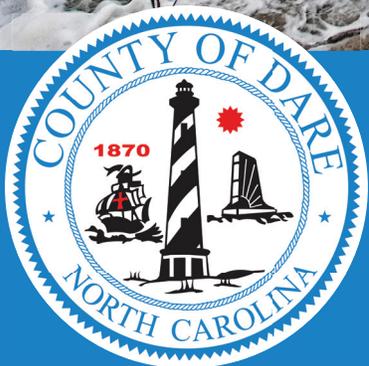


HURRICANE GUIDE

What You Should *KNOW*

What You Should *DO*

When a Hurricane is Threatening the Outer Banks



Dare County Emergency Management

Subscribe to receive email and text notifications in the event of an emergency at: **OBXAlerts.com**

Office: 252.475.5655 | Emergencies: Call 911

What You Should *KNOW*

Atlantic Hurricane Season

JUNE 1 – NOVEMBER 30

Peak season is mid-August to late October.

CATEGORY 1 WINDS 74-95 MPH

Very dangerous winds will produce some danger: Minor damage to property, shrubbery, trees and unanchored mobile homes should be expected. Low-lying coastal roads inundated, minor pier damage and some small craft in exposed anchorage may be torn from moorings.

CATEGORY 2 WINDS 96-110 MPH

Extremely dangerous winds will cause extensive damage: Well-constructed framed homes could sustain major roof and siding damage. Many shallow-rooted trees will be snapped or uprooted and block roads. Serious flooding at coast and many smaller structures near coast destroyed. Considerable damage to piers. Near-total power loss is expected, with outages that could last from several days to weeks.

CATEGORY 3 WINDS 111-129 MPH

Devastating damage will occur: Large trees blown down. Serious flooding along the coast and many small structures near coast destroyed. Electricity and water may be unavailable for several days to weeks after the storm passes. Major damage to piers.

CATEGORY 4 WINDS 130-156 MPH

Catastrophic damage will occur: Shrubs and trees blown down. Extensive damage to roofing materials, windows and doors; complete failure of roofs on many small residences; complete destruction of mobile homes. Major damage to lower floors of structures near shore due to flooding and battering by waves and floating debris. Destruction of piers.

CATEGORY 5 WINDS OVER 156 MPH

Catastrophic damage will occur: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages for weeks to possibly months will occur.

Don't Judge the Severity of a Storm Based on the Category.

The category of the storm (Saffir-Simpson Hurricane Wind Scale) is based on wind speed and does not account for the deadliest impacts: storm surge or flooding.

TROPICAL STORM MICHAEL



*Pictured: Bay Drive in Kill Devil Hills, N.C.
Credit: Eugene Mann Jr.*

In 2018, Tropical Storm Michael caused 2 to 4 feet of extensive, devastating, life-threatening soundside flooding in Kill Devil Hills, Manteo and Nags Head to the tune of \$7 million in damages.

HURRICANE MATTHEW CATEGORY 1



*Pictured: N.C. 12 in Nags Head, N.C.
Credit: Matt Lusk Photography*

Rainfall from Hurricane Matthew (Category 1) in October 2016 exceeded 12 inches in 24 hours in some locations in Dare County, causing flooding, even in homes and businesses built on higher ground. Hurricane Matthew caused \$52.2 million in damages in Dare County.

HURRICANE SANDY CATEGORY 2



*Pictured: I Got Your Crabs in Kitty Hawk, N.C.
Credit: I Got Your Crabs Facebook Page*

Storm surge from this distant offshore storm caused significant oceanside and soundside flooding. The combination of hurricane-generated waves, massively low pressure and a full moon were the perfect ingredients to cause extensive flooding, resulting in over \$13 million in damages in Dare County.

**Front Cover Picture: Nags Head Fishing Pier during Hurricane Sandy
Credit: Rich Coleman Photography (ColemanShots)**

Storm Surge

Storm surge is often the greatest threat to life and property during a coastal storm.

The destructive power of storm surge and large battering waves can result in loss of life, buildings being destroyed, beach and dune erosion, and road/bridge damage along the coast. Storm surge is the abnormal rise of water generated by a storm over and above the normal tide. It happens when the winds of a coastal storm push water onto land. In addition, large and destructive waves ride in on top of the surge. Storm surge can affect the oceanfront and the soundside.

The National Weather Service (NWS) issues Storm Surge Watch/Warning Maps and Potential Storm Surge Flooding Maps. To access these maps, visit NHC.NOAA.gov.

