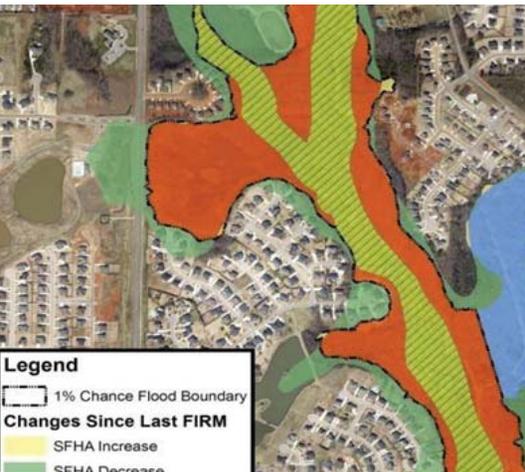


ALABAMA

Post-Flood Recovery Guidebook Appendices



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Prepared for:

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Appendices

A. Preparedness

- Recommended Training Courses

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A. Preparedness

Recommended Training Courses

The following training courses and information sources are compiled from an evolving list of recommended training and resources for local floodplain managers. Many of the recommended trainings are available through independent study courses with FEMA's Emergency Management Institute: <http://training.fema.gov/IS/>

PREPAREDNESS

ADECA Office of Water Resources

www.adeca.alabama.gov/Divisions/owr/floodplain/Pages/default.aspx

The OWR Floodplain Management website provides information, publications, and links to such topics as Risk MAP, "Am I in a Floodplain?" County Flood Map Information and Status, LOMRs, Flood Insurance Reform Act, Safe Dams, and Frequently Asked Questions.

Alabama Association of Floodplain Managers (AAFM)

www.aafmfloods.org/

AAFM sponsored conferences and seminars provide up-to-date educational programs and network opportunities with others interested and experienced in floodplain management.

Association of State Floodplain Managers (ASFPM) – Training Resource Library

www.floods.org/index.asp?menuID=354&firstlevelmenuID=182&siteID=1

The Association of State Floodplain Managers maintains an online Training Resource Library for the convenience of its members and the public.

Certified Floodplain Manager Program (ASFPM-accredited certification program; FEMA 480 Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials)

The role of the nation's floodplain managers is expanding due to increases in disaster losses, the emphasis being placed upon mitigation to alleviate the cycle of damage-rebuild-damage, and a recognized need for professionals to adequately address these issues. This certification program will lay the foundation for ensuring that highly qualified

individuals are available to meet the challenge of breaking the damage cycle and stopping its negative drain on the nation's human, financial, and natural resources.

Managing Floodplain Development through the National Flood Insurance Program (EMI Course 273)

This course is designed to provide an organized training opportunity for local officials responsible for administering their local floodplain management ordinance. The course will focus on the NFIP and concepts of floodplain management, maps and studies, ordinance administration, and the relationship between floodplain management and flood insurance.

RESPONSE

Introduction to Incident Command System (FEMA Independent Study IS-100.b)

As an introduction to the Incident Command System (ICS), this course provides the foundation for higher level ICS training. This course describes the history, features, principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS). (0.3 CEUs)

National Incident Management System (NIMS): An Introduction (FEMA Independent Study IS-700.a)

This course introduces and overviews the National Incident Management System (NIMS). NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernment organization to work together during domestic incidents. (0.5 CEUs)

National Response Framework, an Introduction (FEMA Independent Study IS-800.b)

This course introduces participants to the concepts and principles for the National Response Framework. This course is intended for government executives, private-sector and non-governmental organizations (NGO) leaders, and emergency management practitioners. (0.3 CEUs)

RECOVERY

National Disaster Recovery Framework (NDRF) Overview (FEMA Independent Study IS-2900)

This course provides individuals supporting disaster recovery efforts with a foundation in National Disaster Recovery Framework (NDRF) key concepts, core principles and roles and responsibilities of NDRF leadership (including those of individuals and households to governmental entities at the local, State, tribal, and Federal levels, and between public, private and nonprofit sectors. (0.2 CEUs)

Local Damage Assessment (FEMA Independent Study IS-559)

This course provides information and resources that will enable participants to plan an effective damage assessment program and conduct rapid and effective damage assessments in order to save lives, protect property and the environment, and begin the process of recovery and mitigation. (0.2 CEUs)

Introduction to Individual Assistance (IA) (FEMA Independent Study IS-403)

This course provides a basic introduction to IA, the Individual Assistance program. This information should assist FEMA personnel with basic knowledge to provide applicants with accurate information. (0.1 CEUs)

Introduction to FEMA's Public Assistance Program (FEMA Independent Study IS-634)

This course will familiarize students with the Public Assistance Program and the process applicants follow to receive grant funding assistance in the aftermath of a disaster. (0.4 CEUs)

Substantial Damage Estimator (SDE) Tool, 2.0 (FEMA Independent Study IS-284)

This course will enable learners to successfully use the Substantial Damage Estimator 2.0 tool. Successful use is defined as accurately populating the electronic forms within the tool; saving individual-structure and community-wide data; running all reports available in the tool; and importing and exporting data to other formats, such as Excel. Learners must download, install and use the SDE 2.0 Software to complete the course. (0.3 CEUs)

MITIGATION

Introduction to Hazard Mitigation (FEMA Independent Study IS-393.a)

This course provides an introduction to mitigation for those who are new to emergency management and/or mitigation. (1.0 CEUs)

Mitigation eGrant System for the Subgrant Applicant (FEMA Independent Study IS-30)

This interactive computer-based course is part of a series designed to provide various users with basic knowledge about using the web-based Mitigation Electronic Grants (eGrants) Management System. This course is specifically targeted for Subgrant Applicants. (0.5 CEUs)

Benefit-Cost Analysis Fundamentals (FEMA Independent Study IS-276)

This course serves as an overview of fundamental Benefit-Cost Analysis concepts and theory and is the framework and prerequisite for the classroom, field or facilitated distance learning Benefit-Cost Analysis course. (0.1 CEUs)

Engineering Principles and Practices for Retrofitting Flood-Prone Residential Structures (FEMA Independent Study IS-279)

This course provides essential, non-technical background knowledge about retrofitting. The retrofitting measures presented are creative and practical, comply with applicable floodplain regulations, and are satisfactory to homeowners. It is assumed that students planning to attend the technical course at EMI will have mastered this ISP course. (1.0 CEUs)

Introduction to Residential Coastal Construction (FEMA Independent Study IS-386)

This course will introduce the student to basic information about residential coastal construction. This is a very comprehensive, advanced level course. The target audience includes; engineers, architects, building code officials, floodplain management, hazard mitigation, planning, and building officials with building science knowledge. (1.4 CEUs)



B. Recovery

SDE – Condensed Procedural Guide

The SDE Tool was developed by FEMA to assist State and local officials in determining substantial damage for residential and non-residential structures in accordance with a local floodplain management ordinance meeting the requirements of the National Flood Insurance Program (NFIP). A condensed procedure guide for utilizing the SDE Tool and sample forms are provided.

Rapid Depth-Damage Estimate – Condensed Procedural Guide

The Rapid Depth-Damage Field Estimate method captures essential information to make substantial damage determinations for flood-related damages. The substantial damage determinations are based upon USACE published Generic Depth-Damage Relationships. A condensed procedure guide for utilizing the Rapid Depth-Damage Estimate method and sample forms are provided.

Sample Inspection Door Tag

A sample door tag notice to advise the property owner that an initial damage assessment has been completed, along instructions on repair/reconstruction procedures, is provided.

ATC-45 Placard Information

ATC-45 safety assessment forms and links to placards for download are provided.

Recommended Public Outreach Information

Links to available public outreach information and sample materials are provided for the following:

- FloodSmart – Flood Outreach Toolkit
- FEMA - Sample Notices to Property Owners, Sample Affidavits, and Other Material
- FEMA - Sample Letters of Determination

SDE – Condensed Procedural Guide (RIVERINE or COASTAL)

FEMA's SDE software offers a formalized approach to developing reasonable estimates of building values and reasonable estimates of the cost to repair or reconstruct buildings. The SDE enables local officials to calculate a reasonable and defensible estimate of whether a building has been substantially damaged. While SDE can be used to evaluate damage by any cause (flood, tornado, earthquake, etc.), flooding is the most frequently-occurring natural hazard. Therefore, the software and companion workbook focus primarily on developing inventories of flood-damaged structure.

Guidance on collecting and recording SDE data is presented in the SDE User's Manual and SDE Field Workbook. Available here:

<http://www.fema.gov/media-library/assets/documents/18692?id=4166>

SDE Field Preparations

Prior to conducting substantial damage estimations using the FEMA SDE software, it is recommended to identifying available resources. This includes:

- Selecting the SDE inspection lead, data and QA lead, and emergency management points-of-contact (POCs);
- Reviewing FIRMs and other maps for floodplain and street locations;
- Compiling tax data; and
- Pre-loading available property data into the SDE tool.

Curbside Information

After arriving at a structure, the field inspector should photograph a curbside view of the front or side of the structure, log the photograph, and record basic data for the property on a Damage Inspection Worksheet or in the SDE tool on a laptop computer. Basic data includes:

- Building Address;
- Structure Attributes (residential only);
- Structure Information;
- Inspector Information; and
- NFIP Information.

A sample residential damage inspection worksheet is provided on the following pages.

Exterior Inspections

Data collected during the exterior inspection include the building dimensions, information about exterior-related items, and damage information (e.g. exterior depth of flooding). After recording the basic data, the inspector should estimate the structure area and perform an exterior inspection by walking around the entire exterior of the structure. The field inspector should evaluate the exterior elements of residential and non-residential structures to estimate the percent damage of each exterior element including:

- Roof damage;
- Foundation damage;
- Post, pier, or column damage; and
- Exterior wall damage.

