74 | 78 | 75 | 74 | 73 | 75 | 75 | 73 | 73 | 75 |
| Heat Index | | | | | | | | | | | | | | | |
| Wind (mph) | E 8 | E 6 | SE 10 | SE 9 | S 9 | S 8 | S 13 | S 12 | S 12 | S 10 | S 14 | S 13 | S 10 | S 9 | S 12 |
| Wind Gust | | | 15 | | | | 18 | | | 15 | 20 | | | | 17 |
| Longshore | None | None | None | None | None | None | None | None | None | Mod | Mod | None | Mod | Weak | None |
| Waterspout Risk | Low | Mod | Mod | Low | Low | Mod | Low | Low | Low | Low | Low | Low | Low | Low | Low |

# Q&A with a Meteorologist

**Victoria "Vicky" Oliva** joined the Wilmington NWS team as a Meteorologist in May 2018. Shortly after joining the ILM team, she became the lead for the local Surf and Winter Weather programs. Vicky was named **NWS Eastern Region Employee of the Month for May 2021** for her significant contributions which have led to improved outreach, partnerships, operations, and science applications related to rip currents, which are the #1 weather related killer in the coastal Carolinas. Here's a few questions Vicky answered on our quest to introduce our Wilmington NWS team to everyone.

**Q**: Where did you go to school and what was your NWS Career Path to get to NWS Wilmington?
**A**: I grew up in Brooklyn, NY and got my bachelor's degree in Environmental Earth Science from CUNY Hunter College in Manhattan while working at the weather station on campus. From there, I got accepted into the Atmospheric Science Master's program at North Carolina State University (like several other NCSU alum at the ILM office). While at NC State I got the opportunity to intern as a student at the Raleigh NWS office, which is located on the college campus. It was an amazing experience and allowed me to make valuable connections. Job shadowing the forecasters at NWS Raleigh made me determined to work for the NWS—the ability to work hands on with the weather and help protect the public was exactly what I was working for.

Unfortunately my path to the NWS hit a wall after getting my master's. For almost three years after completing my coursework, I kept applying and interviewing for various NWS locations but didn't have any luck. But I was determined to get into my dream job and wouldn't be deterred. So I kept trying while working an office job and volunteering for NWS Raleigh to stay connected. Then in March 2018 I finally got the call that NWS Wilmington was offering me a job! I love the NWS Wilmington crew, and the Wilmington NC area, and thankful for my crazy path that led me here.

**Q**: How did you become interested in weather?
**A**: Honestly it wasn't anything exciting, or any big weather event, that got me into weather. I had always loved the snow and rain, especially blizzards in NYC. Then a random thunderstorm in Brooklyn when I was in junior year of high school made me realize meteorology was what I wanted to study in college. From there, every thunderstorm, snowstorm, or college course made my interest in weather grow.

**Q**: What is your current role at NWS Wilmington?
**A**: My main job at NWS Wilmington as a Meteorologist is forecasting. I work rotating shifts alongside my fellow meteorologists to provide up-to-date forecasts and vital warning services for NE SC and SE NC. On the side, I am the Surf Program Leader for the office and the lead for the Winter Weather Program. The latter role is mostly focused on our frost & freeze products, since sadly our area does not see much in the way of wintry precipitation often. As Surf Program Leader, I take on various tasks to improve our surf zone forecasting and increase public awareness on rip currents and other beach hazards. I coordinate with several beach patrol groups along our coastline to strengthen our partnerships and work on new local surf projects (such as the Experimental Surf Forecast Matrix seen on page 9).

*Continued on page 11….*

**Q**: What's your favorite type of weather?
**A**: That's a tough one since I love all types of weather. It is probably a close call between thunderstorms and snow. Thunderstorms are awe-inspiring forces of nature and are amazing to watch (from inside a safe building =) ). Snow is just fun… as long as you don't have to drive in it. Thick snowfall brings out the kid in me and can't help but enjoy it. And there's something peaceful about watching snow fall from the sky.

