The Key Largo Wastewater Treatment District (KLWTD) and Islamorada, Village of Islands are at work before, during and after a storm to keep the central sewer collection system and processing plant fully operational.

KLWTD service area: Mile Marker 106 to the north end of the Tavernier Creek Bridge
Islamorada service area: south of the Tavernier Creek Bridge to the south end of Lower Matecumbe Key

While the wastewater system is designed to operate during most significant storm events, there are a few conditions where service may be interrupted. It is important for our customers to understand these situations.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Restrictions</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WIDESPREAD POWER OUTAGES</strong></td>
<td>None</td>
<td>Sewer facilities are on generator back-up and are regularly tested and prepared for power interruptions. <strong>If you have an on-site (grinder pump) system, you will need to conserve sewer usage until power is restored to your home.</strong></td>
</tr>
<tr>
<td><strong>EXTREME WIND WITH RAIN</strong></td>
<td>Reduced Usage Recommended</td>
<td>Heavy rain with extreme winds (over 50 mph) can pose a threat to power generators. The system may be temporarily interrupted during these periods but will be restored immediately after.</td>
</tr>
<tr>
<td><strong>FLOODING</strong></td>
<td>Reduced Usage Recommended</td>
<td>Rising water above the in-home drains can allow for the infiltration of large amounts of water into the sewer system. During periods of flooding, portions of the collection system may be temporarily shut down to avoid overwhelming the system.</td>
</tr>
<tr>
<td><strong>MANDATORY EVACUATIONS And RECOVERY</strong></td>
<td>Reduced Usage Recommended</td>
<td>During periods of mandatory evacuations, service may be interrupted. The system will be restored, usually before re-entry is allowed to the general public.</td>
</tr>
</tbody>
</table>

"Reduce Usage Recommended" means: Water usage should be for sanitary purposes only. Minimize toilet flushing, use of washing machines and dishwashers. Refrain from washing cars, boats, decks or buildings.

✔ Do not park or place debris on or next to air terminals, utility boxes or manhole covers.
✔ Notify your wastewater district of leaks or system failures.
✔ Never drain storm waters into the sewer system – it’s against the law.
✔ Follow us on Facebook for updates.

Key Largo Wastewater Treatment District
Office: (24-hour service) 305-451-4019
www.klwtd.com
facebook.com/klwastewater

Islamorada Village of Islands
Office: 305-664-6450
Emergency: 305-359-0813
www.islamorada.fl.us
facebook.com/IslamoradaFloridaKeys
Keys
All Area Roofing

YOUR LOCAL ROOFER!
HERE TODAY, HERE TOMORROW

METAL • TPO • SHINGLE • FLAT
MAINTENANCE PROGRAM • COMMERCIAL & RESIDENTIAL

MARATHON
3988 Overseas Highway
305.743.4400

KEY WEST
5511 5th Avenue
Stock Island
305.743.4400

We are here to help our friends & neighbors. Call us when you are ready and we will be there for you.

Visit us at www.keysallarearoofing.com

CCC #1331643
Licensed + Insured
2019 HURRICANE GUIDE

CONTENTS

6 ARE WE READY? RESIDENTS, AGENCIES GEAR UP FOR HURRICANE SEASON
10 2019 STORM FORECAST
14 SO LONG, IRMA & MICHAEL!
16 HURRICANE TRACKER
18 WHAT IS A HURRICANE?
20 WHAT’S THE WORST THAT COULD HAPPEN?
23 HURRICANE DISASTER DOS AND DON'TS
27 STORM SUPPLIES BEFORE, DURING & AFTER
What You Should Know
Before the Power Goes Out

✔ Make sure FKEC has your current phone numbers.
When you call FKEC the phone system automatically matches your phone number to your electrical equipment. For faster restoration, make sure the number(s) you are most likely to call from to report an outage are registered to your account.

Update at www.fkec.com/Forms/update-contact-info.cfm or call 305-852-2431

✔ Make sure FKEC can access your meter equipment.
To make repairs FKEC must have 24 hour access to your meter.

✔ If your power goes out, check your breakers first.
Approximately 33% of all power outages are caused by breaker issues, which are the responsibility of the member to resolve.

✔ Report the outage by call or text.
Call 305-852-2431 or Text “outage” to 45183 to report your outage. Note, your mobile number must be pre-registered with FKEC to report via text.

www.fkec.com/Cooperative/report-outage.cfm

✔ Safety first!
Stay clear of all downed power lines or electrical equipment. Call 911 to report a downed power line if you feel the situation presents a clear and imminent danger. Then report the wire down to FKEC by calling (305) 852-2431.

✔ Understand the order of restoration.
In the event of a major storm with widespread outages, work is organized to restore power to the greatest number of members in the least amount of time. FKEC also prioritizes restoring power to life and safety situations and essential community services. Following this, crews work to restore power to individual members with isolated issues.

Popular FKEC Storm Devices:

Meter Based Surge Protection is offered through a device installed at your meter to provide a level of defense for your entire homes electric system.

Learn more at www.fkec.com/Cooperative/stormcenter.cfm or call (305) 852-2431 to order the device today (supplies may be limited).

FKEC “GenSafe” Device enables a portable generator to be safely connected to your home at the electric meter.

305.852.2431 • www.FKEC.com
Residents, agencies gear up for hurricane season

By Timothy O’Hara, Key West Citizen

Just as property owners in the Florida Keys are making their preparations for another hurricane season, so are the government agencies set up to protect them.

The Monroe County Emergency Management Division and the Sheriff’s Office, Key West Police Department and other local government agencies have had more than 18 months to learn from the hard lessons of Hurricane Irma and implement the needed changes, including issues such as failed communication towers because of a lack of generation and ways to better utilize the expertise of the local population in the initial recovery effort.

