



EQUIPMENT WORLD

# MASTERING NATURAL DISASTERS

How contractors can prepare for, respond to and recover  
from hurricanes, floods, fires, earthquakes





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**I**f a natural disaster on the scale of Hurricane Katrina in 2005 or the Midwestern floods in 2019 struck where you live and work, could your construction business survive? Could you come away from such a disaster with your people and your equipment healthy enough to go back to work and help your community recover and rebuild?

Natural disasters are increasing in intensity, frequency and damage. The four most costly weather disasters since 1980 were in 2011, 2016, 2017 and 2018. In addition to the loss of human life and property damage, natural disasters can also destroy the business you've spent years building up. And no region of the country is immune.

Whether large or small, when natural disasters threaten, your company will have to launch into response mode like a well-trained army. If you don't have a plan, if your troops are untrained and unprepared, your company could be severely – perhaps even fatally – affected.

This information is divided into six sections:

- ▶ **How do you prepare for a natural disaster?**
  - *Will your insurance cover you?*
- ▶ **How do you get disaster response work?**
- ▶ **What to do when the storm draws near**
- ▶ **A storm has hit your jobsite or facility. Now what?**
  - *FEMA is looking for a few good construction retirees*
- ▶ **Employees are the No. 1 concern following a disaster**
- ▶ **How three contractors overcame the worst**

*(Editor's note: Most of our focus is on hurricanes and floods, which generally cause the most problems. Earthquakes, fires and tornados are also costly but usually happen without much warning. Still, many of the preparation steps and after-disaster responses we discuss here are relevant for most natural disasters.)*

# HOW DO YOU PREPARE FOR A NATURAL DISASTER?

**F**irst, name a “disaster czar.” In most small construction companies, such a point person will likely be the owner. In medium-size companies, the owner may want to appoint a safety manager or supervisor to this role. In larger companies, this person will need a team.

Make sure the person and/or the team can command authority. Make it clear to everyone in the company that when this point person or team member tells a crew chief to shut down a site and move to a safer place that they will do so without hesitation. With a storm bearing down there is no time for argument or a stubborn foreman slow walking an order he disagrees with.

Here are the elements of a good natural disaster preparation and recovery program:

✔ **Establish a communications plan.** In a natural disaster, cellphone towers are often damaged, making it difficult if not impossible to contact many of the people you need to reach. You may struggle for weeks trying to pull your crews back together, especially if they have evacuated.

Note that while voice conversations on cellphones may not be possible for many days or weeks following a disaster, text messaging will often still work because messaging takes up less bandwidth and can be supported by fewer towers. Encourage employees to get data plans that support text messaging.

Your communications database should include:

- All the phone numbers, emails, emergency/secondary contacts and addresses of all of your employees.
- Cellphone numbers, emails and emergency contact numbers for equipment dealers, rental companies, vendors, subcontractors and suppliers.
- A complete list of emergency numbers including the fire department, police, paramedics, hospitals and utility company hotlines.

The importance of good communications in a natural disaster area cannot be stated strongly enough. You may have employees who are hurt or injured or in need of aid or rescue and you don’t know it. If a person cannot be contacted after the immediate threat of the disaster has passed, it is imperative that you have people able to search for this person and confirm their status.

Larger companies will have to take a team approach and use an emergency communications hierarchy, with each manager and foreman communicating with the people who report to them. Those managers in turn report back indicating who they have contacted and their status.

Once a year you should test to see if all of your communications lines are functioning. Call everyone on your cellphone list or have the supervisors call everyone on their list and report back. Correct any deficiencies or outdated information. The goal is 100 percent communications contact with everybody in the company.

✔ **Develop a business information backup plan,** so all your personnel files, contracts, blueprints and other vital documents are stored and accessible in the cloud or some other redundant or secondary source.

✔ **Assess your company’s financial ability to weather a disaster.** Your lead person may want to coordinate this with the company CFO or accountants, but you should work to answer this question: If a natural disaster shut down all our jobsites for two weeks or a month, could the company afford to

keep paying its employees? If disaster strikes and you can’t pay your people at least temporarily, you may lose your company. Your employees’ bills don’t stop just because their paycheck stops.

One helpful exercise is to go through a disaster simulation, says Jim MacDonnell, BDO McLean Office director and risk management expert. “Walk yourself through the entire trajectory of an incident,” he advises. “When you start asking yourself what you need to get back up and running again, you can figure out the people, equipment, technology, vendors and supplies you need to operate. You can start planning out all of your contingencies and have a backup plan to replace any of them.”

