Ready Business®

INLAND
FLOODING
TOOLKIT

WHY SHOULD ORGANIZATIONS CARE ABOUT INLAND FLOODING RISK?

Most of the United States is at some risk for flooding, so it is important that organizations, including associations, businesses, and community groups, understand the potential impacts.

The *Ready Business Program* for *Inland Flooding* and the Preparedness and Mitigation Project Plan allow users to take action to protect employees, protect customers, and help ensure business continuity as well.

NATURAL DISASTER IMPACT		
IMMEDIATE	ONE YEAR LATER	THREE YEARS LATER
40%	**25%**	**75%**
OF SMALL BUSINESSES WON'T REOPEN	MORE SMALL BUSINESSES WILL CLOSE	OF BUSINESSES WITHOUT A CONTINUITY PLAN WILL FAIL

Source: 2014 data from the Federal Emergency Management Agency (FEMA) and US Department of Labor.

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Introduction

Should your organization be concerned about flooding? In most instances, yes. Everywhere in the United States is at some risk for flooding, so it is important that you understand your risk, develop preparedness and mitigation plans, and take action. Doing so will not only increase the safety of employees and customers, but it will help you remain in business after disasters such as flooding strike. Maintaining business continuity is important for you, and when you are able to continue operations after a disaster, you will improve your community's ability to recover as well.

THE *READY BUSINESS PROGRAM* MOVES ORGANIZATIONAL LEADERS THROUGH A STEP-BY-STEP PROCESS TO:

✓	Identify Your Risk
✓	Develop a Plan
✓	Take Action
✓	Be Recognized and Inspire Others

Following these steps in the *Ready Business Program* as a part of your overall business continuity planning will help protect assets (people, property, operations); sustain the capability to provide goods and services to customers and/or supply chain; maintain cash flow; preserve competitive advantage and reputation; and provide the ability to meet legal, regulatory, financial, and contractual obligations.

Nonprofit organizations can also benefit from the *Ready Business Program* as business continuity will protect staff, clients, and property while allowing operations to continue.

Experts estimate that 75% of businesses without continuity planning will fail within three years of a disaster. The *Ready Business Program* offers information to complete continuity planning, including resources from the Federal Emergency Management Agency (FEMA) *Business Continuity Plan*.

The *Ready Business Program* will provide you with the tools to plan, take action, and become a Ready Business by addressing preparedness and mitigation for your STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, and SERVICE. You will also have the opportunity to apply for recognition as a member of the Ready Business Community.

Introduction: Program Overview

Organizations have six options for recognition through the *Ready Business Program*. The levels include **STAFF, SURROUNDINGS, SPACE, SYSTEMS**, **STRUCTURE,** and **SERVICE.** The **SERVICE** level is achieved by completing requirements for **STAFF, SURROUNDINGS, SYSTEMS,** and **STRUCTURE** levels in addition to the **SERVICE** requirements.

STAFF includes planning and preparedness activities for the protection of your staff.

SURROUNDINGS includes the land-use decisions regarding constructing a flood-wall or levee.

SPACE includes the contents of your workspace, such as inventory, filing cabinets, shelving, and other furniture.

SYSTEMS includes utility systems that support the operation of the building and are generally located on the roof.

STRUCTURE includes architectural and structural elements of the building, especially construction types that may be vulnerable to damage or failure during an event.

SERVICE includes the opportunities for your organization to engage and serve the community following an event. You may only qualify for SERVICE to others after you have prepared your own organization first.

It is important to remember that injury, damage, concurrent damage, cascading disasters such as fire following the event, business interruption, or even increased repair or recovery costs can come from failure to prepare or mitigate. As a result, the first step in the *Ready Business Program* is to complete a *Back-to-Business Self-Assessment* to identify vulnerabilities from any source.

The *Ready Business Program* is intended to recognize and acknowledge businesses and organizations who complete preparedness and mitigation actions to protect employees, customers, and continuity. You can get started today by following the steps provided.

For more information or assistance, contact ReadyBusiness@flash.org or (877) 221-7233.

Benefits

Peace of mind that your organization is prepared not only for inland flooding, but for other business interruptions and natural disasters.

Ready Business **window cling** to announce to your customers or clients and employees that you have taken steps to prepare your STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, and are prepared to be of SERVICE after an event.

Ready Business **recognition certificate**.

Ready Business **web badge** to display on your organization's website.

Organization listing on Ready Business website.

Sample **news release** to recognize and acknowledge your organization's participation in the *Ready Business Program* and tips for media placement.

Gain tips for **media placement**.

Inspire others to take steps to improve community resiliency.

Introduction: *Ready Business Program*

(1) **IDENTIFY YOUR RISK**

Complete the *Back-to-Business Self-Assessment* to determine the specific areas your organization needs to address to prepare, mitigate risk, and return to operation following a disaster.

(2) **DEVELOP A PLAN**

1. Based on the information in the *Back-to-Business Self-Assessment*, complete the Ready Business Preparedness and Mitigation Project Plan for STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, and SERVICE to identify preparedness and mitigation actions needed to ensure safety and business continuity. (Note: *Completing this plan is a critical first step toward recognition as a Ready Business.*)

2. Review the *Quick Reference Guide* to determine which preparedness and mitigation actions you want to take based on the potential impacts to your organization.

(3) **TAKE ACTION**

1. Now that you've created your Preparedness and Mitigation Project Plan, make sure the building owner approves it if you are leasing or renting your building. (Note: *Be sure to check with your local building department to secure required permits prior to performing any retrofitting or other mitigation activity.*)

2. Perform preparedness and mitigation activities as prioritized in the Preparedness and Mitigation Project Plan. Document your actions as instructed in the checklists for STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, and SERVICE with signatures, photographs, receipts, or letters from a company or organization manager, engineer, or design professional, where applicable.

