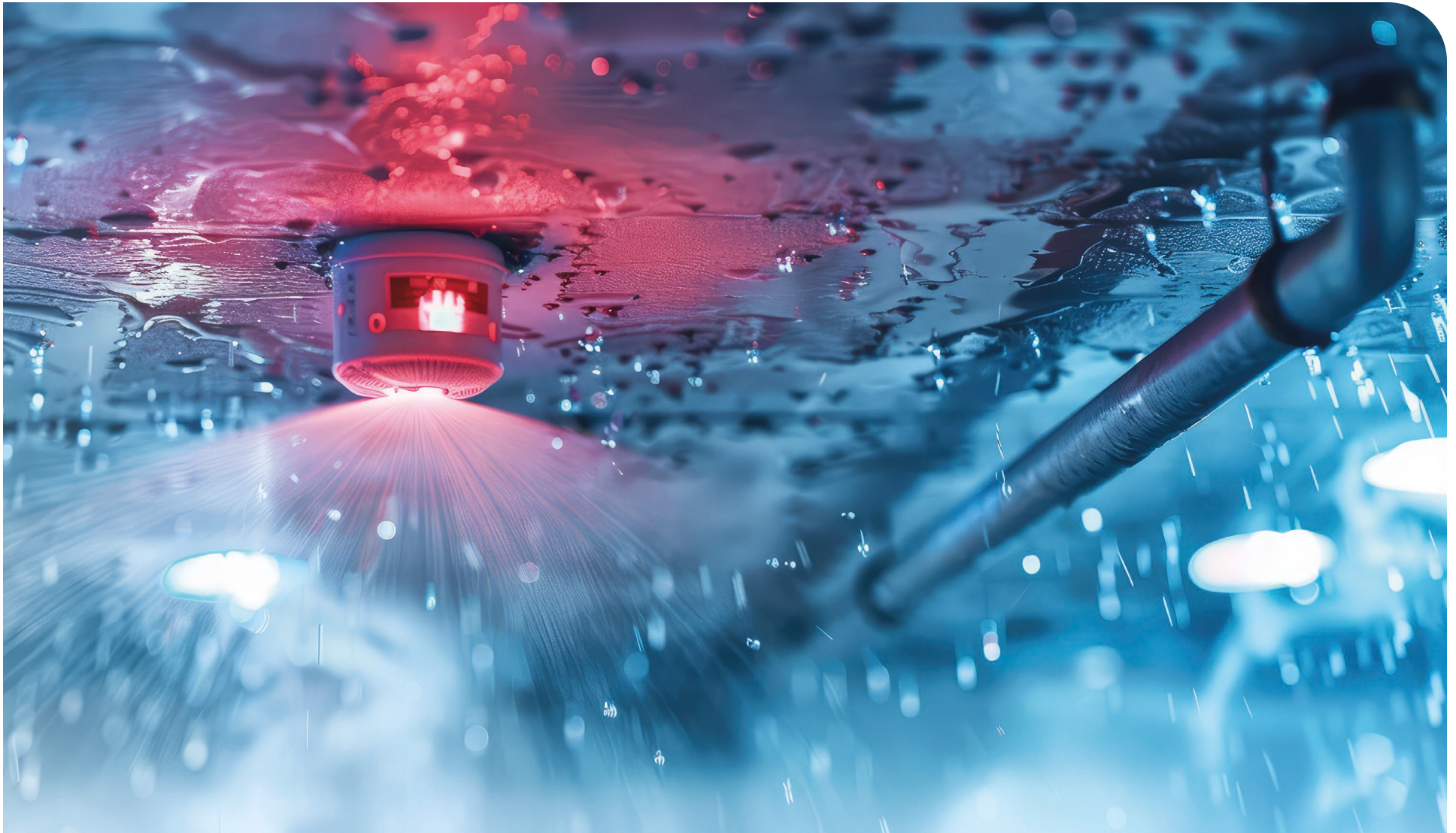


## **Water Will Find a Way:**

The Impact of Water-Related Emergencies on Buildings and the Value of Instant Access to Critical Information





## Fear, Floods, and Facilities

Sometimes a topic hits home with a blast of energy, excitement, and intrigue, and water's impact on buildings is one of them. Nearly everyone has a perspective or experience with water-related disasters.

**“Water is a funny thing because it’s its own living entity.”**  
- Guenevere Dean, Critical Systems Manager, SiriusXM

Water possesses a relentless ability to infiltrate, damage, and disrupt. In building management, water-related incidents - from minor leaks to catastrophic floods - present significant challenges that require swift and informed responses. Modern technologies and practices have enhanced our ability to manage these occurrences, highlighting the critical importance of instant access to information such as shut-off locations and real-time monitoring, according to David Trask, National Director, ARC Facilities.



