

State of Kansas Disaster Damage Assessment Packet



Includes Information On:

Steps to Take Following a Disaster
Substantial Damage “The 50% Rule”
Sample Handouts for Residents
Damage Assessment Field Worksheets
FEMA Substantial Damage Estimator (SDE 3.0)
Sample Notice
Sample Press Release
Sample Damage Determination Letter
Information on Mitigation Programs
Information on Increased Cost of Compliance



FOLLOWING ANY FLOOD, TORNADO, FIRE OR DISASTER

All local floodplain management ordinances in the State of Kansas require permits for the repair or reconstruction of damaged structures. The local floodplain administrator must ensure that the repair of a damaged structure within the community's Special Flood Hazard Area (SFHA) meets the requirements of the floodplain management ordinance.

Following a any sort of event, the local administrator should follow these five steps:

Step 1: Contact the Floodplain Section of the Kansas Dept. of Agriculture – Division of Water Resources (KDA-DWR) or the Federal Emergency Management Agency (FEMA).

Both agencies have experience, materials, and guidance to help you carry out your floodplain management responsibilities. Make use of their help and expertise! KDA-DWR: (785)-296-0854 or FEMA: (816)-283-7517

Step 2: Identify those structures believed to be substantially damaged and begin doing damage assessments. Local officials should tour the flooded areas of the 1% annual chance floodplain and identify every structure which has been affected, as well as those with obvious structural damage.

- Damaged buildings should be marked on a community map and photographed for future reference.
- Tag each structure with the notice included in this packet so residents are aware of the post-disaster permit requirements. A sample press release is also included with this packet.

Damage assessments can be difficult. The most common method for initial assessments is to view a structure from the street and estimate the level of damage based on the high-water mark or other characteristics (i.e. missing roof following a tornado). Some community members may disagree with this initial estimate and invite the community official to enter their property for a more thorough inspection. Another method for a more detailed determination is to request that property owners provide a contractor's estimate for repair costs along with their repair permit application. Then, community officials can compare the estimated cost to repair with the pre-disaster market value of the structure. The pre-disaster market value of every impacted structure can quickly be estimated from the County Appraiser's records. For computer-savvy floodplain managers, the free FEMA Substantial Damage Estimator 3.0 software program is available to help make these determinations. Contact KDA-DWR at:

tara.lanzrath@ks.gov or cheyenne.suneagle@ks.gov for further information.

Step 3: Post information for the public about the local ordinance requirements for obtaining permits for repairs and rebuilding. Often repairs begin on damaged buildings as soon as the sun rises on the day after a disaster. Therefore, it is very important that this step take place as soon as possible. History shows that information normally spreads quickly among disaster victims. Posted signs, flyers, notices on damaged structures, door hangers,

press releases, and letters mailed to individual owners can all be used for this purpose. Educate yourself on the damage assessment process, reconstruction methods, and available mitigation programs. Have a “Floodplain Development Permit Application” in hand and ready to distribute. Keep it simple. Be prepared for residents who are angry that they cannot start immediate repairs.

Step 4: Provide technical information to residents on Increase Cost of Compliance (ICC) coverage, elevation and floodproofing techniques. Post-disaster activities present the perfect window of opportunity to implement mitigation measures that reduce the impact of future hazards. FEMA research shows that every dollar invested in hazard mitigation provides a 6:1 return on investment. Federal or state mitigation programs are often available. The mitigation experts at the KDA Division of Water Resources can be contacted at: (785)-296-4622. Technical manuals and guidance are available. Public meetings can be presented in flooded communities to introduce flood victims to the various options available to them.

Step 5: Implement a permit application procedure. At this point the community should be on its way to enforcing the floodplain ordinance for damaged buildings in the floodplain. Those structures identified as substantially damaged (more than 50% of the pre-flood market value) should be “red-tagged”. Permits should not be issued until compliance with the local floodplain ordinance is demonstrated. Those with less than 50% damage can be issued floodplain development permits and begin repairs immediately. Document that the damages were less than 50% and keep that documentation on file with your permits. Note the damage percentage on the permit form. Every building in the floodplain must have a permit to begin repairs. This applies to even minor damage. Cleaning is not a repair and may begin immediately.

SUBSTANTIAL DAMAGE

“THE 50% RULE”

Communities participating in the National Flood Insurance Program (NFIP) have adopted, and are expected to enforce, a floodplain management ordinance. New residential structures located in a floodplain must be elevated to at least one foot above the base flood elevation, depending upon the requirements of the community’s floodplain management ordinance. Some communities require more than one foot so check your local regulations. Flood proofing options exist for non-residential buildings. The same flood protection and elevation regulations also apply to substantially damaged buildings.