(4) **BE RECOGNIZED AND INSPIRE OTHERS**

1. Complete and submit the application for recognition as a Ready Business.

After you have completed these steps, you will be eligible to become a member of the Ready Business Community, and will enjoy the peace of mind of knowing you have done your part to promote safety, mitigate potential loss, and protect your business or organization.

1

Identify Your Risk:

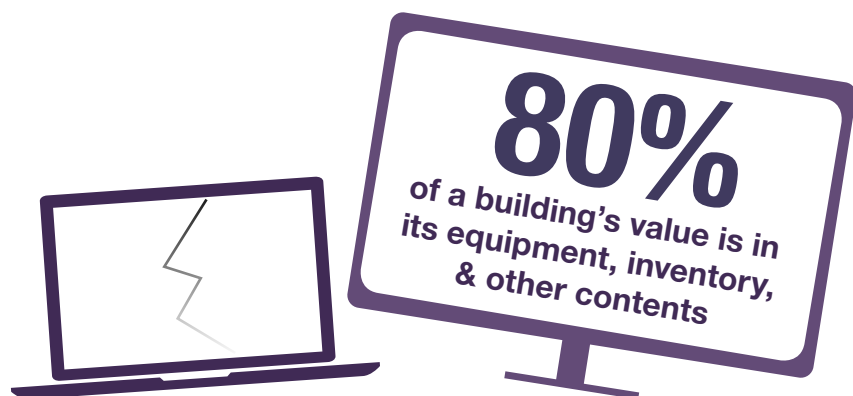*Back-to-Business Self-Assessment*

PLANNING SCENARIO

On May 1 of this year, a flooding event strikes your community and damages both the structure and the contents in the building where your organization operates. Due to damage, your building has been 'yellow tagged' during a rapid assessment by the building department and is closed. A more thorough assessment of your building damage is needed to determine if your structure is safe, or can be made safe, prior to reopening.

Due to the number of buildings damaged in your community, your building's detailed damage assessment will take place three days after the event. You should assume you will not be able to access your facilities for at least three days.

Depending on your type of organization, expect that either 50 percent of your inventory (product) is unsellable, or that 50 percent of your computers or other equipment was damaged during the event (choose whichever creates the greater impact on your organization). Assume that all utilities are interrupted.

Further, you should project that the disruptions will continue for one additional day. The assessment will show that the damage is repairable to the structure, so now you will need to address staff, contents, cleanup, repairs, and replacement.

Based on this scenario, complete the 13 questions on the following pages to identify your risk.

80%
of a building's value is in its equipment, inventory, & other contents

Source: FEMA E-74, *Reducing the Risks of Nonstructural Earthquake Damage - A Practical Guide*

1 | Identify Your Risk: *Back-to-Business Self-Assessment*

ASSESS YOUR READINESS

Based on the planning scenario, complete the 13 questions below to highlight areas that your Preparedness and Mitigation Plan and Business Continuity Plan should address.

IMPACTS ON YOUR ORGANIZATION			RESOURCES THAT CAN HELP MINIMIZE DAMAGE, DISRUPTIONS, AND INJURIES
SYSTEMS/STRUCTURE			
1. Can your organization operate without any of the following: computers, copier, fax machine, files, inventory, or special equipment (e.g., x-ray equipment, cash register, credit card readers)?	❑	Yes No	*Ready Business Program* - SYSTEMS
2. Can your organization operate without any of the following: gas, power, water, internet, or telecommunications?	❑	Yes No	*Ready Business Program* - SYSTEMS
3. Can you still operate your organization without access to the damaged building(s)?	❑	Yes No	*Ready Business Program* - STRUCTURE
STAFF/CUSTOMERS/VENDORS/SUPPLIERS (PEOPLE)			
4. Can you meet payroll if your business income is interrupted? If yes, estimate how long.	❑	Yes No	Business Continuity Plan - PEOPLE
5. Are your employees able to commute to work?	❑	Yes No	Business Continuity Plan - PEOPLE
IMPACT ON YOUR ORGANIZATION			
6. Is your organization easily accessible to the public, your customers, and employees (e.g., parking)?	❑	Yes No	Business Continuity Plan - PEOPLE
7. Are you communicating status with employees, key customers, vendors, and suppliers throughout your recovery?	❑	Yes No	Business Continuity Plan - PEOPLE

OPERATIONS			
8. Can your organization operate without access to the damaged building?	❑ ❑	Yes No	Business Continuity Plan - OPERATIONS
9. Have you set priorities on what operations your organization needs to recover 1st, 2nd, 3rd, etc.?	❑ ❑	Yes No	Business Continuity Plan - OPERATIONS
10. Are your suppliers up and running or do you have sufficient parts/supplies on hand to continue without resupply?	❑ ❑	Yes No	Business Continuity Plan - OPERATIONS
11. Are you able to ship your product or provide services to your customers based on your current impacts, understanding that the demand for these products or services may drastically change?	❑ ❑	Yes No	Business Continuity Plan - OPERATIONS
12. Do you still have all your customers/clients after the disaster?	❑ ❑	Yes No	Business Continuity Plan - OPERATIONS
OVERALL OPERATIONS			
13. Can your organization survive losses if it is closed and/or inaccessible for 3 to 7 days?	❑ ❑	Yes No	*Ready Business Program* & Business Continuity Plan

