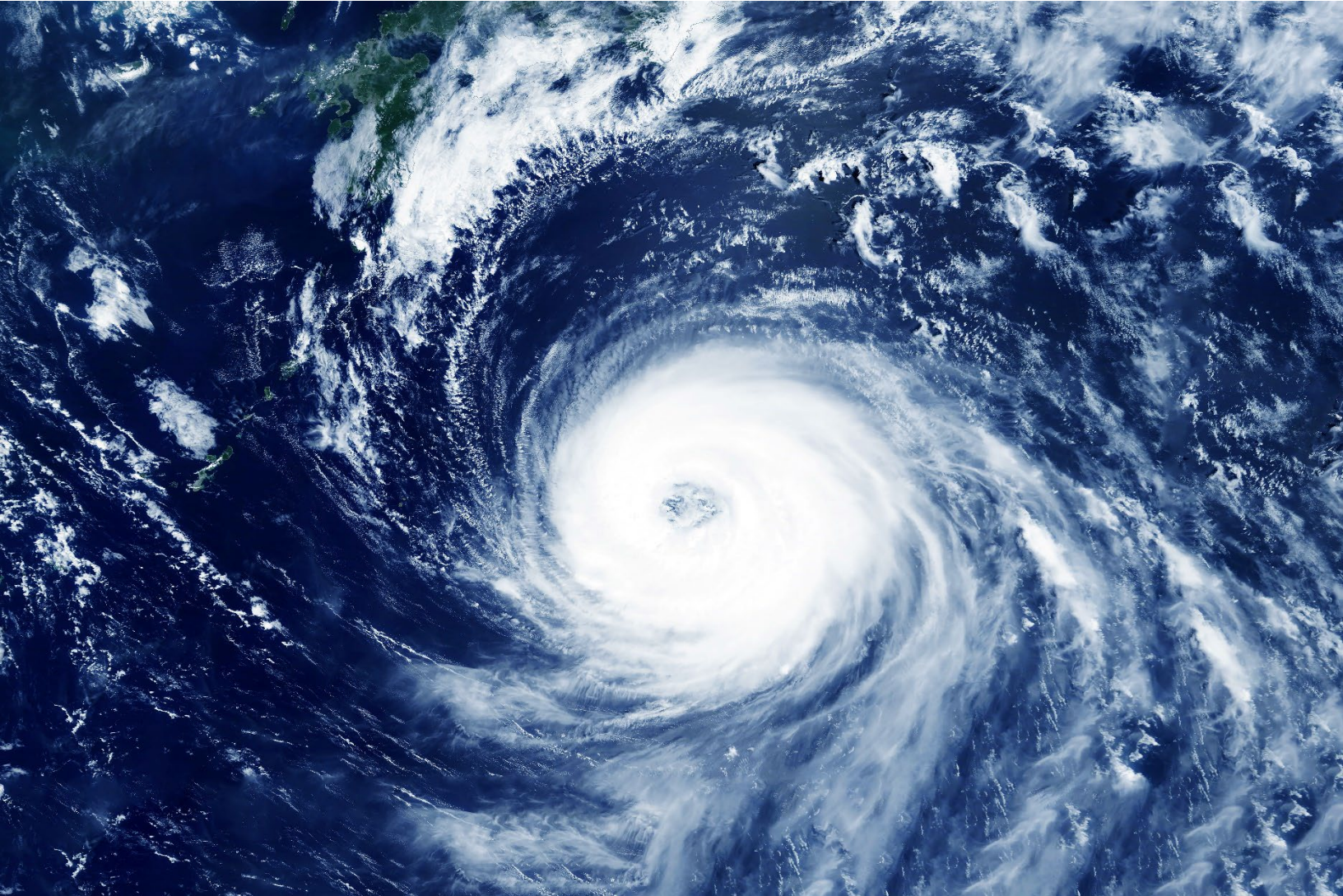


2024 Hurricane Preparedness for Construction Operators



Koncept Carma Inc., dba KCI

Stormwater Specific

Hurricane Preparedness Action Plan

Three Primary Pre-planning Phases



Phase 1

A hurricane action plan should be developed well in advance before a construction site may become exposed to a hurricane event. The following are specific actions that should be considered.

- Define an action team who will take responsibility for communication and planning.
- Determine the equipment and various materials to secure and protect.

Phase 2

Actively monitor weather forecasts for conditions during Hurricane season.