✔ **Create a disaster hazard analysis and response program for each jobsite.** This should identify areas or materials on the jobsite that may become imperiled or hazardous as a result of a natural disaster and include an assessment of how much time and how many people it would take to



Your “disaster czar” or lead person should command the respect of your personnel. When he or she gives the command to respond, there should be no hesitation on following through. This lead person will likely require the support of a trained disaster response team; the larger the company, the larger the team.

button down the jobsite and get trucking assets to the site to remove heavy equipment and perform all relevant response tasks.

Just as you communicate your jobsite safety hazards in a safety briefing, you should also communicate this natural disaster hazard analysis and response program to the crews in a briefing or meeting, especially during storm season.

✔ **Establish criteria for making the decision to evacuate.** “Make sure you have your decision points and your criteria set ahead of time, so that you know when to start activating a plan that allows sufficient time for you to move all of your personnel and equipment out of the area, and lock everything down,” MacDonnell says.

✔ **Obtain FEMA’s floodplain maps** to determine how vulnerable your sites, your equipment yard and your office may be to floods. Download the maps and use them to identify risks and potential high ground nearby where crews and equipment can escape rising waters.

✔ **Establish evacuation plans** for how you are going to button down the site and move the equipment. Work with foremen and supervisors to detail exactly who does what in an evacuation and get these plans in writing. Part of any evacuation plan is to set up a rallying point, a safe place or high ground where crews can reassemble if they are forced to evacuate in a hurry or amid chaos.

Keep in mind that moving equipment may involve the need for trailers and haul trucks, so decisions must be made as to what equipment goes first. If you don’t have your own haul trucks or have just a few haul trucks, coordinate with your trucking broker.

✔ **Get training** when appropriate to increase knowledge and stay current with trends in natural disaster response and recovery. [FEMA](#) has dozens of these.

✔ **Regularly monitor weather conditions** and review jobsite status and conditions as the potential for bad weather or a natural disaster increases.

✔ **Keep tetanus booster shots and immunizations** up to date. Working in the wreckage after a storm can subject workers to a variety of hazards, including tetanus.

✔ **Subscribe to a weather alert service.** A short list includes [Climacell](#), [AccuWeather Enterprise Solutions](#), [The Weather Company](#), [UBIMET](#) and [Weather2](#).

✔ **Secure jobsite structures.** Well in advance of any storm or hurricane you should check to make sure all your jobsite trailers, storage/shipping containers, or outbuildings can either be quickly removed from the jobsite or that they are properly anchored to their foundations according to local building codes.

✔ **Touch base with local emergency relief and disaster response agencies.** Get permission ahead of an emergency to enter jobsites that have been affected. There is typically a qualification process and some form of identification you must carry, but heavy equipment contractors are often the first allowed back into a disaster area for cleanup. Let authorities know your company’s capabilities in terms of deploying heavy equipment to help in recovery operations. (See “How to get disaster cleanup work” on page 6.)

✔ **Make sure you have adequate dewatering pumps** for your sites should they become flooded.

✔ **Regularly test and maintain generators for backup power for the office or jobsite trailers after the storm.** Welder/generators can be used in a pinch as well.

✔ **Purchase and have ready disaster-specific PPE and supplies for crews.** This can include things like portable lighting, dust masks or respirators that double as anti-viral masks, cleaning/decontamination supplies, waterproof boots and rain gear. This has become especially critical in the wake of the coronavirus pandemic, since local regulations may require the use of masks, hand sanitizers and other anti-viral protocols.

✔ **Enroll in one of FEMA’s online Emergency Management Institute courses.** Of particular relevance is the agency’s “Introduction to [Hazard Mitigation](#)” course, but there are literally hundreds of free online self-study courses on diverse topics.

✔ **Look up the OSHA requirements for an Emergency Action Plan (EAP)** and make sure your company is in compliance. Note also that the Occupational Safety and Health Administration requires all businesses to have an EAP, a written document required by OSHA standards [29 CFR 1910.38(a)]. Keep in mind that OSHA’s requirement is the legal minimum. The unique characteristics of construction companies and jobsites make it imperative that you create a more comprehensive response plan.



## Does your insurance have you covered?

**R**eviewing your coverages and fine tuning your policies can make the difference between recovering or being financially crushed by a natural disaster.

"I would encourage contractors to have a conversation with their agent or carrier to make sure the limits and deductibles are appropriate," says John Doherty, technical construction underwriting director for Nationwide Insurance. "Make sure the valuations are correct on your equipment and make sure the deductibles make sense. Also understand what perils are being covered, paying specific attention to earthquakes and floods because at times those two are most likely to be excluded."

"Some insurance policies have clauses that do not cover policy holders for disruptions caused by evacuations," says Jim MacDonnell with BDO. "Really take a look at what your policies do and do not cover and make sure it is appropriate for the level of risk you are willing to take on."

