External Flood Events and Emergency Response Plan

Severe weather can cause water damage in commercial buildings across various regions, including coastal areas, river zones during spring melts, and valleys post-wildfires. Insurers and lenders turn to FEMA flood maps to evaluate flood exposure of clients. The National Flood Insurance Program notes a rise in flood insurance purchases, with $2.4 billion allocated for claims payouts.[1] Understanding the flood risk to your building and assets, play a crucial role in the discussing the need to risk transfer to a flood policy and additionally the opportunity to mitigate that risk.

Property managers should leverage their broker's expertise to evaluate where to place assets to reduce their flood exposure. The building design and construction phase hold the greatest opportunities for minimizing flood risk when an asset is near a flood plain. Building design significantly impacts flood risk reduction, with raised foundations and water-resistant materials like concrete being key considerations. Raised foundations reduce the likelihood of flood damage due to the finished floor. Existing buildings with below grade spaces, basements, parking garages, or floors located in or near a floodplain, must be carefully evaluated for their resilience in worst-case flood scenarios.

It's important to know the lowest point where water intrusion could occur based on your flood zone. FEMA historical flood map tools are helpful when organizing workflows and placing valuable machinery, such as servers and utility equipment outside of the anticipated flood zone.

Once a building is in place, property owners can implement several other measures to enhance water resistance:

+ Install sewer backflow valves to prevent sewer lines from backing up into the building.
+ Secure fuel tanks, HVAC units, and other systems outside the building.
+ Landscape the property to channel water away from the building. Minimize ground pavement, especially in the immediate building perimeter.
+ Acquire temporary flood barriers that can quickly be placed in vulnerable areas outside the building.
+ Work with a professional to pre-cut and stage door and window coverings that can be installed quickly, safeguarding these entry points from flying debris and flood waters.
+ Apply products like Flex Seal to doorways and windows to ensure they are watertight.

BEFORE A FLOOD EVENT

STAY INFORMED

Go online to see water level on government or county website or by FEMA NOAA. Monitor water level indicators/gauges for your local body of water and determine at what level the water is to implement your emergency response plan. Heed the warnings issued by the Emergency Alert System (EAS) and the National Oceanic Atmospheric Administration (NOAA), as directed by local authorities.

PLAN AHEAD

Recognize that implementing temporary barriers takes time, and personal safety takes precedence over property protection. Assess whether the potential cost of flood-related supply chain disruptions, data loss, and infrastructure damage justifies investing in measures such as raising circuit breakers, installing backup generators, or relocating critical operations to mitigate water damage.

BE AWARE OF DEVELOPMENTS IN FLOOD ZONES

As urbanization continues, there may have been revisions to FEMA flood maps. Urban development can alter the flow of water, potentially increasing flood risks for your building. Keep an eye out for Letters of Map Revisions (LOMRs), which are issued when new development affects flood hazards. LOMRs identify changes in flood risk, including alterations in the flow and spread of water.

UNDERSTAND CONSTRUCTION LIMITATIONS

Person doors can only withstand approximately 3 feet of water before hydrostatic pressure causes them to fail. Consider reinforcing or replacing vulnerable doors to reduce the risk of water intrusion to a particular area.

TAKE PREVENTIVE MEASURES

Elevate furnaces, water heaters, and electric panels if they are susceptible to flooding. Additionally, seal basement walls with waterproofing compounds to prevent seepage. Implement temporary barriers that are flood approved to protect critical assets. Ensure that the temporary barriers are in still good working condition by installing at least annually during a mock situation or drill.

DURING A FLOOD EVENT

PRIORITIZE SAFETY

Implement your emergency response plan to ensure all personnel evacuate the location safely. Monitor water levels to determine an effective timeframe to fully implement all the emergency response plans.

IMPLEMENT ACTION ITEMS

Identify action items to protect certain assets, such as:

- Positioning temporary barriers
- Shutting down pieces of equipment
- Raising personal equipment to higher ground
- Raising storage off ground level
- Protecting openings in walls, windows, and doors to reduce the loss during the flooding event, if safe to do so.

SHUT OFF UTILITIES

Turn off utilities at the main switches and disconnect electrical equipment to prevent electrical hazards and further damage.

AFTER A FLOOD EVENT

ASSESS THE DAMAGE TO THE BUILDING AND ASSETS

Work with credentialed third-party vendors to safely reinstate utilities and assess any damage to the equipment within the building.

DISPOSE OF SANDBAGS PROPERLY

After use, sandbags are considered a biohazard and should be disposed of appropriately. They are typically designed for single use only.

STRATEGIC ENGAGEMENT

Roundtable with leaders and determine if the flood emergency response plan needs to be updated, revised, or is effective as is. Assess the damage to the building or assets and understand what went right and what could have been handled differently. Determine the response time for implementation of the emergency response plan. Did outside influences dictate that response time, and could it have been completed more quickly? What would or should we have done differently to prepare and protect our buildings/assets?

CONSIDERING PURCHASING, BUILDING, AND RENOVATING IN A FLOOD ZONE?

CHOOSE STRATEGIC LOCATIONS

Whenever possible, opt to build outside of flood zones to minimize the risk of flood damage to your property.

SEEK EXPERT ADVICE

Consult with your broker's risk control team to assess the construction of your building relative to the flood insurance studies, investigate the last major flood event, impacts, depth of water and amount of time to breach the walls bounding the water. This proactive approach can help mitigate potential risks by prioritizing and protecting assets that are critical to your business.

TRANSFER RISK THROUGH INSURANCE

Transfer the financial risk of flood damage to an insurance policy where available. Work with an experienced broker to ensure that your insurance coverage adequately protects your property against potential flood-related losses.

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Source:

1. Rabb, W. (2023 October 2). Temporary Fix Keeps National Flood Insurance Operating but Only Until Nov.17. Insurance Journal. https://www.insurancejournal.com/news/national/2023/10/02/742562.htm