SUBSTANTIAL DAMAGE. Whenever a building located in a mapped floodplain area - the Special Flood Hazard Area - is damaged from any source (flood, fire, seismic activity, wind, or human activity), the community must determine if that structure is substantially damaged. A building is substantially damaged when the cost of repairs is 50% or more of the structure’s “pre-damaged” market value.

If the building is found to be substantially damaged, the structure must be brought into compliance with the community’s floodplain ordinance (in other words, protected from future flooding to at least one foot above the base flood elevation if it did not already meet this standard).

The cost of repairs must be calculated for full repair to “pre-damaged” condition, even if the owner elects to do less. Example: not putting finish in the flooded basement. The total cost of repair includes structural and finish materials as well as labor. This must include property owner and volunteer labor as well as any donated materials.

CUMULATIVE COST. If standards for CUMULATIVE IMPROVEMENT are adopted in a community’s Floodplain Management Regulations, substantial damage occurs at the point where multiple damages or improvements total 50% of the original market value of the building. This would include a remodel project that happened months before the disaster event.

BUILDING VALUE. Building value is the market value of the structure only. Land and exterior improvements (pools, pool houses, landscaping, walkways, etc.) are excluded.

Following a disaster most communities find that it expedites the process to obtain the structure’s market value from the County Tax Appraiser. This method of obtaining market value ensures consistency. It is a good starting point and can be appealed later.

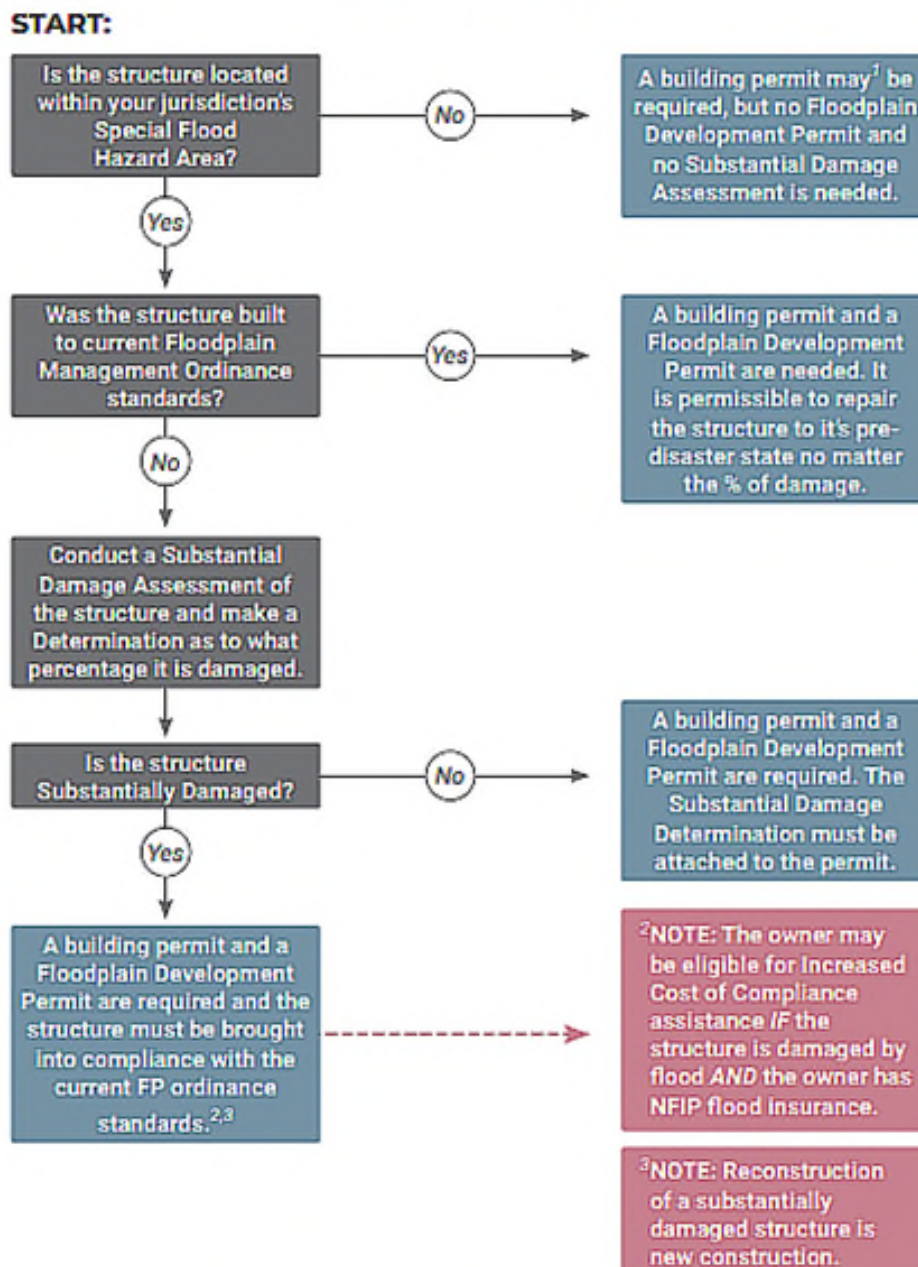
Other acceptable methods of estimating market value include:

- Independent appraisals by a Kansas professional appraiser.
- Detailed estimates of the structure’s Actual Cash Value (replacement cost minus depreciation).

