Notice to Readers

Post-Disaster Toolkit for Floodplain Administrators

TO: Florida Floodplain Administrators and Support Staff
FROM: State Floodplain Management Office
DATE: April 10, 2018

Hurricanes Hermine, Matthew and Irma affected most of Florida producing extreme flooding, coastal erosion and wind damage, which caused water damage to buildings, extensive debris fields and fallen trees. State Floodplain Management Office staff and Natural Hazard Mitigation staff from FEMA Region IV deployed to assist community Floodplain Administrators with meeting their post-disaster responsibilities related to documenting flood damage.

It's been many years since Florida experienced the level of flood damage caused by the comparatively low intensity hurricanes that impacted the State in the past two years. The large areas impacted and extensive amount of flood damage, along with low staffing levels in some communities, presents challenges. Many floodplain management staff do not have experience with their post-disaster responsibilities. Some Floodplain Administrators lacked clear direction on how and when to engage other local staff and volunteers to assist in performing critically important floodplain management functions.

This Toolkit is a reference for Floodplain Administrators, Building Officials, and Emergency Managers and others to prepare for and respond to flooding, whether frequent or rare events. Embedded in the pages that follow are links to additional sources of information that provide more in-depth material. The Toolkit content derives from needs expressed by local officials in affected areas during interviews conducted by Ms. Ayesha Wilkinson and Mr. Ryan Anshell who volunteered as interns from Florida State University during the Spring of 2017. We are indebted for their assistance.

We ask readers to consider additional materials that may help make the Toolkit more complete and useful without extending it beyond practical application as a quick and easy reference. We look forward to receiving suggestions and hearing about your experience using the Toolkit. Please contact us at 850.815.4556 or floods@em.myflorida.com.

SFMO

Download a copy of the Toolkit at:
https://www.floridadisaster.org/dem/mitigation/floodplain/community-resources/

CONTRIBUTORS.
Planning and organization of the Toolkit was started by Ayesha Wilkinson and Ryan Anshell, interns from the Florida State University. Attendees at the 2017 conference of the Florida Floodplain Managers Association contributed valuable insight and comments. Final Toolkit prepared by Steve Martin, State Floodplain Manager and FDEM Floodplain Management Specialists Shannon Riess, Mike DeRuntz, and Jay Anderson. Graphic and technical support provided by FCMC, LLC and RCQuinn Consulting.

PHOTO CREDITS:
Notice to Readers

Post-Disaster Toolkit for Floodplain Administrators

TO: Florida Floodplain Administrators and Emergency Managers

FROM: State Floodplain Management Office

DATE: September 9, 2019

Over the past few years, Hurricanes Hermine, Matthew, Irma and Michael affected most of Florida producing extreme flooding and coastal erosion. These storms caused flood damage to buildings, extensive debris fields and fallen trees. State Floodplain Management Office staff and FEMA Natural Hazard Mitigation staff deployed to assist community Floodplain Administrators with meeting their post-disaster responsibilities related to documenting flood damage and making structures compliant with Building Codes.

The extensive areas impacted and amount of flood damage, along with low staffing levels in some communities, presents challenges. Many floodplain management staff have no experience with their post-disaster responsibilities. Some Floodplain Administrators lacked clear direction on how and when to engage other local staff and volunteers to assist in performing critically important floodplain management functions.

This Toolkit serves as a guide for Floodplain Administrators, Building Officials, and Emergency Managers and others to prepare for and respond to flood damage, whether frequent or rare events. Embedded in the pages that follow are links to additional sources of information that provide more in-depth material. The Toolkit content derives from needs expressed by local officials in affected areas during interviews conducted by Ms. Ayesha Wilkinson and Mr. Ryan Anshell who volunteered as interns from Florida State University during the Spring of 2017. We are indebted for their assistance.

We ask readers to consider additional materials that may help make the Toolkit more complete and useful without extending it beyond practical application as a quick and easy reference. We look forward to receiving suggestions and hearing about your experience using the Toolkit. Please contact us at 850.815.4556 or floods@em.myflorida.com to provide suggestions or to request technical assistance or guidance not covered in the Toolkit.

SFMO
When hurricanes, floods, and other disasters strike, the post-disaster period may be challenging for Floodplain Administrators, Building Officials, homeowners, business owners, city and county elected officials, and others. The guidance in the Toolkit helps Floodplain Administrators and Building Officials meet their post-disaster responsibilities by preparing before the next event occurs. Proactive communities will be better able to more effectively address immediate community needs and program responsibilities when less than ideal conditions occur.
ACTION 1. Plan ahead to communicate
Identifies elements for a communications plan. Encourages working with other community officials, public information officers and Emergency Managers to fill in the details.

ACTION 2. Assess post-disaster needs and request assistance
Provides an overview of the State Mutual Aid Agreement and Emergency Management Assistance Compact so community officials will know how to request assistance from within and outside the State.

ACTION 3. Document high water marks
Describes how to collect and document high water marks and post data in real time on FDEM’s GIS website.

ACTION 4. Make substantial damage determinations
Explains conducting SI/SD determinations and using FEMA’s Substantial Damage Estimator (SDE). The SDE is a powerful tool that is effective when collecting data on damaged buildings to make substantial damage determinations.

ACTION 5. Understand NFIP claims and Increased Cost of Compliance
Describes how property owners who have NFIP flood insurance policies on buildings substantially damaged by flooding may qualify for Increased Cost of Compliance claim payments to help bring buildings into compliance. Links to FEMA’s brochures and FAQs.

ACTION 6. Identify post-disaster and mitigation funding assistance
Provides an overview of post-disaster and mitigation funding programs and other sources of funding. Refers to the Local Mitigation Strategy plans for details on local project priorities.

RESOURCES
Internet links for all resources identified for each action are listed in this section.

APPENDICES
A. Sample SI/SD Worksheet (from FEMA P-758)
B. Residential SDE Damage Inspection Worksheet (from FEMA P-784)
C. Additional Sources of Recovery and Mitigation Funding
ACTION 1 PLAN AHEAD TO COMMUNICATE

Local, State and FEMA teams visit neighborhoods to understand and assess the amount of damage by reaching out to affected property owners. This builds working relationships with impacted citizens that will help Floodplain Administrators and Building Officials conduct inspections to document damage and then make substantial damage determinations.
Elected officials and community managers should understand the need for accessing and inspecting properties that have been identified as “destroyed” or having “major damage” to document whether the buildings were substantially damaged. Explain what “Substantial Damage” means and the requirements for substantially damaged structures to be brought into compliance. Use Florida Floodplain Management Quick Guide, BASF Fact Sheet and FEMA guidance documents.

Property owners in flood zones must be advised of the need to inspect damaged buildings (sample letter follows). Communities must make preliminary substantial damage determinations using the Substantial Damage Estimator program or a similar structured approach to assess and record damage.

Property owners must be reminded that permits are required to make repairs, especially following determinations of substantial damage.

**Note: Communities may elect to waive permit fees, but must not waive requirements to obtain permits and comply with the Florida Building Code.**

Property owners must be informed when a preliminary determination of substantial damage is made and what it means to bring substantially damaged buildings into compliance with the requirements in local flood damage prevention ordinances and the Florida Building Code. Templates for letters and notices to property owners follow.

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**KEY MESSAGES:**

1. Elected officials and community managers should understand the need for accessing and inspecting properties that have been identified as “destroyed” or having “major damage” to document whether the buildings were substantially damaged. Explain what “Substantial Damage” means and the requirements for substantially damaged structures to be brought into compliance. Use Florida Floodplain Management Quick Guide, BASF Fact Sheet and FEMA guidance documents.

2. Property owners in flood zones must be advised of the need to inspect damaged buildings (sample letter follows). Communities must make preliminary substantial damage determinations using the Substantial Damage Estimator program or a similar structured approach to assess and record damage.

3. Property owners must be reminded that permits are required to make repairs, especially following determinations of substantial damage.

**Note: Communities may elect to waive permit fees, but must not waive requirements to obtain permits and comply with the Florida Building Code.**

4. Property owners must be informed when a preliminary determination of substantial damage is made and what it means to bring substantially damaged buildings into compliance with the requirements in local flood damage prevention ordinances and the Florida Building Code. Templates for letters and notices to property owners follow.
Hurricanes and other storms that result in flooding have caused billions of dollars in damage across all parts of Florida. Local jurisdictions throughout the state recognize, plan for and manage development in flood hazard areas. To participate in the National Flood Insurance Program (NFIP), communities agree to regulate all development in flood hazard areas mapped by the Federal Emergency Management Agency (FEMA).

Once an owner or developer makes a decision to construct, add to or substantially improve a building in a flood hazard area, certain requirements intended to minimize future flood damage must be satisfied. Flood provisions for buildings are in the Florida Building Code (FBC), making it easier for design professionals and builders to address the requirements along with other applicable load and design requirements.

The flood provisions of the FBC achieve two broad objectives:

1. As with the rest of the code, the flood provisions help fulfill the purpose of safeguarding public health, safety, and general welfare. Many Florida communities and property owners can attest that designing and constructing buildings to account for flood loads and conditions significantly reduce damage. FEMA reports that structures built to NFIP criteria experience 80% less damage through reduced frequency and severity of losses. Buildings that sustain less damage are more quickly reoccupied, facilitating recovery.