For each question, 1-13, that you answered 'No', address the specific issue in the Ready Business Preparedness and Mitigation Project Plan, or in your Business Continuity Plan.
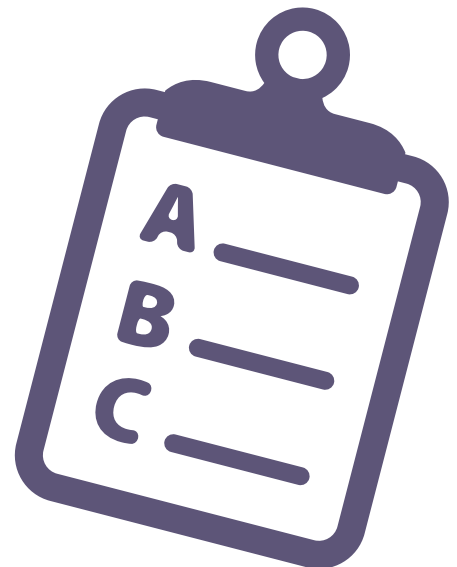
Use the *Ready Business Program* resources to help determine the potential for damage to buildings and contents as well as how you will reduce the damage to buildings and contents if it occurs. Resources are incorporated throughout the Toolkit and a comprehensive list can be found on pages 43-44.

2 Develop A Plan

1. Based on the information in the completed *Back-to-Business Self-Assessment*, create a Ready Business Preparedness and Mitigation Project Plan for your STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, and SERVICE to identify critical preparedness and mitigation actions needed to ensure safety and business continuity. Completing this plan will bring you one step closer to recognition as a Ready Business.

2. Review the Quick Reference Guide to determine which preparedness and mitigation actions you want to take based on the potential impacts to your organization.

2 | Develop A Plan

STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, AND SERVICE

After you have identified the potential flooding risks, and determined the possible impacts on your business or organization, create a Preparedness and Mitigation Project Plan and decide which solutions you will use to reduce risks. The Preparedness and Mitigation Project Plan will support the business continuity planning and readiness process, and bring you one step closer to recognition as a Ready Business.

READY BUSINESS PREPAREDNESS AND MITIGATION PROJECT PLAN

Organization:

Project Lead:

Name:

Title/Department:

Address:

Phone Number:

Email:

Executive Summary:

Background: *(Provide a summary description of risk to include priorities)*

Goals and Objectives:

2 | Develop A Plan: STAFF

While it is always important to evacuate when requested by authorities, some types of inland flooding (e.g. flash floods) may require you to act more quickly. Below is a list of key preparedness measures your organization can complete to help your staff get prepared for an inland flood event; however, the list is not all-inclusive. And, even if you are required to evacuate, being prepared allows you to stay in contact with your staff and provides a sense of comfort that your business will be able to reopen after the disaster. For additional guidance on preparedness measures, please see the *Quick Reference Guide:* STAFF in this program.

By performing Steps one through six, businesses and organizations will be eligible for recognition as a Ready Business – STAFF. The Suggested Actions are recommended, but not required, for recognition.

POTENTIAL PREPAREDNESS ACTION	ASSIGNED TO	BUDGET	COMPLETION DATE
1 Develop Business Continuity and Crisis Communications Plans			
2 Conduct an Employee Awareness Campaign			
3 Develop an Employee Training Program			
4 Conduct an Employee Training Session			
5 Conduct a Flood Drill			
6 Review Insurance Coverage/Create Inventory (Note: *See call out box on page 14 regarding flood insurance*.)			
SUGGESTED ACTION: Develop an Employee Sheltering/Evacuation Plan and Include an Emergency Supply Kit			
SUGGESTED ACTION: Purchase a NOAA Weather Radio for Monitoring During an Event/Download a Mobile Alerting App			

FLOOD INSURANCE IS CRITICAL FOR BUSINESSES AND EMPLOYEES ALIKE

Did you know, that homeowners insurance doesn't cover flood? The National Flood Insurance Program (NFIP) was developed to help provide a means for property owners to financially protect themselves. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. The average flood insurance policy costs about $700 per year. To learn more about the NFIP and flood insurance in your area, visit FloodSmart.

2 | Develop A Plan: SURROUNDINGS

Below is a list of nonstructural inland flooding mitigation activities that can be completed by a floodplain manager or professional engineer; however, the list is not all-inclusive. For additional guidance on nonstructural risks, please see the *Quick Reference Guide:* SURROUNDINGS in this program.

By performing all applicable activities, businesses and organizations will be eligible for recognition as a Ready Business – SURROUNDINGS.

SURROUNDINGS RISKS	MITIGATION SOLUTION	ASSIGNED TO	BUDGET	COMPLETION DATE
Floodwalls and Levees	Consult a floodplain manager or professional engineer to develop a plan for your surroundings that mitigates against flood damage.			

2 | Develop A Plan: SPACE

Below is a list of nonstructural mitigation activities that may require an engineer to identify and evaluate appropriate mitigation steps; however, the list below is not all-inclusive. For additional guidance on nonstructural risks, please see the *Quick Reference Guide:* SPACE in this program.

By performing all retrofit items, businesses and organizations will be eligible for recognition as a Ready Business – SPACE.

NONSTRUCTURAL RISKS	MITIGATION SOLUTION	ASSIGNED TO	BUDGET	COMPLETION DATE
Contents	Determine and relocate your critical contents at least one foot above the Base Flood Elevation (BFE) or the Design Flood Elevation (DFE), whichever is higher.			
Chemicals	Establish a method for safeguarding chemicals in your Preparedness and Mitigation Project Plan.			

2 | Develop A Plan: SYSTEMS

Below is a list of nonstructural mitigation activities that may require an engineer to identify and evaluate appropriate mitigation steps; however, the list is not all-inclusive. For additional guidance on nonstructural risks, please see the *Quick Reference Guide:* SYSTEMS in this program.

By performing all retrofit items, businesses and organizations will be eligible for recognition as a Ready Business – SYSTEMS.