- Qualified estimates based on sound professional judgment made by staff of the local building department.

DETERMINATION OF EVENT DAMAGE – COST OF REPAIR. “Substantial Damage” refers to the repairs of all damage sustained and CANNOT reflect a level of repairs that is LESS than the amount of the damage sustained. If the owner does not intend to repair the damaged building right away or if the owner cannot afford to make all repairs immediately, the local official should inspect the property to determine whether, based on estimates, the work required to restore it to its full pre-damage condition will constitute Substantial Damage.

SDA and Permit Requirement Decision Tree:



¹Not all jurisdictions require building permits.

COSTS THAT MUST BE INCLUDED IN SUBSTANTIAL DAMAGE/SUBSTANTIAL IMPROVEMENT DETERMINATIONS:

- Materials and labor, including the estimated value of donated or discounted materials and owner or volunteer labor.
- Site preparation related to the improvement or repair (e.g., foundation excavation or filling in basements).
- Demolition and construction debris disposal related to removing structure walls, floors. This should NOT include cleanup or disposal of contents.
- Labor and other costs associated with demolition of the structure
- Costs associated with maintaining compliance with other codes or regulations, including the Americans with Disabilities Act (ADA).
- Costs associated with elevating a structure when the proposed elevation is lower than the BFE
- Construction management and supervision
- Contractor's overhead and profit
- Sales tax on materials

Residential Structure Elements and exterior finishes, including:

- Foundations (e.g., spread, or continuous foundation footings, perimeter walls, chain walls, pilings, columns, posts, etc.)
- Monolithic or other types of concrete slabs
- Bearing walls, tie beams, trusses
- Joists, beams, subflooring, framing, ceilings
- Interior non-load-bearing walls
- Exterior finishes (e.g., brick, stucco, siding, painting, and trim)
- Windows and exterior doors
- Roofing, gutters, and downspouts
- Hardware
- Attached decks and porches

Interior Finish Elements, including:

- Floor finishes (e.g., hardwood, ceramic, vinyl, linoleum, stone, and wall-to-wall carpet over subflooring)
- Bathroom tiling and fixtures
- Wall finishes (e.g., drywall, paint, stucco, plaster, paneling, and marble)
- Built-in cabinets (e.g., kitchen, utility, entertainment, storage, and bathroom)
- Interior doors
- Interior finish carpentry
- Built-in bookcases and furniture
- Hardware
- Insulation

Utility and service equipment, including

- Heating, ventilation, and air conditioning (HVAC) equipment
- Plumbing fixtures and piping
- Electrical wiring, outlets, and switches
- Light fixtures and ceiling fans
- Security systems
- Built-in appliances
- Central vacuum systems
- Water filtration, conditioning, and recirculation systems

COSTS THAT MAY BE EXCLUDED FROM SUBSTANTIAL DAMAGE/SUBSTANTIAL IMPROVEMENT DETERMINATIONS:

- Clean-up and trash removal; (e.g., cost of draining a basement, removing dirt and mud, and cleaning and drying out buildings)
- Costs to temporarily stabilize a building so that it is safe to enter to evaluate and identify required repairs
- Costs to obtain or prepare plans and specifications
- Land survey costs
- Permit fees and inspection fees
- Carpeting and re-carpeting installed over finished flooring such as wood or tile
- Outside improvements, including landscaping, irrigation, sidewalks, driveways, fences, yard lights, swimming pools, pool enclosures, and detached accessory structures (e.g., garages, sheds, and gazebos)
- Costs required for the minimum necessary work to correct existing documented violations of health, safety, and sanitary codes
- Plug-in appliances such as washing machines, dryers, and stoves.

Guidance from Substantial Improvement/Substantial Damage Desk Reference – FEMA P-758, May 2010, P. 4-5, 4-6, 4-7

Prior to a disaster occurring: Develop a general plan or framework for how to move into action in time of disaster.