There are four key policies to consider, says Doherty.

1. Auto policies to cover physical damage to your trucks and vehicles
2. Property, covering things like sheds and buildings
3. An inland marine policy. The term "inland marine" is a historical coinage with its roots in marine insurance that covers the products shipped in boats. Inland marine insurance then became the term and the type of insurance that evolved to cover products in transit or at a temporary location such as materials on the jobsite, or a contractor's equipment or materials warehoused by a third party.
4. An "installation floater" is an inland marine policy that covers materials from the time they're put on a truck until they are permanently used or affixed to the project you're building.

You should also have a conversation with your subcontractors if you are a general contractor, or with the general contractor if you are a subcontractor, to make sure there are no gaps between your two respective insurance policies. As a general contractor you will want your subs to have general liability, auto and, if appropriate, inland marine coverages.

When evaluating subs, general contractors look for the four "Cs" says Doherty: character, competence, capacity and coverages. "There are certain states and territories where some coverages may be excluded, so validate that



those coverages are in place," says Doherty. "That's one place where contractors can work with their agents. Most carriers have dedicated construction teams that are well versed in those details." You should also consult with an attorney who is well versed in construction insurance law to review your contract, Doherty adds.

Your insurance agent can also help you develop a disaster mitigation plan. This is typically handled by the agent or insurance company's loss control division, says Doherty. Loss control experts can review your operations and make recommendations. Many insurance companies will have a loss control website and resources and suggestions for you to study and implement.

Doherty also reminds contractors that no disaster plan is ever static. People, jobsites and equipment are in constant change. You don't have to make wholesale revisions every time you win a new bid, but with each new job, make note of anything that might materially effect a change from the usual and adjust accordingly. A good way to keep on top of these changes is to document each job and the equipment on it with photographs.

"When you talk about large contracts,

parametric risk is a headline issue around the construction industry," says Rob McDonough, construction practice leader for Marsh USA, a national insurance broker. In a parametric insurance contract, the contractor is buying a predefined amount of protection that will pay out on predefined terms. "We spend a lot of time with contractors making sure they have the proper relief in their construction contracts for unforeseen events like weather or natural disasters. And it starts with a robust business continuity process," he says.

One of the most frequently overlooked items in insurance coverage is equipment values. "Make sure that you have an updated schedule of equipment that accurately reflects your replacement costs," says McDonough. "These don't get updated as often as they should. You should share this with your insurance company annually or anytime you have a major capex purchase such as a new bulldozer or truck. Anytime you make a change to your asset base, you should consult with your insurance professional to make sure you have an appropriate schedule of values."

Take a look at what your policies do and do not cover and make sure they are appropriate for the level of risk you are willing to take.



# HOW DO YOU GET DISASTER RESPONSE WORK?



**H**urricanes, floods, wildfires and other natural disasters can lead to high demand for debris cleanup and reconstruction, and an opportunity for contractors to provide much-needed services. But being in a position to provide those services takes careful, advanced planning before a disaster strikes.

“It’s always better if a company gets ahead of a disaster,” says Cindy Carrier, program manager for the Louisiana Procurement Technical Assistance Center. “Because sometimes when the disaster happens, things are happening so quickly.”

And the government entities, like the Federal Emergency Management Agency, that are seeking contractors for post-disaster work require registration within their procurement systems. “If you have

Know that you can’t just show up and be immediately hired. There are forms to fill out and procedures to follow.

to register with FEMA and get on their database ... sometimes they’ve already let a contract while you’re still trying to register,” Carrier says.

Jane Dowgwillo, program manager for the Florida Procurement Technical Assistance Center, says her office quickly gets swamped after a hurricane strikes, with calls and emails from all over the country from businesses looking for contracting opportunities. They want to come right to the state and want to know where they should go.

“Back up, you need to get prepared,” she says. “You really need to be properly registered before you even think about it.”



### How to get prepared

Both Carrier and Dowgwillo say the first step for any contractor looking to perform disaster-response work should be to contact their state's Procurement Technical Assistance Center. That's true even if the work is in another state. Contractors can find their local PTAC by going to the [Association of Procurement Technical Assistance Centers](#) website and clicking their state on the map on the home page. They will then get a list of centers and contact information.

There are 94 such centers around the country, in each state and in Puerto Rico and Guam. They are partly funded by the U.S. Defense Logistics Agency with the rest matched by state and local governments and nonprofit organizations. Many of the centers are on state university or college campuses, and there are more than 300 PTAC local offices.

Their services are free, even one-on-one counseling. Services include helping to register with the proper government procurement systems, as well as finding bidding opportunities and preparing proposals.