**FEMA reports that flooding is the most common and expensive natural disaster in the U.S.**

In commercial buildings, the cost of downtime due to water damage can exceed the physical repair costs, with business interruptions leading to significant financial losses.

# The Persistent Threat of Water

Water damage can happen quickly and unexpectedly. Daniel Koenigsfeld, Director of Facilities and Grounds at Des Moines Christian School, faced a major challenge when a six-inch water main broke, flooding the main offices. His team immediately sprang into action, using floor scrubbers to extract water while teachers moved furniture out of the affected areas. By 9 a.m., students were sent home, and a vendor partner had begun repairs on the damaged pipe. By 5 p.m., the clean-up was complete, allowing classes to resume the next day.

**The incident caused approximately \$75,000 in damage, impacting twelve offices. Repairs were extensive, involving foundation fixes, new drywall, insulation, paint, and carpeting. Fortunately, the school's quick response saved all furniture, and the foundation was repaired within days, minimizing long-term disruptions.**



These events are not isolated. They underscore the challenge with handling water incidents and the urgency of quick response.

Theresa Smith, FMP, a Facilities Specialist with Cooperators Insurance, recalled an incident during a renovation when a contractor accidentally knocked a sprinkler head with a ladder, triggering the fire suppression system.

**“It seems people are often concerned about fire, but in my experience, water is so much more destructive. Fire risks in most buildings are minimal and mitigation is significant. Water is used daily and has many sources, including rest rooms, coffee stations, fire suppression and HVAC. One of the biggest problems is that many spaces haven’t been modernized much in the last 15 years.”**

The water damage affected five floors, as the system released in the impacted quadrant and the floors above and below. This mishap caused significant disruption during the project.

In another instance, her team left a plumbed coffee maker in an unoccupied floor following the sale of a department. With no one using it, the reservoir boiled dry, damaging the tubing and causing a leak that affected a file room below. While most files were spared, several boxes on the floor were ruined. The damage cost more than \$5,000, requiring 48 hours of drying, and the replacement of drywall and carpet.

**“Water doesn’t just find a way,” said Theresa. “It is the most destructive force in any office.”**



# The Rapid Escalation of Water Emergencies

A minor leak can evolve into a significant flood within hours if not promptly addressed. Lauren Grant from ATI Restoration underscored that even small leaks are costly.

“Water damage in a building can cause structural problems to ceilings, floors, and walls when not addressed quickly,” said Grant.

.....  
**“This type of damage can cost a company or building owner millions, depending on the building and the specific issues that arise. The most common sources are burst pipes, overflowing septic systems or toilets, leaking appliances, and roof leaks. However, business interruptions often end up being the most costly factor,”** she added.  
.....



## Advanced Technologies in Water Damage Mitigation

In response to these challenges, the integration of advanced technologies has become essential. Jared Mairs, Building Maintenance Technician, Kitchell FM Services pointed out the value of water leak sensors and automatic shut-off valves, which allow facilities departments to respond quickly to leaks and prevent further damage. These technologies are part of a broader trend toward smart building management, where real-time data and automated responses play a crucial role.

.....  
**“Water is a fickle beast,”** he said. **“The key to minimizing damage from water is to plan for it to happen and remain several steps ahead of the possibility.”**  
.....

Jared explained that in some situations leaks can be contained within 1-3 minutes using leak detection systems, as opposed to the alternative which is walking into a building the next day or after a long weekend with the water running.

He added, “A lot of insurance companies will offer annual discounts for installing such systems.”

## The Importance of Preparedness and Training

Preparation for water-related emergencies involves more than just technology; it requires thorough planning and training. Mairs emphasized the need to plan for water emergencies and stay several steps ahead to minimize damage. Creating location maps for shutoff valves and maintenance schedules to ensure shutoffs are regularly tested is an important step when preparing for water-related emergencies. Valves that aren't used often can start leaking. Teams are sometimes hesitant to turn them off because they don't always know what they control.

# Insuring Your Facility



## Insurance Documentation and Processes

Reviewing insurance documentation and understanding the processes for filing claims is crucial in the aftermath of hurricanes and other catastrophic events.

Policy holders should carefully examine insurance policies to know coverage limits, exclusions, and other other requirements.

It's important to:

- Take on-site photos of the site prior to hurricanes
- Document damages with photos, videos, and descriptions
- Report losses to insurance companies ASAP
- Keep records of communication with the insurer, including claim number and representative names
- Understand timelines for filing claims and the required documentation to ensure the claims process is handled efficiently for a rapid recovery.

Scott Ployer from National Property Management Strategies Group explained some of the things that companies can do to minimize insurance escalations effectively.