STORM SURGE WATCH

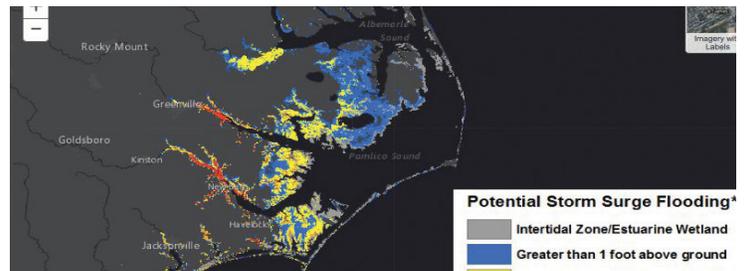
Issued when life-threatening inundation from rising water is possible within the specified area within 48 hours.

STORM SURGE WARNING

Issued when there is danger of life-threatening inundation from rising water within the specified area within 36 hours.

POTENTIAL STORM SURGE FLOODING MAP

Highlights geographic locations where flooding from storm surge could occur and provides the potential height above ground the water could reach based on the forecast track, intensity, and size of a tropical storm or hurricane.



Pictured: National Hurricane Center graphical depiction of potential storm surge flooding.

GRAPHICAL DEPICTION OF STORM SURGE INUNDATION VALUES

A simple graphic that depicts the expected storm surge inundation values at geographic locations.



Pictured: National Hurricane Center graphical depiction of storm surge inundation values.

STORM SURGE POLES

To help residents and visitors understand the hazards of storm surge, awareness displays are installed around the county. The display graphic provides information on how surge is forecast and what the forecast means. The display pole provides a visualization of how high water may rise in feet above ground.



Pictured: Storm surge pole at Rodanthe Beach Access.

Other Hurricane-Related Hazards



RAINFALL

Tropical storms and hurricanes often produce widespread torrential rainfall in excess of 6 inches, which may result in deadly and destructive floods. Flash flooding, a rapid rise in water levels, can occur quickly due to intense rainfall.

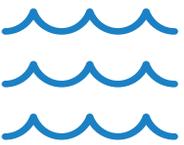
Never drive on flooded roadways. Turn around, don't drown!



WIND

Debris, such as signs, roofing material, siding and small items left outside, become flying missiles during hurricanes.

Hurricane-force winds (74 mph or more) can destroy buildings and mobile homes.



RIP CURRENTS

Strong winds can cause dangerous waves and rip currents. Rip currents are channeled currents of water flowing away from shore, usually extending past the line of breaking waves, that can pull even the strongest swimmers away from shore.

From May to October, the NWS issues rip current forecasts for the Outer Banks at weather.gov/beach/mhx.



TORNADOES

Hurricanes and tropical storms can also produce tornadoes. These tornadoes most often occur in thunderstorms embedded in rain bands.

TRUSTED SOURCES TO STAY INFORMED



For official information, monitor these local radio stations, TV channels, websites and social media accounts.

TELEVISION Current TV (Digital Cable Channel 191)

NOAA WEATHER RADIO 162.425 or 167.475

WEB www.DareNC.com
www.CurrentTV.org
www.DriveNC.gov

www.nhc.noaa.gov
www.weather.gov/mhx
www.ReadyNC.org

TWITTER @DareCountyGovt
@DareCountyEM
@NHC_Atlantic
@NCEmergency

@NWSMoreheadCity
@NHC_Surge
@NCDOT_NC12
@CapeHatterasNPS

FACEBOOK [Facebook.com/NCDOTNC12](https://www.facebook.com/NCDOTNC12)
[Facebook.com/DareCountyGovt](https://www.facebook.com/DareCountyGovt)

APPS FEMA
Smart911

What You Should *DO*

Before Hurricane Season

Know your flood zone

Find out if your home is subject to flooding. It is important to know if your property is located in a flood zone and what steps you can take to prepare your property and reduce the risk of flood damages.

Contact the Dare County Planning Department to determine the flood zone and visit OBXFloodMaps.com for more information about flood risks in our area.

Insure your home

Even if you're not in a flood zone

Whether you own your home or rent, ensure that your home and belongings are properly insured in the event of flooding or wind/hail damage. Please note, it typically takes 30 days for wind and flood damage policies to take effect. For more information on flood insurance, visit floodsmart.gov.

Back up important files

File your most important documents away digitally. Scan the documents or take photos.

Make a plan

Make an evacuation plan with your family. Decide on which route to take, what vehicles you will use and where you will stay.