- Staff members
- Meeting locations
- Staff responsibilities
- Emergency or critical routes
- Known stockpiles of emergency materials, such as: fuel supplies, sandbags, generators, food banks
- List of state agency contacts, contacts in neighboring jurisdictions and any applicable mutual aid agreements, such as: police chiefs, fire chiefs, KDEM, KDA-DWR floodplain administrators, zoning officials, council members
- Plan for notification of the public and local officials
- List of data sources and locations, such as: maps, permit files, tax records, fieldwork tools
- FEMA Independent Study Courses on the SDE Tool: [IS-284 - Using the Substantial Damage Estimator 3.0 Tool](#) and [IS-285 - Substantial Damage Estimation for Floodplain Administrators](#) . It is recommended that prior to a disaster occurring, staff associated with damage determinations take these courses.

Developing a Property Record: A jurisdiction can save considerable post-disaster time and effort by assembling SFHA property records before a disaster occurs. Using the SDE Tool, records should be made for each structure located within the SFHA. The SDE Tool offers multiple ways to create property records in advance. You can create each property record one by one, or in batches by using the enterprise import function with any of the following: Excel spreadsheet, Access database, CSV file, or an XML file. More information regarding importing data is available in Section 3 of FEMA’s P-784 “Substantial Damage Estimator (SDE) User Manual and Field Workbook.”

Post-Disaster: The community public information officer should post information to the community social media site as well as prepare a press release about damage determination procedures. A short social media release can be prepared in advance and provided after a disaster occurs. Elected officials should recognize that citizens will have questions about the recovery process and how to obtain inspections and permits. Floodplain administrators should brief elected officials as soon as possible after an event on the community’s floodplain management responsibilities. Officials should be prepared to answer questions throughout the post-disaster recovery phase. Distributing substantial damage determinations may generate several questions.

Curbside Review: Drive through the areas of the SFHA that has been impacted and determine the scope of the disaster impact. Identify the quantity of structures impacted, the structure types, their approximate levels of damage, any health and safety issues, and any access issues. This is done before the individual structure review; scoping the damage that will thus provide a broad characterization of the affected areas. Collect the following information: depth of flooding above the first floor (if applicable), duration of flooding (if applicable), count total number of damaged structures, approximate degree of damage to structures (may be based on flood depth and duration, refine boundaries of area(s) needing field inspections, take photos as needed to help with prioritization of field work once returned to the office.

25% or less damage: if the interior flood height was one foot or less above the lowest floor; the duration was less than one day; the floodwater velocities relatively low (less than five feet per second); and, the structure and its foundation, exterior walls and roof are in good condition, then the damage to the structure is most likely around 25% or less.

75% or more damage: if there is obvious exterior damage to the foundation, exterior walls or roof, a structure is likely to be substantially damaged. A structure that has shifted off the foundation or has leaning walls has experience significant structural damage.

Based on the above information, the SDA area map may be refined, and priority areas identified. This map should differentiate areas with structures that are damaged to 25% or more from areas that are likely less than 25%. Allow the most time for the inspection of structures that are likely to be damaged 25% or more. Remember that most appeals occur between 40% and 70%. Greater precision is needed in determining substantial damage when the level of repair or improvement costs is close to 50% of the value of the structure. Property owners may appeal a community's substantial damage determination.

Pitfalls to Avoid: The integrity of the community's determinations and permitting process can be undermined if care is not taken to avoid conflicts of interest. Pitfalls to avoid include: Allowing property owners or building contractors to complete damage assessments. Property owners are unable to objectively assess the damage of their own property. Similarly, building contractors' assessments may be biased by a desire to generate business for their own financial gain. Allowing property owners to determine market value; they are unable to objectively state the market value of their property, and an inconsistent approach to determining market value will delegitimize assessments community-wide.

Separate Substantial Damage Records from Non-Substantial Damage Records: After inspection, records or files for structures identified as substantially damaged should be flagged, specially marked so that development permits are not inadvertently issued for repairs that do not bring the structure into compliance with current floodplain regulations. Permits should not be issued until compliance with the local floodplain management ordinance is demonstrated in the supporting documents submitted with the development permit application.

Temporary Moratorium on Permits until Scale/Severity Assessed: Depending on the scale and severity of damage, some communities institute a full or partial moratorium on issuing permits. Once the community has evaluated the magnitude, scope, and general location of potential substantially damaged structures, the community may remove the moratorium. When mitigation projects such as floodplain buyouts, elevation-in-place, or other measures are considered, it may be reasonable to delay rebuilding until the pros and cons of such projects are evaluated. A property owner may get an expedited permit during a moratorium by providing a contractor's estimate that demonstrates the cost of all repairs would not constitute substantial damage.