2. The flood provisions fulfill some of the requirements necessary for communities that participate in the NFIP. FEMA states the flood provisions of the International Code Series, which is the foundation of the FBC, meet or exceed the NFIP requirements for buildings and structures. However, NFIP communities are responsible for regulating all development, including activities that are not within the scope of the codes. This is accomplished by the adoption of local floodplain management regulations (see graphic). Relying on the model ordinance developed by the Florida Division of Emergency Management (DEM) and approved by FEMA, nearly all Florida communities have adopted local regulations explicitly written to rely on the FBC to satisfy the NFIP requirements for buildings (see last page). A floodprotection factor of the FBC achieves two broad objectives:

- Financial benefits: Floodplain management and buildings codes in Florida:
  - Excerpts of the flood provisions of the FBC
  - Florida Floodplain Management Quick Guide
  - Building A Safer Florida: Flood Resistant Construction and the 6th Edition FBC

https://www.floridadisaster.org/dem/mitigation/floodplain/community-resources/

- Answers to Questions About the NFIP: https://www.fema.gov/media-library/assets/documents/272
- Flood Insurance 101: Talking Points for Community Officials: https://www.fema.gov/media-library/assets/documents/11337

https://www.floridadisaster.org/contentassets/5a671dfdafdf45ab9a2c61635e2a4fed/quick-guide-for-floodplain-management.pdf
# Property Owner Responsibilities

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<tr>
<td>1</td>
<td>When buildings appear to have structural damage, obtain safety inspections by Building Officials or Code Enforcement Officers before going into damaged structures. The safety inspection is not equivalent to a preliminary substantial damage determination.</td>
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<tr>
<td>2</td>
<td>Take photographs of all building damage and damaged contents.</td>
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<tr>
<td>3</td>
<td>If buildings are covered by NFIP flood insurance policies, contact insurance companies. Insurance companies will assign adjusters to inspect and prepare claim documentation. Owners must submit “Proof of Loss” information within 60 days of the flood event.</td>
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<tr>
<td>4</td>
<td>Seek emergency assistance by registering in person at Disaster Recovery Centers or filing damage information on FEMA’s website (<a href="http://www.DisasterAssistance.gov">www.DisasterAssistance.gov</a>). Emergency assistance may also be available for tenants.</td>
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<tr>
<td>5</td>
<td>Apply for permits and provide documentation of damage and cost estimates to repair buildings to pre-damage condition. Detailed costs for repairs should be prepared and signed by contractors licensed in Florida.</td>
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<tr>
<td>6</td>
<td>Work closely with local officials and contractors to ensure permits are obtained before starting repairs.</td>
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<tr>
<td>7</td>
<td>Meet with local officials to determine requirements for bringing substantially damaged buildings into compliance with flood damage prevention ordinances and the FBC. This may involve elevating buildings on higher, compliant foundations.</td>
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<tr>
<td>8</td>
<td>Obtain and submit Elevation Certificates to document lowest floor elevations and other building characteristics, as required by the FBC.</td>
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RESOURCES:


- Temporary Occupancy of Substantially Damaged Structures after a Disaster (FEMA Fact Sheet): https://www.fema.gov/media-library/assets/documents/126997


- See resources listed for Action 5 Understand NFIP Claims and Increased Cost of Compliance.

TEMPLATES:

- Sample Letter for Damage Inspections

- Sample Letter to Send Damage Estimate (see Action 4)

- Substantial Improvement/Substantial Damage Notice to Property Owners (see Action 4)
Dear Property Owner or Persons Residing at this Address,

The {city/town/county} is requesting your cooperation to assist us with expediting recovery of our community from the impacts of {insert name of event}. As you should be aware, properties in flood zones designated on our flood maps that were damaged by wind, water, fallen trees or other factors must be inspected before we can issue building permits for repair, reconstruction, or other improvements. In accordance with the Florida Building Code and our flood damage prevention regulations, we must determine whether the damage meets the definition of “substantial damage.”

The process we’ve developed to achieve efficient, orderly and responsive permit review, begins with damage inspections. Therefore, we ask that you allow our staff, or staff of other agencies such as State, FEMA, or private contractors working on our behalf, to access and inspect your damaged building. These authorized staff carry a “right of entry” document and their agency identification and must show them to you before you let them access your property.

The preliminary damage inspections are limited to evaluating the extent of damage to foundations, roofs, windows and doors, siding, installed appliances, electrical and plumbing, heating and air conditioning, and walls and floors. Inspections are required to assess the condition of the building and determine the work required to repair the building to its pre-damage condition. The period of inspections is limited to daylight hours only between {insert anticipated period of inspections}. Once we have inspected your property and the results recorded in our database, we will send you a letter with the results and explain any requirements that may apply.

We greatly appreciate your willingness to allow our community inspectors to assess the condition of your property which will help you and the community move forward as quickly as possible with the permitting and repair of your building.

If you have any questions about this process or the inspectors, please contact us immediately by calling {insert local contact}.

Thank you for your cooperation and support to help our community to recover from {insert name of event}.

Sincerely,

City Manager/County Administrator
Floodplain Administrators must plan ahead to be prepared to assess staffing needs in the post-disaster period, especially after flood events. Knowing in advance how to access support through Florida’s State Mutual Aid Agreement may help communities more successfully respond to disasters. The State Mutual Aid Agreement mechanism provides resources when the amount of work and stress far exceed the capacity of non-disaster staffing levels.
Floodplain Administrators face a variety of needs and demands that may be nearly unmanageable in the post-disaster period, especially when large numbers of buildings are damaged by flooding. As part of the Local Mitigation Strategy planning process, communities estimate the number and types of buildings located in flood zones. This a good starting point for assessing likely needs when significant flooding occurs. Planning before events helps determine whether to request assistance through the Statewide Mutual Aid Agreement after events. Assistance may be provided by local governments and other assisting parties through FDEM’s Memoranda of Understanding with the Florida Floodplain Managers Association (FFMA) or the Building Officials Association of Florida (BOAF). These important agreements were reviewed by BOAF and adopted by FFMA following Hurricane Irma’s landfall in late 2017.

Prior to flood events, Floodplain Administrators and Building Officials should answer these questions and think about how best to fulfill their responsibilities and if they will need assistance:

1. How many buildings are likely to be damaged if floodwater rises up to or above the base flood elevation shown on the FIRMs? The buildings most likely to sustain damage are those built before communities joined the National Flood Insurance Program, and many of these structures may be on lists of buildings that have been flooded more than once (called “repetitive loss structures”) available from FEMA.

2. Faced with managing recovery from a major disaster, does the building department have the capacity to do initial identification of damaged buildings and conduct safety inspections within a few weeks? Remember, these safety inspections are not equivalent to substantial damage determinations.

3. Does the building department, perhaps supported by other offices, have the capacity to do more detailed inspections to collect data on damaged buildings in flood zones within a few weeks or a couple of months, make preliminary estimates of whether buildings are substantially damaged, and send notices to property owners (see Action 1)?

4. Is there sufficient staff available to answer questions from property owners and the public about repairing and rebuilding in compliance with the Florida Building Code and local floodplain management regulations?

When the President declares major disasters, assistance may be available from the State, FEMA, and other Federal agencies. FEMA can deploy training for the Substantial Damage Estimator when many buildings are damaged (see Action 4).
REQUEST ASSISTANCE

The Florida Division of Emergency Management manages the Statewide Mutual Aid Agreement (SMAA) signed by all 67 counties (sec. 252.401(1), Florida Statutes). SMAA is an interagency agreement developed to enable communities statewide (typically those outside of impacted areas) to provide resources that will aid the recovery of other communities adversely affected by storms and flooding. Mutual aid agreements and memoranda of understanding are essential components of emergency management planning, response and recovery operations. These agreements provide a vehicle for reciprocal emergency aid and assistance during and following emergencies and disasters, increasing available resources and improve response and recovery efforts.

The SMAA enables communities to submit written requests for mutual aid directly to another community or through the FDEM. Regardless how the request is submitted, it must be made through and coordinated with the county emergency management agency. When a request is initially submitted, the assisting party assumes the up-front costs, and the requesting party is responsible for reimbursing those costs. Submitting through FDEM allows FDEM to request reimbursement by FEMA when events are declared major disasters by the President.


Working with county emergency management agencies, communities use a specific form (on the next page) and spreadsheet to identify types of assistance and estimate costs. Types of assistance can range from staff support to equipment and materials (but not commodities). Following the formal process and using specific SMAA forms is important, otherwise assisting parties may lose the opportunity for Federal disaster reimbursement or may lack proper documentation for reimbursement by the requesting party. Please see page 12 for more information about how communities may be reimbursed after receiving additional staff support for conducting Substantial Damage assessments.

Ask your community’s Emergency Manager to help you review the SMAA to understand how you can use it to request and provide assistance.
### STATEWIDE MUTUAL AID AGREEMENT

**Type or print all information except signatures**

**Form B**

## PART I

**TO BE COMPLETED BY THE REQUESTING PARTY**

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<th>Time:</th>
<th>HRS</th>
<th>Mission No:</th>
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<th>Point of Contact:</th>
<th>Telephone No:</th>
<th>E-mail address:</th>
<th>Assisting Party:</th>
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<th>Requesting Party:</th>
<th>Incident Requiring Assistance:</th>
<th>Type of Assistance/Resources Needed (use Part IV for additional space)</th>
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<th>Location (address):</th>
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## PART II

**TO BE COMPLETED BY THE ASSISTING PARTY**

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<th>Logistics Required from Requesting Party</th>
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## PART III

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After years of work by the Association of State Floodplain Managers to obtain legal authority for FEMA to reimburse State and local governments for conducting the NFIP-required substantial damage assessments following major disasters, Congress granted that authority in October 2018. The provisions direct FEMA to repay State and local governments for the cost of these assessments similarly to reimbursements from Public Assistance funding to cover the cost of building inspectors that must make life-safety inspections following disasters.

Adopted as part of the Federal Aviation Administration Reauthorization Act of 2018, Division D is titled the “Disaster Recovery Reform Act of 2018” which includes in Section 1206 amendments to the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Embodied in 42 U.S. Code Section 5170a, General Federal Assistance, authorizes FEMA to:

(5) “provide assistance to State and local governments for building code and floodplain management ordinance administration and enforcement, including inspections for substantial damage compliance;”

In related important provisions supporting the assistance on inspections for substantial damage compliance amended, FEMA is authorized under 42 U.S. Code Section 5172(a)(2) to cover:

(c) “base and overtime wages for the, employees and extra hires of a State, local government,…plus fringe benefits on such wages to the extent that such benefits were being paid before the major disaster; and

(d) “base and overtime wages for extra hires to facilitate the implementation and enforcement of adopted building codes for a period of not more than 180 after the major disaster is declared.”