For more information about evacuation plans, emergency supply kits and preparations you can make to your home, visit ReadyNC.org.

HURRICANE SUPPLY KIT

Following is a list of basic items every emergency supply kit should include.

However, it is important individuals review this list and consider the unique circumstances of their family in order to create an emergency supply kit that will meet their needs.

- Water (1 gallon per person, per day for at least 3 days)
- Non-Perishable Food (3-day supply per person) and Canned Goods (pack your can opener), Granola Bars, Nuts, Dried Fruit and Cereal
- Hand Sanitizer or Antibacterial Hand Wipes
- Change of Clothes
- Blanket or Sleeping Bag
- Personal Hygiene Items
- Cell Phone and Solar Battery Charger or Fully Charged Power Banks
- Emergency Light Sources (Flashlights, Candles, Lanterns)
- Portable Radio and Extra Batteries
- First Aid Kit and Medications
- Cash and Change
- Infant/Pet Supplies, if needed
- Important Family Documents

Emergency Notifications

INTEGRATED PUBLIC ALERT & WARNING SYSTEM (IPAWS) WEATHER WARNINGS

IPAWS is our nation's alerting system, used by federal, state and local government authorities to send Wireless Electronic Alerts (WEA) to mobile devices.

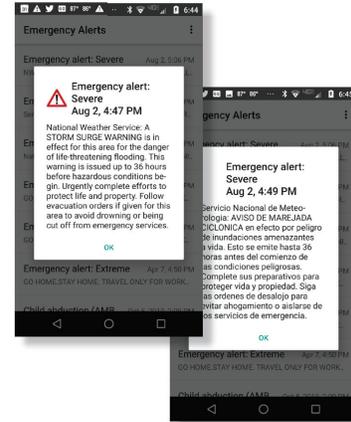


IPAWS sends the following alerts:

- "Presidential Alerts" during national emergencies
- "Emergency Alerts" during natural disasters and extreme weather
- "Public Safety Alerts" for threats that are less severe than Emergency Alerts
- "AMBER Alerts" for child-abduction cases

Ensure that all Government Alerts are turned on within your mobile device's notification settings.

When alerts are issued in the middle of the night, having Government Alerts enabled on your phone could save your life!



Types of weather warnings sent as a WEA include:

- Tornado warnings
- Flash flood warnings
- Extreme wind warnings
- Storm surge warnings

You will only receive these messages when your mobile device is in the area of the emergency with Government Alert notifications turned on. Messages typically show the alert type and time, actions to take, and who issued the alert.

WEA messages are free.

You will not be charged for receiving WEA messages.

If you receive an alert, follow any action advised by the emergency message.

Seek more details from official, trusted sources listed under the "Stay Informed" section on page 3.

DARE COUNTY EMERGENCY MANAGEMENT - OBX ALERTS

In the event of an emergency, fast and reliable information is critical. Sign up to receive official OBX Alerts, emergency alerts sent from Dare County Emergency Management, by text, email or phone.

Sign up for OBX Alerts notifications at OBXAlerts.com.

Choose how time-sensitive messages are received. Examples of emergency notifications include but are not limited to:

- Evacuations/Reentry
- HazMat Incidents
- Hurricanes and Coastal Storms
- Major Road Closures
- Shelter-in-Place
- Countywide Post-Disaster Info



Download the Smart 911 App.

Sign in using your OBX Alerts log-in.

Quickly sign up for emergency text alerts:

Text "DareEmergencyAlerts" to 77295.

N.C. FLOOD INUNDATION MAPPING AND ALERT NETWORK (NCFIMAN)

Sign up to receive email and text alerts from a series of flood gauges located across Dare County at Fiman.NC.gov.

Access any of the gauges in real-time to see water levels rising and falling. This tool allows users to assess the risk of flooding in their area. The flood gauges are installed and monitored by NCFIMAN. Gauges are currently located in Duck, Kitty Hawk, Avon, Cape Hatteras, Buxton, Rodanthe, Oregon Inlet, Manteo and Ocracoke.