**Q**: What's the most memorable weather event you've experienced?
**A**: The most memorable event I've experienced was actually right after I started working at NWS Wilmington. Of course I'm talking about Hurricane Florence. Before Florence, the only two hurricanes I had really experienced was Irene in Brooklyn 2011 and Matthew in Raleigh 2016. Matthew was certainly memorable as rains took out roads and knocked down a few trees around my place. But Florence in Wilmington was on a whole other level. I had only been in the weather service 3 months at that point, and was already preparing to stay at the office for 3 days straight to ride out the hurricane. Experiencing a hurricane head-on, watching Wilmington become an island, and working with the long river flooding event that followed will be something I'll never forget. And hopefully will be a once in a lifetime event.

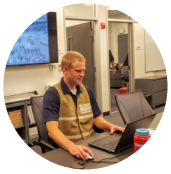
**Q**: What do you like to do in your spare time?
**A**: I am a geek and proud of it! I enjoy board games, video games, sci-fi, television, and all kinds of movies. I've also been a die hard Carolina Panthers fan since the team formed in the 90s. I enjoy nature and greenery: hiking, sight-seeing in the mountains, kayaking in lakes, etc. And I love spending time with friends and family, as well as with my sweet cat.


**Interested in a career at the National Weather Service? Check out the links below!**


Careers in Meteorology


Careers in Hydrology

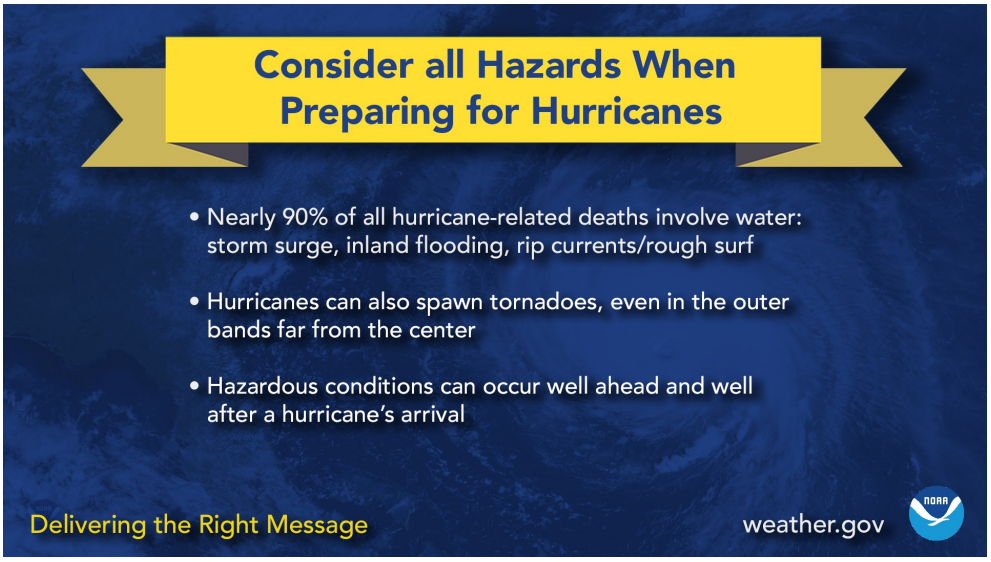

Careers in Physical Science

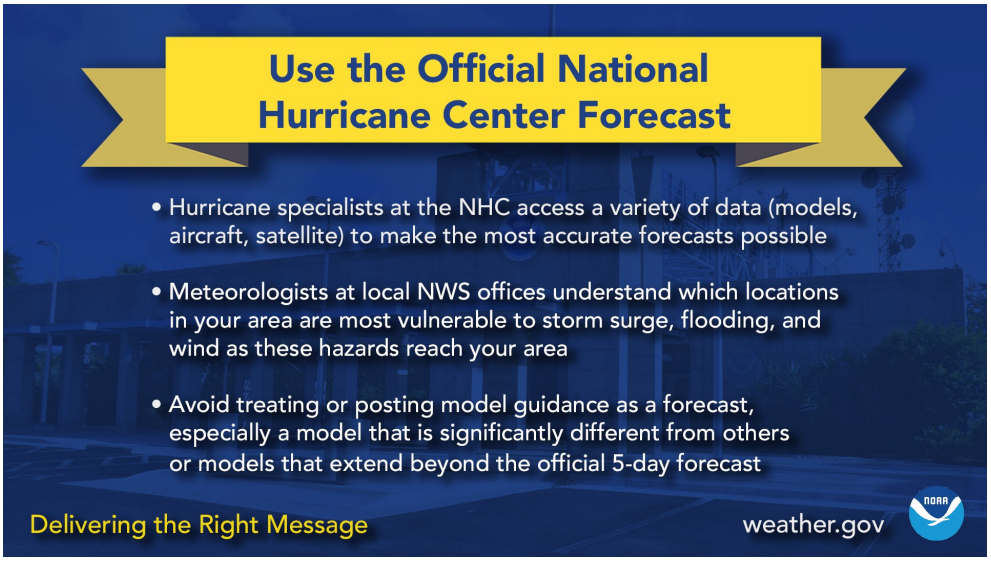

Careers in Operational Support


Careers in Information Technology and Electronics Maintenance

Current NWS Job Openings

NOAA Student Opportunities


Consider all Hazards When Preparing for Hurricanes
• Nearly 90% of all hurricane-related deaths involve water: storm surge, inland flooding, rip currents/rough surf
• Hurricanes can also spawn tornadoes, even in the outer bands far from the center
• Hazardous conditions can occur well ahead and well after a hurricane's arrival
Delivering the Right Message
weather.gov


Use the Official National Hurricane Center Forecast
• Hurricane specialists at the NHC access a variety of data (models, aircraft, satellite) to make the most accurate forecasts possible
• Meteorologists at local NWS offices understand which locations in your area are most vulnerable to storm surge, flooding, and wind as these hazards reach your area