The PTACs also reach out to their counterparts in other states to help businesses find opportunities there. "So if it's an Arkansas company, but the bid lead is coming from Louisiana, they're still going to get it," says Carrier. "They can meet with their Arkansas PTAC to help them with quoting it, or writing a proposal if they have to."

Carrier says her office searches 3,500 websites

each day for bid leads for clients. It uses keyword searches for the type of contracts the business wants, such as "debris removal." Relevant leads are then emailed to the client.

"If our Louisiana-based companies say, 'We can do business across the United States,' then we're searching all of the counties that are in all of those states," Carrier says. "And then there may be small local governments that maybe post in a newspaper. So we're looking for those opportunities as well."

### Federal contracts

After contacting a PTAC and setting an appointment with a counselor, the next step involves registering with the federal government's System for Award Management (SAM). The system is run by the U.S. General Services Administration, and any contractor that wants a federal contract has to be registered in it. That includes performing work for FEMA or the U.S. Army Corps of Engineers, which also handles debris cleanup after disasters.

The free SAM registration process can be tedious, and minor errors can cause delays, such as entering a slightly different company name than is listed with the Internal Revenue Service, Carrier says. The IRS is linked to the system to make sure companies registering are legitimate.

Though some for-profit companies advertise they can guide businesses through the process, PTAC counselors will help businesses register at no cost. Dowgwillo says the companies make claims to reg-



ister clients in record time and land contracts. They charge \$300 to \$600 and some as high as \$2,000 to \$3,000. But she says they have no special “in” with the GSA.

“We, unfortunately, deal with a lot of disappointed people that have handed over their credit card details and never get to see that money again,” she says.

To register with [SAM.gov](https://sam.gov), you’ll first be asked to create a login.gov user account (if you don’t already have one). You will use that login.gov username and password every time you log in to [SAM.gov](https://sam.gov).

Registering on SAM also requires a DUNS number. This is a unique nine-digit number that identifies each location of your business, according to Dun & Bradstreet, which provides the number. The number is free and can be obtained by clicking [here](#).

You will also need to provide SAM with your business’ tax identification number, as well as bank account information. During the registration process, indicate that you want to participate in the Disaster Response Registry. That way contracting officers can locate your information when performing a search of the registry.

SAM also requires a notarized letter stating your firm’s “entity administrator.” However, the letter does not have to be approved before SAM registration is activated.

The process culminates in being assigned a Commercial and Government Entity code. This five-character CAGE code is issued by the Defense Logistics Agency to identify a specific facility at a specific location. It’s required for businesses to get paid for federal contract work.

To find federal government contracting opportunities over \$25,000, go to [beta.sam.gov](https://beta.sam.gov), which has replaced FBO.gov and will eventually replace SAM.gov. The beta site – so named because it is still being tested – is underway to becoming the GSA’s primary clearinghouse for government contracting but is still a work in progress. Carrier says PTACs across the country have reported some issues with the beta site, but PTACs can deal with the site so contractors don’t have to. There are other databases for federal contracts under \$25,000 that PTAC will also help businesses register for and will monitor for them.

The amount of time it takes to register with SAM varies. Carrier says it usually takes three days after hitting the submit button on the registration. Dowgillo says registration can take as long as three to

four weeks, or longer if there errors or problems with the application.

### State and local contracts

One thing contractors should be aware of is that FEMA is required under federal law to contract with businesses located in affected areas when “feasible and practicable,” according to the Association of Procurement Technical Assistance Centers. That can make it more difficult for contractors outside of the disaster area to win contracts, and all the more reason it pays to make plans before a disaster strikes.

Many states have their own contracting and procurement systems, which contractors will want to register for. Again, PTACs can help by contacting the PTAC in the state where the contractor wants to work to find out what steps are required there, Carrier says.

Here are two examples:

For state contracts in Louisiana, businesses need to register with [LaGOV](https://la.gov). The state government posts bid leads in the Louisiana Procurement and Contract Network, or [LaPAC](https://la.gov).

In Florida, contractors can register for the [My-FloridaMarketPlace](https://myfloridamarketplace.com) and for the [Florida Emergency Supplier Network](https://floridamarketplace.com) for state contracts, and local contracts administered through the sites.

Dowgillo also recommends that contractors interested in disaster work in Florida contact individual counties, cities and towns they could potentially work in and register as a vendor. She says many of these local governments will handle their own cleanup with vendors they have received cost estimates from before a disaster and then later seek FEMA reimbursement.

### Insurance companies

Another place to check for disaster work is with insurance companies.

According to the Insurance Information Institute, most insurance companies maintain a list of approved private contractors that they share with their policyholders in a claim situation. These approved contractor lists are not shared with the public. Now is the time to get on these lists, assuming you meet each company’s qualifications.