Distribute Information on FEMA HMA Programs: FEMA has 3 Hazard Mitigation Assistance (HMA) programs:

1. Flood Mitigation Assistance (FMA) This program provides financial assistance to federally recognized tribes and local governments to implement measures that reduce or eliminate long-term risk of flood damage to structures insured under the National Flood Insurance Program. Funds may be used for planning activities as well as purchase of flood-prone properties. The FMA program has priorities to mitigate structures that have suffered repeated flood claims and those with severe repetitive loss. To demonstrate loss, damage must be documented through substantial damage determinations.
2. Hazard Mitigation Grant Program (HMGP) is a mitigation grant that results from a presidential disaster declaration. The goal of the HMGP is to reduce the loss of life and property from any future disaster.
3. Building Resilient Infrastructure and Communities (BRIC) supports pre-disaster mitigation projects with an emphasis on collaborative, multi-stakeholder efforts to implement nature-based solutions. The goal

of the program is to shift the federal focus away from disaster-response funding and towards research-supported, proactive, and sustainable mitigation measures.

Direct all HMA grant questions to the County Emergency Management Director of the State Hazard Mitigation Office (SHMO) at the Kansas Division of Emergency Management.

SAMPLE STAND ALONE DAMAGE ASSESSMENT WORKSHEET (long hand version)

1. Address: _____

2. Owner: _____

Telephone Number _____

3. Occupant: _____

Telephone Number _____

4. Insurance Coverage (Optional):

Company: _____ Policy Number: _____

Building: \$ _____ Contents: \$ _____

5. Type of Event

Flood ___ Fire ___ Tornado ___ Accident ___ Earthquake ___ Other ___ (check one)

6. Special Flood Hazard Area:

Community I.D. #: _____

FIRM Panel: _____ FIRM Date: _____

Flood zone: _____ Base Flood Elevation _____

Existing Lowest Floor Elevation: _____ (if available)

7. Duration of Flooding: Days _____ Hours _____

8. High Water Mark:

A) Exterior Walls _____ ft.

B) Interior Walls _____ ft.

9. Type of Structure:

A) Exterior:

- | | |
|----------------------------|---------------------------|
| 1) Plywood/Hardboard _____ | 5) Brick _____ |
| 2) Stucco _____ | 6) Concrete Block _____ |
| 3) Siding/Shingles _____ | 7) Other (describe) _____ |
| 4) Masonry Veneer _____ | |

B) Manufactured/Mobile Home:

- 1) Dimensions: a) single wide _____ size _____ x _____

- 2) Skirting: b) double wide _____ size _____ x _____
yes _____ no _____

10. Description of Structure:

- A) 1 story _____ 2 story _____ Tri-level _____
1 1/2 story _____ Bi-level _____ 3 or more _____
- B) Garage: attached _____ detached _____
Carport: attached _____ detached _____
- C) Roofing:
Metal/corrugated or ribbed _____ Composition shingles _____
Other: Describe _____
- D) Foundation:
Slab-on-grade _____
Crawlspace _____
Basement _____ (Finished _____ Unfinished _____)
Poured Walls _____
Block Walls _____
Post-Piers-Piles _____
- E) Heating and Cooling:
Forced air _____
Boiler _____
Wall furnace or baseboard _____
Heat Pump _____
Fireplace/wood burning stove _____
Other _____
- F) Plumbing: Number of bathrooms: _____
- G) Built-In Appliances:
List: _____

11. Description of Damage:

- A) Plumbing:
1) Is it exposed? _____
2) Does it need repair? _____
- B) HVAC/Electrical
1) Water depth _____ ft.
2) Damaged _____ (Repairable _____ Replaced _____)

Use corresponding numbers given below to answer C-F below:

- | | |
|-----------------------|--------------------------|
| 1. Settlement/cracked | 2. Partially missing |
| 3. Sagging | 4. Dislodged/destroyed |
| 5. Submerged | 6. Include all the above |
| 7. No damage | 8. Other: describe |
-

- C) Foundation _____
- D) Exterior Walls _____
- E) Interior Walls _____
- F) Roof _____

12. Overall condition of structure:

- | | |
|----------------------------|-----------------------------------|
| A) Minor damage _____ | B) Major Damage _____ |
| C) Totally destroyed _____ | D) Structure off foundation _____ |

13. Determination of Substantial Damage

$$\text{Percent Damage} = \frac{\text{Cost of Repair}}{\text{Market Value}} = \underline{\hspace{2cm}}$$

In the event the percent damage is equal to or greater than 50%, the building is substantially damaged.

_____ This building is substantially damaged and therefore must be elevated or floodproofed so that the lowest floor is protected at or above the community required flood protection level.

_____ This building is not substantially damaged. This building can be repaired without having to be mitigated. Floodplain permit is required, and the permit will document the damage percentage.

_____ This is a properly elevated structure and may be reconstructed at its existing elevation.

Reviewed by: _____ Date: _____

Approved by: _____ Date: _____

**SAMPLE LETTERS,
FORMS AND NEWS
RELEASES**

Pages 15-27

SAMPLE NOTICE TO POST ON STRUCTURES

 **NOTICE** 

Because this building is located in a floodplain and was damaged by _____ (Fire, Flood...), a damage assessment must be conducted by the (city or county).