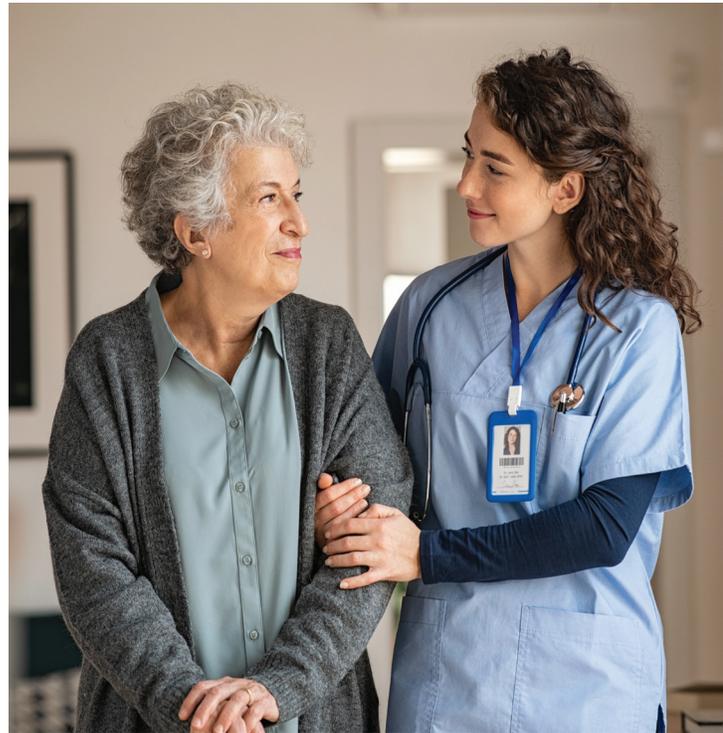
SPECIAL MEDICAL NEEDS REGISTRY

Residents identified with special medical needs and registered with the Dare County Department of Health & Human Services will be contacted prior to, during and/or after an emergency to determine their needs and facilitate assistance as necessary.

Special medical needs refers to individuals needing assistance with medical care or personal care during evacuations and sheltering because of physical or mental impairments. This registry is voluntary.

If you or someone you know may be appropriate for the registry, please contact the Dare County Department of Health & Human Services' Social Services Division at 252.475.5500 or visit DareNC.com/SpecialNeeds.

Be sure to sign up for emergency alerts at OBXAlerts.com and complete a Smart911 profile.



IMPORTANT PHONE NUMBERS

EMERGENCIES: CALL 911

DARE COUNTY EMERGENCY MANAGEMENT

252.475.5655

DARE CENTRAL COMMUNICATIONS (NON-EMERGENCY)

252.473.3444

ROAD CONDITIONS

North Carolina: 511

Virginia: 1.800.367.7623

N.C. Ferry Service: 1.800.293.3779

UTILITY COMPANIES

Dominion/N.C. Power

1.866.366.4357

Cape Hatteras Electric Cooperative

1.866.511.9862

Tideland Electric (Mainland)

1.800.637.1079

Dare County Water Department

252.475.5990

ADDITIONAL CONTACTS

Outer Banks SPCA

252.475.5620

U.S. Coast Guard (Sector N.C.)

910.343.3880

N.C. Highway Patrol

1.800.441.6127

Cape Hatteras National Seashore

252.473.2111

N.C. Emergency Management - State EOC 1.800.858.0368

FLOOD INSURANCE

In June 2020, updated flood maps from FEMA and the state of North Carolina became effective.

Flood maps only depict those areas subject to a 1% annual chance of flooding and do not reflect other flooding sources such as heavy rainfall or elevated groundwater levels. Floods can happen anywhere.

Natural hazards, hurricanes and coastal storms are a part of living on the Outer Banks. Protect your property. Talk to your insurance agent and learn more about flood insurance. For more information on flood maps in Dare County, visit OBXFloodMaps.com.



PETS

In the event of an evacuation, take your pets with you.

What You Should *Know*

Be sure to include your pets in your disaster preparedness planning. Remember if it isn't safe for you, it isn't safe for your pets.

Most shelters do not accept pets. It is imperative you determine where you will take your pets ahead of time. Arrange to have your pet taken care of if you can't take your pet with you. Find out about boarding kennels that may accept your pet on short notice. Talk to friends and relatives who live 100 to 300 miles away from you and might be able to take care of your pet for a few days to a few months.

After the *Storm*

Be careful allowing your pet outdoors. Familiar scents and landmarks may be altered, and your pet could easily be confused and become lost. Downed power lines and wild animals that may have entered the area could present real danger to your pet.

What You Should *Do*

Make sure all your pets are wearing collars and tags with up-to-date identification and contact information. Prepare a kit with a week's worth of emergency supplies available in case the disaster prevents you from getting necessary food and medications. Examples are food, water and medications your pet takes regularly.