Communication was hampered early in the Irma recovery effort because the communication towers used by the Sheriff’s Office, the county, Keys Energy Services, the Florida Keys Aqueduct Authority and other local government agencies lost power because of failed or a lack of generators at various towers.

“We are going to make sure all the generators are checked and serviced before the start of hurricane season,” Sheriff Rick Ramsay said.

The county also has two new generators for the jail, so it won’t have to evacuate the prisoners to facilities on the mainland prior to a hurricane making landfall in the Lower Keys, as was the case before Irma, Ramsay said.

Both the county and the Sheriff’s Office are still struggling to upgrade their facilities to withstand a major hurricane. The Sheriff’s Office itself is still working out of trailers in its parking lot while it works on renovations to its headquarters, which were severely damaged in Irma. The county is still in the design phase of a new Emergency Operations Center, as its current facility is  

---

Photo by Rob O’Neal
The Largest Volumetric Concrete Supplier in the Keys. Protecting the Environment with Less Waste.

 PRODUCTS
Ready Mix Concrete
Aggregates
Concrete Block
& Building Material

Save more with us

SUPPLYING CONCRETE, BLOCK AND AGGREGATE

From 1 to 1000 yards...
You pay only for what you use!*

Serving Key West to Key Largo

Two Locations
101075 Overseas Highway
Key Largo, FL 33037
10610 7th Avenue
Marathon, FL 33050

305.453.0368

www.AllKeysConcrete.com

* Minimums may apply.
Stay Ahead of the Storm

Order Checks. Keep checks on hand to pay for emergency expenses, to get cash and to have your account and routing numbers available.

Secure Additional Funds. Carry a Keys Visa® Credit Card, and have a Keys Personal Loan or Redi-Cash Line of Credit to help pay for unexpected expenses.

Bank Anywhere. Enroll in Online Banking and download our Mobile App at KeysFCU.org to pay bills, manage your accounts and transfer funds anytime, anywhere.

Link your Accounts. Link your Keys FCU accounts with your accounts at other financial institutions to transfer money electronically.

Get Connected. Store our contact information and follow our Social Media sites to learn how we can help you before, during and after the storm.

#Keys Strong

For Assistance

Call 305-294-6622  Go to KeysFCU.org
Visit any branch in Key West, Big Pine or Marathon
not structurally sound enough to withstand a major hurricane.

But the county has started several programs since Hurricane Irma to enlist the community in the response effort. More than 500 local residents have enrolled and received training as part of the Monroe Emergency Reserve Corps.

The program was formed by the county’s Emergency Management Division in the months following Irma as a way to get evacuated residents back into the county quickly in order to help the community respond and recover from a hurricane.

Since Irma, the corps has evolved into a non-profit group that has ongoing training for its volunteers.

“The solution is us saving ourselves,” county Emergency Management Director Marty Senterfitt said. “Monroe Emergency Reserve Corps represents that philosophy. ... They are doing the work of 20 people. Twenty people who I would never be able to fire.”

The volunteers have patterned themselves after the county’s emergency management support structure. The group has incident managers and even a public information officer, and each contingent of the group will operate on a community level, patrolling neighborhoods and checking in on residents.

Senterfitt called them “the eyes and ears” for the county following a hurricane or other natural disaster.

The Monroe County government is accepting applications from local business owners who want to have their employees return early after a hurricane.

The business owners must prove their employees will have enough food and water for at least 14 days and submit a plan for how and where they will be housed and how to deal with sewage. They must also illustrate why their businesses are essential and need to be quickly reopened after a hurricane.

The owners and employees are issued placards for their vehicles that will allow them quick access back into the Keys. The placards have to be renewed each year.

More information on volunteering and the placard program can be found on the county’s emergency management website at http://www.monroecountyem.com.
2019 HURRICANE FORECAST

FEWER STORMS PREDICTED, BUT DANGER STILL EXISTS

The 2019 Atlantic hurricane season may see fewer storms and hurricanes, but that doesn't necessarily mean it will be less dangerous, according to a newly released outlook from the Colorado State University Tropical Meteorology Project.

The group, led by Dr. Phil Klotzbach, calls for a total of 13 named storms, five hurricanes and two major hurricanes.

This is near the 30-year average of 12 named storms, six hurricanes and three major hurricanes. A major hurricane is one that is Category 3 or stronger on the Saffir-Simpson Hurricane Wind Scale.

Though the official Atlantic hurricane season runs from June through November, occasionally we can see storms develop outside those months, as was the case in the previous two seasons with May 2018’s Tropical Storm Alberto and April 2017’s Tropical Storm Arlene.

The CSU outlook is based on more than 30 years of statistical predictors, combined with seasons exhibiting similar features of sea-level pressure and sea-surface temperatures in the Atlantic and eastern Pacific Oceans.

Here are some questions and answers about what this outlook means.

What does this mean for the U.S.?

There is no strong correlation between the number of storms or hurricanes and U.S. landfalls in any given season. One or more of the 13 named storms predicted to develop this season could hit the U.S. or none at all. Therefore, residents of the coastal United States should prepare each year no matter the forecast.

A couple of examples of why you need to be prepared each year occurred in 1992 and 1983.

The 1992 season produced only six named storms and one subtropical storm. However, one of those named storms was Hurricane Andrew, which devastated South Florida as a Category 5 hurricane.

In 1983 there were only four named storms, but one of them was Alicia. The Category 3 hurricane hit the Houston-Galveston area and caused almost as many direct fatalities there as Andrew did in South Florida.

In contrast, the 2010 Atlantic season was quite active, with 19 named storms and 12 hurricanes. Despite the large number of storms that year, not a single hurricane and only one tropical storm made landfall in the United States.