To get on a list, the institute suggests contractors call the insurance companies and ask to be directed to the “property repair program” in the claims department. Each company will have its own requirements for insurance, bonding, etc.





## WHAT TO DO WHEN THE STORM DRAWS NEAR

**E**arthquakes come unannounced and fires are often sudden and unpredictable, but weather forecasters are getting much better at predicting floods, severe storms and hurricanes. In these cases, you may have two to three days to put your plan into action.

But remember that your workers may need a full day or more to evacuate their homes and seek shelter for their families and pets in advance of a storm. In these cases, you may need to start preparing jobsites for a big storm four or five days out.

### Here's a list of what to do:

**Revisit your disaster hazard analysis and response plan** with the crews and begin early preparations if weather forecasters are predicting threats within a three- or four-day window. Establish priorities so crews aren't scrambling to get all of this done in the last 24 hours before a storm hits.

**Double-check that you have the correct phone numbers for all of your personnel.** This can be more easily accomplished if this is done on a direct report basis, and each crew leader or department head handles it for their own direct reports.

**Contact your state and local governmental authorities** about their post-storm requirements for gaining access to your facilities and jobsites. Knowing the requirements ahead of time will help you immensely in the recovery stage. Let your vendors know the anticipated process for gaining access – including required PPE – after the storm.

**Line up your trucking assets** well in advance of a storm or flood and keep in mind, many unpaved access roads will become impassable after a day or two of heavy rains. Even paved roads may wash out under relentless rains or floods.

**Top off the fuel and DEF** on all your machines and gasoline or diesel in your trucks. If you have a diesel fuel tank on the site or in your equipment yard, get it topped off as well and ensure that it's braced against wind or water.

**Make sure your PPE is in a secure, accessible place**, such as personal pickups that will be used to evacuate.

**Remove or secure all loose materials** – such as lumber, metal offcuts or other scrap, plywood and sheet goods; PVC pipe; trash barrels; and toolboxes – appropriate to the anticipated wind speeds or flood/high water dangers. During hurricane and tornado seasons, it's a good idea to clean up loose debris on the jobsite daily as storms can pop up unexpectedly.

**Secure or remove** hazardous chemicals from jobsites or buildings that might be imperiled. This might be bulk materials like solvents, lubricants, acids or other caustic compounds.

**Empty and/or remove dumpsters.**

**Move heavy equipment** to high ground. Evaluate whether it makes sense to return rental machines.



**Remove** signs, fence screens and portable toilets.

**Take down** and store scaffolding and form work if time permits.

**Shut off** the power, water and gas and other utilities if possible.

**Build berms or install silt fencing** to protect areas already cut to grade.

**Sandbag critical structures** if high water or flooding is predicted.

**Board up windows and doors** on structures to protect them from wind-driven rain and flying debris.

**Remove** computers, office equipment and records from jobsite trailers.

**Cancel** material deliveries and incoming rental equipment.

**Reinforce** partially built structures. If you have framing lumber or steel erected but have not sheathed it or put in the necessary bracing, get as many people as you can spare working on that, so the structures don't come apart in the force of high winds or water. If the project is large, have an engineer make recommendations as to securing the structure before it's completed.

**Lower crane booms** to the ground if time permits. At a minimum, put cranes into the slew mode so the wind doesn't turn the boom into a sail.

**Take photos of work** completed and any assets in the field for insurance purposes.



Evacuations take time. Make sure your disaster response plan allows not only for your job to shut down, but also for your employees to take care of their families and property.



# A STORM HAS HIT YOUR FACILITY OR JOBSITE. NOW WHAT?



Assess the damage to your equipment and facilities and take pictures of everything.

**I**n the chaotic aftermath of a natural disaster you may be faced with hundreds of things demanding immediate attention. Establishing priorities is a must. Here's what to do first:

**Reconnect with your people.** This is job one. You need a 100 percent roll call via cellphone or physical contact. If you can't find somebody who works for you, send out search parties. If necessary, check with hospitals or the police. In the coming days and weeks you'll need all hands on deck to restart jobsites and repair or replace what's damaged. If your workers have

lost cars or homes, help them get shelter, transportation and other necessities. Make sure they have the assurances they need to keep working for you.

**Assess the damage to your sites.** When you have permission to re-enter jobsites and facilities, send your supervisors and foremen to assess the damage. Consider using drones to take photos of sites that are inaccessible or hazardous on foot. Huddle with your estimators and other operations personnel to plan the recovery effort. Take photos for insurance purposes.



**Assess the damage to your equipment and trucks.** Again, take photos for insurance purposes to compare to the photos taken before the storm.