Interior Inspections

When inspecting a residential building, field inspectors need to remember AT ALL TIMES that they are inside someone's home or when inspecting non-residential buildings, that they are on someone's property. Field Inspectors should always verify that they have permission to enter the property. Appropriate care and respect for the structure and contents should be demonstrated during the inspections. The inspection team should evaluate the interior construction elements for damage including:

- Interior finish;
- Doors and windows;
- Cabinets and countertops;
- Floor finish;
- Plumbing;
- Electrical;
- Built-in appliances; and
- HVAC.

SDE Determinations

When the field inspection is complete and the percent damage of all elements (exterior and interior) have been estimated and entered into the SDE tool, the SDE determination is made by the SDE tool. If necessary, users may edit and/or revise data for any data fields in the assessment. Once the assessment has been reviewed for quality assurance/quality control by a field inspection team lead and/or supervisor, the assessments can be considered final.

Residential

SDE DAMAGE INSPECTION WORKSHEET

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

Address: _____

SDE ADDRESS Tab

Subdivision 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: _____ Zip: _____

Phone: _____ Cell Phone: _____

Mailing Address

Check here if same as above: _____

First Name: _____

Last Name: _____

Street Number: _____ Street Name: _____ Street Suffix: _____

City: _____ State: _____

County: _____ Zip: _____

Phone: _____ Cell Phone: _____

Care of: _____

SDE STRUCTURE / DAMAGE / NFIP INFO Tab

Structure Attributes

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 Construction: Low Budget Average Good Excellent

Residence Information (if needed): _____

Damage Information

Date Damage Occurred (mm/dd/yyyy): _____

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

Cause of Damage (if "Other" is selected): _____

No Physical Damage (check here if none): _____

Duration of Flood: _____ Hours _____ Days

SDE STRUCTURE / DAMAGE / NFIP INFO Tab

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

Depth of Flood Above First Floor (estimated to nearest 0.5 foot): _____

Inspector Information:

Inspector's Name: _____

Inspector's Phone: _____ Date of Inspection (mm/dd/yyyy): _____

NFIP 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

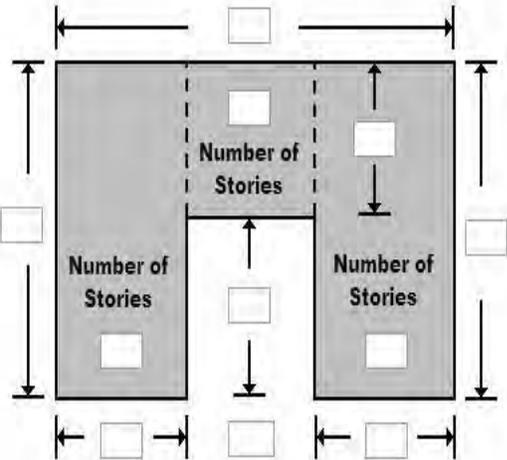
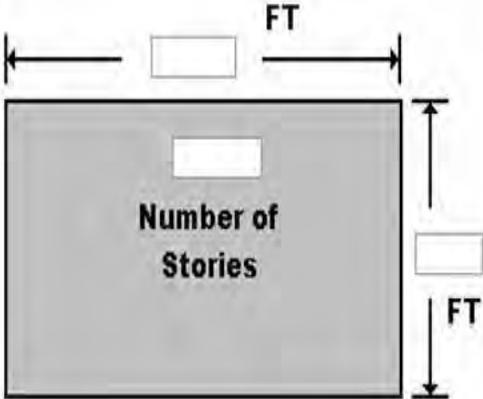
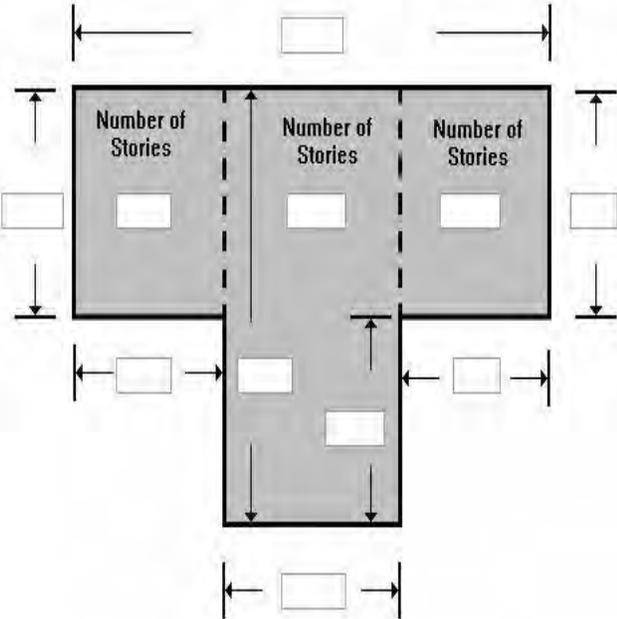
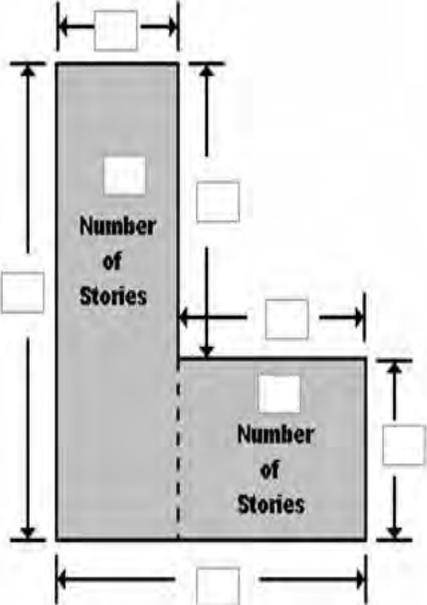
Square Footage

Calculate (on next page) or Enter Square Footage

Total Square Footage (if available): _____

COST Tab

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



COST Tab

Base Cost per Sq Ft: _____ **Geographic Adjustment:** _____

Adjustments

<u>Single-Family House</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Item Cost</u>
Roofing		Sq Ft		
Heating / Cooling		Each		
Appliances		Each		
Fireplaces		Each		
Porch / Breezeways		Sq Ft		
Garage		Sq Ft		
<u>Manufactured House</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Item Cost</u>
Expando		Sq Ft		
Carport		Sq Ft		
Open Porch		Sq Ft		
Enclosed Porch		Sq Ft		
Decks		Each		
Skirting		Sq Ft		
Fireplaces		Each		

COST Tab

Additional Adjustments

<u>Adjustments</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Item Cost</u>

Cost Data Reference (source or name): _____

Cost Data Date: _____

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 PERCENTAGES Tab

Element Percentages

Residence Type: ____ Single-Family (SF) House ____ Manufactured House (MH)

<u>Item</u>	<u>% Damaged</u>	<u>Element %</u>	<u>Item Cost</u>	<u>Damage Values</u>
Foundation (SF only)				
Superstructure				
Roof Covering				
Exterior Finish				
Interior Finish				
Doors and Windows				
Cabinets and Countertops				
Flood Finish				
Plumbing				
Electrical				
Appliances				
HVAC				
Skirting / Forms Piers (MH only)				

SDE OUTPUT SUMMARY Tab - Optional User Entered Data

Professional Market Appraisal: _____

Tax Assessed Value: _____ **Factor Adjustment:** ____ **Adjusted Tax Assessed Value:** _____

Contractor's Estimate of Damage: _____

Community's Estimate of Damage: _____

Sample Rapid Depth-Damage Field Estimate (RIVERINE)

The Rapid Depth-Damage Field Estimate method captures essential information to make substantial damage determinations for flood-related damages. The substantial damage determinations are based upon USACE published Generic Depth-Damage Relationships:

<http://corpsnedmanuals.us/FloodDamageReduction/FDRID022DamageDpthRel.asp?ID=22>

The Rapid Depth-Damage Field Estimate method allows a community to quickly separate flood-damaged structures into three groups:

- Clearly non-substantial damage (less than 40%)
- Clearly substantial damage (greater than 50%), and
- Uncertain whether substantial damage (40-50%)

Structures within these categories should be addressed as follows:

Clearly non-substantial damage (less than 40%)

- Structure is non-substantially damaged, no building protection requirements apply, obtain local permit.
- Note, construction requirements within the floodway may vary based on local flood damage prevention ordinance.

Uncertain whether substantial damage (40-50%)

- Compare the structure's pre-damage value to the cost of repair.
- If repair costs are less than 50% of the value of the structure, then the structure is non-substantially damaged.
- If repair costs equal or exceed 50% of the value of the structure, then the structure is substantially damaged.
- Note, your local flood damage prevention ordinance may have more restrictive regulations than 50%.

Clearly substantial damage (greater than 50%)

- Substantially Damaged structures must be brought into compliance with the current local flood damage prevention ordinance requirements.
- Obtain local permit and meet building protection requirements of the local flood damage prevention ordinance.

A Rapid Depth-Damage Field Estimate worksheet (see next page) should be completed for each structure, indicating the depth (in feet) of floodwaters. This method requires an actual measurement of flood depth based on visual watermarks and/or observed flood damage to the structure. A photo of each structure should also be taken to accompany the worksheet. This helps identify the structure and document the condition of the structure.

There may be occasion when obvious structural damage has occurred or poor condition of the existing home may be such that even the lesser depths of flood water appear to have caused great damage. This should be noted on the Rapid Depth- Damage Field Estimate worksheet. If uncertain whether substantial damage has occurred, additional improvements and/or additions are proposed, or there is a dispute regarding a damage assessment, more information will be required in order to accurately determine whether or not the structure is substantially damaged.