In other words, a season can deliver many storms but have little impact or deliver few storms and have one or more hitting the U.S. coast with major impact.

The U.S. averages one to two hurricane landfalls each season, according to NOAA’s Hurricane Research Division statistics.

The past two hurricane seasons have been particularly destructive.

In 2018, four named storms impacted the U.S. coast, most notably Hurricanes Florence, then Michael within a month of each other.

In 2017, seven named storms impacted the U.S. coast, including Puerto Rico, most notably hurricanes Harvey, Irma, which devastated the Middle Keys, and Maria, which battered Texas, Florida and Puerto Rico,
respectively.

In 2016, five named storms impacted the Southeast U.S. coast. The most notable was Hurricane Matthew with its powerful scraping of the coast and subsequent inland rainfall flooding.

In the past three seasons, eight hurricanes were so destructive and/or deadly their names were retired from further use by the World Meteorological Organization.

Before then, the number of U.S. landfalls had been well below average over the previous 10 years.

The 10-year running total of U.S. hurricane landfalls from 2006 through 2015 was seven, according to Alex Lamers, a meteorologist with the National Weather Service. This was a record low for any 10-year period dating to 1850, considerably lower than the average of 17 per 10-year period dating to 1850, Lamers added.

None of the U.S. landfalls from 2006 through 2015 involved major hurricanes.

Bottom line: It’s impossible to know for certain if a U.S. hurricane strike, or multiple strikes, will occur this season.

How much of a role will El Niño play?

One ingredient worth attention is El Niño, the periodic warming of the central and eastern equatorial waters of the Pacific Ocean. As of early spring, a weak El Niño is in place and may be gaining some strength. Klotzbach noted March upper ocean heat content in the area of the equatorial Pacific monitored for El Niño was among the highest in 40 years of March records.

Long-range forecasters at both NOAA and The Weather Company, an IBM business, now believe there’s a good chance this El Niño will persist into at least the summer, if not into the fall, during the heart of the hurricane season. El Niño tends to produce areas of stronger wind shear (the change in wind speed with height) and sinking air in parts of the Atlantic Basin that are hostile to either the development or maintenance of tropical cyclones.

With the major exception of Michael, this wind shear was a factor keeping the Caribbean Sea rather quiet in the 2018 season, as evidenced by the relative dearth of Caribbean tracks in the 2018 track map above.

But there are several important caveats to this.

Stronger-than-average wind shear was present in the Caribbean Sea in 2018 without an official El Niño. The wind shear suppressed development in the Caribbean but not elsewhere in the Atlantic.

Any other factors in play?

El Niño is only one of several influences on the atmospheric circulation. Water temperatures in the Atlantic have a much more direct role in tropical cyclone development on the Atlantic side of the continent.

The current water temperatures across the North Atlantic basin show cooler-than-average water temperatures in the far North Atlantic and in the eastern tropical Atlantic between the Lesser Antilles and Africa. Warmer-than-average water is widespread in the Gulf of Mexico, off the southeast coast of the U.S. and in the central Atlantic Ocean.

However, it isn’t the anomalies that allow hurricanes to
ATTENTION CONTRACTORS AND DEVELOPERS

M&W WINDOWS, LLC.

Diamond Level Wholesale Distributor

We are a leading Wholesale distributor for PGT and CGI Windows! With plenty of options we will meet your expectations!

Jobsite Delivery Available

M&W Windows, LLC prides itself in providing excellent service before, during, and after the sale!

Phone: 954.298.7429 • Fax: 954.416.6144
www.mandwwindows.com • C17Willie@Yahoo.com

Wholesale pricing to Contractors, Developers, Window Installers, Architects, Etc.

Please feel free to forward any and all quote requests directly to us for a fast response!
intensify, but rather the actual heat of the oceans. Water temperatures of 80 degrees or higher are generally supportive of tropical storm and hurricane formation and development.

Much of the tropics stay at or above this temperature for most of the year.

So why bring it up if favorable conditions are always around?
If temperatures in the main development region (MDR) between Africa and the Caribbean Sea are warmer than average, we often get more than the average number of tropical storms and hurricanes from this region. Conversely, below-average ocean temperatures can lead to fewer tropical storms than if waters were warmer.

Warmer waters in the MDR allow tropical waves, the formative engines that can become tropical storms, to get closer to the Caribbean and United States.

Other factors that can be detrimental to tropical storm or hurricane development include dry air and wind shear.

In 2013 and 2014, there was prohibitive dry air and/or wind shear during a significant part of the season, but El Niño was nowhere to be found.

This was the third April outlook issued since the passing of Dr. William Gray, noted hurricane researcher and emeritus professor of atmospheric science at Colorado State University.

Gray, who died in April 2016, was the creator of the yearly Atlantic hurricane season outlooks, which have been published every year since 1984. He developed the parameters for these outlooks in the late 1960s, which was considered groundbreaking research at that time.
Hurricane Irma devastated the Caribbean and the Florida Keys in September 2017, but thankfully, we’ve heard the last of “Irma” as the name joins a long list of retired storm names.

Each year, the World Meteorological Organization names the Atlantic storms, alternating male and female names in a six-year rotation. When a particularly bad storm wreaks havoc in a given year, that name is retired and taken out of rotation.

After the 2017 season, the WMO decided to retire Irma, Nate, Harvey and Maria. Irma and Harvey will go down in history as two of the costliest hurricanes ever to hit the shores of the United States, according to LiveScience.

Following the 2018 season, Michael, which devastated the Panhandle area, and Florence, which struck the East Coast, also were retired.