*Gaining access to your jobsite and facility is one of the first steps to recovery. Contact state and local authorities ahead of time to educate yourself on access requirements. Photo: National Guard, Staff Sgt. Amanda Johnson*

**Make use of your equipment telematics locating features** or installed tracking devices to locate assets, especially on equipment such as generators and light towers that are under demand and easily transportable by would-be thieves.

**Communicate to clients and customers** the impact of the storm on their properties.

**Get in touch with government agencies.** Communicate with FEMA and state disaster response agencies. Your heavy equipment and expertise may be needed in the days and weeks ahead, and

there could be a lot of business from this. You'll have to weigh the merits of rebuilding clients' sites and projects versus taking on disaster recovery work. But clearing roads and debris

is often a critical priority for a community. (There's more on this in the "How to get disaster cleanup work" section on page 6.)

**Hold an all-employees meeting** as soon as possible, if not in person then through a conference call or, if internet service is available, a video conferencing system such as Zoom. If you are financially able, tell your employees they'll continue to get a regular paycheck for the time being regardless of how much billable work they can perform. Allow employees to take time off to file insurance claims, search for missing pets or work on their own issues.



Consider going to a four-day or three-day work week temporarily.

This may seem like a large expense at a time when you have no revenues coming in, but it is vitally important to the morale, loyalty and mental health of your people. Most construction workers don't have much savings to rely on. If you can't provide your people with temporary income, they'll find it elsewhere, in the next town over, at a warehouse or some other business, and it's possible you won't ever get them back.

**Don't let a disaster go to waste.** After things are more or less back to "normal," set aside time to review with your team what you've learned, says BDO's Jim MacDonnell. Critically examine what worked and what didn't while it's still fresh on your mind and change your disaster plan accordingly. "It's too easy to put some controls in place and then start to forget about them," he says. "Then another storm happens, and you're completely unprepared for it."

## FEMA is looking for a few good construction retirees

FEMA is actively recruiting retired construction supervisors and workers – including those adept at juggling all the paperwork in a typical construction office – as Reservists to help it with the many tasks required after a disaster.

This is on-call work. Applicants must be available to travel within 24 to 48 hours and be deployed for 30 or more days. Appointments are for two years and can be renewed.

According to FEMA, Reservists are deployed to perform disaster response activities directly related to specific disasters, emergencies, projects, or activities of a non-continuous nature.

Hiring typically commences immediately after a natural disaster. People with construction supervisory experience or detailed technical knowledge of construction are in high demand and encouraged to apply.

Reservists are not guaranteed deployment on a regular basis, but FEMA's goal is to attempt to deploy each Reservist at least once a year as dictated by disaster activity.

FEMA divides its Reservists into "cadres," or general areas of operation. Here are some of the most likely cadres that fit someone with a construction background:

- **Public Assistance:** Aids with debris removal, emergency protective measures and the repair, replacement and restoration of disaster-damaged, public facilities. (Good for those with project management, construction inspection, surveyor or design engineer experience.)
- **Disaster Emergency Communications:** Deploys, installs, operates, maintains and protects telecommunications and operations assets. (Good for those



Those with construction experience – whether in the field or in the office – have valuable skills for disaster response and relief.

with a telecommunications installation background.)

- **Logistics:** Coordinates and monitors all aspects of resource planning, movement, ordering, tracking and property management during an incident. (Good for those with a construction office background.)
  - **Safety:** Provides safe and healthy work environments, including conducting job hazard analysis, for FEMA employees and emergency management partners. (Good for those with a construction safety background. Requires 10 years of safety program management.)
- You can apply to be a Reservist by emailing your resume to [fema-careers@fema.dhs.gov](mailto:fema-careers@fema.dhs.gov) and include the "cadre" of interest in the subject line (scroll down to see a description of each cadre when you use this link).

# EMPLOYEES ARE THE NO. 1 CONCERN FOLLOWING A DISASTER



Taking care of your employees is not only the right thing to do, it's critical to the future of your company.

**M**oving people and equipment out of harm's way and setting up a communications matrix is a fairly straightforward process. But it's easy to overlook the mental and psychological toll disasters can take on your employees and their families, says Renata Elias, a vice president and managing consultant for Marsh Risk Consulting.

Failing to address these can be as damaging to your company as the physical or financial wreckage in the wake of a catastrophe, says this 30-plus-year veteran in disaster planning, response and recovery.

"Your people are your No. 1 priority. They are your most important asset," Elias says. "Look after your people, and everything else will fall in place."

It's not only the right thing to do, it's critical to the future of your business. The sooner your employees get back on their feet, the sooner you'll be back in business. As a manager or owner, the first thing you have to do after a disaster is make sure your people have the basics: food, water, clothing and shelter, says Elias.