- The National Hurricane Center issues advisories on Tropical updates.
- <https://www.trackthetropics.com/graphical-tropical-weather-outlook/>
- <https://www.weather.gov/safety/hurricane-ww>

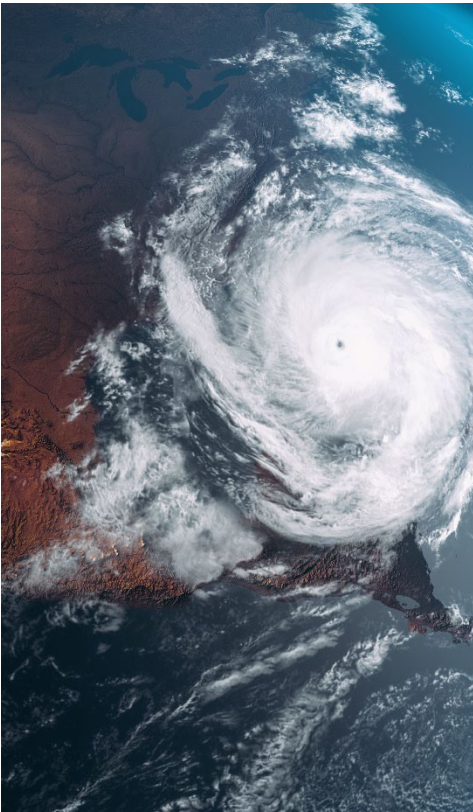
Phase 3

Whenever a tropical cyclone or storm (a tropical depression, tropical storm, or hurricane) has formed, always maintain awareness to the tracking and direction of the storm.

- Listen closely to instructions from local officials on TV, radio, cell phones or other computers for instructions from local officials.
- Evacuate immediately if told to do so.

This document's purpose is to help clients prepare for hurricane season and describe actions to perform that may protect the construction site in the event of a hurricane or tropical storm.

Establishing A Plan



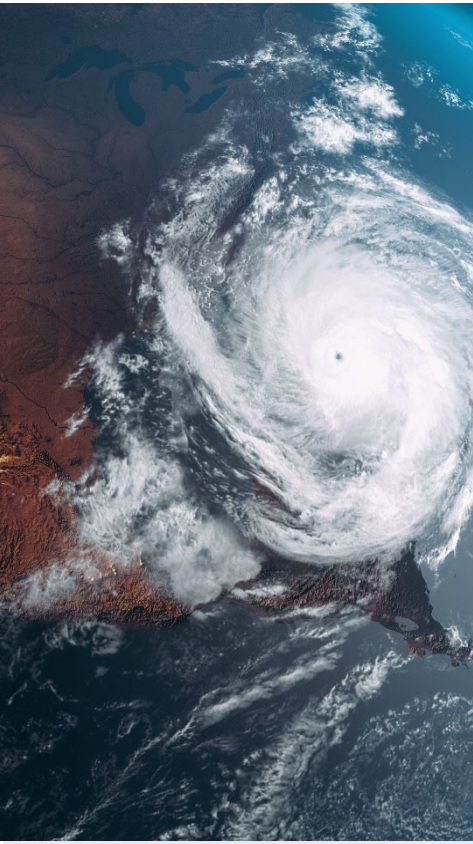
A hurricane action plan should be developed well in advance before a construction site may become exposed to a hurricane event.

If you are operating a construction site in an area that is prone to hurricanes, it's important to have a hurricane action plan in place. Here are some steps you can take to create your plan:

1. **Monitor the weather:** Stay informed about the latest weather reports and hurricane warnings. Set up alerts so you can receive updates in real-time.
2. **Secure equipment and materials:** Move any loose materials or equipment indoors or to a secure location. This includes tools, scaffolding, and other equipment that could be damaged or cause damage if they become loose.
3. **Backup sensitive data and information:** Make digital copies of important documents, contracts, and plans, and store them on a secure, cloud-based platform.
4. **Establish communications:** Set up a communication plan to stay in contact with your workers and subcontractors. Make sure everyone knows what to do in the event of a hurricane and how to reach each other.
5. **Evacuation plan:** Have a clear evacuation plan in place, including evacuation routes and safe locations. Make sure everyone on site knows the plan and what to do in case of an evacuation order.
6. **Backup power:** Consider investing in a backup generator to keep essential equipment running in case of a power outage.

By following these steps and creating a hurricane action plan, you can help protect workers, equipment, and the construction site in the event of a hurricane. Remember to regularly review and update the plan to ensure it remains effective and relevant.

Types of Storms



Florida is known for its severe weather, with several types of storms that are common in the state. Here are some of the most common types of storms found in Florida: Below describes the various levels of intensity that may take place regarding severe weather in the state of Florida.

Thunderstorms: Thunderstorms are the most common type of storm in Florida, occurring daily during the summer months. They can produce heavy rain, lightning, and gusty winds.

Severe thunderstorms: Severe thunderstorms can produce strong winds, hail, and tornadoes. They can occur at any time of year in Florida but are most common during the summer months.

Hailstorms: Hailstorms are less common in Florida and can occur during severe thunderstorms. They can produce hailstones that range in size from small pebbles to golf balls.

Tornadoes: Florida is one of the most tornado-prone states in the country. Tornadoes can occur during severe thunderstorms and hurricanes and can be extremely dangerous.