While documenting the damage, the Floodplain Administrator and/or other authorized staff may also wish to leave a notice to advise the owner that an initial damage assessment has been done and include instructions on the repair/reconstruction and permit process. A sample door tag is provided following the sample Rapid Depth-Damage Field Estimate worksheet.

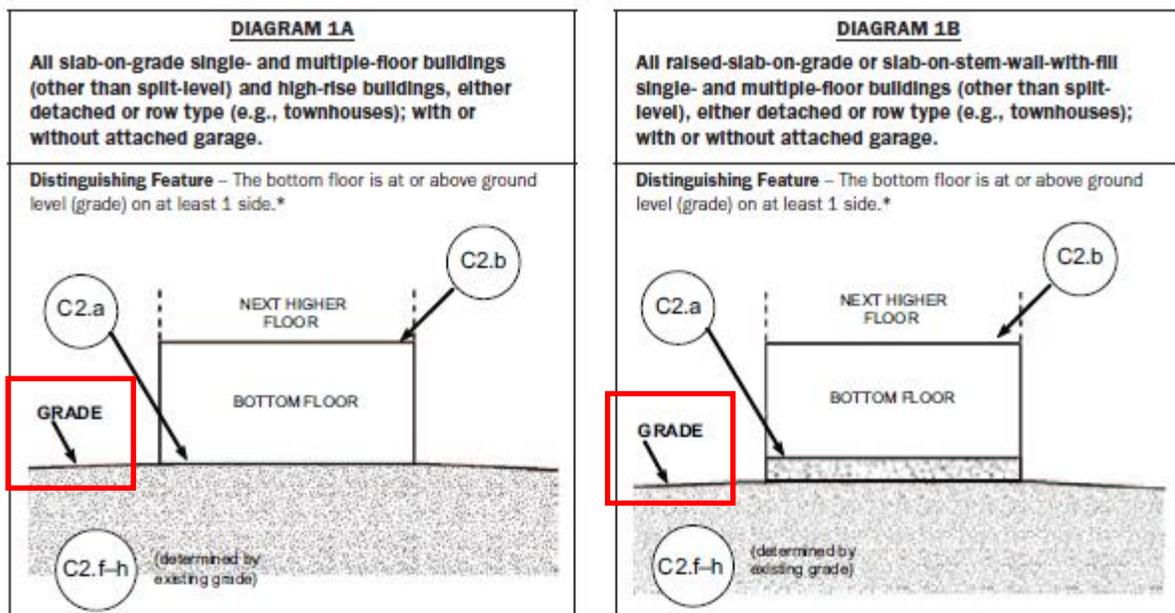
Note: The rapid depth-damage estimate is recommended for riverine flooding events only due to the use of the USACE generic depth-damage relationships. The depth-damage relationships were developed based on the premise that water depth, and its relationship to structure elevation, is the most important variable in determining the expected value of damage to buildings. Similar properties, constructed, furnished, and maintained alike, and exposed to the same flood stages and forces, may be assumed to incur damages of similar magnitudes or proportion to actual values. However, for coastal storm events, a very large percentage of damages are related to erosion (i.e., undermining of structures) and/or wave forces rather than actual inundation of structures, and often discontinuous or stepwise depth-damage relationships are more indicative of the actual damage potential.

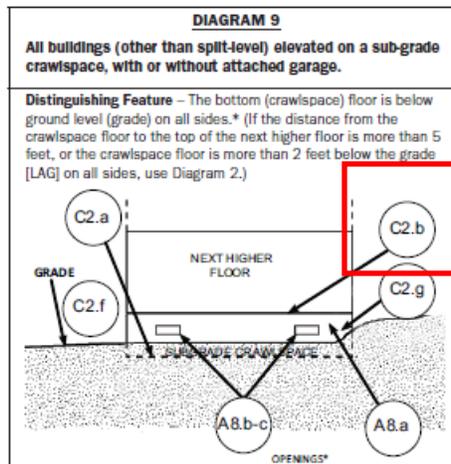
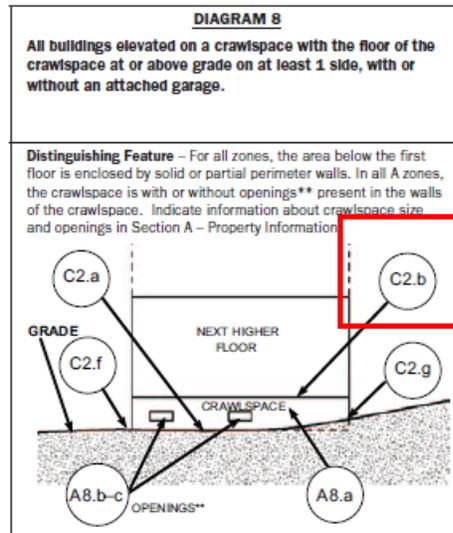
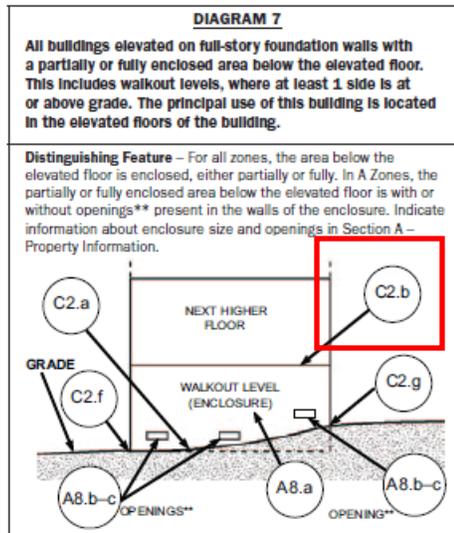
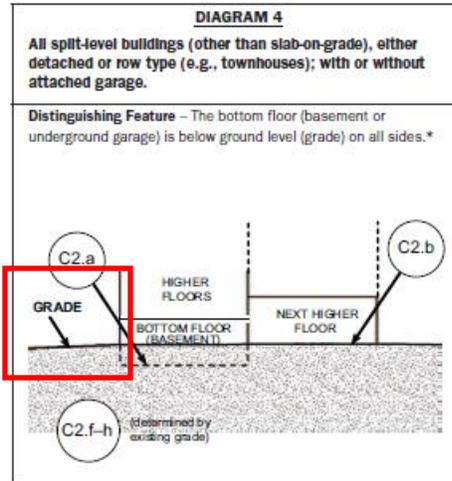
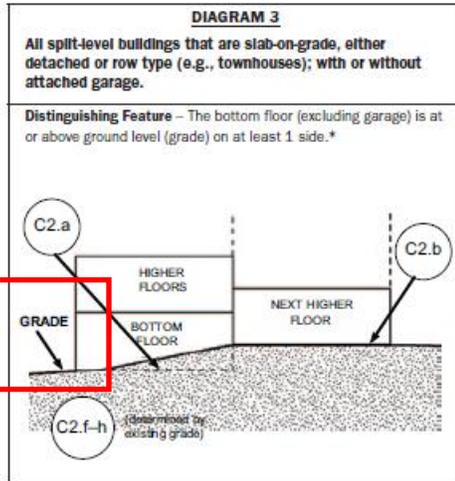
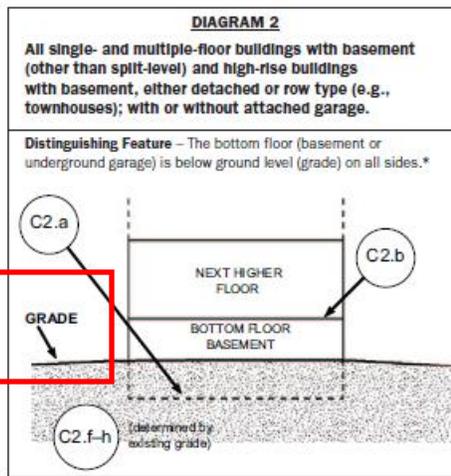
DEPTH DAMAGE FIELD ESTIMATE				(Jurisdiction)		(County)			
(owner or renter)			Spoken to? Yes / No			(phone)			
(street address)			(PO Community)			(zip)			
DATE OF INSPECTION	DATE OF CONSTRUCTION	FIRM PANEL	SOURCE OF DAMAGE	DURATION OF FLOODING	TIME OF INSPECTION				
/ /	/ /		Flood	/ /					
Structure located in:	Floodway	Flood Fringe	Floodway/Flood Fringe Limits Not Determined		Outside Identified Floodplain				
TYPE OF STRUCTURE:		ONE STORY	TWO OR MORE	SPLIT LEVEL	MANUFACTURED HOME				
Does structure have a basement?		Yes	No	Yes	No	Yes	No	Yes	No
	Depth in feet to LAG								
Structures with damages of ≥ 50% require use of Post-FIRM flood protection standards.	16	81.1%	80.7%	76.4%	69.2%	69.3%	84.4%	SD	SD
	15	81.1%	80.2%	76.4%	67.7%	69.3%	83.8%	SD	SD
	14	81.1%	79.5%	75.4%	65.9%	69.3%	81.7%	SD	SD
	13	81.1%	78.5%	73.7%	63.8%	69.3%	78.4%	SD	SD
	12	81.1%	77.2%	71.4%	61.4%	68.8%	73.9%	SD	SD
	11	81.1%	75.4%	68.4%	58.7%	67.2%	68.6%	SD	SD
	10	80.1%	73.2%	64.8%	55.7%	64.8%	62.6%	SD	SD
Structures with damage estimates between 40% & 50% require further information to determine which flood protection standards apply.	9	77.7%	70.5%	60.8%	52.4%	61.6%	56.1%	SD	SD
	8	74.2%	67.2%	56.4%	48.8%	57.8%	49.2%	SD	SD
	7	69.8%	63.2%	51.8%	44.9%	53.5%	42.3%	SD	SD
	6	64.5%	58.6%	46.9%	40.7%	48.6%	35.5%	SD	SD
	5	58.6%	53.2%	41.9%	36.2%	43.8%	28.9%	SD	SD
	4	52.2%	47.1%	36.9%	31.4%	38.6%	22.8%	SD	SD
	3	45.5%	40.1%	31.9%	26.3%	33.4%	17.4%		
Post-FIRM flood protection standards may be used to repair structures with damages of <50% but are not required.	2	38.7%	32.1%	27.0%	20.9%	28.2%	12.9%		
	1	32.0%	23.3%	22.3%	15.2%	23.2%	9.4%		
	0	25.5%	13.4%	17.9%	9.3%	18.5%	7.2%		
	-1	19.4%	2.5%	13.9%	3.0%	14.2%	6.4%		
	-2	13.8%	0.0%	10.2%	0.0%	10.4%	0.0%		
	-3	9.0%		7.2%		7.2%			
	-4	5.2%		4.7%		4.7%			
	-5	2.4%		2.9%		3.1%			
-6	0.8%		1.9%		2.5%				
-7	0.7%		1.7%						
-8	0.0%		1.7%						
Notes									
For help with completing and using this form, see explanatory notes on reverse.									
INSPECTED BY: (name/telephone)									
Posted (Yes / No) / / as:				INITIAL FIRM DATE		Rev			