**“Insurance premiums are skyrocketing across most sectors. It isn’t just one sector specific, it’s across all of them. It’s even trickling down to our medical insurance, our car insurance, our home insurance, because of what’s happening in the world with wildfires and floods,” he said.**

“What I tell people to do is, review the last three to five years of your insurance claims that you filed with your various carriers, workers’ comp carriers, property and general liability, whomever. Review the last three to five years’ worth of insurance claims to see where the focuses are, where are the trends forming, and what are you paying out,” he said.

# Preparation, Planning, Evaluation



## Preparation and Planning

Emergency plans for water incidents are essential for minimizing damage and ensuring safety during floods, pipe bursts, or other water-related emergencies. These plans typically include steps for identifying and shutting off the water source to prevent further flooding, as well as clear evacuation routes for those in the affected area. They also outline procedures for contacting emergency services and water damage restoration professionals promptly. Emergency plans should designate roles and responsibilities for team members or residents, ensuring that everyone knows how to respond quickly and effectively. Additionally, these plans often include instructions for protecting valuable assets, securing important documents, and safely navigating the aftermath, such as avoiding electrical hazards. Regular drills and updates to the plan are crucial to maintaining preparedness for any water-related incident. Having your paper emergency binder stored in the flooded basement isn't helpful. Having an electronic plan, shared across mobile devices is the modern way to store and share valuable emergency information.



## Evaluate, Revise for Continuous Improvement

Post-incident evaluation and the subsequent adjustment of emergency plans are critical for improving future responses to emergencies. After an incident, a thorough review helps identify what worked well and what areas need improvement, providing valuable insights into the effectiveness of current plans. This evaluation includes analyzing response times, communication efficiency, resource availability, and overall coordination among team members. By addressing any weaknesses or gaps, organizations can make informed changes to their plans, ensuring they are better prepared for future incidents. Regularly updating and refining these plans based on real-world experiences enhances resilience and can significantly reduce the impact of similar events in the future, ultimately safeguarding people, property, and operations.

## Partner Up for Protection

Partnering with a water mitigation company when water-related disasters strike your facility is crucial for minimizing damage and ensuring a swift, effective response. These specialized companies have the expertise, equipment, and resources needed to quickly assess the situation, extract water, dry out affected areas, and prevent mold growth, which can significantly reduce repair costs and downtime. They also handle the intricacies of insurance claims and compliance with industry standards, ensuring that all work is documented and meets regulatory requirements. By having a reliable water mitigation partner, facilities can restore normal operations more quickly and reduce the long-term impact of water damage.



## Restoration Resources

### Facility Restoration

Restoring facilities after water damage involves several key steps, including immediate water extraction, thorough drying using industrial fans and dehumidifiers, and assessing structural integrity for potential repairs. Damaged materials like drywall and flooring often need to be replaced to prevent mold growth. Sanitization is crucial to prevent bacteria and mold proliferation. Preventive measures to alleviate future water damage include regular inspections of plumbing systems, maintaining roof integrity, installing sump pumps in basements, and ensuring proper drainage around the facility.