Since Congress passed the bill, and the President signed the law, FEMA has been working to develop guidance on how such activity may qualify for Public Assistance reimbursement. At the time of publication, FEMA has developed draft guidance, but has not yet issued the guidance for either public review, if required, or implementation. Communities that wish to ensure that future work conducted through the Statewide Mutual Aid Agreement or through other direct support will be reimbursable, should check with the State Floodplain Management Office or FEMA’s websites for copies of FEMA’s latest guidance.
After flooding occurs, identifying and recording High Water Marks is an important action for Floodplain Administrators. The maximum height of flooding at various locations should be captured because it is an important factor that helps assess the extent of damage. The data can be used when estimating repair costs and may be valuable if communities decide to seek mitigation grant funds (see Action 6).
Knowing the depth of flooding in neighborhoods by documenting high water marks helps community officials identify the most severely impacted areas. This is important for many reasons. Emergency Managers can benefit from knowing or recording the depth of flooding when Preliminary Damage Assessments are conducted to estimate damage for the purpose of requesting disaster declarations. High water marks may identify changes in flood patterns as communities develop or redevelop, which is noteworthy especially for risk discovery meetings held during the flood map revision process. Having high water marks may help Floodplain Administrators and Building Officials when they conduct initial substantial damage determinations (see Action 4).

Collect Field Data

High water marks should be collected soon after floodwater recedes since subsequent rainfall or property owner cleanup can obscure or erase evidence of water levels. If Water Management Districts collect high water marks, Floodplain Administrators can save time and effort by coordinating with the districts to determine if community-collected data in areas where districts are not focused is needed to provide a more complete picture of the extent and severity of flooding.

If Floodplain Administrators are unable to capture high water marks, another source for mark data may be the U.S. Geological Survey (USGS). The USGS manages a network of more than 8,000 real-time stations throughout the U.S. After many flood events, the agency collects additional data to document high water. The USGS Flood Event Viewer (FEV) provides convenient, map-based real time access to storm-surge and other flooding data (sidebar).

Having documented high water marks is useful for administering floodplain management requirements. When property owners indicate buildings were affected by only a few inches of floodwater but nearby high water marks indicate flooding may have been more severe, the high water mark data can supplement descriptions of damage and cost estimates to improve damage assessments and substantial damage determinations.

**MAP LAYERS**

<table>
<thead>
<tr>
<th>Real-Time Data</th>
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<tr>
<td>▲ Real-time Stream Gage</td>
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<td>▲ Rapid Deployment Gage</td>
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<tr>
<th>Observed Data</th>
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<tr>
<td>◈ Barometric Pressure Sensor</td>
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<td>◈ Storm Tide Sensor</td>
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<tr>
<td>◈ Meteorological Sensor</td>
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<td>◈ Wave Height Sensor</td>
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<td>◈ High Water Mark</td>
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<th>Interpreted Data</th>
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<tr>
<td>◈ Peak Summary</td>
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GENERAL PROCEDURES FOR COLLECTING HIGH WATER MARKS

The general procedures for collecting high water marks are simple, but must be followed using careful observations to record pertinent information. Step-by-step procedures include:

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<td><strong>1</strong></td>
<td><strong>TARGET</strong></td>
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<td>Target locations of reported or observed significant flooding. Look for stain and mud lines on buildings and other features, such as signs, utility poles, trees, and other objects. Look for debris lines and objects on or caught in vegetation. Where building exteriors have been cleaned, look inside closets, cabinets or utility sheds.</td>
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<td><strong>2</strong></td>
<td><strong>LOCATE</strong></td>
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<td>Identify locations by building address and/or GPS coordinates.</td>
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<tr>
<td><strong>3</strong></td>
<td><strong>MEASURE</strong></td>
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<td>If possible, place a permanent mark or a nail to identify high water marks on buildings, signs, utility poles, trees, or other objects. Measure and record the height of the mark above grade. Record the location with a GPS device.</td>
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<td><strong>4</strong></td>
<td><strong>PHOTOGRAPH</strong></td>
</tr>
<tr>
<td>Take a photograph of the building or location and a close-up view that shows both water mark and adjacent grade. Photograph location identifiers (building address or mailbox with the building in the background). Take multiple photographs to document flood impacts in the vicinity.</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><strong>RECORD</strong></td>
</tr>
</tbody>
</table>
| Record the data:  
• Location/address  
• Date of data collection  
• Identification number  
• Measurement notes  
• GPS coordinates  
• Person who collected the data  
• Description of photos  
• Temporary Mark Description |
| **6** | **UPLOAD** |
| Upload data using Florida’s High Water Mark Mobile Reporting System (next page). |

Use the USGS Flood Event Viewer to access data for previous hurricane and flood events, online at [http://stn.wim.usgs.gov/FEV](http://stn.wim.usgs.gov/FEV)
SILVER JACKETS HIGH WATER MARK MOBILE REPORTING SYSTEM

During the past several years Florida’s Silver Jackets, a State-Federal partnership initiated by the U.S. Army Corps of Engineers, undertook a project to inform and enable government officials and citizens on how to capture high water marks using Florida’s High Water Marks Mobile Reporting System. The System enables photographic images and alpha-numeric data to be uploaded in real time to a web-based GIS database housed at the Florida DEM. This allows Emergency Managers, Floodplain Administrators, insurance agents and adjusters, and mappers to quickly access high water marks anywhere in Florida where data are collected.

COLLECT HIGH WATER MARKS USING THE FLORIDA HWM MOBILE REPORTING SYSTEM

To get started, visit the appropriate app store to download Collector for GIS:

![Apple App Store](https://itunes.apple.com/us/app/arcgis/id589674237)


![Microsoft Store](https://www.microsoft.com/en-us/store/apps/collector-for-arcgis/9wzdncrdg7lk)

The FDEM GIS Team has created a web map and instructions for recording High Water Marks within FDEM’s ArcGIS Online organization. The High Water Mark Strike Team uses Collector for ArcGIS to report and collect high water marks. Using Collector for ArcGIS on a mobile device or windows based computer, an individual can collect a high water mark location in the field, assign attributes of information, and take pictures linked to that location. There is also a disconnected version of the HWM web map that allows for field collections where there is no cellular or internet connectivity. Using this method enables users to upload High Water Marks data once your device has a connection to the web. Please note that all collections made in Collector for ArcGIS are available for public visibility within the FDEM HWM web application (see below).

The HWM system requires users to log in with a username and password to access the HWM Strike Team Group hosted on the FDEM ArcGIS Online organization account. There are standard operating guides available within the Group for instructions on how to access and use Collector for ArcGIS to make high water mark collections. To obtain your credentials to access the HWM Strike Team Group, contact FDEM GIS at:

EOC-GIS@em.myflorida.com, or FDEM’s GIS Administrator at (850) 815-4730.

Once you have received your credentials from the FDEM GIS Team, the HWM Strike Team Group site is available at:

https://floridadisaster.maps.arcgis.com/home/group.html?id=9ef2bfde1ef-74882a72aa416d1eb07ed#overview
Once in Collector for ArcGIS, using the HWM web map, you can enter the below information on your high water marks collection:

1. **Description of location**
   a. Street address
   b. Intersection, bridge or boat ramp location
   c. Distance to visible landmark
2. **Describe water level related to a visible landmark**
3. **Record any data from river or stream gage**
4. **Describe location of temporary marks left on site**
5. **Measure from a fixed location that can be identified in the future**
6. **Identify and measure stain lines on a tree or structure and what forms the mark**
7. **Record the flood event name**
8. **Record name of collector (person recording the data)**
9. **Record email address of collector**
10. **Provide elevation, if obtainable, a numeric water surface value in feet and inches**
11. **Provide comments on how numeric water level values were obtained (i.e., survey equipment, reading from gage, measurement from known elevation).**

To zoom in on points in your area that are already loaded, visit the FDEM HWM web application at: https://maps.floridadisaster.org/hwm and click on a colored point.
Florida State law requires communities to enforce the Florida Building Code. Communities also enforce local floodplain management regulations. Floodplain Administrators and Building Officials must use diligence and care in the post-disaster period to identify damaged buildings and inform owners of the requirement to obtain permits to repair damage. When buildings in flood zones are damaged, a critical responsibility is to determine whether the damage is substantial damage. FEMA’s Substantial Damage Estimator tool is designed to collect data to help make those determinations.
When owners of buildings located in flood zones propose improvements or must repair damage, communities must determine whether proposed improvements and repairs constitute “substantial improvement” (SI) or repair of “substantial damage” (SD). Floodplain Administrators must coordinate with Building Officials when SI/SD determinations are made.

**DEFINITION: SUBSTANTIAL DAMAGE.**
Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**DEFINITION: SUBSTANTIAL IMPROVEMENT.**
Any repair, reconstruction, rehabilitation, alteration, addition or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the Building Official and that are the minimum necessary to assure safe living conditions.

2. Any alteration of a historic structure provided that the alteration will not preclude the structure’s continued designation as a historic structure.

When work is determined to be SI or SD, buildings must be made compliant with the floodplain management requirements for new construction. All elements of compliance apply, including elevation relative to the flood level, foundation type, utilities and equipment, and flood damage-resistant materials. For guidance, see FEMA P-758, Substantial Damage/Substantial Improvement Desk Reference (link in resources below).

**DEFINITION: MARKET VALUE.**
The price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used for floodplain management, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, Actual Cash Value (replacement cost depreciated for age and quality of construction), or tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.
MAKING SI/SD DETERMINATIONS

All but a few Florida communities enforce local floodplain management regulations explicitly written to coordinate with the flood resistant construction requirements of the Florida Building Code. Those communities have the following (or similar) in their regulations:

Substantial improvement and substantial damage determinations. For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

1. Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;

2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;

3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and

4. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the Florida Building Code and this ordinance is required.

Some communities adopt higher standards by modifying these definitions:

**Substantial Damage** – to include “repetitive” flood damage, triggering the definition when flood-related damage sustained on two separate occasions during a 10-year period for which the cost to repair after each flood, on average, equals or exceeds 25% of the market value of the building before the damage occurred.

**Substantial Improvement** – to accumulate costs of improvements over specified period of type, such as 1, 2, 5 or 10 years, or the life of the building.
SAMPLE SI/SD WORKSHEET

Using a standard SI/SD worksheet helps improve consistency. The sample shown here is from Appendix D of the SI/SD Desk Reference (link at the end of this section). A fill-in-the-blank worksheet works well for non-disaster periods or if only a few buildings are damaged. This form is included in the Toolkit Appendix.