It may be possible for the company to provide for some of these, using its trucking assets to bring in water, food and other supplies and generators for those who need emergency power. Some companies have rented out a whole suite of rooms in hotels outside of the disaster zone to shelter affected employees. At a minimum, your company's disaster lead and crisis management team should know where to get employees emergency relief services from the Red Cross and government agencies.

Elias also recommends that companies have Employee Assistance Plans that can help with longer term issues as well as mental health counseling. Construction workers and companies used to a can-do mentality sometimes underestimate the psychological toll a disaster and prolonged recovery can take on even normally strong and healthy people.

"When the TV crews roll up the cable and the fire trucks roll up the hoses, that's when the tough part starts," Elias says. Until then everybody is running on adrenaline, but the long haul is where the strain is felt. "The key to surviving any traumatic event



is making sure you have a support system,” says Elias. That includes friends, families and your work organization.

### An unlikely resource

One way to strengthen an organization’s interpersonal communications and support system is to undertake a workplace violence prevention program, says Elias. Workplace violence is often a disaster in its own right – just not weather-related. But the skills learned in these programs have benefits beyond just preventing violence.

To detect a troubled employee, workplace violence prevention programs emphasize good communication and staying in touch with every employee – not letting people nursing a grudge, hurting or unable to express frustration or problems fester with resentment. “It’s becoming much more common as companies work on their resilience training,” she says.

“If managers and supervisors have consistent contact with their workers they are better able to pick up on the warning signs that somebody is having trouble,” adds Elias. “The hardest thing for most people is thinking they have nowhere to go, nobody to turn to. So your supervisors should be able to pick up on these warning signs and help employees know about the resources out there to get them.”

### Training and review

The field Elias works in is known by a few different names: risk management, disaster mitigation, or loss control. The profession is an important subset of the insurance world. Evaluations, training and testing are all part of the consultation process.

“In our training and awareness sessions we work with specific team members, whether it’s the response team, crisis communications team or senior leadership. We also put together town hall meetings and general awareness sessions for all employees,” says Elias. “You not only need your key members trained, but you need for your employees to understand and be aware.”

Training also covers what senior leadership and employees need to do to be prepared at home.

After training there is usually some sort of tabletop exercise in what Elias calls a classroom discussion environment. “We walk them through the organization’s processes. We’ll ask them, ‘What do you do if 10 employees lost their home? What do you do if three employees were in the hospital?’ We can talk those things through to identify gaps and strengths.”

Awareness training for general employees is typically a 15-minute session online or 45 minutes to an hour in person. The programs are customized to the specifics of each business, and exercises may run two to three hours, sometimes four, depending on how much time senior leadership will have, she says.

### Three key things

Regardless of what you call it, your company’s ability to recover from a disaster has three key elements, Elias says.

**One: Be proactive and not reactive.** “If a crisis has hit, it’s already too late if you are not prepared,” she says.

**Two: Resilience.** “I think of resilience as an umbrella, with the point of the umbrella as the senior leadership and all the spokes representing different components of the plan: emergency response, business continuity, workplace security, etc.,” she says. “To be resilient and not get wet during a crisis, you need that umbrella to be whole without any broken spokes. It’s important that an organization has all these components working and aligned and not in silos.”

**Three: Redundancy.** You should always cross-train crisis management personnel, so if one person is hobbled by the crisis, another can step in to fill that role. There should also be sufficient redundancy in communications and personnel involved in critical business functions. “Make sure more than one tool is in the toolbox,” Elias says.

“When the TV crews roll up the cable and the fire trucks roll up the hoses, that’s when the tough part starts.”

– Renata Elias, vice president and managing consultant for Marsh Risk Consulting

# THESE CONTRACTORS SURVIVED DISASTERS AND HAVE LESSONS TO SHARE

## BARRIERE CONSTRUCTION

### Moving \$35 million in equipment in 24 hours

**A**s Hurricane Katrina approached the coast of Louisiana, it put the New Orleans firm of Barriere Construction, a heavy highway and civil contractor, in its cross-hairs. City and state officials knew three days out that New Orleans was in danger, but it was a battle getting operations to cease work and prepare for the worst, says Ben Tucker, director of equipment and facilities for the company. At the time the company didn't have a detailed evacuation plan, but coastal Louisiana has seen its share of powerful hurricanes and knowing what to do is imprinted in the population's DNA. It was all hands on deck for the next 24 hours as crews moved what equipment they could to the north shore of Lake Pontchartrain and parked equipment they would need soon after on top of construction debris dump sites and material stockpiles. That equipment was spared flood damage, but Tucker notes that it took two weeks for the floodwaters to recede to where they could recover those machines. Equipment at the asphalt plant was also parked on top of stockpiles, and the material siloes were filled with rocks to keep them from blowing over. Everything that could be topped up with fuel was topped up, including equipment, service trucks and storage tanks. Tucker and others contacted Barriere's vendors to see what they could have available after the storm. Fuel and trucking services were the most important, Tucker says. The cell-

phone coverage vanished, but the radio networks remained and helped crews communicate at short range during the recovery.