Additional Instructions for the Rapid Depth-Damage Field Estimate Worksheet:

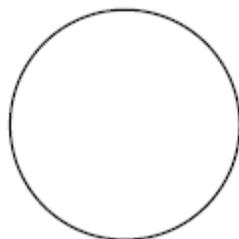
1. **JURISDICTION:** Since a property's mailing address (*e.g., Post Office Community*) is not always the same as jurisdiction, enter the correct information for each structure.
2. **SOURCE OF DAMAGE** indicates whether the damage was the result of flood, fire, wind, etc. or a combination of sources. Use the RAPID DEPTH-DAMAGE FIELD ESTIMATE worksheet for flood-related damages.
3. **DATE OF INITIAL FIRM** refers to the community's Flood Insurance Rate Map (FIRM). The initial date indicates when the flood area was first identified by FEMA. A building constructed before this initial FIRM date (*i.e., pre-FIRM*) that is substantially damaged—from any source—(and/or improved), must be brought into compliance with your Post-FIRM standards.
4. **FIRM PANEL:** Communities may have multiple panels. The panel number is found below the map title.
5. The **DEPTH IN FEET TO LOWEST ADJACENT GRADE (LAG)** refers to the level of the flood water. The table uses -8 feet as the basement floor level, so a depth of -6 feet results from 2 feet of floodwater in a basement. Round depths to the nearest whole foot.
6. Property owners with structures that have damages in the 40% (shaded on table) should be asked for documentation of damage and repairs to ensure that the structure is not substantially damaged.
7. For a structure with a compliant **Enclosure Below Lowest Floor** (see diagrams 7, 8, and 9) use lowest floor instead of lowest adjacent grade to measure depth of flooding. Compliant enclosures must have openings.
8. **Manufactured Homes** are not included in the USACE depth-damage tables; consider a floodwater depth of one foot above the lowest floor to indicate substantial damage.
9. Local Floodplain Official must give property owners **written notice** that their structure has been determined to be substantially damaged along with instructions to comply with local permit requirements.

Examples for locating Lowest Adjacent Grade (LAG) utilizing FEMA's *Elevation Certificate and Instructions, 2012 Edition*





Sample Door Tag:



NOTICE

On _____, an initial damage assessment was completed for this structure as a result of the recent flood event.

(Community Name) requests that you contact our office as soon as possible to obtain a building permit for the storm related damage to your property. There is no cost for this permit

Office hours are 8:00 am to 5:00 pm
Monday through Friday

(Community Name)
Floodplain Administrator
Address
Phone Number

ATC-45 Placard Information

The ATC-45 *Field Manual: Safety Evaluation of Buildings after Wind Storms and Floods* is intended to be used by building officials, building inspectors, engineers, and others involved in post-disaster safety evaluation of building types commonly found in the United States. The *Field Manual* explains three different building safety evaluation procedures. Two of the procedures (Rapid Evaluation and Detailed Evaluation) are discussed in detail. For each of these procedures, the document provides guidance on where to look for damage.

The ATC-45 *Field Manual* has been printed in an easy-to-use, pocket-sized format. The document can be obtained from the Applied Technology Council, 201 Redwood Shores Parkway, Suite 240, Redwood City, California 94065 (phone, 650/595-1542; fax, 650/593-2320; e-mail, ATC@ATCouncil.org).

Available for immediate download in PDF format are the following ATC-45 placards and safety assessment forms:

- ATC-45 Rapid Evaluation Safety Assessment Form
- ATC-45 Detailed Evaluation Safety Assessment Form
- ATC-45 Fixed Equipment Checklist
- ATC-45 UNSAFE Posting Placard (print on red cardstock)
- ATC-45 RESTRICTED USE Posting Placard (print on yellow cardstock)
- ATC-45 INSPECTED Posting Placard (print on green cardstock)
- ATC-45 Appendix E: Guidelines for Owners and Occupants of Damaged Buildings

These documents are available here:

https://www.atcouncil.org/index.php?option=com_content&view=article&id=182%3Aatc-45-placards&catid=45%3Adownloads&Itemid=1

The Rapid and Detailed Evaluation Safety Assessment Forms are provided on the following pages.

UNSAFE

**DO NOT ENTER OR OCCUPY
(THIS PLACARD IS NOT A DEMOLITION ORDER)**

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below: _____ _____ _____	Date _____ Time _____
Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.	This facility was inspected under emergency conditions for: _____ (Jurisdiction)
Facility Name and Address: _____ _____	Inspector ID / Agency _____ _____

**Do Not Remove, Alter, or Cover this Placard
until Authorized by Governing Authority**

RESTRICTED USE

Caution: This structure has been inspected and found to be damaged as described below: _____ _____ _____	Date _____ Time _____
Entry, occupancy, and lawful use are restricted as indicated below: _____ _____ _____	This facility was inspected under emergency conditions for: _____ (Jurisdiction)
Facility Name and Address: _____ _____	Inspector ID / Agency _____ _____

**Do Not Remove, Alter, or Cover this Placard
until Authorized by Governing Authority**

INSPECTED

LAWFUL OCCUPANCY PERMITTED

This structure has been inspected (as indicated below) and no apparent structural hazard has been found. <input type="checkbox"/> Inspected Exterior Only <input type="checkbox"/> Inspected Exterior and Interior	Date _____ Time _____
Report any unsafe condition to local authorities; reinspection may be required.	This facility was inspected under emergency conditions for: _____ (Jurisdiction)
Inspector Comments: _____ _____	Inspector ID / Agency _____ _____
Facility Name and Address: _____ _____	

**Do Not Remove, Alter, or Cover this Placard
until Authorized by Governing Authority**

ATC-45 Rapid Evaluation Safety Assessment Form

Inspection

Inspector ID: _____ Inspection date: _____
 Affiliation: _____ Inspection time: _____ AM PM
 Areas inspected: Exterior only Exterior and interior

Building Description

Building name: _____
 Address: _____
 Building contact/phone: _____
 Number of stories: _____
 "Footprint area" (square feet): _____
 Number of residential units: _____

Type of Building

Mid-rise or high-rise Pre-fabricated
 Low-rise multi-family One- or two-family dwelling
 Low-rise commercial

Primary Occupancy

Dwelling Commercial Government
 Other residential Offices Historic
 Public assembly Industrial School
 Emergency services Other: _____

Evaluation

Investigate the building for the conditions below and check the appropriate column. **Estimated Building Damage (excluding contents)**

Observed Conditions:	Minor/None	Moderate	Severe	
Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None
Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%
Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%
Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%
Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%
Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%

See back of form for further comments.

Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

INSPECTED (Green placard) **RESTRICTED USE** (Yellow placard) **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

Number of residential units vacated: _____

Further Actions Check the boxes below only if further actions are needed.

Barricades needed in the following areas: _____

Detailed Evaluation recommended: Structural Geotechnical Other: _____

Substantial Damage determination recommended

Other recommendations: _____

See back of form for further comments.

ATC-45 Detailed Evaluation Safety Assessment Form

Inspection

Inspector ID: _____ Inspection date: _____

Affiliation: _____ Inspection time: _____ AM PM

Final Posting from page 2

- Inspected
 Restricted Use
 Unsafe

Building Description

Building name: _____

Address: _____

Building contact/phone: _____

Number of stories: _____

"Footprint area" (square feet): _____

Number of residential units: _____

Type of Building

- Mid-rise or High-rise
 Low-rise multi-family
 Low-rise commercial

- Pre-fabricated
 One- or two-family dwelling
 Other: _____

Primary Occupancy

- Dwelling
 Other residential
 Public assembly
 Emergency services

- Commercial Government
 Offices Historic
 Industrial School
 Other: _____

Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

	Minor/None	Moderate	Severe	Comments
Overall hazards:				
Collapse or partial collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building or story lean or drift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fractured or displaced foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Structural hazards:				
Failure of significant element/connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Column, pier, or bearing wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Roof/floor framing or connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Superstructure/foundation connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Moment frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Diaphragm/horizontal bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Vertical bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Shear wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Nonstructural hazards:				
Parapets, ornamentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Canopy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cladding, glazing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ceilings, light fixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stairs, exits, access walkways, gratings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Interior walls, partitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mechanical & electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building contents, other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Geotechnical hazards:				
Slope failure, debris impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ground movement, erosion, sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Differential settlement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Recommended Public Information Flyers

FloodSmart – Flood Outreach Toolkit

www.floodsmart.gov/toolkits/flood/index.htm

The National Flood Insurance Program (NFIP) developed the *Flood Outreach Toolkit* to assist the local Floodplain Administrator educate and inform communities and citizens about the importance of flood insurance coverage.