NOTIFYING PROPERTY OWNERS

The results of SI/SD determinations must be given to property owners in an official letter. A template for a letter to send damage estimates and the SI/SD Notice to Property Owners is included in this section for reference. When buildings located in flood zones incur substantial damage, property owners with NFIP flood insurance may be eligible for Increased Cost of Compliance claims which provide up to $30,000 towards the cost of bringing buildings into compliance (see Action 5).

Because the determination letters notify owners of significant requirements, communities should send the letters in a manner that documents receipt by addressees. Three additional sample letters are in Appendix E of the SI/SD Desk Reference (link below) to:

1. Notify owners when proposed improvements are substantial improvements.
2. Notify owners when buildings have sustained substantial damage.
3. Notify owners that damage is not substantial damage.

Communities must advise property owners participating in the Sheltering and Temporary Essential Power (STEP) program, that their structures must be evaluated for Substantial Damage Determinations, prior to permits being issued for temporary and permanent repairs. Temporary repairs may not be included in calculations for substantial improvement.

After events that damage many buildings, you may want to prepare preliminary SI/SD Determinations by using tax assessment value as Market Value and by estimating Repair Costs by using building valuation tables or judgement. Unless the damage is clearly much more than, or much less than, market value, owners should submit actual cost estimates for final SI/SD Determinations.
**POST-FLOOD DATA FROM NFIP CLAIMS**

The SI/SD Desk Reference describes using estimates of repair costs from NFIP claims as a screening tool to help focus attention in the post-flood period (Sec. 7.4.1). For a number of reasons, insurance adjuster estimates are not sufficient for making substantial damage determinations (e.g., insurance policies exclude some damage). Only local officials are authorized to make substantial damage determinations.

Adjusters who handle NFIP claims are required to report to FEMA if a building “appears to have been substantially damaged” based on the information available to the adjuster, which are probable repair costs, building replacement cost value, and building actual cash value. The form used to make these reports is the Adjuster Preliminary Damage Assessments (APDAs). Note these reported values are not the same values that must used by Floodplain Administrators or Building Officials to make SD determinations. Regardless, the APDA data may help local officials focus efforts in areas where data suggests buildings have incurred substantial damage. These data may also help when property owners provide estimates of repair costs that are lower than the paid claim amount or estimates developed by the community.

Local officials may also request final insurance claim payment data that may be useful should property owners challenge SD determinations made by Floodplain Administrators or Building Officials, including when results from using FEMA’s Substantial Damage Estimator (SDE) are used.

**SUBSTANTIAL DAMAGE ESTIMATOR (FEMA P-784 CD)**

FEMA developed the Substantial Damage Estimator tool to assist State and local officials in determining potential substantial damage for residential and non-residential structures. The tool assesses flood, wind, wildfire, seismic and other forms of damage. It gives communities a basis and objective process to provide timely and more consistent substantial damage determinations. Data and photographs are saved for future reference.

The SDE User Manual and Workbook includes inspection worksheets for residential and non-residential structures (link below). The worksheet for residences (single-family, town or row house, and manufactured homes) is included in the Toolkit Appendix.
Substantial Damage Process Chart

**Preparation**
- Communicate floodplain requirements to local officials
- Before the water goes down
  - Disaster strikes
- Support response efforts in the EOC
- Use information from the EOC and your knowledge of the floodplain
- Decide which likely hotspots of damage to prioritize

**Data Gathering**
- Proactively go out and inspect each structure for damage, while also capturing high water marks
- Document market value and estimate cost of repairs needed
- Evaluate whether estimates indicate substantial damage
- Estimated repair costs are equal to or great than 50% of market value
- Presumed substantially damaged
  - Create a list of presumed SD structures
- Estimated repair costs are less than 50% of market value
- Presumed not substantially damaged
  - Create a list of presumed non-SD structures
- Send letters notifying property owners of next steps available to them

**Administration**
- Based on estimates sent to owners
  - If not SD
    - If SD (based on estimates) and owner does not submit data
      - Determine if structure conforms to current requirements
      - If conforming
        - Use estimates to make SD determination
        - Owner submits plans to bring building into compliance
        - Owner submits appeal; community processes*
      - If nonconforming
        - Consider owner data and make determination
        - If determination is SD
          - Issue permit for repairs
        - If determination is not SD
          - Owner disagrees with final determination
    - If SD (based on estimates) and owner submits data
      - Determine if structure conforms to current requirements
      - If conforming
        - Use estimates to make SD determination
        - Owner submits plans to bring building into compliance
        - Owner submits appeal; community processes*
      - If nonconforming
        - Consider owner data and make determination
        - If determination is SD
          - Issue permit for repairs
        - If determination is not SD
          - Owner disagrees with final determination

*Process chart does not show the steps taken to process appeals. Results could be to sustain or revise the Substantial Damage Determination.
TEMPLATES:

- Sample Letter to Send Damage Estimate
- Substantial Improvement/Substantial Damage Notice to Property Owners

RESOURCES:

For more complete information about making substantial improvement and substantial damage determinations, download the following:

- SI/SD Desk Reference (FEMA P-758):
  https://www.fema.gov/media-library-assets/documents/18562

- FEMA P-758 Appendix D: Sample Notices and Affidavits:

- FEMA P-758 Appendix E: Sample Letters of Determination:

  - Post Disaster Planning – Checklist 1
  - Field Preparation – Checklist 2
  - Damage Inspection Worksheet – Residential
  - Damage Inspection Worksheet – Non-Residential
  - Photo – Log
  - Recommended Guideline for Interaction with Structure Owner
INSTRUCTION: MODIFY THIS LETTER IF THE COMMUNITY ENFORCES CUMULATIVE SUBSTANTIAL IMPROVEMENT OR REPETITIVE FLOOD DAMAGE REQUIREMENTS.

SAMPLE LETTER TO SEND DAMAGE ESTIMATE

[Community Letterhead]

TO: Property Owner Name
Property Owner Address
SUBJECT: Building Damage Estimate

Dear (Sir/Madam/Name),

On {date} your {home/business/building} located at {address/legal description} was damaged by {flood/fire/tornado/other}. Your property is located in flood zone {A, AE, A1-30, AH, AO, VE, V1-30}. When a property in a special flood hazard area is damaged by any cause, we must determine whether the amount of damage meets the National Flood Insurance Program (NFIP) definition of “substantial damage.” The preliminary determination for your property is {number} percent. This number is determined by comparing the estimated cost to repair the building to its pre-damage condition to the estimated market value of the building before the damage occurred.

Prior to beginning repairs, please contact the Building Department for a building permit. A permit is required. Failure to obtain a required permit is a violation. We regret your loss and the damage you have experienced. We will try to make the permitting process as easy as we can for you.

INSTRUCTIONS: SKIP THE NEXT PARAGRAPH IF COMPUTED PERCENTAGE IS LESS THAN 50%. IF THE PERCENTAGE IS EQUAL TO OR GREATER THAN 50%, INCLUDE SELECT THE APPROPRIATE PARAGRAPH. ATTACH WORK SHEET TO SHOW HOW THE PRELIMINARY SUBSTANTIAL DAMAGE DETERMINATION WAS MADE. THIS DOCUMENTATION IS NECESSARY FOR THE OWNERS WITH NFIP FLOOD INSURANCE POLICIES TO CLAIM INCREASED COST OF COMPLIANCE (UP TO $30,000 TO HELP PAY FOR COMPLIANCE) WHEN THE ADJUSTER FINDS THE BUILDING WAS SUBSTANTIALLY DAMAGED BY FLOODING.

Because the estimated cost to repair your damaged building to its pre-damage condition equals or exceeds 50% of its estimated market value, it appears the building was substantially damaged. Substantially damaged buildings are required to be brought into full compliance with flood resistant construction requirements of the Florida Building Code. In addition to other requirements that reduce exposure to future flooding, residential buildings must be elevated at least one foot {or more if local freeboard exceeds FBC} above the base flood elevation. Non-residential buildings must be elevated or dry flood proofed to at least one foot {or more if local freeboard exceeds FBC} above the base flood elevation. Call this office at {phone number} by {deadline date} to schedule a consultation to discuss your options for bringing the building into compliance.

If you disagree with the preliminary estimates of projected costs or market value, you may submit additional information, including a contractor’s detailed cost of repairs or documentation of the actual cash value (replacement cost less depreciation) or a professional property appraisal prepared by a licensed appraiser. We are sure you want to repair your property as soon as possible. It will speed up the process if you contact this office as soon as possible.
The {community name} participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can jeopardize our participation in the program which could result in losing eligibility for flood insurance, disaster assistance and federally-backed loans and grants for our citizens. Thank you in advance for your cooperation and assistance at this difficult time.

Sincerely,

Building Official/Floodplain Administrator
Contact Information

Copy: City Attorney/County Attorney

Enclosure: SI/SD Notice to Property Owners
SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE
NOTICE TO PROPERTY OWNERS

Repairing your building after damage? Conducting additions, renovations, or remodeling your building?

Here’s what YOU need to know about the “50% Rule.”

If the lowest floor of your home or business is below the base flood (100-year) elevation or the required freeboard elevation established by your community, there are floodplain management requirements in the Florida Building Code (FBC) that may affect how you repair, renovate, or remodel the building. These requirements also allow non-residential buildings to be dry floodproofed rather than elevated. These requirements are consistent with the requirements of the National Flood Insurance Program, which protect public safety and investments from future flood damage.

Save yourself time, aggravation and money. Please read the following information:

SUBSTANTIAL DAMAGE means damage of any origin sustained by a building whereby the cost of restoring the building to its before damage condition would equal or exceed 50 percent of the market value of the building before the damage occurred. (Note: The cost of the repairs must include all costs necessary to fully repair the building to its before damage condition).

If a building is “substantially damaged” or “substantially improved,” it must be brought into compliance with the floodplain management requirements in the Florida Building Code, including elevating the building to or above the elevation required by the community. Following National Flood Insurance Program requirements, communities have the responsibility to determine “substantial damage” and “substantial improvement,” described here:

1. Your community may estimate Market Value by using the tax assessment value of your building (excluding the land and accessory structures), plus about 15% to 20%. If you disagree with this estimate, you may hire a State licensed real estate appraiser and submit documentation of the actual case value (replacement cost less depreciation) or a market value appraisal of the building.