NONSTRUCTURAL RISKS	MITIGATION SOLUTION	ASSIGNED TO	BUDGET	COMPLETION DATE
Mechanical Systems	Consult a professional engineer to develop solutions for protecting vital systems through elevation, anchoring, or other approved means.			
Fuel Tanks				
Electrical Systems				
Communications Equipment				
Sewer and Water Management Systems				
Potable Water Systems				

2 | Develop A Plan: STRUCTURE

Assessing structural and complex nonstructural risk requires the services of a structural engineer or other design professional to accurately evaluate and design reasonable mitigation measures. Below is a list of potential mitigation solutions; however, the list is not all-inclusive. For additional guidance on structural risks, please see the *Quick Reference Guide:* STRUCTURE in this program.

By performing a minimum of one retrofit item on this list, businesses and organizations will be eligible for recognition as a Ready Business – STRUCTURE.

STRUCTURAL RISKS	MITIGATION SOLUTION	ASSIGNED TO	BUDGET	COMPLETION DATE
Elevation	Consult a professional engineer to evaluate elevating your structure so the lowest floor is at or above the BFE or DFE, whichever is higher.			
Wet Floodproofing	Consult a professional engineer to evaluate options for wet floodproofing the structure.			
Dry Floodproofing	Consult a professional engineer to evaluate options for dry floodproofing the structure.			

2 | Develop A Plan: SERVICE

Can your organization provide community service to others following a disaster? Identify and build local relationships to create a SERVICE component in your Business Continuity Plan. For additional guidance on the SERVICE component, please see the *Quick Reference Guide:* SERVICE in this program.

By performing all applicable preparedness activities in STAFF and mitigation actions in SURROUNDINGS, SPACE, SYSTEMS, and STRUCTURE, businesses and organizations will be eligible for recognition as a Ready Business – SERVICE.
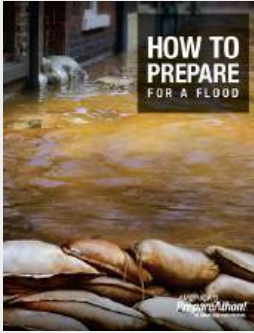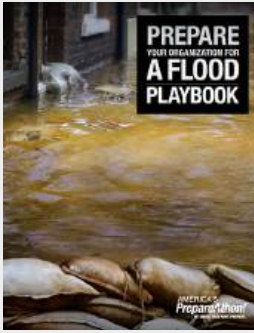
SERVICE ACTION	ASSIGNED TO	BUDGET	COMPLETION DATE
Contact your Local Emergency Management Office			
Identify Ways to Engage and Participate in Your Community			

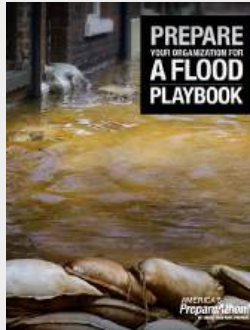| RELIEF KITS	CHARGING STATION	FOOD PREPARATION	VOLUNTEER
If your organization is open after the disaster, you could become a distributor or storage warehouse for Disaster Relief Kits. Providing a place for the supplies to be stored locally allows volunteer organizations to readily distribute them throughout affected areas.	Does your organization have electricity after the disaster? If so, you may want to become a volunteer charging station. Provide a safe, secure place for emergency responders, volunteers, and community members to charge their cell phones, power wheelchairs, and battery-powered tools.	Does your organization have the capability to prepare or serve meals? Providing a sanitary kitchen for emergency responders, volunteers, or community members to prepare or receive meals following a disaster is essential for rebuilding the community.	Not sure how your organization can directly contribute after the disaster? Volunteer. Contact your Local Emergency Manager and determine where the volunteer opportunities exist in the community. You could prepare meals, sort debris, or even work at a local office of a volunteer organization. For additional ideas, visit National Voluntary Organizations Active in Disaster.

PREPAREDNESS ACTION	PREPAREDNESS SOLUTIONS	PREPAREDNESS RESOURCES
STEP 1: Develop Business Continuity and Crisis Communications Plans	Create a Business Continuity Plan that includes strategies for storing critical business documents and data.	 *Business Continuity Plan*
	Consult the Disaster Resistant Business Toolkit.	 *Disaster Resistant Business (DRB) Toolkit*
	Assign a Business Continuity Team Leader responsible for implementing the Business Continuity Plan to bring your organization back to business after an event.	 *Business Continuity Plan*
	Create a Crisis Communications Plan that includes internal and external communication protocols for before, during, and after a disaster.	 *Crisis Communications*

PREPAREDNESS ACTION	PREPAREDNESS SOLUTIONS	PREPAREDNESS RESOURCES
STEP 2: Conduct an Employee Awareness Campaign	Conduct an employee awareness campaign to educate staff on the safest response before, during, and after an event. The awareness campaign should include educating staff on the safest response before, during, and after a flood, including definitions of National Weather Service (NWS) terms, e.g., flood watch vs. flood warning. Address shelter locations, emergency communications plans and policies, when to evacuate (when advised), seeking high ground for flash flooding, and avoiding entering flood waters. The campaign should also provide guidance on critical actions after a flood event. Reference *How to Prepare For A Flood* for additional content.	 *How to Prepare For A Flood.* Prepareathon
STEP 3: Develop an Employee Training Program	Develop a training program that provides activities for employee engagement before, during, and after a flood. Your training can be incorporated into established campaigns such as *National Preparedness Month* and should focus on disaster preparedness and safety. Drills or exercises should be incorporated into the program. Include *Turn Around, Don't Drown!* into your messaging.	 *Prepare Your Organization For A Flood Playbook.* Prepareathon *Turn Around, Don't Drown!*