Barriere temporarily lost about 30 percent of its workforce after the storm. About half of those came back over time. But with a smaller pool of applicants

to choose from, building back the original workforce was tough. "At that point, you're just hiring to get bodies, not to fill skillsets," Tucker says, "and it showed on the maintenance side. Our costs rose, and the emergency repair rate went up."

Fortunately, only a small fraction of the company's equipment was lost to flooding. Tucker says they also tapped their primary supplier for wheeled excavators and telehandlers with buckets on them to assist in the cleanup, because those machines are easier to move from job to job in urban areas. The company's communications network was routed through Dallas, Texas, until service was restored in Louisiana.

Barriere played a big role in the cleanup and rebuild efforts after Katrina. It also built a FEMA trailer park for employees who had lost their houses in the storm.

Today the company has a highly detailed disaster response plan that's reviewed and updated every year, especially employee contact information. In the new plan every single employee has a designated role to play so nothing is left to chance.

Looking back over that history-making event, Tucker says what surprised him the most was that the infrastructure they thought would protect them didn't. "You may think you're safe, but you're not. You always have to plan for the worst."



**"You always have to plan for the worst."**

– Ben Tucker, Barriere Construction, New Orleans

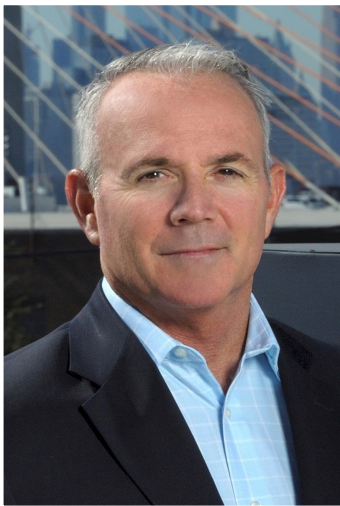


## SKANSKA USA

### It's not what you know but who you know

**M**ason Ford, director of equipment and a 19-year veteran at Skanska USA, has seen disasters on both coasts. But when Hurricane Sandy hit the East Coast in 2012, Skanska's reputation in the industry coupled with Ford's personal relationships, helped enormously with disaster relief.

"We had lots of support, even guys from Boston were coming down, bringing pumps and helping out," Ford says. "That was a result of having strong



– Mason Ford

relationships with vendors and even competitors who were able to pitch in and help." Within hours of the storm's passing, one of Skanska's vendors out of Atlanta had two truckloads of 12-inch pumps headed for Skanska's operations. One truck made it driv-

ing straight through in 16 hours. The second truck arrived within a day.

The company lost a half-dozen machines that were underground at the World Trade Center Site but otherwise came through the storm intact. It got a shipment of fuel brought into the yard the day before the storm hit and was able to keep the corporate office running, although there was little gas available commercially for several weeks. And while it took three months

to get back to work at the World Trade Center, Skanska received a contract to provide boilers to thousands of flooded out homes on the Brooklyn shoreline—homes that might have gone without heat that winter (Sandy struck in late October) had the company's well-oiled logistics machine not been able to deliver..

Skanska also now has a severe weather alert system that covers the entire United States. "Many of our people get email, text and private email and phone alerts if there is any severe weather situation or fires that would have an impact to any of our people, jobs, offices or facilities," says Ford. "That way we don't have people stuck out on a bridge, or in a tunnel when there is severe weather."

## ANTHONY'S LANDSCAPING SERVICES

### You do what you have to do for your employees

**I**n August 2005 just about every skill and character quality Ted Anthony possessed was put to the test when Hurricane Katrina raked across southern Louisiana. Anthony's office and yard were covered by more than 6 feet of water. It took him and his supervisors more than a week after the storm just to locate all their employees, but he made the decision that nobody was going to miss a paycheck.

"Needless to say, the mission changed," Anthony quips. Day by day, they began pulling things back together. Employees were given carte blanche to do what they needed to restore their lives. "I told them, 'Whatever you have to do, just go do it, we'll work around it,'" Anthony says.

Cleanup work was plentiful, but surprisingly so was landscaping, says Ray Gumpert, a partner in the business. "A lot of people wanted their landscaping restored first," he says. "Our clients had a lot of pride in the beauty of their lawns and gardens. They turned to us to give them that emotional boost that came with restoring something that's been lost." It took five months for business to return to normal.