Shelters that do accept pets will require owners to bring their pets in a kennel/carrier, and you must provide proof of current vaccinations upon registration of your pet at the shelter. Animals will not be accepted without proof of vaccination, if they appear to be sick or if they are exhibiting aggressive behavior.



What You Should *DO*

When a Hurricane Watch is Issued, *Be Ready.*

Hurricane Watch: Hurricane conditions (sustained winds of 74 mph or higher) are **possible** within 48 hours.

- Make all preparations to evacuate if an evacuation order is issued.
- Sign up to receive emergency alerts from Dare County Emergency Management at OBXAlerts.com.
- Monitor the radio, the Current TV channel (channel 191 on digital cable or streamed live online at CurrentTV.org), or NOAA Weather Radio for official bulletins of the storm's progress.
- Cover all window and door openings with shutters or other building materials.
- Bring inside lawn furniture and other loose, lightweight objects, such as garbage cans, garden tools, etc.
- Ensure your emergency supply kit is adequately stocked with water, food, a first aid kit and medications that will last your family at least 72 hours.
- Fuel and service vehicles. Load supply kit for evacuation.
- Inspect and secure mobile home in preparation to evacuate.
- Use your cell phone and take pictures and/or video of your home and belongings. Email the files to yourself so you can access them in the event your home is damaged by the storm.
- Check on friends, family members and neighbors.

When a Hurricane Warning is Issued, *Take Action.*

Hurricane Warning: Hurricane conditions (sustained winds of 74 mph or greater) are **expected** within 36 hours.

- Follow instructions issued by local officials. Leave immediately if an evacuation order is issued. **Call 252.475.5655 if you need assistance.**
- Closely monitor radio, the Current TV channel, local television and NOAA Weather Radio for official bulletins or sign up to receive email updates from Dare County Emergency Management at OBXAlerts.com.
- Complete preparation activities, including securing window and door openings, storing all loose outside objects, etc.
- Store valuables and personal papers in watertight containers in a high spot. If an evacuation order is issued, take them with you.
- Regardless of evacuation order, residents in mobile homes should evacuate or relocate to a suitable location as soon as a Hurricane Warning is issued.



*Pictured: N.C. 12 in Buxton
Credit: Daniel Pullen Photography*

Evacuations

What You Should *Know*

The responsibility for ordering evacuations within Dare County rests with the Dare County Senior Leaders. The group is comprised of the Chairman of the Dare County Board of Commissioners or designee, the six municipal mayors, the Dare County Sheriff and the Superintendent of the National Park Service.

Know the best evacuation route.

Dare County has two evacuation routes: Highway 64/264 West and Highway 158 North. Residents and visitors evacuating from Hatteras Island, Nags Head and Roanoke Island are encouraged to utilize Highway 64/264, which has less congestion and fewer traffic lights, allowing for constant speed. This route intersects with Interstate 95, allowing travelers to head north or south to their desired destination. While this route may appear longer on a map or GPS, it is typically faster than evacuating via Highway 158.

Evacuation routes are well-marked with blue hurricane evacuation route signs.

High-profile vehicles (campers, tractor trailers, boats, RVs, etc.) are at risk while traveling during high winds, especially on bridges. These vehicles should evacuate long before heavy winds begin.

There are no American Red Cross approved shelters in Dare County. Inland shelter locations will be broadcast on local radio and television stations and posted on DareNC.com.

Know Your Zone

Know Your Zone is a cooperative effort of North Carolina Emergency Management and county emergency management partners in coastal counties. When weather-related evacuations are ordered by state or local officials, they will do so using predetermined zones.



Dare County has two evacuation zones designated Zone A and Zone B:

Hurricane Evacuation Zone A

Hatteras Island, including:

- Rodanthe
- Waves
- Salvo
- Avon
- Buxton
- Frisco
- Hatteras Village

Hurricane Evacuation Zone B

All areas north of Oregon Inlet, including:

- Roanoke Island
- Nags Head
- Kill Devil Hills
- Colington
- Kitty Hawk
- Southern Shores
- Duck

To look up your zone, visit KnowYourZone.NC.gov.

What You Should *Do*

If vacationing on the Outer Banks, ensure that you are familiar with the North Carolina Vacation Rental Act. Article 6 addresses mandatory evacuation compliance and refund entitlements for those that have not refused insurance coverage. When an evacuation is ordered, follow your rental company's check-out guidance, take all belongings with you, leave quickly and expect delays as you travel home. Be aware, visitors may be evacuated prior to residents.

Evacuate early. Don't wait to evacuate. Evacuation routes will become very congested.