The list of retired names includes a number of storms that heavily impacted the Keys, including Katrina, which devastated New Orleans after twisting and turning in the Gulf. That was in 2005, one of the worst years for hurricanes in the chain of islands, as one after another pummeled the Keys. It started with Dennis, then Katrina, then Rita and finally ended with Wilma, one of the first times the WMO has had to go through the entire alphabet due to the number of storms. All the names were retired at the end of that year.
So far, more than 85 names have been retired since the naming system began in 1954. For several hundred years, according to the National Hurricane Center, storms were named for the saints on whose day the storm occurred. It was also common practice to simply use the year, as in the Great Labor Day Hurricane of 1935. In 1953, storms were named using only female names. The first female hurricane was named “Maria,” the heroine of the 1941 novel “Storm” by George Rippey Stewart, according to NOAA. That practice came to an end in 1979, when male names were put into alternating rotation.

Today, the center says that that the six lists of names are maintained and updated by the WMO through an international voting committee. The lists contain French, Spanish, Dutch and English names because “hurricanes affect other nations and are tracked by the public and weather services of many countries,” according to NOAA. That’s why it’s not uncommon to see names such as Ione, Klaus, Fifi, and Gustav used for storms.

The letters Q, U, X, Y and Z are not used in the rotation as there are not enough names starting with those letters to use them. If in any given year, there are more than 21 named storms, the default is to then go to the Greek alphabet. According to Accuweather, the only year that the Greek letters had to be used was in 2005, when they had to use the first six.

This hurricane season begins with a fresh list of names, and you’ll never see “Irma” or “Michael” again.
To track a hurricane, plot the latitude and longitude coordinates as provided by the National Hurricane Center. The coordinates designate the location of a storm's center and are included in the advisories issued by the NHC as a storm approaches. As you plot each location, connect the dots to follow the storm's path.
Hurricane Loans
A Mortgage, Home Equity Line of Credit, or Personal Loan can provide peace of mind knowing that money is on hand to prepare and, if necessary, recover quickly from a hurricane. A First State Bank loan can help you to secure your home before a storm, purchase generators, or make repairs after a storm. Apply for a mortgage or a personal loan online @KeysBank.com.

Digital Banking
Online, Mobile, and Text Banking, Mobile Deposit, Direct Deposit, and Bill Pay ensure that payroll and other important banking transactions can happen automatically or on the go. Log in or enroll today at KeysBank.com or with the KeysBank Mobile App to access your accounts 24/7, even if you have to evacuate.

Debit Cards
First State Bank debit cards are essential for quick cash access when banks are closed or if you have to evacuate. Remember, FSB does not charge a fee for using your debit card at any ATM* and all 1,100 Publix Presto! ATMs are free to FSB customers. You can get cash back with debit card purchases at many businesses. Instant issue cards are available at our 11 Keyswide locations. Get yours before it's time to evacuate!

Credit Cards
When evacuations become necessary, a credit card is critical for emergency funds, travel expenses, and supplies. First State Bank offers personal and business credit cards to meet both your everyday and emergency needs.

Emergency Cash & Checkbook
In the event of a power failure, electronic means of payment like credit and debit cards may not be available. Be sure to have cash and your checkbook on hand for purchases.

Secure Important Documents
Make copies of your insurance papers, Social Security cards, birth certificates, mortgages, and other important documents to keep on hand. Originals can be stored in a First State Bank Safe Deposit Box**.

* Other banks’ fees may apply
**Safe deposit contents are not FDIC insured.
A hurricane is a rotating storm system up to hundreds of miles across. A region of low air pressure at the center is called the eye. Rain bands spiral outward from the eye. The high winds of a hurricane sweep across the ocean water producing a dangerous storm surge, a wall of water that can cause massive flooding even miles inland.

Hurricane season is upon us. Everyone who lives in the Florida Keys is on a first-name basis with any number of past storms, but few may actually understand what differentiates a tropical storm from a hurricane.

According to the National Oceanic and Atmospheric Administration, a tropical cyclone is a rotating low-pressure weather system that has organized thunderstorms but no fronts (a boundary separating two air masses of different densities). Tropical cyclones with maximum sustained surface winds of less than 39 miles per hour (mph) are called tropical depressions. Those with maximum sustained winds of 39 mph or higher are called tropical storms.

The storm remains a tropical storm until the sustained winds exceed 73 mph. Once those sustained winds reach 74 to 95 mph, that storm becomes a Category 1 hurricane.

According to the Saffir-Simpson scale, the following are the wind speeds that determine a hurricane’s category:

- Category 1: 74 to 95 mph
- Category 2: 96 to 110 mph
- Category 3: 111 to 129 mph
- Category 4: 130 to 156 mph
- Category 5: 157 mph or higher

The Climate Prediction Center classifies hurricane seasons as above-normal (between 12 and 28 tropical storms and between seven and 15 hurricanes); near-normal (between 10 and 15 tropical storms and between four and nine hurricanes) and below-normal (between four and nine tropical storms and two to four hurricanes).

In 2017, the season was considered to be an above-normal, extremely active hurricane season, with 17 named storms. Of those named storms, 10 became hurricanes, with six of those reaching major hurricane status. The season saw the first two major hurricanes — Harvey in Texas and Irma in the southeastern U.S. — to hit the continental U.S. in 12 years, according to the Climate Prediction Center. Puerto Rico and several Caribbean islands saw tremendous damage from the various storms.

In 2018, the U.S. experienced its third straight busier-than-average hurricane season.
Hurricane Florence struck Wilmington, North Carolina, in mid-September, arriving as a Category 2 storm but quickly faltering to Category 1, although dropping near record amounts of rainfall.

About a month later, Hurricane Michael formed in the Gulf of Mexico off Venezuela, remaining a Category 2 storm for most of its trek but then gaining strength and speed as it headed toward the Florida Panhandle. Originally labeled a Category 4 storm, researchers recently upgraded it to Category 5.