The toolkit provides resources to help the audiences you connect with on a regular basis—community members and the media—understand the importance of flood preparedness and protection. The suite of materials includes fact sheets, brochures and talking points that are indicated as either 1) resource material for the local Floodplain Administrator or 2) outreach materials for distribution to the public and the media. Documents available for “After a Flood Disaster” include:

Materials for Floodplain Administrator

- Flood Insurance 101
- Flood Maps
- ICC
- After the Flood

Materials for the Public

- After the Flood
- NFIP Flood Insurance Claims Handbook
- Appealing Your Flood Insurance Claim
- Consumer Brochure Managing Your Flood Insurance Claim

Documents available for general Flood Insurance 101 include:

Materials for Floodplain Administrator

- FloodSmart Campaign
- Flood Insurance: How It Works
- Flood Facts: Flood Risks Across the Country
- NFIP: Flood Insurance and Flood Maps
- Facts and Figures
- Answers to Tough Questions

Materials for the Public

- NFIP Summary of Coverage
- Consumer Brochure: Why You Need Flood Insurance
- Consumer Brochure: Flood Preparation and Safety
- Contents Only Coverage
- Map Change Effects on Insurance

Public Outreach Materials from ADECA OWR

The ADECA OWR Floodplain Management website provides a wide variety of resources, forms and links. These include information regarding:

- National Flood Insurance Program
 - NFIP Community Participation Resources
 - Biggert-Waters Flood Insurance Reform Act of 2012
 - NFIP Flood Insurance Guidance Fact Sheets
- Floodplain Mapping
- Forms
- Coastal Mapping Update
- FEMA Pamphlets
- Training
- Links to Other Agencies

For more information, visit

www.adeca.alabama.gov/Divisions/owr/floodplain

The screenshot shows the ADECA website's 'Floodplain Management' page. The header includes the ADECA logo and navigation links. The main content area has a title 'Floodplain Management' and a descriptive paragraph. Below the text is a photograph of a flooded area with boats. At the bottom, there is a section titled 'Click the names below for more information on floodplain management:' with a list of links including 'Risk MAP (Mapping, Assessment and Planning)', 'Am I in a Floodplain?', 'County Flood Map Information and Status', 'Letters of Map Revision (LOMR)', 'National Flood Insurance Program and Flood Insurance Reform Act', 'Resources, Forms and Links', 'Safe Dams', and 'Frequently Asked Questions (View FAQ Page)'.

FEMA – Substantial Improvement/Substantial Damage Desk Reference

www.fema.gov/media-library/assets/documents/18562?id=4160

This *Substantial Improvement/Substantial Damage (SI/SD) Desk Reference* was prepared by FEMA to provide practical guidance and suggested procedures to implement the NFIP requirements for SI/SD. The desk reference includes the following sample documents for the local Floodplain Administrator:

Sample Notices to Property Owners, Sample Affidavits, and Other Material

- Sample Substantial Improvement/Damage Notice to Property Owners, Contractors, and Design Professionals
- Requirements for Applications for Permits for Substantial Improvements and Repair of Substantial Damage
- Costs for Substantial Improvements and Repair of Substantial Damage
- Owner's Affidavit: Substantial Improvement or Repair of Substantial Damage
- Contractor's Affidavit: Substantial Improvement or Repair of Substantial Damage
- Substantial Improvement Worksheet for Floodplain Construction
- Adjuster Preliminary Damage Assessment (FEMA Form 81-09)

Sample Letters of Determination

- Letter to Notify Property Owners of a Determination That Work Constitutes Substantial Improvement
- Letter to Notify Property Owners of a Determination That Work Constitutes Repair of Substantial Damage
- Letter to Notify Property Owners of a Determination That Work Does NOT Constitute Repair of Substantial Damage

Alabama Post-Flood Recovery Guide for Elected Officials



The process for a major disaster declaration is summarized as follows:

- Step 1.** Local government responds to the emergency or disaster supplemented by neighboring communities and volunteer agencies. If the local government is overwhelmed, the county Emergency Management Agency requests an Emergency Declaration from the county commissioners declaring a state of disaster emergency and requesting state assistance.
- Step 2.** AEMA responds with state resources, such as the National Guard and other state agencies. If these resources are overwhelmed, then AEMA requests assistance from the Federal Emergency Management Agency (FEMA).
- Step 3.** A damage assessment is performed by a Joint Preliminary Damage Assessment team composed of local, state, and federal agencies to determine losses and recovery needs.
- Step 4.** A Major Disaster Declaration is requested by the Governor, based on the impact assessment, along with an agreement to commit state funds and resources to long-term recovery.
- Step 5.** FEMA evaluates the request and recommends action to the White House based on the disaster, the local community and the state's ability to recover.
- Step 6.** The President considers the request and FEMA informs the Governor whether it has been approved or denied. This decision process could take a few hours to several weeks depending on the nature of the disaster.

Presidential Major Disaster Declaration Assistance

After a Presidential major disaster declaration has been made, FEMA will designate the area eligible for assistance and announce the array of Federal programs available to assist in the response and recovery effort. Not all programs, however, are activated for every disaster. The determination of which programs are activated is based on the needs found during the damage assessment and any subsequent information that may be discovered. These programs include:

- **Individual Assistance (IA)** - financial or direct assistance to individuals and families whose property has been damaged or destroyed as a result of a federally-declared disaster, and whose losses are not covered by insurance.
- **Public Assistance (PA)** - supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process.
- **Hazard Mitigation** – the Hazard Mitigation Grant Program (HMGP) provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.



Prepared by:
AMEC Environment & Infrastructure, Inc.
3800 Ezell Road, Suite 100
Nashville, TN 37211

Regardless of community size or the nature of a disaster, local government leaders are responsible for overseeing all four phases of emergency management—preparedness, response, recovery, and mitigation. Most agree that a key factor in recovering from any disaster is effective local leadership. As an elected official, your decisions and actions will influence all sectors of your community: local government, citizens, private sector, voluntary organizations, and the media. It is your duty to act in the best interest of your constituents and your community as a whole. In the emotion-filled response and aftermath of a flood or hurricane event, actions that will lead to a successful long-term recovery may not seem obvious. The key to successful long-term recovery is purposeful consideration of the eventual impact that activities in all phases of emergency management will have on the recovery of your community.

The Alabama Department of Economic and Community Affairs (ADECA), Office of Water Resources (OWR), with assistance from AMEC Environment & Infrastructure, Inc., developed an Alabama-specific “Post-Flood Recovery Guidebook” for local Floodplain Administrators. The purpose of the Floodplain Administrator’s Guidebook is to assist communities in: responding to a flood or hurricane event, enforcing the National Flood Insurance Program (NFIP) requirements for rebuilding efforts, and outlining suitable disaster recovery measures that will help reduce future flood damages.

This companion Elected Officials’ Guide is a quick-reference resource for elected officials of floodprone communities to highlight specific activities of elected officials in all four phases of emergency management that will lead to successful long-term recovery following flood and hurricane events.



Preparedness

During an event, elected officials will be called on to make important decisions. Involvement in preparedness activities by elected officials is necessary to bring about understanding required for effective decision-making.

- Be familiar with flood risk areas—coordinate with your Floodplain Administrator to understand what areas of the community are prone to flooding, including the number of vulnerable residents and specific businesses and critical facilities at risk.
- Understand your community's floodplain management ordinance—all communities that participate in the National Flood Insurance Program (NFIP) must adopt and enforce floodplain management regulations that meet or exceed minimum NFIP standards. The ordinance provides requirements for any development that occurs in floodplain areas as well as requirements that become relevant after a structure in the floodplain is damaged more than 50% (substantially damaged).
- Understand your community's flood warning capabilities and your role in decisions such as evacuation orders, road closures, sandbagging, and/or moving contents above flood levels.
- Understand flood preparedness, response, recovery, and mitigation roles in your community—various departments within your community will have specific roles (i.e. Emergency Management, Public Works, Building Permit Office, Community Development, Fire Department, Police Department, etc.). Know who does what and when.
- Be familiar with procedures to request assistance—your community may have mutual aid agreements established with neighboring communities. If a disaster is beyond local capabilities, a local disaster emergency can be declared and State assistance can be requested. Elected officials should establish rapport with mutual aid partners and County Emergency Management Officials as well as understand the procedures to initiate a timely request (see step by step procedures on back of guide).
- Help coordinate/support local government activities to communicate flood risk to citizens.
- Participate in disaster response training and exercises—since elected officials will most definitely be involved in real events, it is crucial that you participate in training and exercises in advance of a real event. This includes familiarity with your Community Emergency Response Plan.
- Be prepared to talk to the media—elected officials are often asked to be the voice of the community's response and recovery efforts. It is a good idea to establish rapport with media outlets in advance as well as determine general types of information that will be released to the media.