PREPAREDNESS ACTION	PREPAREDNESS SOLUTIONS	PREPAREDNESS RESOURCES
STEP 4: Conduct an Employee Training Session	Hold a preparedness discussion with your staff. Discuss what you have done to prepare for disasters, review your Business Continuity Plan, review your Crisis Communications Plan, and share awareness campaign key messages. Use the *Prepare Your Organization For A Flood Playbook* to facilitate this discussion and engage your employees. The discussion should: • Educate the employees about your business continuity and crisis communications plans; • Include basic first aid and CPR training; and, • Describe evacuation and shelter plans.	 Prepare Your Organization For A Flood Playbook. Prepareathon
STEP 5: Conduct a Flood Drill	Conduct your flood drill, but before you begin, contact your local emergency manager and floodplain manager for additional ideas and to offer them a way to participate.	 *Prepare Your Organization For A Flood Playbook.* Prepareathon

PREPAREDNESS ACTION	PREPAREDNESS SOLUTIONS	PREPAREDNESS RESOURCES
STEP 6: Review Insurance Coverage/ Create Inventory	Meet with your insurance agent annually to review your insurance, especially property coverage limits, deductibles, and coinsurance requirements. Maintain a current photo or video inventory of your premises, equipment, inventory, supplies, etc.	**Ready** Business. *Insurance Coverage Discussion Form*
SUGGESTED ACTION: Develop an Employee Sheltering/Evacuation Plan and Include an Emergency Supply Kit	Develop an employee sheltering/evacuation plan to include an emergency kit with supplies you may need before, during, and/or after the disaster.	**Ready** Business. *Emergency Supply List*
SUGGESTED ACTION: Purchase a NOAA Weather Radio for Monitoring During an Event/Download a Mobile Alerting App	Purchase a NOAA Weather Radio with single area message encoding (SAME) or download an alerting app for your mobile device. You may also sign up to receive emergency notifications from your local emergency services. Download *Be Smart. Take Part. Know Your Alerts and Warnings* for a summary of available notifications. Designate a Team Leader and assign them to monitor your NOAA Weather Radio during an event. Listen and heed instructions given by local emergency management officials. Have backup batteries and chargers.	All Hazards NOAA Weather Radio NOAA's National Weather Service *NOAA Weather Radio All Hazards* **Prepare**athon *Be Smart. Take Part. Know Your Alerts and Warnings*

RESOURCES:

FEMA. *Prepare Your Organization For A Flood Playbook.* Prepareathon

FEMA. *How to Prepare For A Flood.* Prepareathon

SURROUNDINGS RISKS	MITIGATION SOLUTION	REFERENCES
Floodwalls and Levees	Consult a floodplain manager or professional engineer to develop a plan for your surroundings that mitigates against flood damage.	FEMA logo FEMA P-936, *Floodproofing Non-Residential Buildings.* FEMA P-259, *Engineering Principles and Practices of Retrofitting Floodprone Residential Structures.*

SPACE RISKS	MITIGATION SOLUTION	REFERENCES
Mechanical Systems	Determine and relocate your critical contents at least one foot above the BFE or the DFE, whichever is higher.	FEMA P-936, *Floodproofing Non-Residential Buildings.*
Chemicals	Establish a method for safeguarding chemicals in your Preparedness and Mitigation Project Plan.	*Emergency Response Plan*

SYSTEMS RISKS	MITIGATION SOLUTION	REFERENCES
Mechanical Systems Fuel Tanks/Systems Electrical Systems Communications Systems Sewer and Water Management Systems Potable Water Systems	Consult a professional to evaluate and design for the following flood mitigation techniques: • Elevate service equipment at least 12" above BFE. Use platforms or pedestals for equipment installed on the ground. • Relocate equipment to an existing location above the BFE. • Protect the equipment in place with floodwalls, shields, or anchors and tie-downs. • Protect drainage systems with backflow valves. Consult a licensed plumber for proper installation of these devices.	FEMA FEMA P-259, *Engineering Principles and Practices of Retrofitting Floodprone Residential Structures.* FEMA P-936, *Floodproofing Non-Residential Buildings.*

Quick Reference Guide: STRUCTURE

The International Code Council's *International Building Code (IBC)* addresses construction methods for most commercial structures as well as residential structures that are not covered by the *International Residential Code*. The IBC contains both prescriptive and engineered provisions, and applies to the many different types of commercial structures.

It is important to note that the recommendations in this document are general, and are intended to highlight areas of a structure that could be strengthened against flooding. However, the recommendations cannot account for all of the different building types and variables in the IBC. As a result, a licensed professional is necessary to identify and perform building mitigation activity appropriate for your business or organization.

STRUCTURAL RISKS	MITIGATION SOLUTION	REFERENCES
Elevation	Consult a professional engineer to evaluate elevating your structure so the lowest floor is at or above the BFE or DFE, whichever is higher.	**FEMA** FEMA P-550, *Recommended Residential Construction for Coastal Areas: Building on Strong and Safe Foundations.* FEMA P-312, *Homeowner's Guide to Retrofitting.*
Wet Floodproofing	Wet floodproofing is a technique that allows flood waters to enter the structure. Consult a professional engineer to evaluate options for wet floodproofing the structure. Consider the following items when wet floodproofing: • All materials used should be resistant to damage from flood waters. • Wet floodproofing does not protect the structure from flowing water, erosion, scour, debris, or damage to contents. • Post-flood clean-up should be considered before using wet floodproofing techniques. • Installation of properly sized and placed wall openings, below the expected flood level. • By allowing water to enter the structure, you may cause a secondary issue with protection of systems. Reference the SYSTEMS section to mitigate these items.	**FEMA** FEMA P-936, *Floodproofing Non-Residential Buildings.* FEMA P-259, *Engineering Principles and Practices of Retrofitting Floodprone Residential Structures.*