Before occupying this building or doing any repair work you must call the (city or county) community's Floodplain Administrator at (____) _____ to schedule an inspection.

Failure to obtain reconstruction approval may result in a penalty.

SAMPLE PRESS RELEASE

RESIDENTS IN (COMMUNITY) WITH DISASTER DAMAGE REMINDED OF PERMIT REQUIREMENTS

As property owners in (community) contemplate clean up and repairs following recent (disaster), the (community permit office) is reminding residents to obtaining local permits before repairing or rebuilding flood-damaged structures.

The permits are required as part of local government participation in the National Flood Insurance Program, providing eligibility for flood insurance, flood disaster assistance, state and federal grants and loans, and buyout funds for flood-prone property.

Local floodplain management ordinances require that permits be obtained for any construction or development activity in a floodplain area, including the repair or reconstruction of structures damaged by a disaster.

Special conditions apply to substantially damaged buildings - those in which the total cost of repairs is 50 percent or more of the structure's pre-disaster market value. If a building is found to be substantially damaged, regulations require that repairs not begin until compliance with the local floodplain ordinance is demonstrated. In some cases, that may require repairs that include elevating or flood-proofing the structure to reduce the potential for future flood damage.

The cost to repair must be calculated for full repair to "pre-damaged" condition, even if the owner elects to do less. The total cost to repair includes structural and finish materials as well as labor. If labor and materials have been donated, they must still be assigned a value. If local building codes require the structure to be repaired according to certain standards, these additional costs must be included in the full repair cost for the structure.

State and federal assistance may be available to property owners to reduce the chances of future flood damage. Mitigation assistance may cover costs of relocation, or for elevating or purchasing flood-damaged structures. If damage is caused by a flood, flood insurance may also provide up to \$30,000 to protect a structure from future flooding through a claims process known as ICC (Increased Cost of Compliance). The property owner must have had flood insurance for ICC to become available.

Property owners and residents with (disaster)-damaged buildings should contact (local building and zoning administrator) for more information on repair and reconstruction permits.

SAMPLE SUBSTANTIAL DAMAGE DETERMINATION LETTER (Flood)

Date

Property Owner Name
Property Owner Address

Subject: Damage Estimation

Dear _____ (Sir/Madam/Name),

On _____ (date) your _____ (home/business/structure) located at _____ (address/legal description) was damaged by a _____ (flood). Your property is located in flood zone _____ (A, AE, A1-30, AH, AO). When a property in a special flood hazard area is damaged the _____ (community name) is required to perform damage estimation in accordance with _____ (ordinance/regulation/resolution and number). The damage estimation for your property has been determined to be _____ (number percentage). This number is based on cost to repair the building to the market value before the disaster. The fair market value of your structure was determined to be _____ (dollar amount). The cost to repair is estimated to be _____ (dollar amount).

Prior to beginning repairs to your structure please contact _____ (Floodplain Manager) for a floodplain development permit. A floodplain development permit is required. Failing to obtain a required permit is a violation of _____ (Ordinance/Resolution/Code citation). We regret your loss and the damage you have had. We will try to make the permitting process as easy as we can for you.

Because the damage to your building has been determined to be greater than 50% of fair market value your building has been determined to be substantially damaged. Substantially damaged properties are required to be brought into full compliance with floodplain regulations found in _____ (Ordinance/Resolution citation.) Residential structures must be elevated _____ (amount of freeboard) above the base flood elevation. Non-Residential structures must be floodproofed or elevated to _____ (freeboard requirement). Call this office at _____ (phone number) by _____ (deadline date) to schedule a consultation to discuss your options for bringing the building into compliance. Increased Cost of Compliance (ICC) funds could be available for those who have flood insurance through the National Flood Insurance Program (NFIP). Contact your claims adjuster for details. **(Buildings that are already in compliance will not qualify for ICC so do not include statements about ICC for those buildings.)**

If you disagree with the damage estimation there is an appeal process. An appeal will require additional information such as _____ (contractor’s estimate/insurance adjusted claim/licensed appraisal/other). Details about an appeal and about how the damage estimation was done can be discussed in more detail by calling this office. We are sure you want to repair your property as soon as possible. It will speed things up if you contact _____ (Community Floodplain Management Office) as soon as possible.

The _____ (Community Name) participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can put _____ (Community Name) in jeopardy of losing flood insurance, disaster assistance and Federally backed loans and grants for our citizens. Thank you in advance for your cooperation and assistance at a difficult time.

Sincerely,

Community Official
Floodplain Manager
Contact Information

Copy: City Attorney/County Attorney

ATTACH WORK SHEET SHOWING HOW YOU DETERMINED THE DAMAGE PERCENTAGE WHEN ICC WILL BE USED AND STATE IF THERE IS CUMULATIVE IMPROVEMENT OR CUMULATIVE DAMAGE REQUIREMENT IN LOCAL FLOODPLAIN REGULATIONS.