Flooding can begin well before a hurricane nears land. Plan to evacuate early and keep a full tank of gas in your vehicle.

If you choose to stay, rather than follow evacuation orders, prepare to sustain yourself for at least 72 hours. Emergency personnel will not risk their personal safety during the storm. There may not be power, water, rescue or medical services available. Stay away from windows and glass doors, and move furniture away from exposed doors and windows. Don't go out in the brief calm during the passage of the eye of the storm; after the eye passes, the winds will change direction and quickly return to hurricane force. Keep the radio or television tuned in for the latest updates, if possible. Sign up for emergency alerts at OBXAlerts.com.

BOATING PRECAUTIONS

- Trailer boats should be removed from the water and stored.
- Safe anchor rigging should consist of new or good tie ropes, with extra length and at least 3 or 4 substantial anchors for the craft.
- If possible, boats should anchor in groups with bow lines individually tied high to the tree or piling on mainland with loose rope for rising tide and the sterns well-anchored to hooks. Boats in the group should also be tied together at bows and sterns using protective bumpers.
- Do not tie up parallel to banks; receding tides often beach or capsize boats in this type of anchorage.
- Be sure that a navigable passage at stern of secured boats is made available for late-arriving boats seeking safe anchorage beyond the first boats anchored.
- Safe anchorage boats should be tied high, using a half-hitch knot (loop knots slip). Rope lengths should be sufficient to take care of excessive high water.
- Make an inventory of all vessel equipment. Note items to be removed from the vessel. Take photographs or video of your vessel. Keep a copy of these documents and files on board and ashore.
- If your plan calls for moving your vessel, move it at least 48 to 72 hours before the hurricane is estimated to strike the area.

After the *STORM*

Reentry

Immediately following the storm, damage assessment teams will travel throughout Dare County surveying the effects of the storm. Remain indoors until local authorities say it is safe to go outside. Continue to monitor the radio or TV for instructions from local officials. Information regarding reentry, road closures and areas closed to the public will be available on the Government Channel and DareNC.com/EM.

What You Should *Know*

Dare County has an online reentry program allowing users to print or access digital reentry permits for use at checkpoints. Details can be found at DareNC.com/Reentry.

- Priority One: Essential Personnel**
Essential personnel includes essential utility personnel, government personnel, medical personnel and damage assessment personnel.
- Priority Two: Permanent Residents and Essential Personnel for Critical Businesses**
Permanent residents will be allowed reentry with a valid N.C. driver's license or government-issued identification card with a local address. To expedite movement through traffic control points, residents can also display a reentry permit. Non-resident essential personnel of critical businesses such as grocery stores, food distributors, pharmacies, banks, gas stations, property management companies, building supply stores and hotels will be permitted reentry with a reentry permit and matching current government-issued ID.
- Priority Three: Non-Resident Property Owners and Non-Resident Employees of Non-Critical Businesses**
Non-resident property owners will also be allowed reentry with a current tax bill or parcel data sheet with a matching current government-issued ID or a reentry permit with matching current government-issued identification. Non-resident employees of non-critical businesses will be allowed entry with a reentry permit with matching current government-issued identification.
- Priority Four: General Public and Visitors**
No reentry permit is needed.

Safety is an important consideration following a hurricane as homeowners and businesses begin to survey their properties. During this process, watch out for hazards, including loose or dangling power lines and water on roadways. All motorists are advised to proceed with caution. Motorists may encounter roadways where local officials need to restrict access because of potential hazards. Do not drive into standing water; debris may not be visible.

Why are there reentry delays?

- Polluted water
- Severe flooding
- Limited communications
- No electricity, phone, wireless communications
- Septic tanks backed up and flooding
- Structures undermined
- Trees and limbs on roads
- Damage to personal property
- Lack of infrastructure to support population

What You Should *Do*

Residents: Keep your driver's license with a Dare County address or Dare County property tax receipt and corresponding identification with you during a staged reentry. You may encounter checkpoints in various locations across Dare County.

Visitors: Any plans to visit the Outer Banks should be confirmed before traveling to the area. All accommodations must be assessed for safety before you will be allowed access. Don't risk coming and having to turn around once you arrive. Contact your accommodations provider before leaving on your trip to verify your property or room is available.

Business Owners: At the beginning of every hurricane season, ensure your employees have the proper reentry credentials. Contact Dare County Emergency Management to receive reentry passes for employees.



Dare County Emergency Management Hurricane Guide

DareNC.com/EM | Office: 252.475.5655