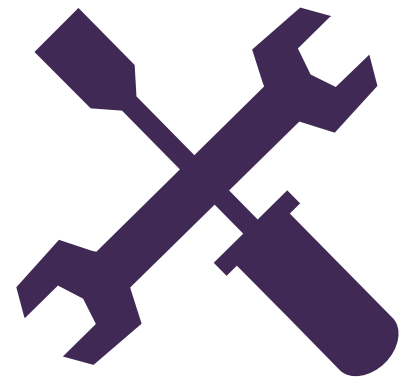| STRUCTURAL RISKS	MITIGATION SOLUTION	REFERENCES
Dry Floodproofing	Dry floodproofing is a technique that prevents the entry of water into the structure. Dry floodproofing should only be considered in instances where the flood waters are expected to last a short duration and a depth of less than three feet. *Because the walls are exposed to floodwaters and the pressures they exert, dry floodproofing is recommended only for structures with walls constructed of flood-resistant materials and flood depths are low.* Consult a professional engineer to evaluate options for dry floodproofing the structure. Consider the following items when dry floodproofing: • All exterior walls of the structure must be sealed and possibly reinforced. • All openings below BFE must be permanently sealed or have enhanced flood shields installed. • Protected from seepage. • Anchoring of structure to resist flotation and lateral movement. • Selecting and designing proper drainage systems to eliminate excess hydrostatic loads. • Design watertight core areas to protect vital systems if dry floodproofing the entire structure is not possible.	FEMA FEMA P-936, *Floodproofing Non-Residential Buildings.* FEMA P-259, *Engineering Principles and Practices of Retrofitting Floodprone Residential Structures.*

SERVICE ACTION	MITIGATION SOLUTION	REFERENCES
Contact your Local Emergency Management Office	Contact your local emergency management office to identify emergency management personnel and resources in your area.	*Emergency Management Agencies*
	Contact your local emergency management office during your disaster planning to learn how you may provide service(s) before and after a disaster strikes. Include this information in your Business Continuity Plan.	
Identify Ways to Engage and Participate in your Community	In addition to preparing your organization, it is important to understand your local and tribal community emergency operations plans and to work with other organizations in your community or tribe. Opportunities to participate in whole community planning include the following: • Learn about public-private partnerships. • Participate in local or tribal organizations that make your community a safer and more prepared place to live and do business, such as your local Citizen Corps Council, hazard mitigation planning team, or local and tribal Community Emergency Response Team (CERT). • Citizen Corps Council includes representatives from all sectors of the community. This whole community membership helps to ensure the community perspective is reflected in local emergency management practices.	*Prepare Your Organization For A Flood Playbook.* Prepareathon

3 Take Action

1. Make sure that your Preparedness and Mitigation Project Plan is approved by the building owner if you are leasing or renting your building. Always check with your local building department to secure required permits prior to performing any retrofitting or other mitigation activity.

2. Perform preparedness and mitigation activities as prioritized in the Preparedness and Mitigation Project Plan. Document your preparedness and mitigation as instructed in the checklists for STAFF, SURROUNDINGS, SPACE, SYSTEMS, STRUCTURE, and SERVICE with signatures, photographs, receipts, or letters from a company manager, engineer, or design professional, where applicable.

3 | Take Action: Ready Business - STAFF Checklist

The following checklists assist in documenting actions taken to prepare your staff and organization for flood events. Submit these checklists with your application for recognition under *Step Four: Be Recognized and Inspire Others*. The Suggested Actions are recommended, but not required, for recognition.

PREPAREDNESS ACTIONS	ACCOMPLISHED	INITIAL/DATE OF RESPONSIBLE PERSON
1 Developed Business Continuity and Crisis Communication Plans	Must be completed to receive recognition	
2 Conducted an Employee Awareness Campaign	Must be completed to receive recognition	
3 Developed an Employee Training Program	Must be completed to receive recognition	
4 Conducted an Employee Training Session	Must be completed to receive recognition	
5 Conducted a Flood Drill	Must be completed to receive recognition	
6 Reviewed Insurance Coverage/Created Inventory	Must be completed to receive recognition	
SUGGESTED ACTION: Developed an Employee Sheltering/Evacuation Plan and Included an Emergency Supply Kit	❑ Yes ❑ No ❑ Not Applicable	
SUGGESTED ACTION: Purchased a NOAA Weather Radio for Monitoring During an Event/Downloaded a Mobile Alerting App	❑ Yes ❑ No ❑ Not Applicable	

SURROUNDINGS RISKS	MITIGATION SOLUTION	ACCOMPLISHED	INSERT PHOTO OR RECEIPT
Floodwalls and Levees	Consulted with a floodplain manager or professional engineer regarding land use or code restrictions/requirements in your area.	❑ Yes ❑ No ❑ Not Applicable	

SPACE RISKS	MITIGATION SOLUTION	ACCOMPLISHED	INSERT PHOTO OR RECEIPT
Contents	Determined and relocated all critical contents at least one foot above the BFE or DFE, whichever is higher.	❑ Yes ❑ No ❑ Not Applicable	
Chemicals	Established a method for safeguarding chemicals in your Preparedness and Mitigation Project Plan.	❑ Yes ❑ No ❑ Not Applicable	

NONSTRUCTURAL RISKS	MITIGATION SOLUTION	ACCOMPLISHED	INSERT PHOTO OR RECEIPT
Mechanical Systems	Consulted a professional engineer and modified all relevant systems and connections to resist expected flood load.	❏ Yes ❏ No ❏ Not Applicable	
Fuel Tanks		❏ Yes ❏ No ❏ Not Applicable	
Electrical Systems		❏ Yes ❏ No ❏ Not Applicable	
Communications Equipment		❏ Yes ❏ No ❏ Not Applicable	
Sewer and Water Management Systems		❏ Yes ❏ No ❏ Not Applicable	
Potable Water Systems		❏ Yes ❏ No ❏ Not Applicable	