2. You must obtain and submit to your Building Official a detailed and complete cost estimate for the addition, remodeling, reconstruction, and/or repair of all damage incurred by your building. The cost for construction must be prepared and signed by a licensed general contractor. Your community may require the contractor to sign an affidavit indicating that the cost submitted includes repairs of all damage or all improvements to your building, not just structural work. See below for a list of items that must be included.
Your community will evaluate the cost of improvements or cost of repairs and determine if they are fair and reasonable. For repair of storm or flood damage, pre-storm prices and rates will be used. The cost of improvements or repairs does not include items not considered a permanent part of the building (i.e., plans, surveys, sidewalks, pools, screens, sheds, gazebos, fences, etc.).

3. If your community determines your damaged building incurred “substantial damage” or is proposed to be “substantially improved,” then an Elevation Certificate must be submitted to your community to determine the elevations of the existing buildings. Elevation Certificates must be prepared by licensed professional surveyor. Garages and carports are not considered to be the “lowest floor.”

4. If the existing floor is below the base flood elevation, the building must be elevated to or above that level plus one foot (or higher, if required by your community). Likewise, all electrical and mechanical equipment (heating and cooling, etc.), bathrooms and laundry rooms must be elevated to or above that level. Only parking, building access and limited, incidental storage is allowed below the elevated building, but only if the walls enclosing those areas comply with FBC requirements, including flood openings. If engineering analyses indicate dry floodproofing is feasible, non-residential buildings may be dry floodproofed instead of being elevated.

If the building is found to conform to all of the FBC requirements for the flood zone in which it is located, repairs and improvements may be performed provided they maintain conformance with the floodplain management requirements. This means if the lowest floor, electrical and mechanical equipment, laundry, and bathroom are already above the required elevation; if the type of foundation is permitted in the flood zone; if enclosures below the elevated building comply; and if all other aspects of the building conform to the FBC requirements, no additional FBC-flood related requirements may be imposed.

5. Building plans must be prepared to show how the building is to be elevated and brought into compliance with all flood-related requirements. If located in Zone V (Coastal High Hazard Area) or seaward of a line delineating Limit of Moderate Wave Height LiMWA or Coastal A Zone (if designated), or if the building is to be dry floodproofed, the plans must be prepared and certified by a registered professional engineer or architect. Blank certificates for this purpose are available from the Building Official.

6. Following a Presidential disaster declaration, the Small Business Administration may make loans available for both home and business owners for purposes of bringing buildings into compliance. Proof that your community determined the building incurred “substantial damage” is required.

**BUILDING REPAIRS OR IMPROVEMENTS SUBJECT TO DETERMINATION OF SUBSTANTIAL DAMAGE/IMPROVEMENT**

**All structural elements including:**
- Spread or continuous foundation footings and pilings
- Monolithic or other types of concrete slabs
- Bearing walls, tie beams and trusses
- Wood or reinforced concrete decking or roofing
- Floors and ceilings
• Attached decks and porches
• Interior partition walls
• Exterior wall finishes (e.g. Brick, stucco or siding) including painting and decorative moldings
• Windows and doors
• Re-shingling or retiling a roof
• Hardware
• Chimneys or flue pipes

**All interior finish elements, including:**
• Tiling, linoleum, stone or carpet over subflooring Bathroom tiling and fixtures
• Wall finishes (e.g. Drywall, painting, stucco, plaster, paneling, marble or other decorative finishes) Kitchen, utility and bathroom cabinets
• Built in bookcases, cabinets and furniture
• Hardware

**All utility and service equipment, including:**
• HVAC equipment
• Repair or reconstruction of plumbing and electrical services
• Light fixtures and ceiling fans
• Security systems
• Built in kitchen appliances
• Central vacuum systems
• Water filtration, conditioning or recirculation systems
• Fireplaces, inserts, and wood heaters

**Also:**
• Labor and other costs associated with demolishing, removing or altering building components
• Overhead and profit
Floodplain Administrators and Building Officials should know about the NFIP flood insurance claims process to understand what property owners may experience and to be aware of the role they have when insured buildings in flood zones are substantially damaged by flooding. NFIP flood insurance claims data may be requested and can be used to focus attention on areas where damage appears most severe.
NFIP FLOOD INSURANCE CLAIMS

Property owners who have NFIP flood insurance policies receive information from FEMA on the claims process, including the NFIP Insurance Claims Handbook (link below). After flooding, Floodplain Administrators are involved in identifying damaged buildings, advising property owners about permit requirements, making substantial damage determinations (see Action 4), and working with property owners to comply with substantial damage requirements and reduce exposure to future flooding.

A common concern expressed by Floodplain Administrators is how quickly the NFIP starts paying claims – often well ahead of community efforts to determine building permit requirements. This means owners often start repairs – even major repairs – before getting permits. Working without permits may violate the building code. Contractors licensed in Florida should know about permit requirements and should apply for and obtain permits before working, or verify that owners have obtained permits or documentation that permits are not required.

From the one-page NFIP Flood Claims Process fact sheet (link following):

- Owners report losses to their insurance agents or companies. Adjusters are assigned to estimate damage (“a detailed room-by-room unit-cost estimate of damage”) and advise owners about preparing the “Proof of Loss” documentation. Adjusters may authorize advance partial payments to help owners start making repairs.
- After the adjuster and owner agree on the damage estimate, the adjuster sends documentation to the owner’s insurance company and the claim is settled (paid), unless the claim is denied by FEMA.

Resources for policyholders and others interested in the NFIP claims process, including steps for resolution if owners disagree with adjusters:

  [https://www.fema.gov/media-library/assets/documents/114402](https://www.fema.gov/media-library/assets/documents/114402)
  [https://www.fema.gov/media-library/assets/documents/6659](https://www.fema.gov/media-library/assets/documents/6659)

The NFIP and insurance adjusters generally do not tell property owners that local building or floodplain permits may be required.

Claims adjusters prepare estimates of covered flood damage (cost to repair). This estimate becomes the basis for the claim payment. It is NOT equivalent to the costs required to make substantial damage determinations. The adjuster’s estimate can be used to help identify which buildings should be evaluated more closely. See FEMA P-758.
**INCREASED COST OF COMPLIANCE**

NFIP flood insurance policies include Increased Cost of Compliance (ICC) coverage for buildings in Special Flood Hazard Areas. As of 2018, ICC coverage provides up to $30,000 to help cover the costs incurred if damage caused by flooding is determined by a community to be substantial damage (see Action 2 and Action 4). A substantial damage determination triggers the requirement that owners bring buildings into compliance with floodplain management requirements for new buildings, which may mean elevating buildings and making other changes based on flood zone.

ICCs claims can help pay for relocating, elevating, demolishing buildings, and for dry floodproofing non-residential buildings. Owners can assign ICC payments to communities seeking grant funds for mitigation; the assigned ICC claim funds are used as part of the non-federal share required by FEMA mitigation grant programs (see Action 6).

Floodplain Administrators have a key role in the ICC claim process. The most important points of involvement:

- Making substantial damage determinations, whether based on a one-time, 50% determination (costs compared to market value) or based on repetitive flood damage (if specified in local floodplain management regulations in the definition for “substantial damage”).
- Helping owners, design professionals, and contractors understand requirements to bring buildings into compliance with all of the Florida Building Code requirements for flood-resistant construction based on flood zone and base flood elevation.
- Issuing permits for work to bring substantially damaged buildings into compliance, inspecting work during construction, and providing owners with Certificates of Occupancy or other documentation of completion and compliance.
Floodplain Administrators who take the time, whether before the next flood or shortly after, to learn about Increased Cost of Compliance are best positioned to help citizens tap into this additional source of money to bring buildings into compliance. Not only does it help citizens, it helps increase long-term community resiliency to future flooding.

RESOURCES:

- Increased Cost of Compliance Coverage (policy holder resources and checklist): https://www.fema.gov/increased-cost-compliance-coverage
- Increased Cost of Compliance (ICC) Fact Sheet: https://www.fema.gov/media-library/assets/documents/1130
- Increased Cost of Compliance Coverage Guidance for State and Local Officials (FEMA 301): Provides detailed guidance on how the ICC coverage relates to community administration of floodplain management ordinances: https://www.fema.gov/media-library/assets/documents/1973

Starting the ICC Claim Process After a Flood

1. Contact your insurance company and document the loss (photographs, etc.).
2. If your community determines your home substantially damaged (or a repetitive loss), discuss with them what mitigation activity is required to bring your building into compliance and if any mitigation grants are available.
3. Submit to adjuster a substantial damage or repetitive loss letter; a signed repair contract; and building permit that documents rebuilding requirements in the floodplain.
4. Insurance provider will verify your home's flood damages equate to 50 percent of the before flood market value.
Identifying post-disaster funding needs and sources may not be an immediate post-disaster responsibility of Floodplain Administrators, but it is essential to have a basic understanding of the range of funding assistance programs. Property owners may have heard that FEMA and other agencies have grants to help recover from disasters. When community officials know about available funding sources and a timeline of availability they can help families and property owners make decisions about approaches to mitigating during the long-term recovery process, which also may bear on alternatives for construction and local permitting.
POST-DISASTER AND MITIGATION FUNDING ASSISTANCE

When the President declares major disasters, State and local resources are usually insufficient for effective response and recovery. Many forms of disaster response and Federal funding assistance become available. Local emergency management agencies coordinate with FDEM and FEMA to access those resources.

In the longer term, FEMA and other agency grant programs are available to mitigate the effects of disasters. As Floodplain Administrators, other local officials, and citizens work through the post-disaster recovery period they may identify opportunities to mitigate risk.

Communities may decide to pursue mitigation grants to reduce future flooding impacts, including buying and demolishing buildings in flood zones, elevating buildings, retrofitting with dry floodproofing measures (non-residential buildings only), and some drainage improvements and stream restoration projects. Projects may address public buildings and privately owned buildings.

Florida communities have received nearly $1 billion in FEMA mitigation grants in the last 20 years.