The official hurricane season in the Atlantic is June 1 to Nov. 30 each year, although storms have occurred in other months, albeit rare. 🌍
Summer at the southern tip of the Florida Keys becomes a numbers game, with an emphasis on 1 through 5. Residents of the coastal, hurricane-prone area, especially those in the isolated island chain of the Florida Keys, quickly grow accustomed to the term “Category 1.” But even the most seasoned and cynical residents cringe when they hear the catastrophic possibility of a Category 5 hurricane. The five categories of hurricanes — often shortened in conversation to Cat 1, Cat 2, Cat 3, Cat 4 or Cat 5 — are known as the Saffir-Simpson Hurricane Wind Scale.

Wind engineer Herb Saffir and meteorologist Bob Simpson designed the scale to gauge a hurricane’s strength and potential for property damage. To be classified as a hurricane, a tropical cyclone must have maximum sustained winds of at least 74 mph (Category 1). The highest classification in the scale, Category 5, consists of storms with sustained winds exceeding 156 mph.

The scale addresses only the potential for wind damage. It does not address other hurricane-related impacts, such as storm surge, rainfall-induced flooding or tornadoes.
An important message from Florida Keys Contractors Association

Peace of Mind is important during Hurricane Season.

Be sure to hire a licensed and insured contractor to get your home and business ready during storm season.

After the storm: Be sure to hire licensed contractors to repair storm damaged structure.

Ask your contractor
• Do you have a Monroe County License?
• Do you have general liability & worker’s comp insurance?
• Are you familiar with Monroe County Building Regulations?
• Will you pull a permit if my work requires it?
• Have you done this type of work before?
• Are you self performing the entire project?
• Will you supply releases of liens for your subcontractors & suppliers?

Work that requires a licensed and insured contractor
Aluminium • Landscaping • Masonry • Roofing • Shutters • Windows & Doors • Seawalls & Docks and more…please call for more information.

Florida Keys Contractors Association
(305) 743-9429
floridakeyscontractorsassociation.com
admin@FKCA.org

Monroe County Building Department
(305) 289-2501
monroecounty-fl.gov

---

**SAFFIR-SIMPSON HURRICANE SCALE**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SUSTAINED WIND SPEED (MPH)</th>
<th>POTENTIAL DAMAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>74-95</td>
<td>Minimal, with some roof leakage, gutter damage, snapped tree branches and toppled trees with shallow roots</td>
</tr>
<tr>
<td>2</td>
<td>96-110</td>
<td>Moderate, with major roof and siding damage; uprooted trees could block roads; power loss possible for days to weeks</td>
</tr>
<tr>
<td>3</td>
<td>111-129</td>
<td>Devastating damage, with gable and decking damage, many more uprooted trees and extended power outages</td>
</tr>
<tr>
<td>4</td>
<td>130-156</td>
<td>Catastrophic damage; roofs and exterior walls will be destroyed; trees will snap; power outages for weeks to months. Large area uninhabitable for weeks or months</td>
</tr>
<tr>
<td>5</td>
<td>157 OR HIGHER</td>
<td>High fraction of framed houses will be destroyed; power outages for weeks to months; and huge swaths uninhabitable for same period</td>
</tr>
</tbody>
</table>

**SOURCE:** NOAA’S NATIONAL HURRICANE CENTER

---

**ARBORTECH**
Landscape Design & Improvement

**COMMERCIAL & RESIDENTIAL SERVICES**

**Annual Property Maintenance Programs**

- **COMPLETE TREE SERVICE**
- **HURRICANE PREPARATION**
- **STUMP REMOVAL**
- **TRANSPLANTS**
- **LAND CLEARING**
- **MULCH & TOP SOIL**
- **LOCALLY OWNED & OPERATED**

Licensed & Insured SP3163
Free Estimates • (305) 852-5180
This Hurricane Season 2019 prepare your pets too...

Robert H. Foley, DVM, CVA-Acupuncturist
Samantha Bartlett, DVM
Herbal Medicine, Pet Hemp Usage
Dianne Poliakoff, DVM
Avian, Exotic Medicine and Surgery
Kimberly Craney, DVM
General Small Animal Medicine

305-852-3665
Monday-Friday 8-5:30  Saturday 8-4:30
Emergency Services Available
We are all survivors of Hurricane Irma
www.upperkeysvet.com
87801 Overseas Hwy. Islamorada, FL 33036
HURRICANE DISASTER

Dos and Don’ts

Hurricane disaster dos and don’ts can save lives, when properly applied. Proper preparation can prevent harm to houses, property and people. Before, during and after a big one hits, making the right choices can avert disaster.

---

**DOS BEFORE THE STORM HITS**

Having the right supplies can make all the difference if a storm becomes disastrous.

- Keep plenty of water, non-perishable food, a manual can opener, flashlights, batteries and a battery-powered or hand-crank radio on hand.
- Always have adequate medical supplies, particularly a first aid kit and prescription medications.
- Sterilize the bathtub and fill it with water.
- Water can be put into a toilet’s refill tank to flush without power.
- Charge cellphones.
- Pull out cash for general use.
- Fill cars with gasoline.
- Be aware of needs specific to all residents.
- Turn off propane tanks.
- Bring in outdoor objects that could become projectiles and anchor what can’t be moved.
- Set fridges on their coldest settings and well insulate them with things that will hold the cold much better than air.
- Be cognizant of the elevation and local hazards like rivers, lakes and floodplains.

- Straps and additional clips can help secure a roof to the rest of a frame.
- Both the placement and trimming of bushes and trees can create wind barriers.
- Ensure gutters and downspouts are free of leaves, sticks and other debris.
- Add a protective layer over windows, such as installed shutters, impact-resistant windows or nailed boards that are in decent condition.
- Preinstalling shutter fasteners allows for easier and quicker installation.
- Shingles and soffits help distribute quickly accumulating rain.
- Seal with caulk or other means any cracks between windows, doors and pipe entries which could funnel aggressive winds indoors.
- Secure and brace external doors.