• Avoid treating or posting model guidance as a forecast, especially a model that is significantly different from others or models that extend beyond the official 5-day forecast
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All Storms are Different
Don't Let Past Experiences Dictate Your Planning
• Impacts can be much worse for some hurricanes compared to others, even of similar strength, due to differences in landfall location, size, and forward speed
• The storm's scale only tells you about the strongest winds near the center of the storm and does not tell you about potentially life-threatening flooding from rain or storm surge
• Stay informed of the latest forecasts as changes in track, intensity, and landfall location can result in changes in potential impacts
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# Want to Become a Weather-Ready Nation Ambassador?

*By Steve Pfaff*

It's no surprise for many that live in southeast NC and northeast SC that we are susceptible to a wide variety of weather impacts. In fact, our part of the country is like no other when it comes to the different hazards we have to prepare for including wind driven wildfires, hurricanes, ice storms, flooding, tornado outbreaks, severe thunderstorms, drought, etc. Although many of these events do not occur routinely, if we fail to plan for them then many will become caught off guard by their impacts. The National Weather Service (NWS) is responsible for doing storm survey assessments of areas hit hard by severe weather, and a common theme we hear from those who were hit hardest is – "I can't believe this happened to me". While most people agree that we have an exposure to hazardous weather, only a small segment of the population is ideally prepared to deal with extreme weather events.

During a typical year the United States has 100,000 severe thunderstorms, 5,000 floods and flash floods, 1,000 tornadoes, and 2 land-falling hurricanes. It's no wonder why our Nation needs to be Weather-Ready. While there have been advancements in weather related technology and research that have led to the increased accuracy and warning lead time over the last decade, people are still being killed in great numbers. For instance, during 2011 there were 549 fatalities from tornadoes – almost 300 people during the Alabama outbreak on a single day! As a result, the NWS has started a new program called Weather-Ready Nation to enhance community resilience in the face of extreme weather events across the Nation.