The most common grant programs that support recovery and mitigation are described in this section. See the Toolkit Appendix for a summary of other possible sources of funding for mitigation, repairs, and other housing assistance.
In Florida, the Local Mitigation Strategy (LMS) is a plan developed by counties, cities and towns to identify hazards, focus on how hazards may affect local decisions, and reduce or eliminate the risks associated with natural and manmade hazards. These plans must be in accordance with secs. 252.311 and 252.35, Florida Statutes, Rule 27P-22, Florida Administrative Code, and the Federal Disaster Mitigation Act of 2000, PL 106-390. LMS plans must be updated every five years to remain compliant.

Without an approved LMS plan, communities are unable to apply for many Federal grants. Work Groups may amend project lists to include projects community identify after flood events. To be eligible for FEMA mitigation grants, projects must be identified in the LMS.

**RESOURCE:**


For additional sources of funding, please see Appendix C.
ASSISTANCE FOR COMMUNITIES AND ELIGIBLE NON-PROFIT ORGANIZATIONS

PUBLIC ASSISTANCE (FEMA)

FEMA’s post-disaster Public Assistance (Section 406) is a recovery grant program that provides assistance to States, tribal governments, local governments and certain types of private non-profit organizations so that communities can quickly respond to, and recover from, major disasters and emergencies declared by the President. Through the program, FEMA provides supplemental Federal disaster grant assistance for debris removal, life-saving emergency protective measures, and the repair, replacement, or restoration of disaster-damaged publicly owned facilities, and the facilities of certain private non-profit organizations.

RESOURCES:

https://www.floridadisaster.org/dem/recovery/public-assistance-program/


FDEM is the Governor’s representative when Federal disasters are declared. The FDEM Recovery Bureau works with eligible public entities and private non-profit organizations to access FEMA’s Public Assistance program grants.
**DEBRIS REMOVAL (FDEP)**

The Florida Department of Environmental Protection (FDEP) must approve debris staging areas for the owner/operator of a staging area to receive Public Assistance funds from FEMA.

**RESOURCES:**

- [http://www.dep.state.fl.us/mainpage/em/debris.htm#fema](http://www.dep.state.fl.us/mainpage/em/debris.htm#fema)
- [http://www.dep.state.fl.us/mainpage/em/files/debris_guidance.pdf](http://www.dep.state.fl.us/mainpage/em/files/debris_guidance.pdf)
- [https://www.fema.gov/media-library/assets/documents/90745](https://www.fema.gov/media-library/assets/documents/90745)

---

**POST-DISASTER HAZARD MITIGATION GRANT PROGRAM (FEMA and FDEM)**

The HMGP program (Section 404) is a FEMA and FDEM partnership that assists communities, private non-profit organizations and Federally-recognized Tribes in implementing long-term hazard mitigation measures following major disaster declarations. HMGP funds become available after major disasters are declared by the President.

The objectives of the Hazard Mitigation Grant Program are to:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prevent future loss of lives and damage to property due to disasters</td>
</tr>
<tr>
<td>2</td>
<td>Implement State or local hazard mitigation plans</td>
</tr>
<tr>
<td>3</td>
<td>Enable mitigation measures to be implemented during immediate recovery</td>
</tr>
<tr>
<td>4</td>
<td>Provide funding for previously identified mitigation measures that benefit the disaster area</td>
</tr>
</tbody>
</table>

Eligible applicants may use HMGP funds for the repair of existing damaged structures and infrastructure if the measures are cost-effective or required by codes.

---

Although HMGP is a Federal program, it is administered by FDEM through a partnership arrangement. FDEM’s Mitigation Bureau helps communities to identify feasible and cost-effective projects, develop project scopes and budgets, and prepare benefit-cost analyses. Contact the FDEM Mitigation Hotline at 850.815.4524.
To be eligible for HMGP funding, Local Mitigation Strategy plans developed by each county with participation by municipalities must identify proposed projects. Depending on areas affected and the nature of damage, LMS plans may be amended to include projects identified after specific events.

**FLOOD MITIGATION ASSISTANCE GRANTS (FEMA and FDEM)**

The Flood Mitigation Assistance (FMA) is a FEMA and FDEM partnership that provides funding to States, Federally-recognized Tribes and communities for mitigation projects and planning that reduce or eliminate long-term risk of flood damage to structures insured by the National Flood Insurance Program. The U.S. Congress appropriates funding each year. Eligible activities include buyout, demolition, elevation-in-place, and dry floodproofing (non-residential only). Proposed projects must be cost-effective and must be identified in Local Mitigation Strategy plans. Communities can sponsor applications on behalf of property owners.

**RESOURCES:**

https://www.floridadisaster.org/dem/mitigation/hazard-mitigation-grant-program/


https://www.fema.gov/hazard-mitigation-grant-program

https://www.fema.gov/hazard-mitigation-assistance

Contact the FDEM Mitigation Hotline at 850.815.4524.
**PRE-DISASTER MITIGATION GRANTS (FEMA and FDEM)**

The Pre-Disaster Mitigation (PDM) Grant program is a FEMA and FDEM partnership that assists communities and Federally-recognized Tribes in implementing sustained pre-disaster natural hazard mitigation projects. The goal is to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding in future disasters. This program awards planning and project grants, and provides opportunities for raising public awareness about reducing future losses before disasters strike. Mitigation planning (Florida’s Local Mitigation Strategy plans) is a key process used to break the cycle of disaster damage, repair, and repeated damage. The nationally-competitive program is funded each year by Congressional appropriations.

**RESOURCES:**

https://www.floridadisaster.org/dem/mitigation/

https://www.fema.gov/pre-disaster-mitigation-grant-program


**FLORIDA HURRICANE LOSS MITIGATION PROGRAM (FDEM)**

The Florida Hurricane Loss Mitigation Program, administered by FDEM, receives annual funding from the Florida Hurricane Catastrophe Trust Fund. Working through local governments, nonprofit organizations, and qualified for-profit entities, funds are used to improve the wind resistance of residences.

**RESOURCE:**

https://www.floridadisaster.org/dem/mitigation/hurricane-loss-mitigation-program/

Contact the FDEM Mitigation Hotline at 850.815.4524.
COMMUNITY DEVELOPMENT BLOCK GRANT (HUD and FDEO)

The Florida Department of Economic Opportunity (FDEO) administers the federal Community Development Block (CDBG) Grants under the Small Cities CDBG Program for approximately 249 eligible cities in Florida. HUD administers CDBG programs for larger cities and urban counties.

CDBG DISASTER RECOVERY PROGRAM:
Following major disasters declared by the President, the U.S. Congress may appropriate additional funds for Disaster Recovery Grants to help rebuild affected areas. This funding can cover a broad range of recovery activities and enables HUD to help communities that may not otherwise be able to recover due to limited resources.

CDBG PROGRAMS (other than disaster recovery): The CDBG program provides communities with resources to address a wide range of community development needs. The CDBG entitlement program allocates annual grants to larger cities and urban counties to develop viable communities by providing housing, a suitable living environment, and opportunities to expand economic opportunities, principally for low- and moderate-income persons. Flood mitigation projects that may be eligible include drainage improvement projects.

RESOURCES:


https://www.hudexchange.info/programs/cdbg-dr/

The FDEO website provides summary information about the several programs available under the CDBG program, such as the Disaster Recovery Initiative and Neighborhood Stabilization Program (link above).
ASSISTANCE FOR INDIVIDUALS, FAMILIES, AND BUSINESSES

INDIVIDUAL ASSISTANCE (FEMA)

FEMA’s Individual Assistance Program helps individuals, households, and businesses recovering from losses caused by major disasters declared by the President. The program provides minimal funding to cover basic expenses, including temporary housing, minimal repairs, disaster-related medical and dental costs, disaster-related funeral and burial costs, clothing and household items, fuel for heating, and moving and storage expenses.

RESOURCES:

https://www.floridadisaster.org/dem/recovery/

What is FEMA’s Individual Assistance Program (FACT SHEET): https://www.fema.gov/disaster/4294-4297/updates/fact-sheet-what-femas-individual-assistance-program

SMALL BUSINESS ADMINISTRATION (SBA)

After major disasters are declared by the President, the SBA provides low-interest loans to businesses of all sizes, private non-profit organizations, homeowners, and renters. Loans can be used to repair or replace the following damaged or destroyed items: real estate, personal property, machinery and equipment, and inventory and business assets.

RESOURCES:

https://www.sba.gov/loans-grants/see-what-sba-offers/sba-loan-programs/disaster-loans

The first step for individuals, households and businesses seeking individual assistance is through the FEMA toll-free number 1-800- 621-3362  (TTY: 1-800-462-7585).
ACTION 1. Plan Ahead to Communicate with Elected Officials and Citizens.

Floodplain management (Quick Guide) and building codes in Florida: https://www.floridadisaster.org/dem/mitigation/floodplain/community-resources/

Answers to Questions About the NFIP: https://www.fema.gov/media-library/assets/documents/272

Flood Insurance 101: Talking Points for Community Officials: https://www.fema.gov/media-library/assets/documents/11337


Temporary Occupancy of Substantially Damaged Structures after a Disaster (Fact Sheet): https://www.fema.gov/media-library/assets/documents/126997

Cleaning Flooded Buildings (FEMA Fact Sheet): https://www.fema.gov/media-library/assets/documents/31368
ACTION 2. Assess Post-Disaster Needs and Request Assistance.


Silver Jackets High Water Mark Mobile Reporting system at the following app stores:

https://itunes.apple.com/us/app/arcgis/id589674237

HWM map services:
https://maps.floridadisaster.org/hwm
https://floridadisaster.maps.arcgis.com/apps/MapAndAppGallery/index.html?appid=cd2bbb3fb7c540ed8d80977cb2803553

ACTION 4. Make Substantial Damage Determinations and use FEMA’s Substantial Damage Estimator.

SI/SD Desk Reference (FEMA P-758):
https://www.fema.gov/media-library/assets/documents/18562

FEMA P-758 Appendix D: Sample Notices and Affidavits:

FEMA P-758 Appendix E: Sample Letters of Determination:

Substantial Damage Estimator and Forms (FEMA P-784):
https://www.fema.gov/media-library/assets/documents/18692

ACTION 5. UNDERSTAND NFIP CLAIMS AND INCREASED COST OF COMPLIANCE.