Tropical storms: Tropical storms are less severe than hurricanes, but can still produce strong winds, heavy rain, and flooding. They can occur in Florida during hurricane season, which runs from June to November.

Hurricanes: Florida is at high risk for hurricanes, with several major storms hitting the state in recent years. Hurricanes can produce high winds, heavy rain, storm surge, and flooding.

Knowing the different types of storms that are common in Florida can help you prepare and stay safe during severe weather events. Tropical and hurricane weather patterns are our most dangerous severe weather to watch and prepare for.

A Stormwater Specific - Hurricane Preparedness Check List

Before a Tropical storm or hurricane - Watch stage.

STEP 1

- ☐ Document, confirm, and approve a tropical and hurricane preparedness plan for your respective site.
- ☐ Established your response team members and proactively assign specific duties.
- ☐ Identify materials, buildings, structures, and heavy equipment that should be secured or removed from the construction site.
- ☐ Ensure all BMPs are in place and maintained.
- ☐ Protect and stabilize all sensitive areas.

During a Tropical storm or hurricane - Warning stage.

STEP 2

- ☐ Make sure all building materials, debris, or supplies are properly secured.
- ☐ Areas prone to flooding should be prepared by pulling out inlet protection as needed.
- ☐ Properly brace structures that are considered incomplete.
- ☐ Ensure all openings to the construction structures are covered to limit water intrusion.
- ☐ Make sure fuel, hazardous liquids, or other equipment have been secured.
- ☐ Secure SWPPP books.
- ☐ Ensure port-o-lets are serviced and emptied out, and placement is far from inlets – place side down.

After a Tropical storm or hurricane - Recovery stage.

STEP 3

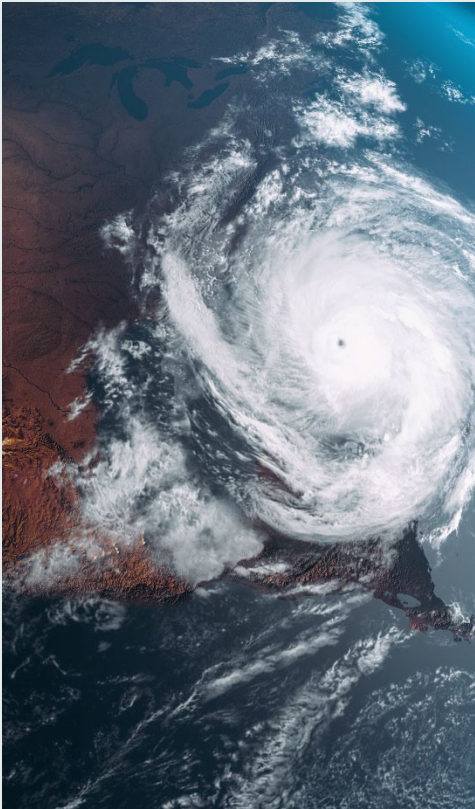
- ☐ Do not attempt to access any equipment until safe.
- ☐ Check the condition of local roadways and advise workers and sub-contractors.
- ☐ Assume that all downed power lines are fully energized and avoid them.
- ☐ Repair and replace any BMPs that were damaged or removed due to the storm, such as replace inlet protection.
- ☐ Review stormwater report thoroughly and delegate team to make corrections as needed.



KCI will suspend inspections before the storm approaches and will do inspections after the roads are deemed safe by local authorities.

SWPPP books will be updated with necessary documentation and executive orders.

Hurricane State of Emergency – Executive Orders



What is a state of emergency?

A state of emergency is typically declared by a government authority when there is an imminent threat of a disaster, such as a hurricane. A hurricane state of emergency is a formal declaration by a state or local government that provides additional resources and powers to prepare for and respond to a hurricane.

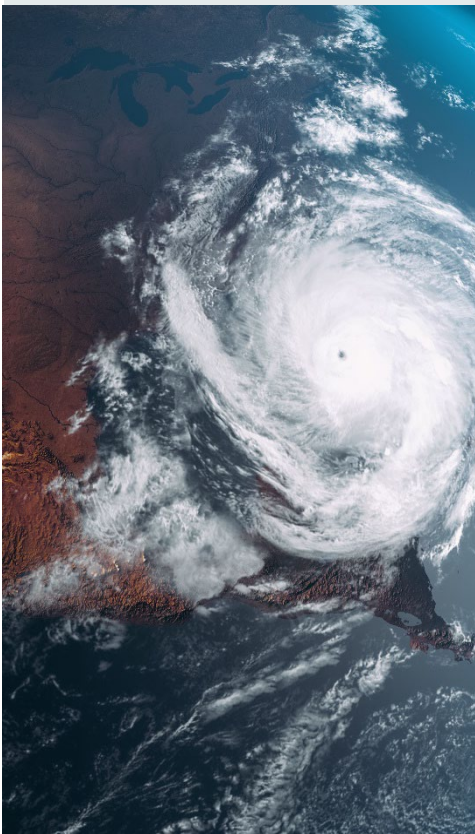
When a state of emergency is declared, certain measures may be taken to help protect the public, such as evacuating residents from the affected areas, opening shelters for those who cannot evacuate, and calling up the National Guard to provide assistance. In addition, resources may be allocated to help with preparation and recovery efforts, such as clearing debris, restoring power and water services, and providing medical care.