If a hurricane intensifies, extra precautionary measures become essential to keep families safe.

- Keep handy personal and governmental emergency contacts.
- Develop an effective evacuation plan with reliable evacuation routes.

---

**DOS DURING THE STORM**

- Use a TV or, if the power goes out, a battery-operated radio to hear weather and emergency alerts.
- Use a weather radio app for current weather information.
- Close interior doors to minimize potential windflow.

- Watch for downed power lines and structural damage.
- Try to smell potential gas leaks.
- Take photos for insurance purposes afterward.

---
Volunteer Today!

Medical and public health backgrounds are needed
- Physicians • Nurses • Pharmacists • Veterinarians • Dentists • Epidemiologist • Emergency Medical Technician • Infectious Disease Specialist • Health Educators • Mental Health Professionals
- Community members needed, too
- Interpreters • Chaplains • Amateur Radio Operators • Office Workers • Lawyers • Logisticians

Help protect the health of your community during emergencies & in times of need.

To volunteer, contact Florida Keys MRC at 743-1111 x 203 or mrc@fkahec.org
For more information on the Florida Keys MRC, go to: www.fkahec.org or www.medicalreservecorps.gov

Know Your Hurricane Risk

Make an emergency plan...
Build or restock your basic disaster supplies kit, including food and water, a flashlight, batteries, chargers, cash, and first aid supplies.

Consider Buying Wind and Flood Insurance

Some Things are Just A Little too Important to Entrust to Just Anyone

Automobile • Business • Life/Health • Marine Homeowners • Windstorm and Flood
Regan Insurance Agency
Since 1958
90144 Overseas Highway, Tavernier, FL 33070
8065 Overseas Highway, Marathon, FL 33050
Tavernier 305.852.3234 • Marathon 305.743.3414

Healthy Air Products

Exposure to air pollutants can be 100 times higher indoors than outdoors.
EVERYONE CAN BENEFIT FROM IMPROVED INDOOR AIR QUALITY
Call us today about:
- HIGH EFFICIENCY • AIR FILTERS SYSTEMS • HUMIDITY CONTROL
- UV LIGHT DISINFECTION

Ready to Respond

Administration 305-664-6400
Fire Rescue non-emergency 305-664-6490

Sign up for Islamorada Emergency Alerts
Go to the Notifications link in the Contact Us tab at www.islamorada.fl.us or Join My List on Facebook @IslamoradaFloridaKeys
DONT'S

- Don’t decide that local government evacuation orders don’t matter.
- Don’t run indoor generators without carbon monoxide detectors, as some have slowly poisoned homeowners.
- Don’t hang out near windows during the storm.
- Avoid rooms particularly susceptible to big, falling trees.
- Avoid electrical equipment that may possibly lead to electrocution.
- Especially if in a building with a foundation in a floodplain, don’t assume basement flooding will be very gradual, as flows can increase quickly and have trapped families.
- Don’t drink water from the tap until the water supply has been deemed safe by local authorities.
- To avoid unnecessary panic, don’t overhype storms.
- Don’t venture outside into a hurricane.
- After the storm, don’t touch loose or dangling electrical wires.
- Don’t step in puddles possibly touching damaged electrical equipment.
- Don’t drive unless necessary because of potentially flooded roadways.
- If the power goes out for a long time, beware of spoiled food in the refrigerator.
- Don’t forget to consider and quickly remedy potential long-term damages from mold.
- Avoid entering buildings that smell like gas.
- Last but not least, don’t put off reporting electrical, gas or water utility problems indoors and outdoors.

Risks of electrocution, gas explosions, supply shortages, preventable damages to property, falling and tossed debris, rushing waters, flood damages and their corresponding threats can accompany hurricanes. Being smart and prepared before and during the storm can minimize the physical threats and the damages.

STOCK UP ON HURRICANE SUPPLIES
SALES TAX FREE HOLIDAY
MAY 31 - JUNE 6, 2019

Qualified for tax-free purchases:

- Portable self-powered light sources, such as flashlights, selling for $20 or less
- Portable self-powered radios, including two-way radios and weather-band radios, selling for $50 or less
- Tarps, other waterproof sheets, ground anchors or ties, also for $50 or less
- Gas or diesel fuel tanks that are sold for $25 or less
- AA, AAA, C, D, 6-volt or 9-volt batteries sold for $30 or less (car and boat batteries are excluded)
- Non-electric coolers up to $30
- Portable generators sold for $750 or less
- Reusable ice sold for $10 or less

KEYS INDUSTRIAL WELDING SUPPLIES
For All Your Welding Needs!
90280 Overseas Highway
Tavernier, FL 33070
305.922.2546

HOME RENOVATIONS
- Kitchen • Bath
- Additions • Painting
- Impact Windows
- Exterior Decks, Railings & Fences
- Free Estimates

786.316.2104
Roberto Sanchez
www.LowCostHousing.us • email: lowcosthousingrs@gmail.com
We take care of everything from the estimating, to ordering, permitting, and installation! The process is done in-house for expedited and cost effective service. Your installation will be completed by our own employees for increased quality control, not subcontracted out like most window and door dealers! We offer everything from “pocket friendly” products to luxury lines.