The Weather-Ready Nation Ambassador program is the initiative that recognizes a wide variety of partners in their efforts to advocate weather safety and planning. The Ambassadors help to unify weather safety efforts, are action-oriented, inclusive, and help lead to new partnership opportunities with the NWS. The Ambassador program is open to any club, organization, company, civic group, or government agency (Local/State/Federal) and is free to join. There are no formal guidelines or requirements to become an Ambassador other than to sign-up and become integrated into the pipeline of weather safety information through the Weather-Ready Nation program. Consider the following - does weather potentially impact your family, friends, club members, staff or coworkers? If you answered yes then consider joining to become a Weather-Ready Nation Ambassador. Help the NWS to better serve our local communities by signing up!

For more information, and to apply to become a WRN Ambassador, visit: https://www.weather.gov/wrn/about

AMBASSADOR™

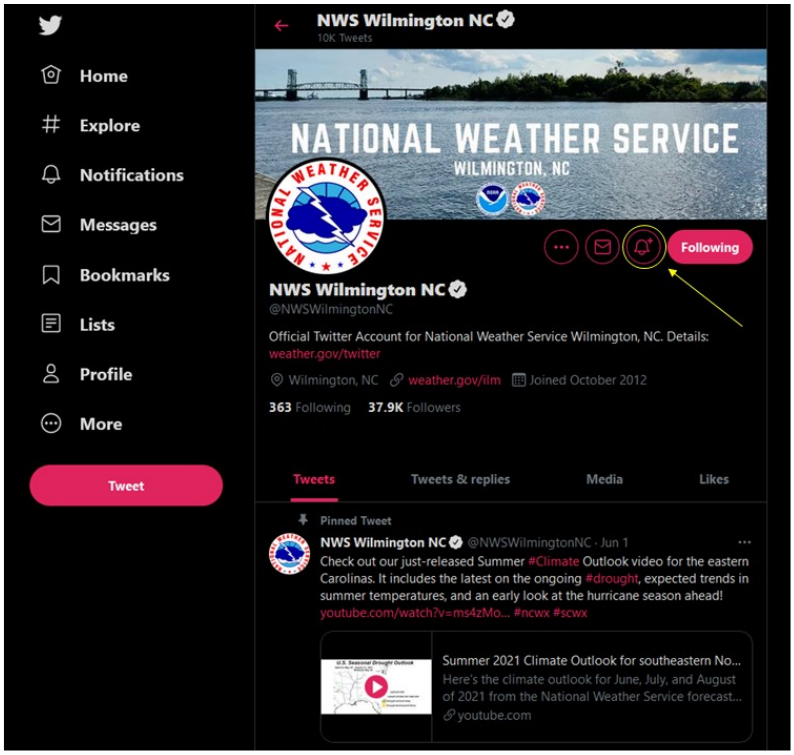
WRN

WEATHER-READY NATION

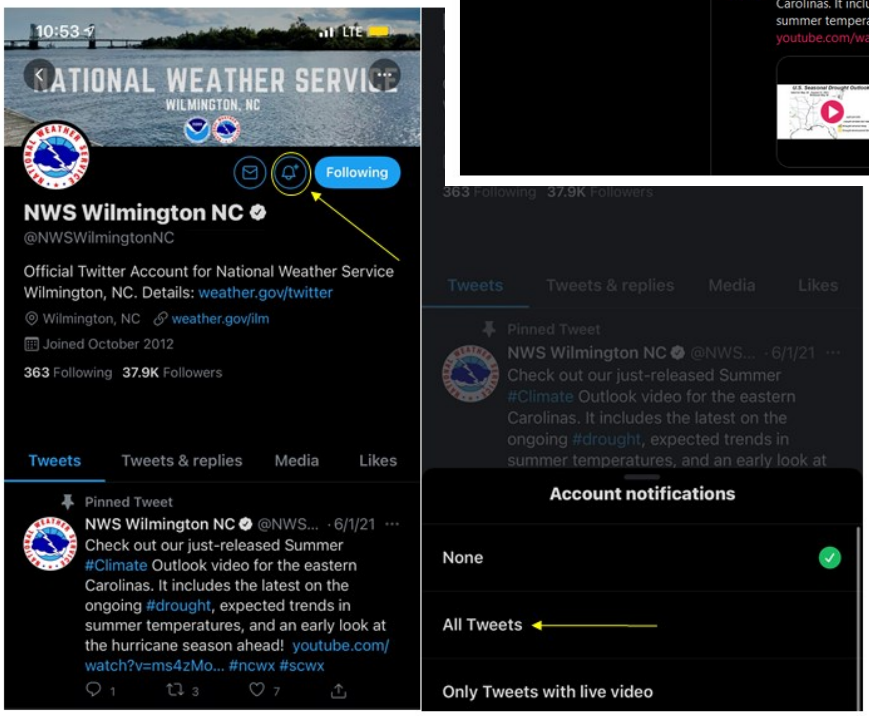
# Social Media Notifications

Whether it's during active weather, storms in your area, or you are just interested in information from the National Weather Service, you can turn on social media notifications from your local NWS office to stay notified of ongoing weather in your area. For Twitter, you can turn on mobile notifications alerting you of new tweets from your NWS office. For Facebook, you can choose to turn on Notifications for the NWS page that will send you a notification within Facebook for new posts, up to 5 a day.