STRUCTURAL RISKS	MITIGATION SOLUTION	ACCOMPLISHED	INSERT PHOTO OR RECEIPT
Elevation	Consulted a professional engineer to evaluate elevation of the structure.	❑ Yes ❑ No ❑ Not Applicable	
Wet Floodproofing	Consulted a professional engineer to evaluate options for wet floodproofing the structure.	❑ Yes ❑ No ❑ Not Applicable	
Dry Floodproofing	Consulted a professional engineer to evaluate options for dry floodproofing the structure.	❑ Yes ❑ No ❑ Not Applicable	

SERVICE ACTION	SERVICE SOLUTION	INITIAL/DATE OF RESPONSIBLE PERSON
Contacted your Local Emergency Management Office	These activities are written into your Business Continuity Plan.	
Identified Ways to Engage and Participate in your Community	These activities are written into your Business Continuity Plan.	

Be Recognized and Inspire Others

4

Now that you have taken the steps to prepare and mitigate your organization to protect customers and employees, you can gain recognition for your accomplishment by completing the application and submit with the checklists completed from *Take Action* to be recognized as a Ready Business Community Member.

You will receive a Ready Business Community Member recognition certificate, window cling, and web badge to let your customers and staff know that you are a Ready Business and your organization will be added to the list of program participants on the Ready Business website. You will also receive a sample news release that you may use to let your community know that you have taken action to prepare.

PLEASE COMPLETE:

Organization Name:

Owner/Manager:

Address:

Phone Number: Fax:

Email:

Organization Website URL:

READY BUSINESS DESIGNATION LEVEL (Please indicate each level you are applying for):	
☐ Ready Business - **STAFF**	Must complete steps one through six for STAFF recognition
☐ Ready Business - **SURROUNDINGS**	Must complete all applicable SURROUNDINGS mitigation activities for recognition
☐ Ready Business - **SPACE**	Must complete all applicable SPACE activities for recognition
☐ Ready Business - **SYSTEMS**	Must complete all applicable SYSTEMS activities for recognition
☐ Ready Business - **STRUCTURE**	Must complete one of the applicable STRUCTURE activities for recognition
☐ Ready Business - **SERVICE**	Must complete all applicable SERVICE activities and STAFF, SURROUNDINGS, SPACE, SYSTEMS, and STRUCTURE for recognition

Please include with your application the preparedness actions and mitigation checklists completed from *Step Three: Take Action*.

Feedback

Tell us about yourself and your organization

1. TYPE OF ORGANIZATION?

- ☐ Retail
- ☐ Professional Office
- ☐ Restaurant
- ☐ Service Provider
- ☐ Nonprofit
- ☐ Industrial
- ☐ Daycare Center/School
- ☐ Other, please list

2. HOW MANY PEOPLE DO YOU EMPLOY?

- ☐ 1 - 9
- ☐ 10 - 24
- ☐ 25 - 49
- ☐ 50 - 99
- ☐ 100 - 249
- ☐ 250 - 499
- ☐ 500 or more

3. HOW DID YOU HEAR ABOUT THE *READY BUSINESS PROGRAM*?

- ☐ Local Fire Department
- ☐ From another organization
- ☐ Online
- ☐ FEMA
- ☐ State or local emergency management office
- ☐ Other, please list

4. PLEASE PROVIDE ANY SUGGESTIONS FOR THE *READY BUSINESS PROGRAM*:

_____

_____

_____

_____

_____

Thank you for your participation in the *Ready Business Program*. You will receive a response to your application within two to four weeks. For more information or if you have questions about the program or application, contact FLASH at (877) 221-7233 or email ReadyBusiness@flash.org. Once you have completed the application(s), please scan and email to ReadyBusiness@flash.org.

For business continuity and preparedness questions, please contact FEMA at FEMA-Private-Sector@fema.dhs.gov.

Signature   Print Name   Date

www

Valuable Websites

Prepareathon

https://www.ready.gov/prepare

Federal Alliance for Safe Homes (FLASH)

http://www.flash.org

Ready Floods

https://www.ready.gov/floods

Ready Business

http://www.ready.gov/business

B	
Base Flood	Flood that has a one percent probability of being equaled or exceeded in any year.
Base Flood Elevations (BFE)	The computed elevation to which floodwater is anticipated to rise during the base flood. BFEs are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles. The BFE is the regulatory requirement for the elevation or floodproofing of structures. The relationship between the BFE and a structure's elevation determines the flood insurance premium.
C	
Check Valve	Valve that allows water to flow in one direction, but automatically closes when the direction of flow is reversed.
Coastal Flooding	Flooding which occurs when water is driven onto land from an adjacent body of water. This generally occurs when there are significant storms, such as tropical and extratropical cyclones.
D	
Debris	Materials carried by floodwaters, including objects of various size and suspended soils.
Design Flood Elevation (DFE)	Elevation of the highest flood, including freeboard, that a retrofitting method is intended to protect against.
Dry Floodproofing	A combination of measures that results in a structure, including the attendant utilities and equipment, being watertight with all the elements substantially impermeable to the entrance of floodwater and with structural components having the capacity to resist flood loads.
E	
Elevation	In retrofitting, the process of raising a home or other building so that it is above the height of a given flood.
F	
Flash Flood	A flood that rises and falls very quickly, usually characterized by high flow velocities.