Response

The recovery process begins even before the response phase is complete because decisions made while responding to the emergency can affect the recovery process

- Be involved in decisions to control access to flood impacted areas—these decisions are not always popular with residents of impacted areas. However, for the safety of the citizens and first responders access may need to be limited.
- Elected officials may be called on to assist in prioritization on response efforts. In this phase, the focus is first on life-safety, then protection of property and the environment.
- Coordinate with your Floodplain Administrator to be familiar with any impact assessments made in the flooded area.
- If a joint Preliminary Damage Assessment is warranted, be aware of the agencies involved and the steps for submitting the damage assessments.
- Fulfill your duties as outlined in your Community Emergency Response Plan, including your role in the Local Emergency Operations Center, if activated.
- If local response capabilities are overwhelmed, coordinate with the County Emergency Management Agency to request an Emergency Declaration from the County Commissioners (see step by step procedures on back of guide).
- Coordinate with government departments in your community to ensure staff time and resources are adequately tracked for potential reimbursement
- Be prepared to talk to the media—elected officials are often asked to report on the response activities after an event. This may include information on evacuations, damage assessments conducted, or other response activities.
- Coordinate with the Floodplain Administrator and EOC staff on messages that should be released to the public cautioning them not to repair damages without proper permits.
- The recovery process begins even before the response stage is complete because decisions made while responding to the emergency can affect the recovery process.



Recovery

The plan for recovery should include various phases, i.e., short, medium, and long-term planning. This will allow decision makers to focus time and resources appropriately while establishing clear expectations. Decisions made early on in the recovery phase can have an impact on the community's growth pattern for decades.

- Work with the Floodplain Administrator and the Building Permitting authority to ensure post-disaster reconstruction is done in compliance with your community's floodplain management ordinance.
- Your Floodplain Administrator and Building Permitting office will need your support in explaining to homeowners and business in the special flood hazard area (SFHA) that detailed damage assessments will need to be completed. Those with substantial damage may need to be brought into compliance with the current floodplain management ordinance as a condition of rebuilding.
 - For damaged structures located outside of the SFHA, permits can be issued and repair can proceed.
 - For structures in the SFHA that are clearly not substantially damaged or those determined not substantially damaged after a detailed substantial damage estimation(SDE), permits can be issued at repair at existing elevation can proceed. However, if additional improvements or additions are planned, additional information will need to be provided.
 - For structures that may be substantially damaged, a detailed SDE will need to be completed. If determined substantially damaged or if planned improvements and damage exceed 50% of structure value, structure must be brought into compliance with the minimum requirements of the community's ordinance.
- There may be pressure following a flood event to waive your local permit fees—this decision must be carefully considered, as the cost for your staff, materials, and equipment will also be a heavy burden following the event.
- It may be beneficial to consider a moratorium on construction due to the influx of permit requests and staffing capabilities. Additionally, if acquisition of flood-damaged properties utilizing FEMA Hazard Mitigation Assistance or other funds, a moratorium on construction would allow time to consider this as an alternative to rebuilding.
- Coordinate with the Floodplain Administrator to capture high water marks.



Mitigation

It is never too early to learn from the disaster and mitigate future disasters through thoughtful planning.

- Participate on the Hazard Mitigation Planning Committee charged with developing/updating the community's local hazard mitigation plan. An approved plan is required for jurisdictions to apply for FEMA Hazard Mitigation Assistance Grants. This plan should also be reviewed in light of any new information revealed by the recent event.
- Work with your Floodplain Administrator and others in your community to identify potential new mitigation projects. Ask the question, "Could these damages have been prevented?" If the answer is yes, the solution project might be eligible for funding through FEMA's Hazard Mitigation Assistance Grants.
- Become familiar with grant funding opportunities and requirements to ensure maximum utilization of these grants where applicable.
- Provide support to community staff in preparation of FEMA Hazard Mitigation Assistance grant applications for identified projects. The Hazard Mitigation Branch of the Alabama Emergency Management Agency administers the hazard mitigation assistance grants. Eligible applicants include the state and local governments, certain private-non-profits, and federally recognized Indian tribal governments. While private citizens and businesses cannot apply directly for the grant programs, they can benefit from the programs if they are included in an application sponsored by an eligible applicant.
- According to the 2013 Alabama State Hazard Mitigation Plan, the following flood-related mitigation project activities have been identified as priorities for funding under FEMA Hazard Mitigation Assistance Grants.
 - Elevation;
 - Acquisition;
 - Drainage improvements; and
 - Improved identification of threat through floodplain mapping.
- The post-flood environment may provide opportunities for other types of mitigation funding including: FEMA Public Assistance Section 406 Mitigation, Community Development Block Grants, Small Business Administration Loans, Increased Cost of Compliance coverage, and more. Coordinate with your Floodplain Administrator and local Emergency Manager to determine additional programs that may be available.



C. Mitigation

HMGP Letter of Intent

The purpose of the Letter of Intent (LOI) is to establish your community's interest in the Hazard Mitigation Grant Program (HMGP) and to identify projects that are priority for your jurisdiction to reduce or eliminate future emergency or disaster costs.

HMGP Main Application

The HMGP application is currently submitted as hard-copy only. The original application and one (1) copy should be submitted to AEMA. The application requires application information and project specific information. Information requested includes:

- Local hazard mitigation plan status
- History of hazards/damages in the area to be protected
- Project Description
- Project Location
- Scope of work/budget
- Benefit-Cost Ratio
- Alternative Actions Considered
- Environmental documents
- Maintenance agreement
- Applicants certification
- Historical Review

**ALABAMA EMERGENCY MANAGEMENT AGENCY
LETTER OF INTENT
HAZARD MITIGATION GRANT PROGRAM (HMGP)
FEMA-1971-DR**

The purpose of this form is to establish your community's interest in the HMGP and to identify projects that are priority for your jurisdiction to reduce or eliminate future emergency or disaster costs.

(This is NOT the Public Assistance permanent repair and restoration program)

NAME/ADDRESS OF JURISDICTION:

BASIS OF ELIGIBILITY:

___ State Gov't ___ Indian Tribe
___ Local Gov't ___ Other
___ Special Purpose District
___ Private Non-profit Organization

COUNTY OF JURISDICTION _____

POINT OF CONTACT _____ PHONE NUMBER _____
EMAIL _____

(PLEASE Do Not Include projects that were covered under the Public Assistance permanent Repair and restoration section of the Disaster Relief Act)

1. Brief Description of Problem: _____

2. Brief Description of Project: _____

3. Is the project consistent with your Local Hazard Mitigation Plan risk assessment, goals and actions? Yes No Identify its location in plan by page and section. _____

4. Identification of Benefits: _____

5. Estimation of Cost: _____
6. Source of Local Share: _____

Please Return Form To:

**Kelli Alexander, State Hazard Mitigation Officer
Alabama Emergency Management Agency
P. O. Drawer 2160
Clanton, Alabama 35046-2160
Phone: (205) 280-2269 Fax Number: (205) 280-2493**



Alabama Emergency Management Agency Hazard Mitigation Grant Program



Project Application

Applicant _____
(Must be a State or Local government, Federally recognized Indian tribe, or certain PNP)

Project Location _____
(Street, city, county, and state)

Project Title (descriptive) _____

Estimated Project Cost (total) \$ _____

Please submit the original application and one (1) copy.

THIS SECTION FOR STATE USE ONLY

- Standard HMGP or
- HMGP 5% Initiative
- FMA
- Other _____

- Initial Submission *or*
- Resubmission

- Completeness Checklist
- State 409 Plan
- Eligible Applicant
- B/C Analysis

- Project Type(s)**
- Acquisition/Demolition
 - Acquisition/Relocation
 - Elevation
 - Drainage
 - Wind Retrofit
 - Tornado
 - Seismic Retrofit
 - Other _____

- Community NFIP Status:**
- Participating Community
ID #: _____
 - CRS Participant
 - In Good Standing
 - Sanctioned
 - Regulatory Floodway
 - Coastal V-Zone

State Application ID _____

Reviewer Phone # _____

Date Received _____

Reviewer Fax # _____

State Reviewer _____

Reviewer Email: _____

This application is for all Federal Emergency Management Agency (FEMA Region IV) Hazard Mitigation Grant Program (HMGP) proposals. Please complete ALL sections and provide the documents requested. If you require technical assistance with this application, please contact Alabama Emergency Management Mitigation Division at (205) 280-2476.

A. To Fill Out This Application: complete all sections of the main application AND the following worksheets, if applicable:

- **Safe Room Worksheet:** one per site
- **Acquisition Worksheet:** Acquisition Projects only – one per structure; owners’ names required
- **Elevation Guidelines/Worksheet:** Elevation Projects only – one per structure
- **Drainage Worksheet:** Drainage Projects only
- **Wind Retrofit Worksheet:** Wind Retrofit Projects only – one per structure
- **Alert and Notification Systems Worksheet:** one per site (see also III-B-5 below)
- **Generator Worksheet:** one per site (see also III-B-5 below)
- **Generator Data Sheet:** one per site (see also III-B-5 below)

B. Applicant Information

1. **Applicant (Organization)** _____

2. **Applicant Type**
 State or Local Government Recognized Indian Tribe Private Non-Profit

3. County / Counties _____

4. State Legislative district(s): H: _____ S: _____ Congressional District(s) _____

5. Tax I.D. Number _____ FIPS Code _____ DUNS Number _____

6. **Point of Contact**
 Mr. Ms. Mrs. First Name _____ Last Name _____
 Title _____
 Street Address _____
 City _____ State _____ Zip Code _____
 Telephone () - _____ Fax () - _____
 Email Address _____

7. **Application Prepared by**
 Mr. Ms. Mrs. First Name _____ Last Name _____
 Title _____
 Telephone () - _____ Fax () - _____
 Email Address _____

8. **Authorized Applicant Agent**
 Ms. Mr. Mrs. First Name _____ Last Name _____
 Title _____ Telephone () - _____ Fax () - _____
 Street Address _____
 City _____ State _____ Zip Code _____
 Email Address (if available) _____

Date _____ **Signature** _____

NOTE: If your project is approved, work must begin within 90 days of the obligation of funds

I. Planning Requirement

For all disasters declared after November 1, 2004, a community must have a FEMA approved Local Hazard Mitigation Plan in order to be eligible for HMGP.