A state of emergency may be declared before a hurricane hits to allow for necessary preparation and evacuation. It may also be declared after a hurricane has caused significant damage to help with recovery efforts. The declaration of a state of emergency may also trigger the activation of emergency response plans and the release of funds from the state or federal government to assist with recovery efforts.

KCI pays close attention to such declarations during severe weather. Our goal is to understand and assist clients with all governmental announcements associated to all State of emergency notices.

KCI will be ready to provide such formal documentation as part of a Stormwater Pollution Prevention Plan (SWPPP) updates in time of need.

Before, During, After a Hurricane



Before a potential hurricane makes landfall, it is critical to prepare a plan that outlines how to protect your site, your equipment, the actual structure in progress, and your people. Here are some things to think about before, during, and after a severe tropical storm or hurricane.

Preparing BEFORE for a hurricane?

Number 1: Stay informed by monitoring the latest weather updates and forecasts.

Number 2: Communicate your plan to the staff frequently through various training sessions and to include any OSHA requirements regarding safety and security for all.

Number 3: Document and communicate a timeline to when you plan to stop and resume activity.

Number 4: Document all current work in progress. Have documentation that includes pictures, along with itemized lists.

What should a construction site (team) do during a hurricane?

Number 1: Stay away from the site during a hurricane. Server Flooding can occur.

Number 2: Follow your evacuation plan and listen to instructions from local authorities.

Number 3: If possible, through out the storm, continue to maintain awareness of local authorities' instructions. Stay in frequent contact with other staff members to ensure current information on emergency procedures.

What should a construction site do after a hurricane?

Number 1: Wait for local authorities to give permission before you visit the construction site.

Number 2: Be Aware and be cautious. Excavation holes can become full of water, and they may be deeper than you realize. Hurricane-force winds can also damage and create loose materials that can result in serious injury.

Number 3: Once you determine everyone is safe, you can begin a clean-up process.

Frequently Asked Questions

What is a hurricane?

A hurricane is a tropical storm with sustained winds of at least 74 miles per hour. Hurricanes can cause significant damage from high winds, heavy rain, storm surges, and flooding.

What is a tropical storm?

A tropical storm is a type of cyclone with sustained winds between 39 and 73 miles per hour. Tropical storms can cause significant damage from high winds, heavy rain, storm surges, and flooding.

How are hurricanes named?

Hurricanes are named using a rotating list of names maintained by the World Meteorological Organization. Names are assigned alphabetically and alternate between male and female names.

Where do hurricanes form?

Hurricanes form over warm ocean waters near the equator. They typically form in the Atlantic Ocean, Gulf of Mexico, or the Caribbean Sea.

When is hurricane season?

Hurricane season runs from June 1 to November 30 in the Atlantic Basin, which includes the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico.

What is the difference between a hurricane watch and a hurricane warning?

A hurricane watch means that hurricane conditions are possible within 48 hours. A hurricane warning means that hurricane conditions are expected within 36 hours or less.

What is the difference between a tropical storm watch and a tropical storm warning?

A tropical storm watch means that tropical storm conditions are possible within 48 hours. A tropical storm warning means that tropical storm conditions are expected within 36 hours or less.

How can you prepare for a hurricane?

Prepare for a hurricane by stocking up on emergency supplies, securing your home, and developing an evacuation plan. Stay informed about the latest weather updates and follow any evacuation orders issued by local authorities.

What should you do during a hurricane?

Stay indoors and away from windows during a hurricane. If flooding occurs, move to higher ground. If you need to evacuate, follow your evacuation plan, and listen to instructions from local authorities.

What should you do after a hurricane?

Stay alert for downed power lines, standing water, and other hazards. Only return to your home or business after it has been deemed safe by local authorities. Contact your insurance company to report any damage and begin the claims process.

What are some things a construction site can do to prepare before the storm?

Secure the job site by tying down any construction equipment susceptible to heavy winds along with removing equipment like cranes from the site altogether. focus on materials, trash, tools, hazardous materials, dumpsters, and portable bathrooms, as well as job site signage and turn off the power.

What are some things a construction site can do after a storm?

Assess the damage. Pay close attention to possible structural integrity issues, along with possible hazardous spills and debris, and any destruction that interferes with the restart of the building.