The National Flood Insurance Program Flood Claims Process (Fact Sheet) – English and Spanish:
https://www.fema.gov/media-library/assets/documents/114402

NFIP Flood Insurance Claims Handbook (FEMA F-687) – English and Spanish.
https://www.fema.gov/media-library/assets/documents/6659
Increased Cost of Compliance Coverage (policy holder resources and checklist):
https://www.fema.gov/increased-cost-compliance-coverage

Increased Cost of Compliance (ICC) Fact Sheet:
https://www.fema.gov/media-library/assets/documents/1130

Increased Cost of Compliance Coverage Guidance for State and Local Officials (FEMA 301):
Provides detailed guidance for State and Local Officials on how the ICC coverage relates to community administration of floodplain management ordinances:

**ACTION 6. Identify Post-Disaster And Mitigation Funding Assistance.**

https://www.floridadisaster.org/dem/mitigation/hazard-mitigation-grant-program/

https://www.floridadisaster.org/dem/mitigation/local-mitigation-strategy/


http://www.dep.state.fl.us/mainpage/em/debris.htm#fema

http://www.dep.state.fl.us/mainpage/em/files/debris_guidance.pdf

https://www.fema.gov/media-library/assets/documents/90745


https://www.fema.gov/hazard-mitigation-grant-program

https://www.fema.gov/hazard-mitigation-assistance

https://www.fema.gov/flood-mitigation-assistance-grant-program

https://www.fema.gov/pre-disaster-mitigation-grant-program

https://www.floridadisaster.org/dem/mitigation/hurricane-loss-mitigation-program/


What is FEMA’s Individual Assistance Program (FACT SHEET): 
https://www.fema.gov/disaster/4294-4297/updates/fact-sheet-what-femas-individual-assistance-program

https://www.fema.gov/individual-disaster-assistance

https://www.sba.gov/loans-grants/see-what-sba-offers/sba-loan-programs/disaster-loans
APPENDICIES

A. Sample SI/SD Worksheet (from FEMA P-758)
B. Residential SDE Damage Inspection Worksheet (from FEMA P-784)
C. Additional Sources of Recovery and Mitigation Funding
Substantial Improvement Worksheet for Floodplain Construction
(for reconstruction, rehabilitation, addition, or other improvements, and repair of damage from any cause)

Property Owner: 
Address: 
Permit No.: 
Location: 
Description of improvements: 

<table>
<thead>
<tr>
<th>Present Market Value</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>of structure ONLY (market appraisal or adjusted assessed value, BEFORE improvement, or if damaged, before the damage occurred), not including land value:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost of Improvement -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual cost of the construction** (see items to include/exclude)</td>
</tr>
<tr>
<td>$</td>
</tr>
<tr>
<td><strong>Include volunteer labor and donated supplies.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ratio =</th>
<th>Cost of Improvement (or Cost to Repair) × 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Market Value</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
</tbody>
</table>

If ratio is 50 percent or greater (Substantial Improvement), entire structure including the existing building must be elevated to the base flood elevation (BFE) and all other aspects brought into compliance.

Important Notes:
1. Review cost estimates to ensure that all appropriate costs are included or excluded.
2. If a residential pre-FIRM building is determined to be substantially improved, it must be elevated to or above the BFE. If a non-residential pre-FIRM building is substantially improved, it must be elevated or dry floodproofed to the BFE.
3. Proposals to repair damage from any cause must be analyzed using the formula shown above.
4. Any proposed improvements or repairs to a post-FIRM building must be evaluated to ensure that the improvements or repairs comply with floodplain management regulations and to ensure that the improvements or repairs do not alter any aspect of the building that would make it non-compliant.
5. Alterations to and repairs of designated historic structures may be granted a variance or be exempt under the substantial improvement definition) provided the work will not preclude continued designation as a “historic structure.”
6. Any costs associated with directly correcting health, sanitary, and safety code violations may be excluded from the cost of improvement. The violation must have been officially cited prior to submission of the permit application.

Determination completed by: ____________________________

Date: ____________________________
Residential

SDE DAMAGE INSPECTION WORKSHEET

Single-Family, Town or Row House (Site Built Residences), or Manufactured House

Address: ____________________________________________________________

SDE ADDRESS Tab

Subdivision / Community Information

Subdivision: ___________________________ Parcel Number: ______
Lot Number: _______ Elevation of Lowest Floor: ___________ Datum: ________________

Community Information

NFIP Community ID: _________ NFIP Community Name: ________________________________
Latitude: ___________________ Longitude: ____________________________

Building Address

Owner First Name: ______________________ Owner Last Name: ______________________
Street Number: _______ Street Name: ___________________ Street Suffix: ______
City: ___________________________ State: _________
County/Parish: ______________________ Zip: ________
Phone: _______________ Cell Phone: __________________

Mailing Address

Check here if same as building address: ______
First Name: __________________________
Last Name: __________________________
Street Number: _______ Street Name: ___________________ Street Suffix: ______
City: ___________________________ State: _________
County/Parish: ______________________ Zip: ________
Phone: ___________________________ Cell Phone: __________________
### Structure Attributes / Information

Residence Type:  
- _____ Single Family  
- _____ Town or Row House  
- _____ Manufactured House

Foundation:  
- _____ Continuous Wall w/Slab (Standard)  
- _____ Basement  
- _____ Crawlspace
- _____ Piles  
- _____ Slab-on-Grade  
- _____ Piers and Posts

Superstructure:  
- _____ Stud-Framed (Standard)  
- _____ Common Brick  
- _____ ICF  
- _____ Masonry

Roof Covering:  
- _____ Shingles – Asphalt, Wood (Standard)  
- _____ Clay Tile  
- _____ Standing Seam (Metal)
- _____ Slate

Exterior Finish:  
- _____ Siding or Stucco (Standard)  
- _____ Brick Veneer  
- _____ EIFS
- _____ None – common brick, structural

HVAC System:  
- _____ Heating and/or Cooling  
- _____ None

Story:  
- _____ One Story (Standard)  
- _____ Two or More Stories

### Structure Information

Year of Construction:  

Quality of Initial Construction:  
- _____ Low  
- _____ Budget  
- _____ Average  
- _____ Good  
- _____ Excellent

Residence Information (if needed):

### Inspector / Damage Information

Inspector’s Name:  

Inspector’s Phone:  

Date of Inspection (mm/dd/yyyy):  

Date Damage Occurred (mm/dd/yyyy):  

Cause of Damage:  
- _____ Fire  
- _____ Flood  
- _____ Flood and Wind  
- _____ Seismic  
- _____ Wind  
- _____ Other

Cause of Damage (if “Other” is selected):

---

SDE Residential Damage Inspection Worksheet
SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Damage Undetermined: ______ (check here and check the reason below):

_____ No Physical Damage Sustained   _____ Vacant / Property   _____ Resident Refused Inspection

_____ Address Does Not Exist   _____ Other (Explain)


Duration of Flood: _________ Hours   _________ Days

Depth of Flood Above Ground (estimated to nearest 0.5 foot): _________

Depth of Flood Above Lowest Floor (estimated to nearest 0.5 foot): _________

NFIP / Community Information

FIRM Panel Number: _____________ Suffix: _____ Date of FIRM Panel (mm/dd/yyyy): _____________

FIRM Zone: __________ Base Flood Elevation: _______________________

Regulatory Floodway: ___ Yes ___ No ___ Possible

Community Information (if needed): __________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
COST Tab

Select appropriate diagram of structure footprint and enter structure dimensions and the number of stories:
**COST Tab**

**Square Footage**

Base Cost per Sq Ft: _________________  Total Square Footage: _________________

Geographic Adjustment: _________________

**Cost Adjustments**

<table>
<thead>
<tr>
<th>Single-Family House</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Item Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roofing</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating / Cooling</td>
<td></td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appliances</td>
<td></td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fireplaces</td>
<td></td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porch / Breezeways</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garage</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manufactured House</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Item Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expando</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carport</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Porch</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclosed Porch</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decks</td>
<td></td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skirting</td>
<td></td>
<td>Sq Ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fireplaces</td>
<td></td>
<td>Each</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Additional Cost Adjustments

<table>
<thead>
<tr>
<th>Adjustments</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Item Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

**Cost Data Reference** (source or name): ____________________________________

__________________________________________________________________________

**Cost Data Date:**

__________________________________________________________________________

**Note:** The computed **Actual Cash Value** (ACV) for the structure will be calculated once the square footage, base cost, cost adjustments, costs add-ons, and depreciation percentage are entered into the SDE tool.

**Depreciation Rating:**

1. Very Poor Condition  2. Requires Extensive Repairs  3. Requires Some Repairs
4. Average Condition  5. Above Average Condition  6. Excellent Condition  7. Other

Depreciation Percentage (if ‘Other’ selected for Depreciation Rating): ______________________________

Depreciation Explanation (if ‘Other’ selected for Depreciation Rating): ______________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
**ELEMENT PERCENTAGE Tab**

*Note:* The inspector needs only enter the % **Damaged** data here. The data in the Element %, Item Cost, and Damage Values columns will be populated based on the selected attributes once all the data are entered into the SDE tool.

**Residence Type:** _____ Single-Family (SF) House _____ Townhouse _____ Manufactured House (MH)

<table>
<thead>
<tr>
<th>Item</th>
<th>% Damaged</th>
<th>Element %</th>
<th>Item Cost</th>
<th>Damage Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation (not required for MH)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superstructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Covering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior Finish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Finish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doors and Windows</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabinets and Countertops</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood Finish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appliances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skirting / Forms Piers (MH only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SDE OUTPUT SUMMARY Tab – Optional User Entered Data**

Professional Market Appraisal: ____________________________

Tax Assessed Value: ______________ Tax Factor Adjustment: ______________________

Adjusted Tax Assessed Value: ________________________

Contractor’s Estimate of Damage: ______________________

Community’s Estimate of Damage: ______________________
APPENDIX C: SELECTED POSSIBLE SOURCES OF FUNDING FOR MITIGATION, REPAIRS AND OTHER HOUSING ASSISTANCE

These program summaries should not be relied on to determine eligibility. Contact the appropriate federal agency for assistance.