Date of Plan Approval:

Section and Page in Plan Where Project is Included:

Describe how project is consistent with the risk assessment, goals and actions in plan:

Please include copy of page where project is included, not the entire plan

II. History of Hazards / Damages in the Area to be Protected*

In this section describe all past damages from hazardous events (include name of storms if applicable) in the project area. Include Presidentially declared disasters as well as events that did not result in a Presidential declaration. Do not list county-wide or community-wide damages. Damages described must be site specific.

A. Overview of Past Damages

Provide a detailed past history of damages in the project area, including direct and indirect costs. Include information for as many past incidents as possible. Attach any supporting documents, i.e. proofs of loss, PW's, force account logs. Direct costs should include damages to structures and infrastructure in the project area as a result of the hazard. Indirect costs should include the cost to the local government to respond to victims of the hazard in the project area, any interruption to local businesses, and losses of public services.

*** For Acquisitions and Elevations, provide an overview in this section and specific damages to each property in the Individual Property Worksheets.**

Date	Level of Event	Damages	Indirect costs (describe)
<i>[e.g. 10/7/89</i>	<i>50 year flood</i>	<i>Total of \$195,000 in damages to 16 homes in project area</i>	<i>Emergency Services Evacuation of 58 people.]</i>
<i>e.g. 8/18/92</i>	<i>100 year flood</i>	<i>Total of \$1,895,000 in damages to 23 homes in project area</i>	<i>Emergency Services Evacuation of 108 people.]</i>

III. Project Description

A. Project Description / Protection Provided

Describe, in detail, the proposed project. Also, explain how the proposed project will solve the problem(s) and provide the level(s) of protection described in Section B. If any other projects are underway or proposed in the project area, please describe. Also describe any planned, future development in the project area. Please include building code requirements for new development and substantial improvements in the community (use additional page, if necessary)

B. Hazards to be Mitigated / Level of Protection

1. Select the type of hazards the proposed project will mitigate:

Flood Wind Seismic Other (or list) _____

2. Fill in the level of protection the proposed project will provide (e.g. 23 structures protected against the 100-year (1%) flood. List data in Flood Levels (10,25, 50, 100...) mph winds or Mercalli Scale Earthquake (1-12)

_____ structures protected against the _____

3. **Engineered Projects Only** (e.g. Drainage Improvements)

Include (attach to this page) **ALL** engineering calculations used to determine the above level of protection.

The following documents are attached:

4. **Useful life of the project**

Proposed project will provide protection against the hazard(s) above for _____ years.

5. **Alert and Notification/Generator Projects**

Alert and Notification (Siren) projects require a specification sheet for each site, and Generator projects require a generator data sheet per each system on site.

IV. Project Location (If project is involving multiple locations, provide project location information for each site on worksheet). Fully describe the location of the proposed project.

A. Site

1. Physical Location

Describe the area and/or population affected/protected by this project, include the location (street number/name, city, county, zip codes, latitude/longitude in decimal format). **Please specify whether the site is in incorporated limits or unincorporated county.**

2. Population Affected

Provide the number for each type of structure (listed below) in the project area. Include **all** structures in project area.

- _____ residential properties
 _____ businesses / commercial properties
 _____ public buildings
 _____ schools / hospitals / houses of worship
 _____ residents

B. Legible Copy of Flood Insurance Rate Map (FIRM) showing Project Site. Please provide either Letter (8.5" x 11") or Legal (8.5" x 14") size maps.

Attach a copy of the panel(s) from the FIRM, and, if available, the Floodway Map, (along With the appropriate flood profile and discharge tables from the community FIS) with the project site and structures marked on the map (FIRMs are typically available from your local floodplain administrator who may be located in the planning, zoning, or engineering office. Maps can also be ordered from the Map Service Center at 1-800-358-9616. For more information about FIRMs, contact your local agencies or visit the FIRM site on the FEMA WebPage at <http://msc.fema.gov>).

Using the FIRM, determine the flood zone(s) of the project site (Check all zones in the project area).

- VE or V 1-30
 AE or A 1-30
 AO or AH
 A (no base flood elevation given)
 B or X (shaded)
 C or X (unshaded)
 Floodway
 Coastal Barrier Resource Act (CBRA) Zone (Federal regulations strictly limit Federal funding for projects in this Zone; please coordinate with your state agency before submitting an application for a CBRA Zone project)

If the FIRM for your area is not published, please attach a copy of the Flood Hazard Boundary Map (FHBM) for your area, with the project site and structures marked on the map

Project Location Continued**C. City or County Map with Project Site and Photographs (All Maps Are Mandatory)*****Please provide either Letter (8.5" x 11") or Legal (8.5" x 14") size maps.***

- Attach a copy of a city or county scale map (large enough to show the entire project area) with the project site and structures marked on the map.
- USGS 1:24,000 topo map with project site marked on the map.
- For **acquisition** or **elevation** projects, include a copy of the Parcel Map (Tax Map, Property Identification Map, etc.) with each property in the project clearly marked on the map. Use SAME ID number as in the property worksheet.
- Attach project area photographs from at least two different angles (2 copies each). The photographs should include relevant streams, creeks, rivers, etc. and drainage areas which affect the project site or will be affected by the project.

Attach 2 copies of each site photograph here

Clearly label the back of each photo

Notes:

F. Benefit Cost Ratio: _____

Attach Copy of Benefit Cost Analysis Report and All Supporting Documentation. *Not Required for Initiative Projects.* For help or information on obtaining FEMA's BCA software, please go to <http://www.bchelpine.com/>.

VI. Alternative Actions

This application cannot be reviewed if this section is incomplete.

List **two feasible** alternative projects to mitigate the hazards faced in the project area. One alternative is the "No Action Alternative" (section A).

A. No Action Alternative. *Note: As of July 2006, this is all that is required for Alert and Notification and Generator Projects in the Alternative Actions section.*

Discuss the impacts on the project area if no action is taken.

B. Other Feasible Alternative

Discuss a feasible alternative to the proposed project. This could be an entirely different mitigation method or a significant modification to the design of the current proposed project. Please include scope of work, engineering details (if applicable), estimated budget and the impacts of this alternative.

1. Other Feasible Project Description and Scope of Work

Describe, in detail, the alternative project. Also, explain how the alternative project will solve the problem(s) / provide protection from the hazard(s).

2. Other Feasible Project Location

- Attach a map or diagram showing the alternative site in relation to the proposed project site.
- Attach two Photographs of alternative site(s)

Attach 2 copies of each photograph here

Clearly label the back of each photo.

Alternative Actions Continued

C. Funding Sources (round figures to the nearest dollar) The maximum FEMA share for HMGP projects is 75%. The other 25% can be made up of State and Local funds as well as in-kind services. HMGP funds may be packaged with other Federal funds, but other Federal funds (except for Federal funds which lose their Federal identity at the State level – such as CDBG, ARS, HOME,) may not be used for the State or Local match.

Estimated FEMA Share \$ _____ _____ % of Total

Non-Federal Share

Estimated Local Share \$ _____ _____ % of
(Include In-Kind Value) Total

List Funding Sources _____

Estimated State Share \$ _____ _____ % of Total

List Funding Sources _____

Estimated Other Agency Share \$ _____ _____ % of Total

List Other Non-Federal Agency _____

Other Non-FEMA Federal Funds \$ _____ **Do Not Include In Total**

List Other Federal Agency _____

D. Impacts of Other Feasible Alternative Project

Discuss the impact of this alternative on the project area. Include comments on these issues: Environmental Justice; Endangered Species; Wetlands; Hydrology (Upstream and Downstream Impacts); Floodplain/ Floodway; Historic Issues; Hazardous Materials.

VI. Environmental Documents

The applicant **must** provide the following environmental documentation to FEMA before starting construction activity **or** jeopardize project funding.

**The Following Types of Projects
Do Not Require Environmental Documentation:**

- Development of Mitigation Plans
- Inspection and monitoring activities
- Studies involving only staff time and funding
- Training activities using existing facilities

Other projects require certain environmental documentation depending upon the project type and its potential effects on the physical, biological and built environment. The various types of projects and their required environmental documentation follow: (x=required)

	Engineering Plans/Tech Specs	ADEM Concurrence	US Fish and Wildlife	US Army Corps of Engineers	US Dept. of Agriculture (NRCS)	National Marine Fisheries Service (NMFS)	State Historic Preservation Officer (SHPO)
Retrofits	x						x
Elevation	x						x
Acquisitions with demolition		x	x	x			x
Drainage	x	x	x	x	x	x	x
Construction on previously disturbed land	x	x					x
Construction on previously undisturbed land	x	x	x	x	x	x	x
Fixed Generators		x					X
Portable Generators							
Sirens	x	x					X

Warning Systems, Shutters, And Communication Projects

- Coordination from the State Historic Preservation Officer (SHPO) regarding cultural resources (archeological and historical). ***Provide the SHPO with:***
 - a description of the project referencing structure/site addresses
 - a map of sufficient scale and detail that shows the project site and surrounding project area (Area of Potential Effects)
 - several original photographs of the project site and adjacent area/structures
- * See also - additional documentation section

Acquisition/Relocation Projects (Residential Only) And Stormwater Management Projects (Road/Bridge/Culvert Repair, Detention Ponds and Drainage)