SAMPLE SUBSTANTIAL DAMAGE DETERMINATION LETTER (Non-Flood)

Date

Property Owner Name
Property Owner Address

Subject: Damage Estimation

Dear _____ (Sir/Madam/Name),

On _____ (date) your _____ (home/business/structure) located at _____ (address/legal description) was damaged by a _____ (fire/tornado/other). Your property is located in flood zone _____ (A, AE, A1-30, AH, AO). When a property in a special flood hazard area is damaged the _____ (community name) is required to perform damage estimation in accordance with _____ (ordinance/regulation/resolution and number). The damage estimation for your property has been determined to be _____ (number percentage). This number is based on cost to repair the building to the market value before the disaster. The fair market value of your structure was determined to be _____ (dollar amount).

Prior to beginning repairs to your structure please contact _____ (Floodplain Manager) for a floodplain development permit. A floodplain development permit is required. Failing to obtain a required permit is a violation of (Ordinance/Resolution/Code citation). We regret your loss and the damage you have had. We will try to make the permitting process as easy as we can for you.

Because the damage to your building has been determined to be greater than 50% of fair market value your building has been determined to be substantially damaged. Substantially damaged properties are required to be brought into full compliance with floodplain regulations found in _____ (Ordinance/Resolution citation.) Residential structures must be elevated ---- (amount of freeboard) above the base flood elevation. Non-Residential structures must be floodproofed or elevated to _____ (freeboard requirement). 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 damage estimation there is an appeal process. An appeal will require additional information such as _____ (contractor's estimate/insurance adjusted claim/licensed appraisal/other). Details about an appeal and about how the damage estimation was done can be discussed in more detail by calling this office. We are sure you want to repair your property as soon as possible. It will speed things up if you contact _____ (Community Floodplain Management Office) as soon as possible.

The _____ (Community Name) participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can put _____ (Community Name) in jeopardy of losing flood insurance, disaster assistance and Federal backed loans and grants for our citizens. Thank you in advance for your cooperation and assistance at a difficult time.

Sincerely,

Community Official
Floodplain Manager
Contact Information

Copy: City Attorney/County Attorney

STATE IF THERE IS CUMULATIVE IMPROVEMENT OR CUMULATIVE DAMAGE REQUIREMENT IN LOCAL FLOODPLAIN REGULATIONS.

SAMPLE NON-SUBSTANTIAL DAMAGE DETERMINATION LETTER (Any Disaster)

Date

Property Owner Name
Property Owner Address

Subject: Damage Estimation

Dear _____ (Sir/Madam/Name),

On _____ (date) your _____ (home/business/structure) located at _____ (address/legal description) was damaged by a _____ (flood/fire/tornado/other). Your property is located in flood zone _____ (A, AE, A1-30, AH, AO). When a property in a special flood hazard area is damaged the _____ (community name) is required to perform damage estimation in accordance with _____ (ordinance/regulation/resolution and number). The damage estimation for your property has been determined to be _____ (number percentage). This number is based on cost to repair the building to the market value before the disaster. The fair market value of your structure was determined to be _____ (dollar amount).

Prior to beginning repairs to your structure please contact _____ (Floodplain Manager) for a floodplain development permit. A floodplain development permit is required. Failing to obtain a required permit is a violation of _____ (Ordinance/Resolution/Code citation). We regret your loss and the damage you have had. We will try to make the permitting process as easy as we can for you.

The _____ (Community Name) participates in the National Flood Insurance Program. Failing to enforce floodplain damage requirements can put _____ (Community Name) in jeopardy of losing flood insurance, disaster assistance and Federal backed loans and grants for our citizens. Thank you in advance for your cooperation and assistance at a difficult time.

Sincerely,

Community Official
Floodplain Manager
Contact Information

Copy: City Attorney/County Attorney

STATE IF THERE IS CUMULATIVE IMPROVEMENT OR CUMULATIVE DAMAGE REQUIREMENT IN LOCAL FLOODPLAIN REGULATIONS.

SAMPLE RIGHT OF ENTRY FORM

**PROPERTY OWNER’S RIGHT OF ENTRY CERTIFICATION
AND RELEASE**

A floodplain permit is required for all construction activity in the Special Flood Hazard Area (SFHA) or that area inundated by the 1% annual chance of a flood, as designated by the National Flood Insurance Program (NFIP). These SFHAs are designated as A, AE, A1-A30, AH, or AO Zones on the Flood Insurance Rate Maps (FIRMs). This includes construction for new or improved residential and non-residential structures, filling, and excavation.