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>APPLICANT ELIGIBILITY</th>
<th>ELIGIBLE ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individuals and Households Program (FEMA)</strong></td>
<td>- Must be a U.S. citizen, non-citizen national, or qualified alien</td>
<td>Housing Assistance: Short-term displacement Lodging Expense Reimbursement; Rental Assistance; Financial Assistance for Repairs to primary residence, utilities, residential infrastructure, privately owned roads; Home Replacement costs.</td>
</tr>
<tr>
<td></td>
<td>- FEMA must be able to verify the applicant's identity.</td>
<td>Direct Housing Assistance: When use of Rental Assistance limited due to a lack of available housing resources, FEMA helps individuals and households find housing through other means, such as a Multi-Family Lease and Repair (MLR), temporary availability of FEMA Manufactured Housing Units (MHUs), or Permanent or Semi-Permanent Housing Construction (PHC) where no alternative housing resources are available.</td>
</tr>
<tr>
<td></td>
<td>- The applicant's insurance, or other forms of disaster assistance received, cannot meet their disaster-caused needs.</td>
<td>Other Needs Assistance: May include funeral, medical, dental, childcare, and assistance for miscellaneous items such as chainsaws or dehumidifiers purchased or rented after the disaster.</td>
</tr>
<tr>
<td></td>
<td>- The applicant's necessary expenses and serious needs are directly caused by a declared disaster.</td>
<td></td>
</tr>
<tr>
<td><strong>Transitioning Shelter Assistance (FEMA)</strong></td>
<td>- Applicants must register with FEMA for assistance and pass identity and citizenship verification.</td>
<td>Short-term lodging needs for individuals and families who cannot access homes because of disaster-related damage.</td>
</tr>
<tr>
<td></td>
<td>- Pre-disaster primary residence is located in a geographic area that is designated for TSA.</td>
<td>Initial period of assistance will be 5-14 days (adjustable to 30 days, if needed) from date of TSA implementation; may be extended, if needed, in 14-day intervals for up to six months from the date of disaster declaration.</td>
</tr>
<tr>
<td></td>
<td>- Displaced from pre-disaster primary residence and unable to obtain lodging through another source.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Disaster survivors may be eligible to stay in authorized lodging for a limited period of time and have the cost of the room and taxes covered by FEMA (excludes incidental room charges such as telephone, room service, food, etc.).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Cost Share Notes: FEMA (75%); State (25%).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Application: Applicant automatically reviewed for eligibility when FEMA application is completed.</td>
<td></td>
</tr>
</tbody>
</table>
| **Home & Personal Property Loan (SBA)** | **FHA 203 K Loan (HUD)** | **Eligible projects include**  
| • Up to $200,000 for Home Repair/Replacement and up to $40,000 for Personal Property.  
• Cost Share Notes: Interest rate 1.75% for applicants unable to obtain credit elsewhere; 3.5% for those who can obtain credit elsewhere. SBA determines whether applicants can obtain credit elsewhere. SBA disaster loans are offered with up to 30-year terms.  
• Application: Physical Damage: 60 days from date of disaster declaration; Economic Injury: nine months from date of disaster declaration. | • Applicants must have a FICO credit score of at least 620.  
• Must show evidence of sufficient income that meets payment requirements.  
• New construction must meet all current health and building code requirements.  
| • Home owners apply online, giving permission for the IRS to share tax information with SBA.  
• SBA sends inspectors to estimate the cost of repairs. | • Minimum loan is $5,000; maximum depends on area-specific FHA Mortgage Limit (275,665 to $636,150).  
• Cost Share Notes: Must pay upfront Mortgage Insurance Premium and ongoing interest.  
• Application: Non-disaster loan without specific application deadline. | • Eligible projects include replacement or repair of primary residence and/or personal property replacement. Mitigation elements may cover elevating flood-prone structures, relocating utilities, retrofitting structures, safe rooms and storm shelters, retaining walls, and grading and contouring land.  
• Eligible projects include structural alterations and reconstruction; modernization and improvements to the function; elimination of health and safety hazards; changes to improve appearance and eliminate obsolescence; reconditioning or replacing plumbing; installing well and/or septic system; add or replace roofing, gutters, and downspouts; add or replace floors and/or floor treatments; major landscape work and site improvements; enhanced accessibility for disabled people; make energy conservation improvements. |
**FHA 203 H Loan (HUD)**
- Maximum loan amount depends on area-specific FHA Mortgage Limit ($275,665 to $636,150).
- **Cost Share Notes:**
  - No down payment required; borrower eligible for 100% financing; closing costs and prepaid expenses paid by the borrower in cash or paid through premium pricing or by the seller, subject to a 6% limit on seller concessions.
  - Mortgages (private lenders) collect up-front insurance premium (which may be financed) at the time of purchase, as well as monthly premiums that are not financed, but instead are added to the regular mortgage payment.
- **Application:** Borrower’s application for mortgage insurance must be submitted to the lender within one year of the President’s declaration.

**Title I Property Improvement Loan for Manufactured Homes (or Home & Lot Combination) (HUD)**
- **Maximum Loan Amounts:**
  - Manufactured home only - $69,678
  - Manufactured home lot - $23,226
  - Manufactured home & lot - $92,904
- **Cost Share Notes:** Title I programs offer coinsurance; buyers required to make down payments; interest rate negotiated between borrowers and lenders.
- **Application:** Non-disaster loan without specific application deadline.

<p>| Individuals eligible when homes are located in areas designated by the President as disaster areas and when homes were destroyed or damaged to such an extent that reconstruction or replacement is necessary. | Mortgage insurance for home repairs, replacement, or relocation. Homes that individuals move to, if outside the declared disaster area, are covered if original homes were in declared disaster areas. | Manufactured home buyers who meet credit requirements and plan to use the manufactured home as their principal place of residence. | Eligible projects meet HUD’s Model Manufactured Home Installation Standards; carry one-year manufacturer’s warranty if units are new; are installed on a home site that meets established local standards for site suitability and has adequate water supply and sewage disposal facilities available. |</p>
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<tr>
<th><strong>Title I Home &amp; Property Improvement Loan (HUD)</strong></th>
<th><strong>Florida Small Business Emergency Bridge Loan Program (State)</strong></th>
<th><strong>Community Development Block Grants (Disaster Recovery) (HUD)</strong></th>
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<tr>
<td>• Maximum Loan Amounts:</td>
<td>• Short-term, interest-free working capital loans that are intended to “bridge the gap” between the time a major catastrophe hits and when a business has secured longer term recovery resources, such as sufficient profits from a revived business, receipt of payments on insurance claims or federal disaster assistance.</td>
<td>• When the President declares a major disaster, Congress may appropriate funds to for HUD when there are significant unmet needs for long-term recovery.</td>
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<td>o Single family home - $25,000</td>
<td>• In the event of a disaster, the Governor of Florida has the option to activate the Emergency Bridge Loan Program by Executive Order.</td>
<td>• Cost Share Notes: No cost share is required.</td>
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<tr>
<td>o Manufactured home on permanent foundation (classified and taxed as real estate) - $25,090</td>
<td>• Provides a source of expedient cash flow to Florida small businesses impacted by a disaster.</td>
<td>• Application: Determined by HUD.</td>
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<td>o Manufactured home (classified as personal property) - $7,500</td>
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<td>o Multifamily structure - an average of $12,000 per living unit, up to a total of $60,000.</td>
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<td>• Applicable local and state governments are awarded CDBG-DR funds through HUD directly. Individuals can apply for funds through the community government after a community identifies eligible activities.</td>
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<tr>
<td>• Cost Share Notes:</td>
<td></td>
<td>• HUD notifies eligible States and communities.</td>
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<td>o Fixed interest rate negotiable, but generally based on the most common market rate in the area.</td>
<td></td>
<td>Each CDBG-DR award/allocation method is published in a Federal Register Notice which contains information on eligible recovery activities (e.g., long-term recovery; housing infrastructure; housing; economic revitalization) and program requirements, including distribution of funds in low and moderate income communities.</td>
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<td>o Loans over $7,500 must be secured by a mortgage or deed of trust.</td>
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</table>
| HOME Investment Partnerships Program (Federal Block Grant) (HUD) | HUD does not provide HOME assistance directly to individuals or organizations. If you are interested in participating in this program, you need to contact your local or state government to find out how the program operates in your area. | Eligible projects include providing home purchase or rehabilitation financing to eligible homeowners and new homebuyers; building or rehabilitating housing for rent or ownership; "other reasonable and necessary expenses related to the development of non-luxury housing including site acquisition or improvement; demolition of dilapidated housing to make way for HOME-assisted development; rental associations; relocation expenses.

| New Construction – HOME value limits for new construction is 95% of median purchase price for the area based on FHA single family mortgage program data. | • Cost Share Notes: Formula grant program that does not require a cost-share. | State Housing Initiatives Partnership (SHIP) (Florida Housing)

| Existing Housing – HOME value limits for existing units is 95% of median purchase price for the area based on FHA single family mortgage program data for existing housing and data for sale of existing housing in standard condition. | | • Local governments who wish to participate must establish a local housing assistance program by ordinance; develop a local housing assistance plan and housing incentive strategy; amend land development regulations or establish local policies to implement the incentive strategies; form partnerships and combine resources in order to reduce housing costs; and ensure that rent or mortgage payments within the targeted areas do not exceed 30 percent of the area median income limits, unless authorized by the mortgage lender. • Funds are allocated to local governments on a population-based formula. |

| Cost Share Notes: Formula grant program that does not require a cost-share. | | State Housing Initiatives Partnership (SHIP) (Florida Housing)

| Application: HUD informs eligible jurisdictions with current and approved Consolidated Plans of available project funding each year. | | SHIP dollars may be used to fund emergency repairs, new construction, rehabilitation, down payment and closing cost assistance, impact fees, construction and gap financing, mortgage buy-downs, acquisition of property for affordable housing, matching dollars for federal housing grants and programs, and homeownership counseling. |

| Provides funds to local governments as an incentive to create partnerships that produce and preserve affordable homeownership and multifamily housing. | | • Provides funds to local governments as an incentive to create partnerships that produce and preserve affordable homeownership and multifamily housing. • Designed to serve very low, low and moderate income families • The minimum allocation is $350,000.

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For additional information please contact the State Floodplain Management Office at 850.815.4556 or floods@em.myflorida.org.