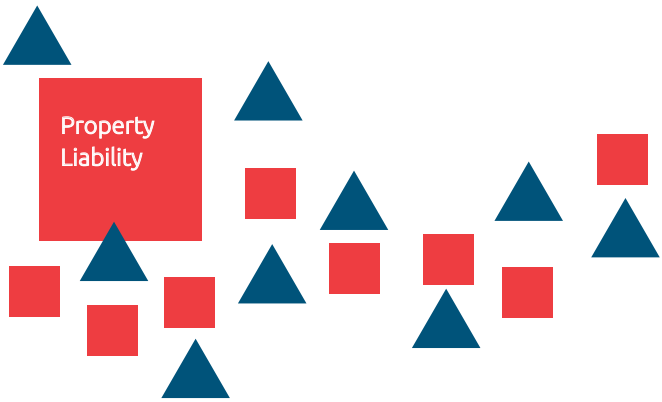
LESSONS LEARNED



CIRMA

February 2021 | No. 19

Property Liability

BACKGROUND

On August 4th 2020, Hurricane Isaias was tracking north across the east coast and had been downgraded to a tropical storm as it entered into Connecticut. Heavy rains and strong winds from this storm battered the region. As a result, CIRMA members experienced significant property damage. Consistent with prior storms, the majority of the damage related to this weather event can be categorized within two common causes: *Falling trees and debris* and *Equipment Failure.*

FALLING TREES AND DEBRIS

Tree damage to member facilities and surrounding areas:
43 Reported

Wind and rain from the storm caused the uprooting of trees and the breaking off of limbs that ultimately struck municipal and school facilities. This caused damage to roofs, fences, playgrounds, and vehicles. It was determined that the following conditions existed that significantly contributed to the damage:

- Tree branches were found overhanging and within 10 feet of a structure or roof.
- Review of records found that multiple trees had been identified and tagged to be taken down prior to the storm event.

EQUIPMENT FAILURE

Mechanical Failures and damage to equipment claims:
28 Reported

Due to heavy winds and storm-related conditions, municipalities experienced power outages. CIRMA members were forced to use generators to power their facilities, some lasting for extended periods of time. As the power was restored systematically, the resulting surge exploited several preventative maintenance issues, which resulted in damage to the equipment and facilities. Below is a summary that identifies areas where ongoing regular maintenance could have potentially prevented the property damage.

HVAC systems were reported with engine failures and were found inoperable after the storm. Top causes for engine failure were:

- **Broken fan belts causing equipment to be inoperable** – It was determined that the fan belts were original to the machinery and were in need of replacement based on manufacturer recommendations.
- **Overheating of equipment resulting in damage to the machinery's electrical system** – It was determined that a protective shield was removed and not replaced, exposing wiring.
- **Damaged fan blades** – Several blades within machinery were noted to be bent on inspection reports prior to the storm. These damaged blades led to equipment failure and resulted in areas of the building to not be properly cooled.
- **Generators overheated** – Several municipal generators were damaged by overheating during post storm recovery operations. It was determined that the generator fluids were not regularly checked and were low at time of operations. This caused at least one generator to overheat resulting in fire causing damage to the facility.

LESSONS LEARNED

The following recommendations can be included in a municipality's Property Risk Management Program:

- Conduct regularly scheduled tests in accordance with manufacturer recommendations.
- Identify, report and repair maintenance issues and conditions.
- Determine if proper surge protection is in place and install if needed.
- Maintain record keeping files on all equipment.
- Identify protocols to utilize generators and other machinery for extend use periods as part of your emergency operations plan.
- Implement a vegetation management plan to maintain recommended distancing around facilities.
- Consider using the CIRMA Risk Management Property Assessment service deliverable.

For more information on this topic, please contact your CIRMA Risk Management Consultant. Visit our training schedule at CIRMA.org/ Training & Education Programs page for a list of current training programs.

Connecticut Interlocal Risk Management Agency

545 Long Wharf Drive, 8th Floor
New Haven, CT 06511
www.CIRMA.org