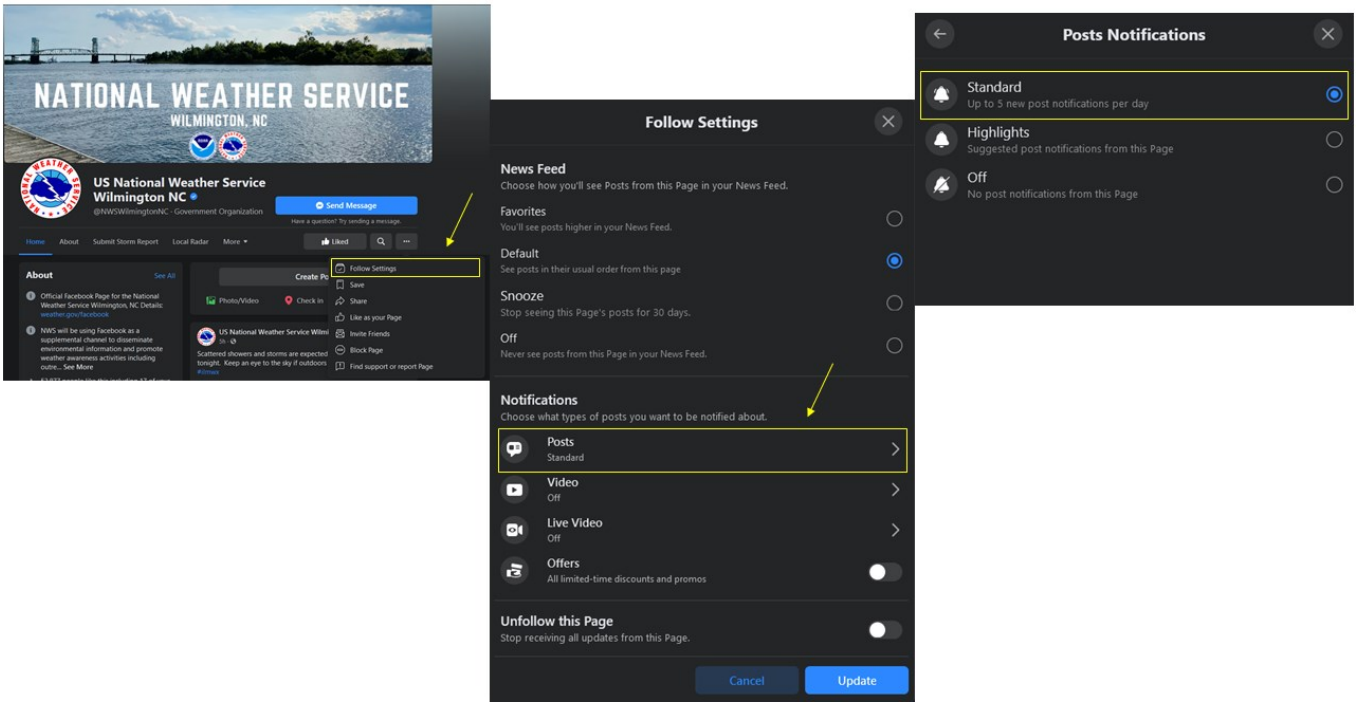
## Twitter via Desktop




## Twitter via Mobile



# Facebook via Desktop

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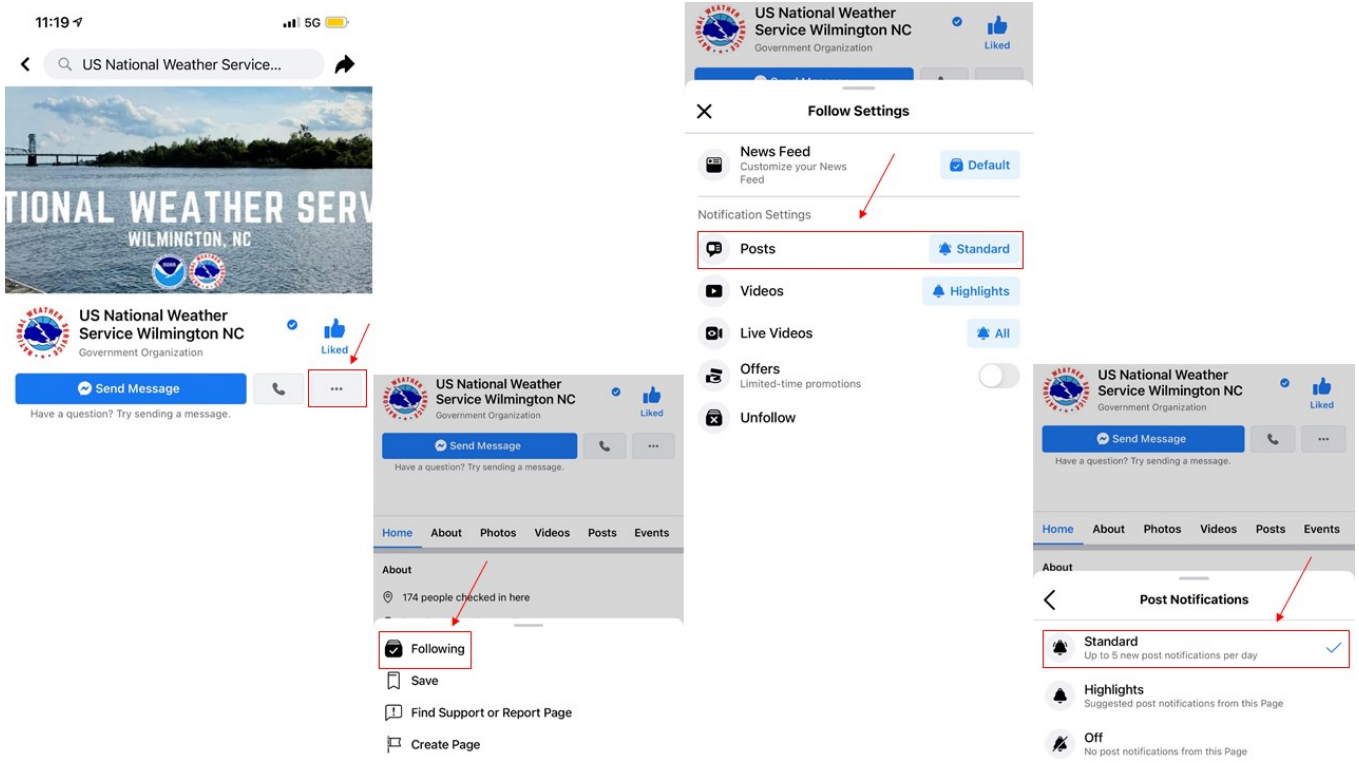

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## WE NEED YOUR STORM REPORTS!

Events of tornadoes, hail, damaging winds, and flooding are very important to us.

**Please call: 1-800-697-3901**

**Storm reports **ONLY****

Email: ilm.wxreports@noaa.gov

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