**WE FEATURE THE FOLLOWING PRODUCTS:**
- Impact Windows & Doors
- Mahogany Doors
- Bi-fold Doors
- Commercial Storefront
- Rollup Bug Screens
- Rollup Hurricane Screens
- Rollup Hurricane Shutters
- Accordion Hurricane Shutters
- Bahama Hurricane Shutters
- Retractable Door Bug Screens
- Exterior Decorative Shutters... even Marine Grade Outdoor Cabinetry!
STORM SUPPLIES
BEFORE, DURING & AFTER

With hurricane season running from June to November, there are myriad responsibilities to consider. Let’s break down some of those concerns in a timely fashion:

BEFORE THE STORM

General preparedness (through season)
• Keep your vehicle gas tank above half-full through the season.
• Test run generators monthly with a load to insure proper working order.
• Have cash on hand in small denominations for year-round preparedness.
• Maintain portable battery-powered radio.
• Have secondary charging capabilities for cellphones and tablets.
• Register if you need transportation assistance to evacuate.

Home Preparedness
• Board up your windows or close storm shutters.
• Trim the trees and shrubs around your home.
• Clear loose and clogged downspouts and rain gutters.
• Perform an inventory of home contents (electronics, jewelry, appliances, clothing, etc.) and store in a safe place.
• Take detailed photos(s)/videos(s) of home property and contents (internal and external) and store in safe place.
• Secure or remove all items outside your home (grill, hanging plants, potted plants, etc.).
• Tie down small or young trees to prevent uprooting.
• Store all-important documents (insurance papers, etc) in a waterproof container and in a secure location.
• Turn off propane tanks.
• Fill the bathtub and large containers with water for sanitary purposes (cleaning, flushing toilets.)

AS THE STORM APPROACHES

If you plan to evacuate:
• What is your zip code?
• Are you located in an evacuation area in the evacuation map?
• Where are you going?
• Who is your contact at your destination?
• What is their contact information?
• What is your backup evacuation location?
• Take a copy of all-important documents and store in a waterproof container and in a secure location.
• Top off your vehicle gas tank before hitting the road.

If you plan to stay:
• Listen to the radio or TV for information.
• If you have gas items you need to operate after the storm (generator, chainsaw, etc), fill gas storage container(s).
• Stock up on canned food and drinking water, as well as water for other uses.

DURING THE STORM

• Listen to the radio or TV for information.
• Turn the refrigerator and freezer to its coldest setting and keep its doors closed. Avoid using the phone except for emergencies.
• Stay indoors during the storm and away from windows and glass doors.
• Close all interior doors.
• Keep curtains and blinds closed.
• Take refuge in a small interior room, closet, or hallway on the lowest level of your home.

AFTER THE STORM

If you are returning from evacuation
• Return only after the all clear is given for your area.
• Do not venture on to roads until you have been

With hurricane season running from June to November, there are myriad responsibilities to consider. Let’s break down some of those concerns in a timely fashion:

BEFORE THE STORM

General preparedness (through season)
• Keep your vehicle gas tank above half-full through the season.
• Test run generators monthly with a load to insure proper working order.
• Have cash on hand in small denominations for year-round preparedness.
• Maintain portable battery-powered radio.
• Have secondary charging capabilities for cellphones and tablets.
• Register if you need transportation assistance to evacuate.

Home Preparedness
• Board up your windows or close storm shutters.
• Trim the trees and shrubs around your home.
• Clear loose and clogged downspouts and rain gutters.
• Perform an inventory of home contents (electronics, jewelry, appliances, clothing, etc.) and store in a safe place.
• Take detailed photos(s)/videos(s) of home property and contents (internal and external) and store in safe place.
• Secure or remove all items outside your home (grill, hanging plants, potted plants, etc.).
• Tie down small or young trees to prevent uprooting.
• Store all-important documents (insurance papers, etc) in a waterproof container and in a secure location.
• Turn off propane tanks.
• Fill the bathtub and large containers with water for sanitary purposes (cleaning, flushing toilets.)

AS THE STORM APPROACHES

If you plan to evacuate:
• What is your zip code?
• Are you located in an evacuation area in the evacuation map?
• Where are you going?
• Who is your contact at your destination?
• What is their contact information?
• What is your backup evacuation location?
• Take a copy of all-important documents and store in a waterproof container and in a secure location.
• Top off your vehicle gas tank before hitting the road.

If you plan to stay:
• Listen to the radio or TV for information.
• If you have gas items you need to operate after the storm (generator, chainsaw, etc), fill gas storage container(s).
• Stock up on canned food and drinking water, as well as water for other uses.

DURING THE STORM

• Listen to the radio or TV for information.
• Turn the refrigerator and freezer to its coldest setting and keep its doors closed. Avoid using the phone except for emergencies.
• Stay indoors during the storm and away from windows and glass doors.
• Close all interior doors.
• Keep curtains and blinds closed.
• Take refuge in a small interior room, closet, or hallway on the lowest level of your home.

AFTER THE STORM

If you are returning from evacuation
• Return only after the all clear is given for your area.
• Do not venture on to roads until you have been
advised they are passable and safe. Be on the lookout for downed power lines and avoid if identified.

- If any safety issues are present, do not enter your home (gas smell, flood waters, fire damage, etc.). If structural issues are present, stay away until you can have your home inspected by a qualified building inspector or engineer.
- Watch for and avoid loose animals and poisonous snakes.
- Avoid carbon monoxide poisoning hazards; do not run generators, grills, or other gas-operated appliances indoors.

**Damage Assessment**

- Have a fire extinguisher readily available in the case of a fire.
- Watch for safety hazards (loose boards, slippery floors, broken glass, etc.)
- Carefully check for damage to the roof, foundation, and chimney. If the building looks unstable do not enter. Use a stick or other tool to sift through debris.
- Open cabinets cautiously. Beware of objects that can fall off shelves.
- If you smell natural gas, leave the structure and contact your local gas utility company.
- Use a battery powered flashlight to inspect the structure. Do not use oil or gas lanterns or candles inside the structure.
- If structural damage is present, turn off utilities.
- Do not use electrical appliances that have been wet/damaged until checked by a professional.
- Check with local authorities or have well water tested before using any water (could be contaminated).
- Until cleared with authorities or tested, all water should be boiled for 1 minute at a rolling boil to disinfect before drinking.
- Avoid using any toilets until you have checked for sewage or water line damage. If you suspect damage call a plumber. Service damaged sewage systems as soon as possible as they present serious health hazards (septic tanks, pits, etc.)
- Check your smoke and carbon monoxide detectors to ensure they are functioning properly. If any damage is identified to your home, contact your insurance company to start a claim. Photograph any damage.
- Throw away any spoiled food items or those that have come in contact with floodwaters.