Flood	Under the NFIP, "a general and temporary condition of partial or complete inundation of normally dry land areas" from 1) the overland flow of a lake, river, stream, ditch, etc.; 2) the unusual and rapid accumulation of runoff of surface waters; and 3) mudflows or the sudden collapse of shoreline land.
F	
Floodproofing	Structural or nonstructural changes or adjustments included in the design, construction, or alteration of a building that reduce damage to the building and its contents from flooding and erosion.
Floodwall	Flood barrier constructed of man-made materials, such as concrete or masonry.
Freeboard	Additional amount of height included in the DFE to provide a factor of safety.
H	
Hydrostatic Pressure	Force exerted on the walls and uplift (buoyancy) on floors by the floodwaters.
I	
Inland Flooding	Any type of flooding that occurs that is not considered coastal flooding. For example flash floods, riverine floods, aerial flooding, etc.
L	
Levee	Flood barrier constructed of compacted soil.
Lowest Floor	Floor of the lowest enclosed area within the building, including the basement. The only exception is an enclosed area below an elevated building, but only when the enclosed area is used solely for parking, building access, or storage and is compliant with relevant regulations.
R	
Retrofitting	Making changes to an existing home or other building to protect it from flooding or other hazards such as high winds and earthquakes.
S	
Service Equipment	The utility systems, heating and cooling systems, and large appliances in a retrofitted home.
W	
Wet Floodproofing	The use of flood-damage-resistant materials and construction techniques to minimize flood damage to areas below the flood protection level of a structure, which is intentionally allowed to flood.

The following is a list of websites and content referenced in this document.

Page #	Title of Document	Link
3	FEMA. *Business Continuity Plan.* Ready Business	www.fema.gov/media-library/assets/documents/89510
4	Ready Business email	readybusiness@flash.org
14	FloodSmart	www.floodsmart.gov
19	National Voluntary Organizations Active in Disaster	www.nvoad.org/how-to-help/volunteering
20	FEMA. *Business Continuity Plan.* Ready Business	www.fema.gov/media-library/assets/documents/89510
20	*DRB Toolkit*	www.drbtoolkit.org
20	FEMA. *Business Continuity Plan.* Ready Business	www.fema.gov/media-library/assets/documents/89510
20	Small Business Administration. *Crisis Communication.*	www.agilityrecovery.com/assets/SBA/crisiscomms.pdf
21	FEMA. *How to Prepare For A Flood.* Prepareathon	www.fema.gov/media-library/assets/documents/98102
21	FEMA. *Prepare Your Organization For A Flood Playbook.* Prepareathon	www.fema.gov/media-library/assets/documents/98407
21	*Turn Around, Don't Drown!*	tadd.weather.gov/
22	FEMA. *Prepare Your Organization For A Flood Playbook.* Prepareathon	www.fema.gov/media-library/assets/documents/98407
22	FEMA. *Prepare Your Organization For A Flood Playbook.* Prepareathon	www.fema.gov/media-library/assets/documents/98407
23	FEMA. Insurance Coverage Discussion Form.	www.fema.gov/media-library/assets/documents/89528
23	FEMA. *Emergency Supply List*	www.fema.gov/media-library/assets/documents/90354
23	NOAA. *Weather Radio All Hazards*	www.nws.noaa.gov/nwr/
23	*Be Smart. Take Part. Know Your Alerts and Warnings.*	www.community.fema.gov/action/access-alerts-and-warnings
24	FEMA. *Prepare Your Organization For A Flood Playbook.* Prepareathon	www.fema.gov/media-library/assets/documents/98407
24	FEMA. *How to Prepare For A Flood.* Prepareathon	www.fema.gov/media-library/assets/documents/98102
25	FEMA P-936, *Floodproofing Non-Residential Buildings.*	www.fema.gov/media-library/assets/documents/34270
25	FEMA P-259, *Engineering Principals and Practices of Retrofitting Floodprone Residential Structures,* Third Edition (2012)	www.fema.gov/media-library/assets/documents/3001
26	FEMA P-936, *Floodproofing Non-Residential Buildings.*	www.fema.gov/media-library/assets/documents/34270
26	FEMA. *Emergency Response Plan.* Ready Business.	www.ready.gov/business/implementation/emergency
27	FEMA P-259, *Engineering Principals and Practices of Retrofitting Floodprone Residential Structures,* Third Edition (2012)	www.fema.gov/media-library/assets/documents/3001

The following is a list of websites and content referenced in this document (continued).

Page #	Title of Document	Link
27	FEMA P-936, *Floodproofing Non-Residential Buildings.*	www.fema.gov/media-library/assets/documents/34270
28	FEMA P-550, *Recommended Residential Construction for Coastal Areas: Building on Strong and Safe Foundations* (2009)	www.fema.gov/es/media-library/assets/documents/3972
28	FEMA P-312, *Homeowner's Guide to Retrofitting,* Third Edition (2014)	www.fema.gov/media-library/assets/documents/480
28	FEMA P-936, *Floodproofing Non-Residential Buildings.*	www.fema.gov/media-library/assets/documents/34270
28	FEMA P-259, *Engineering Principals and Practices of Retrofitting Floodprone Residential Structures,* Third Edition (2012)	www.fema.gov/media-library/assets/documents/3001
29	FEMA P-936, *Floodproofing Non-Residential Buildings*	www.fema.gov/media-library/assets/documents/34270
29	FEMA P-259, *Engineering Principals and Practices of Retrofitting Floodprone Residential Structures,* Third Edition (2012)	www.fema.gov/media-library/assets/documents/3001
30	FEMA. *Emergency Management Agencies*	www.fema.gov/emergency-management-agencies
30	FEMA. *Prepare Your Organization For A Flood Playbook.* Prepareathon	www.fema.gov/media-library/assets/documents/98407
39	Ready Business email	readybusiness@flash.org
39	FEMA Private Sector Division email	FEMA-Private-Sector@fema.dhs.gov