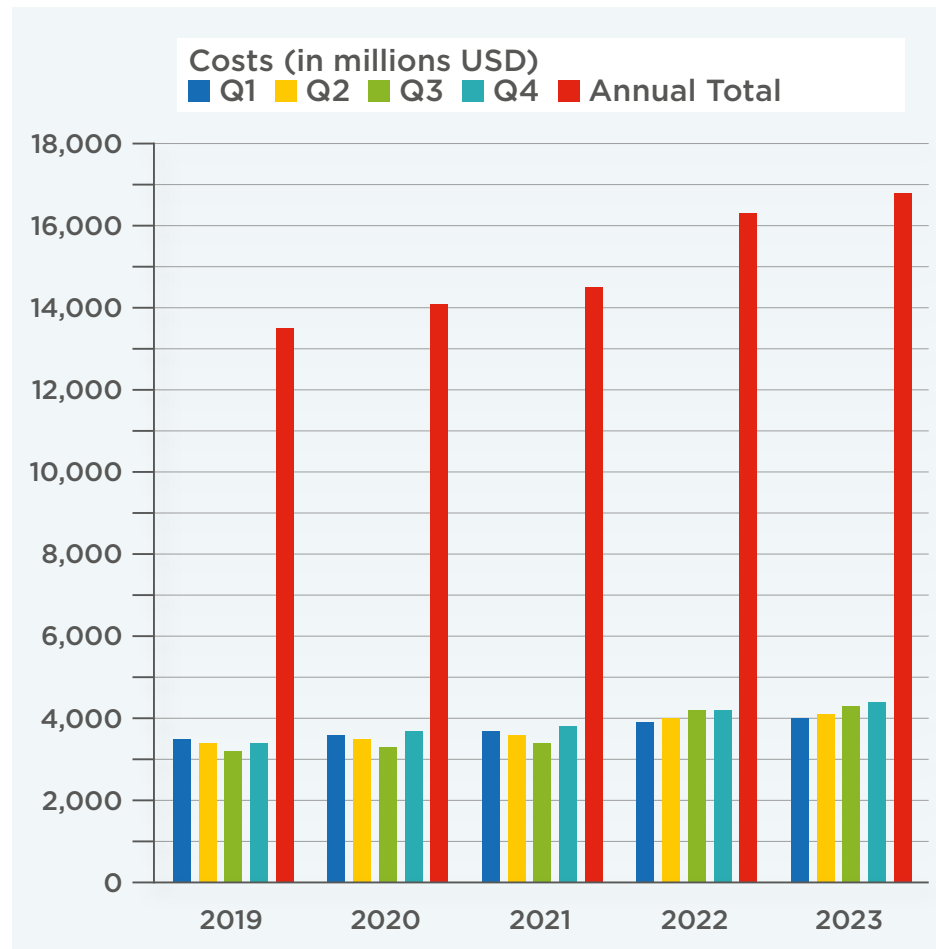
### Critical Equipment & Supplies

Internal water removal equipment is crucial for managing and mitigating water damage in buildings. Key tools include high-powered pumps for extracting standing water, industrial fans and dehumidifiers to dry areas and reduce moisture, and wet vacuums for smaller tasks. Together, they efficiently remove water, speed up drying, and help prevent further damage and health risks.

# The Dramatic Cost of Water Damage to Your Facility

## Statistics: Increasing Cost of Water Damage

### Water Damage Costs by Year

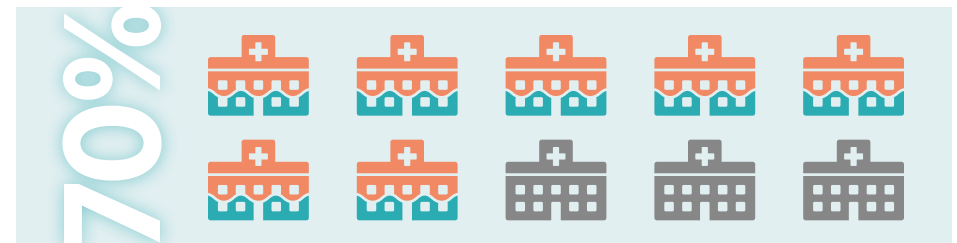


Source: National Flood Insurance Program

## Statistics: Industry Breakdown of Water Damage

### Hospitals

Water damage in hospitals can significantly disrupt operations, posing risks to infection control, compliance, and patient safety. Problems such as leaks, floods, and mold growth are especially dangerous in healthcare settings, where they can compromise sterile environments and patient well-being.



### K12 School Districts

A study by the U.S. Government Accountability Office (GAO) found that 41% of K-12 school districts reported issues with HVAC systems, leaks, and mold, which directly affect indoor air quality, student health, and learning environments. Water damage is a major contributor to these issues, leading to costly repairs and potential disruptions in school operations.





# The Role of Instant Access to Critical Building Information

One of the most critical aspects of managing water-related emergencies is having instant access to information. Knowing the locations of shut-off valves, understanding the layout of water systems, and having real-time data from sensors can significantly reduce response times and limit damage.

As James Riggio from BELFOR Property Restoration noted, the ability to rapidly assess and respond to water damage is paramount.

.....  
**“At a one hotel, there was a fire riser break on the third floor, and it flooded all the way to the 1st floor. The incident caused \$100k in damage and it forced them to relocate hotel guests and close sections.”**  
.....

Water-related emergencies pose a significant threat to buildings, but modern technologies and proactive management practices offer robust solutions. The introduction of mobile apps which enable facilities teams to locate shut-offs in seconds, advanced sensors, and real-time monitoring tools enhances our ability to respond swiftly and effectively. Technology alone is not enough.

Comprehensive planning, regular inspections, and thorough training are essential components of a successful water damage mitigation strategy. By understanding the persistent threat of water and leveraging both technology and preparedness, facilities teams can protect their properties from the devastating impacts of water-related emergencies.

**The key to minimizing damage lies in staying informed, prepared, and ready to act at a moment’s notice.**

**ARC Facilities** provides organizations with the ability to map facility equipment locations from their mobile devices – empowering facility members and others to quickly locate critical water shut-offs, accelerating emergency responsiveness and remote troubleshooting.

To learn more about ARC Facilities, visit [www.arcfacilities.com](http://www.arcfacilities.com).

**Request a demo** to speak with a team member.

Email us at [solutions@arcfacilities.com](mailto:solutions@arcfacilities.com)