Coordination from the following Federal and State agencies:

- State Historic Preservation Officer (SHPO) regarding cultural resources (archeological and historical). ***Provide the SHPO with:***
 - several original photographs of the project site and adjacent area/structures
- Alabama Department of Environmental Management regarding required permits for erosion and sediment control, stormwater management, water and air quality
- Alabama Department of Environmental Management regarding hazardous and toxic materials
- U.S. Army Corp of Engineers District regarding Individual (404 Wetlands) Permit or approval under an existing Nationwide Permit
- U.S. Fish and Wildlife Service regarding Federal Threatened and Endangered Species
- Alabama Department of Conservation and Natural Resources regarding fish and wildlife
- Alabama Department of Conservation and Natural Resources regarding Threatened and Endangered Species

Provide the following documentation to each agency listed above:

- a description of the project referencing structure/site addresses
- a map of sufficient scale and detail that shows the project site and surrounding project area (Area of Potential Effects)

* See also - additional documentation section

Additional Documentation

- *If the project involves five or more acres of land* – provide a NPDES permit from the U.S. Environmental Protection Agency
- *If the project is located outside of town/city limits* - provide documentation from the USDA National Resource Conservation Service (Prime, Unique or other Important Farmlands).
- *If the project is located in a coastal area* - provide letters from the:
 - Alabama Department of Environmental Management (Coastal Unit)
 - U.S. Fish and Wildlife Service (Coastal Barrier Resources Act and Coastal Barrier Improvement Act)
 - U.S. Dept. of Commerce National Marine Fisheries Service (Commercial fishing and breeding grounds)
- *If the project will affect any low-income or minority groups in the project area* – provide applicable Environmental Justice information (census, economics, housing and employment).

VIII. MAINTENANCE AGREEMENT

All applicants whose proposed project involves the retrofit or modification of existing public property or whose proposed project would result in the public ownership or management of property, structures, or facilities, must first sign the following agreement prior to submitting their application to FEMA.

(NOTE: those applicants whose project only involves the retrofitting, elevation, or other modification to private property where the ownership will remain private after project completion DO NOT have to complete this form.)

The _____ (*City, Town, County*) of _____, State of __, hereby agrees that if it receives any Federal aid as a result of the attached project application, it will accept responsibility, at its own expense if necessary, for the **routine** maintenance of any real property, structures, or facilities acquired or constructed as a result of such Federal aid. Routine maintenance shall include, but not be limited to, such responsibilities as keeping vacant land clear of debris, garbage, and vermin; keeping stream channels, culverts, and storm drains clear of obstructions and debris; and keeping detention ponds free of debris, trees, and woody growth.

The purpose of this agreement is to make clear the Subgrantee's maintenance responsibilities following project award and to show the Subgrantee's acceptance of these responsibilities. It does not replace, supercede, or add to any other maintenance responsibilities imposed by Federal law or regulation and which are in force on the date of project award.

Signed by _____ (*printed or typed name of signing official*) the duly authorized
 _____ (*title*) of _____ (*name of applicant*),
 this _____ (*day*) of _____ (*month*), _____ (*year*).

Signature _____

IX. Applicants Certification

Each applicant whose proposed project involves elevation of one or more residential structures or relocation or acquisition and demolition of such structures shall sign the following certification: each owner must also provide "Model Acknowledgement of Conditions for Mitigation of Property in a Special Flood Hazard Area with FEMA Grant Funds" to ensure the property is insured in the National Flood Insurance Program (NFIP). For additional information, contact your State Hazard Mitigation Officer (SHMO).

I, _____, _____, of
 (print name) (title)
 _____ certify that that all owners of property listed in this (town, city,
 or county organization)

have been contacted and have voluntarily expressed a willingness to participate in the proposed project. Any structures elevated or retrofitted shall be covered by flood insurance for the life of the structure.

Additionally, the _____ understands that any and all (town, city, or county organization)

property acquired under the Hazard Mitigation Grant Program will be maintained by the applicant as openspace. All property acquired in this project will be governed by the following guidelines from the Code of Federal Regulations, Section 206.434(d):

(d) Property acquisition and relocation requirements. A project involving property acquisition or the relocation of structures and individuals is eligible for assistance only if the applicant enters an agreement with the FEMA Regional Director that provides assurances that:

1. The following restrictive covenants shall be conveyed in the deed to any property acquired, accepted, or from which structures are removed (hereafter called in section (d) the property):
 - (i) The property shall be dedicated and maintained in perpetuity for uses compatible with open space, recreational, or wetlands management practices; and
 - (ii) No new structure(s) will be built on the property except as indicated below:
 - (A) A public facility that is open on all sides and functionally related to a designated open space or recreational use;
 - (B) A rest room; or
 - (C) A structure that is compatible with open space, recreational, or wetlands management usage and proper floodplain management policies and practices, which the Director approves in writing before the construction of the structure begins.
 - (iii) After completion of the project, no application for additional disaster assistance will be made for any purpose with respect to the property to any Federal entity or source, and no Federal entity or source will provide such assistance.
2. In general, allowable open space, recreational, and wetland management uses include parks for outdoor recreational activities, nature reserves, cultivation, grazing, camping (except where adequate warning time is not available to allow evacuation), temporary storage in the open of wheeled vehicles which are easily movable (except mobile homes), unimproved, previous (sic; should read "pervious") parking lots, and buffer zones.
3. Any structures built on the property according to paragraph (d)(1) of this section, shall be floodproofed or elevated to the Base Flood Elevation plus one foot of freeboard.

Any other use of acquired structures or properties must be approved by both the State and Federal Emergency Management Agencies' Directors. (Please contact your State Hazard Mitigation Officer for further details)

Certified this _____ day of _____,
 (day) (month) (year)

By _____
 (signature of responsible official)

X. HISTORIC REVIEW FORM

Please complete one of these forms for **EACH** project site and attach a cover letter with the contact person's mailing address and a brief description of the project.

Project Description: _____

Physical address of project area: _____

Latitude: _____ Longitude: _____

Contact person's name and email address (our response letter will be sent to this email address):

(1) Township _____ N/S Range _____ E/W Section _____ (if known)

(3) **Required:** Provide at least one representational photograph of the project area with directional information (facing east, northwest, etc.)

(4) Answer the following to the best of your abilities:

A. Has the ground at the project location been disturbed other than by agriculture?
 Yes _____ No _____ Unknown _____

If you answered yes to question A, please check all that apply:

Trenching _____ Grading _____ Bulldozing _____ Fill _____
 Erosion _____ Landscaping _____ Other _____ (explain) _____

B. To your knowledge, have Indian or historic artifacts (such as arrowheads, old bottles, square nails) been found on or adjacent to the project area?
 Yes _____ No _____

(5) What is the approximate size of the project area (acres)? _____

(6) Is there a building 50 years old or older within or near the project area? Yes _____ No _____

IF "NO" SKIP questions 7 and 8. IF "YES" then complete the following:

(7) What was the approximate date of construction? _____

(8) Attach photos of the front, rear, and side elevations of the building.

Optional: Feel free to elaborate on any of the above questions or include any additional information you think may be helpful in the review of your project. Attach additional pages if necessary.

Please mail the project form, photos and cover letter to the following address:

Alabama Historical Commission
 468 S. Perry St.
 Montgomery, AL 36130-0900
 Attn: Gail Jones



D. References

- *Alabama State Hazard Mitigation Plan*, Alabama Emergency Management Agency, Atkins, Apr. 2013
- *Addressing Your Community's Flood Problems, A Guide for Elected Officials*, Association of State Floodplain Managers, Inc., and the Federal Interagency Floodplain Management Task Force, 1996.
- *Elevation Certificate and Instructions, 2012 Edition*, Federal Emergency Management Agency
- *Flood: Post-Disaster Community Responsibilities*, Mississippi Emergency Management Agency
- *How-To Guide for No Adverse Impact, Mitigation*, Association of State Floodplain Managers, Inc., and Michael Baker Corporation, 2013.
- *Long-Term Community Recovery Planning Process, A Self-Help Guide*, Federal Emergency Management Agency, Dec. 2005
- *Model Guide for Developing a Post-Flood Damage Standard Operating Procedure*, Federal Emergency Management Agency Region VII, Apr. 1997
- *Model Job Description for a Community Floodplain Manager*, Association of State Floodplain Managers, Mar. 2010
- *No Adverse Impact: A Toolkit for Common Sense Floodplain Management*, Association of State Floodplain Managers, Inc., 2003.
- *Post-Disaster Reconstruction, The Patchwork Quilt, A Creative Strategy for Save & Long Term Post-Disaster Rebuilding*, Ed Thomas and Sarah K. Bowen, CFM, Nov. 2008
- *Post-Flood Guidance for Local Floodplain Administrators*, Indiana Department of Natural Resources, Division of Water, Oct. 2008
- *Public Assistance, Alternative Procedures Pilot Program – Debris Removal*, Federal Emergency Management Agency, Sep. 2013
- *Reimbursement Procedure for FEMA Public Assistance*, Federal Emergency Management Agency
- *Substantial Damage Determinations, A Guide for Local Officials*, Division of Water, Ohio Department of Natural Resources, Floodplain Management Program, revised 2007
- *Substantial Damage Estimator, Best Practices, Approaches to Using FEMA's Substantial Damage Estimator Tool*, Federal Emergency Management Agency, May 2012.
- *Substantial Improvement/Substantial Damage Desk Reference*, Federal Emergency Management Agency. May 2010
- *Terminology and Standards for Community-Level Flood Preparedness Programs*, Flood Warning and Preparedness Subcommittee of the Association of State Floodplain Managers Flood Mitigation Committee, Feb. 1993