As facilities professionals, we are very sensitive to weather and what it can do to our grounds and buildings. As our profession has evolved over the years, we have become much better equipped to foresee and prepare for the possibilities inherent with all types of weather. But even with the best planning, a severe weather event may overwhelm our available resources.

The good news is that, despite this fact, there is a camaraderie among educational institutions that permeates throughout the industry. We tend to help each other in good times and in bad. Sharing experiences helps us all achieve greater success. One of the most difficult challenges of our job is navigating your way through a natural disaster, because of all the networking and priorities that must be considered to enable a quick recovery. Luckily, we can rely on our network of fellow facilities management professionals to bring more resources to bear.

Hitting in October 2018, Hurricane Michael was the third-most intense Atlantic hurricane in terms of pressure to make landfall in the United States and the strongest storm on record in the Florida Panhandle. When Michael entered Georgia, it was still packing gusts up to 115 mph.

Albany State University (ASU), located in southwest Georgia, suffered tremendously from the storm, sustaining substantial wind and water damage that caused safety issues for students, faculty, and staff. Much of the damage was to the grounds and exterior...
surfaces of the buildings. Parts of buildings throughout the campus had damage that resulted in materials hanging from roof levels and upper window areas. The grounds areas of the campus saw the loss of over 125 trees and much damage to limbs and branches, which then posed a severe safety threat needing to be addressed prior to allowing anyone back on the campus.

OTHER UNIVERSITIES TO THE RESCUE

Lee Howell, director of facilities management at ASU, faced an overwhelming task to get his campus ready to reopen. He quickly realized that he needed assistance and made a plea to other universities for help. Facilities managers from six universities, who knew Lee and ASU from their participation with Georgia APPA (GAPPA), quickly came to his aid. Within hours of his request for help, Lee was coordinating response activities from these universities and planning for the arrival of their crews.

Lee said of the help he received:

“We never would have been able to tackle the destruction and damage so quickly without crews from Valdosta State University, the University of West Georgia, Georgia Southern University, Fort Valley State University, Georgia College & State University, and Middle Georgia State University. Each school sent teams to our campus and worked quickly, efficiently, and thoroughly to bring our school back to normal. They brought equipment, positive attitudes, and years of experience to a huge undertaking. Our university community and I, personally, will be forever in their debt! If any of their universities are in need of assistance, I will happily pledge the support of Albany State University to assist.”

Hurricane Michael was preceded by an equally horrific event, Hurricane Florence, which made landfall off the Carolina coast on September 14, 2018. Though it had been downgraded from a Category 4 storm to a Category 1 event prior to landfall, its slow-moving nature produced days of outer-band rainfall throughout the Carolinas. The velocity of the winds (140 mph off the coast), in addition to the storm’s movement, which was crawling along at only 2-3 mph, presented a terrifying prognosis. When you marry those conditions with the inevitable storm surge that always accompanies coastal storms, you fear the worst.

The University of North Carolina Wilmington (UNCW) was squarely in the crosshairs of Florence. The university received the most damage of any school from this September event. Sixty percent of the roofs on campus were damaged, and the major science facility lost its 2,000-sq.-ft. roof. The 158,000-sq.-ft. building was a total loss. Replacement cost could run upwards of $60 million.

HELP TO RESTORE THE CAMPUS

Water damage was also a major concern and had to be addressed. Most campus structures were impacted by each component of the storm. Dave Olson, director of physical plant at UNCW, expressed his thanks for the caring professionals who arrived from throughout North Carolina to help restore their beautiful East Coast campus. “We welcomed coordinators, inspectors, engineers, and management from all over the state. Emergency management staff from UNC Greensboro, UNC Asheville, NC State, North Carolina A&T, Appalachian State, Elizabeth City State, and Winston-Salem State were taking shifts in our Emergency Operations Center and lending their expertise in ever-changing conditions.” Although other departments and functions also received assistance from throughout the University of North Carolina System, Olson could not help stating proudly, “The support of these people certainly played a big part in us being able to work our emergency plan efficiently and return our university to our students, staff, and community within four weeks.”
Of course, natural disasters are not limited to hurricanes. On April 27, 2011, after a week of tornado sirens, a large EF4 tornado ripped through the city of Tuscaloosa, Alabama and the edge of the University of Alabama campus, destroying everything in its path. Wires on poles were strewn like spaghetti. Roads were impassable, and nearly 32,000 students were without power. The university received many calls from other Southeastern Conference Schools asking how they could help. As damage assessment was completed, an immediate need for power existed. Mississippi State University answered the call and deployed several truckloads of generators to the campus, dispersed them in the highest priority areas, and connected them to the buildings. These remained in place for many weeks as power began to be restored across campus.

PAYING IT FORWARD

The University of Alabama was in a position to “pay it forward” as Jacksonville State University, located about two-and-a-half hours from the university, was hit by a devastating EF3 tornado in April 2018 that ripped through campus, causing massive destruction. The University of Alabama immediately extended a helping hand and waited for the damage assessment teams to prioritize necessary work. A team of 13 grounds employees quickly deployed and remained on scene for four days, where they hauled off 31 dump truck loads of debris, cut down 150 storm-damaged trees, trimmed damaged limbs off approximately 30 damaged trees, and cleaned up debris around five key campus buildings.

As members of APPA and its regions experience disaster recovery such as tornados, hurricanes, and flooding, we competently relay our stories to other member institutions at conferences so they can better prepare themselves for the unexpected. The focus is on helping our friends in need!

Mark Duclos is assistant vice president for facilities operations at Georgia College & State University in Milledgeville, GA. He can be reached at mark.duclos@gcsu.edu. This is his first article for Facilities Manager. Paul Wuebold is senior executive director, facilities and grounds, at the University of Alabama in Tuscaloosa, AL. He can be reached at pwuebold@fa.ua.edu.
JOIN US FOR

CampusEnergy2019

Hilton New Orleans Riverside

WHO SHOULD ATTEND:
• Campus, hospital, airport and military energy managers
• Community energy developers
• Energy technology providers
• Consulting engineers
• Sustainability directors
• Resiliency officers
• Energy policy specialists

CampusEnergy2019 will convene in New Orleans, La., a city where energy resiliency, climate mitigation and emergency preparedness are essential. For the 32nd consecutive year, IDEA members will come together to share experiences, explore new solutions and learn from each other. The annual IDEA Campus Energy Conference has earned a reputation for excellent technical content, valuable peer exchange and open, constructive dialogue with informed business partners in a relaxed, collegial atmosphere.

District energy/CHP systems form the backbone of efficient, resilient and sustainable energy infrastructure for campuses, healthcare, research centers, airports and military bases around the globe. Aggregating the thermal and electricity needs of dozens or even hundreds of buildings creates economies of scale that enable investment in highly efficient, sustainable and resilient energy infrastructure. College and university campuses have emerged as global leaders in the operation and optimization of world-class district energy systems.

Pre-Conference Workshops: Feb. 25 & 26
Distribution Workshop & Microgrid Workshop

EXHIBIT AND SPONSORSHIP OPPORTUNITIES:
Please contact Tanya Kozel at tanya.idea@districtenergy.org or +1-720-541-7913

FOR REGISTRATION AND DETAILS VISIT:
www.districtenergy.org/conferences

QUESTIONS?
idea@districtenergy.org or +1-508-366-9339