**Emergency essentials kit food**

- Seven-day supply of non-perishable food that doesn’t need cooking (14 days, if possible)
- Hand-operated can opener
- Plastic plates, cups, utensils
- Water 1 gallon of drinking water per person per day enough for five days

**Communication**

- Portable, battery-powered AM/FM radio
- NOAA All Hazards alert radio
- Landline phone with a long cord
- Extra batteries for flashlights, lanterns, radio
- Extra cellphone battery or car charger
- Whistle

**Family safety items**

- Smoke detector with battery for each floor
- Carbon monoxide detector with battery backup
- Fire extinguisher
- Non-scented bleach for sanitization
- Sunscreen
- Insect repellant
- Shovel and other basic tools

**Pet Needs**

- Seven-day supply of non-perishable pet food and water (14 days, if possible)
- Cage or pet carrier and leash
- Pet medications and pet first-aid kit
- Current photo in case you are separated
- Cat litter and box
- Pet bed and toys

**Personal Hygiene**

- Hand sanitizer or disinfectant wipes
- Toilet paper, paper towels, garbage bags
- Dental care and vision products
- Travel-size soaps and other beauty supplies
- Change of clothes, pair of shoes and blanket per person

**First aid**

- First aid kit
- Backup prescriptions for essential medications

**Clean air items**

- Nose and mouth protection masks (N-95 rating)
- Plastic sheeting
- Duct tape

**Baby Items**

- Formula, bottles, powdered milk
- Diapers
- Baby wipes
- Diaper rash ointment

**Lighting**

- Flashlights for each family member with extra batteries
- Fluorescent lanterns for each common area
- Waterproof matches or a utility lighter

**Prescription Medications**

- List all the brand name and generic prescription medications you currently take.
- Doctors’ names and numbers
- List all nonprescription medications, vitamins and supplements
WHERE ARE WE LOCATED?
WHERE DO YOU NEED US?

Sea Tow is proud to serve the boating community throughout the Florida Keys, from Key Largo to Key West.

Our Coast Guard-licensed Captains are immediately available after a storm to help with your recovery efforts. We recover vessels sunk at your dock, in the mangroves or land-based. We have equipment to safely re-float, pump-out and get your boat back on the davits or trailer even before power is restored. Commercial services are also available for large scale work including vessel transport and barge/crane services.

We live here, we boat here. Call Sea Tow and speak with one of our seasoned Captains about preparing for a storm and ultimately how to protect your boat.

Sea Tow Key Largo
305-451-3330

Sea Tow Islamorada/Marathon
305-289-2055

Sea Tow Lower Keys
305-745-2070

Sea Tow Key West
305-295-9912

seatow.com
**CATEGORY 1 & 2 STORMS,**

shelters available are:

**Key West High School**
2100 Flagler Ave, Key West

**Sugarloaf Elementary**
US1 & Crane Blvd, MM19

**Coral Shores High School**
US1, MM 90, Tavernier

**Marathon High School**
350 Sombrero Rd, Marathon

*Pet Sheltering available for each shelter*

**CATEGORY 3, 4 OR 5 STORMS,**

there are NO shelters in Monroe County that would be safe.
Evacuation becomes MANDATORY for everyone and you will then be directed to the appropriate shelter on the mainland. Sheltering options may include, Florida International University, the E. Darwin Fuchs Pavilion at the Miami-Dade County Fair and Exposition, 10901 SW 24th St., Miami, FL 33165 (which will allow residents to shelter with their pets), and other facilities within Miami Dade County, based on their availability on a per storm basis.

**SHELTERING PETS**

Monroe County Emergency Management in conjunction with Monroe County School Board have identified areas to shelter pets in the Keys for Category 1 & 2. Pets must be properly caged along with up-to-date shot records.

For more information on Pet Sheltering refer to our website

[www.monroecountyem.com](http://www.monroecountyem.com)
or call 305-289-6043

**SPECIAL NEEDS REGISTRY**

Monroe County Social Services has a “Special Needs Registry Program” that will offer assistance to persons with special needs living in the Keys during evacuation and sheltering. To be part of this program you must pre-register.

Call 305-292-6043, or visit our website.

[www.monroecountyem.com](http://www.monroecountyem.com)

**MONROE COUNTY EMERGENCY MANAGEMENT INFORMATION HOTLINE:**

1-800-955-5504
GET PREPARED

8 Locations in the Florida Keys
OPEN 24 HOURS

Serving the Florida Keys for over 50 Years
www.mytomthumb.com
Keep your trees trimmed to at least 10 feet away from all electric lines.

If limbs are intruding on electrical lines, do not attempt to trim them yourself.

Instead call us so a trained tree trimmer can safely trim the limbs away from the lines at no cost.

Call KEYS at (305) 295-1010, or visit KeysEnergy.com to submit your free tree trimming request today!

New Emergency Notification System!

KEYS is now using an automated notification system to update our customers on major system emergencies by text messages and phone calls.

In order for the system to work, customers should ensure KEYS has your accurate phone number on file.

Please contact KEYS at (305) 295-1090 and a customer service representative will help you — or update your own account information online at KeysEnergy.com/TeleLink.php