I, the undersigned, being the owner of the land and all structures located at **(address of the structure)**, Kansas, do hereby grant the community of **(community’s name)** permission to inspect the property to determine the amount of damage and to comply with the National Flood Insurance (NFIP) Regulations for Substantial Damage Determinations according to Title 44 CFR, Section 60.3.

I, the undersigned, do hereby grant the community of **(community’s name)**, its agents, servants, employees, and assigns, for a period of 60 days or the completion of the substantial damage assessment, from the date of this document, permission to enter upon the above identified land to accomplish substantial damage/improvement determinations.

In consideration of the substantial damage assessment conferred on me by the community of **(community’s name)**, in said substantial damage/improvement determinations, I, the undersigned, do hereby release and forever discharge the community of **(community’s name)** its agents, servants, employees and assigns from any and all claims, demands, or actions for damages for any and all personal injuries, or loss or damage to property sustained in or growing out of said inspections, and from complications arising therefrom.

I also hereby agree to comply with the Community’s Ordinance/Resolution No. _____.

It is understood that the above-mentioned substantial damage assessment and the terms of the release are fully understood and voluntarily accepted.

I HAVE READ THE FOREGOING RELEASE AND FULLY UNDERSTAND IT.

IN WITNESS WHEREOF, I have hereunder set my hand this _____ day of

_____ .

Signature

Witness

SAMPLE HANDOUT FOR RESIDENTS

Phone

Fax

Website

Address

City, KS ZIP

Substantial Improvement /Substantial Damage NFIP Requirements

Improvement and Repair of Property in the Floodplain

(Insert community name) is a participating community in the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency. In exchange for making flood insurance available to citizens of the county, FEMA requires the community to adopt and enforcement floodplain management regulations governing new construction and substantial improvements in mapped floodplains.

If you are rebuilding after a storm, renovating, remodeling, or adding an addition to your home or business, here is information you need to know concerning substantial improvement and substantial damage.

Making SI/SD Determinations

Once the cost of the work and the market value of the structure have been determined, the (Community Name) will make a final determination of SI/SD. The work is SI/SD if the ratio of the cost of work to the market value equals or exceeds 50%:

$$(\text{Cost of Work} / \text{Market Value of Building}) \geq 50\%$$

If the (Community Name) determines that improvements or repairs to a building constitute SI/SD, then the building must be brought into compliance with the NFIP floodplain management requirements for new construction.

The purpose of the Substantial Improvement (SI) and Substantial Damage (SD) requirements is to protect the property owner's investment and safety, and, over time, to reduce the total number of buildings that are exposed to flood damage, thus reducing the burden on taxpayers through payment of disaster assistance. The SI/SD requirements are triggered when the local official determines that the cost of repairing or improving a building in a Special Flood Hazard Area (SFHA) equals or exceeds 50% of the building's market value (excluding land value).

Substantial Damage (SD) means damage of any origin sustained by a structure whereby the cost of restoring the structure to pre-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. *Work on structures that are determined to be substantially damaged is considered to be substantial improvement, regardless of the actual work performed. The cost of the repairs must include all costs necessary to fully repair the structure to its before-damage condition.*

Substantial Improvement (SI) means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before “start of construction” of the improvement. This term includes structures, which have incurred “substantial damage”, regardless of the actual repair work performed. The term does not, however, include either: (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.

(Insert Community Name)’s Responsibility

Communities that participated in the NFIP must determine whether proposed work qualifies as a substantial improvement or repair of substantial damage. If work on buildings constitutes SI/SD, then structures must be brought into compliance with NFIP requirements for “new construction”, including the requirement that the lowest floor be elevated one (1) foot above the base flood elevation (BFE). There are four (4) major actions (Community Name) performs in administering the SI/SD requirements:

- Determine costs,
- Determine market values,
- Make SI/SD determinations, and
- Require owners to obtain permits to bring substantially improved or substantially damaged buildings into compliance with the floodplain management requirements.

Determining Costs

The term “costs of improvements” includes the complete costs associated with all the types of work performed. The term “costs of repair” includes the costs of all work necessary to restore a damaged building to its pre-damaged condition. Both terms include the costs of all materials, labor, and other items necessary to perform the proposed work.

Costs That Must Be Included in SI/SD Determinations. The following list of costs that must be included is not intended to be exhaustive, but characterizes the types of costs that must be included:

- Materials and labor, including the estimated value of donated or discounted materials and owner or volunteered labor
- Site preparation related to the improvement or repair (e.g., foundation excavation or filling in basements)
- Demolition and construction debris disposal
- Labor and other costs associated with demolishing, moving, or altering building components to accommodate improvements, additions, and making repairs
- Costs associated with complying with any other regulations or code requirement that is triggered by the work, including costs to comply with the requirements of the Americans with Disabilities Act (ADA)
- Costs associated with elevating a structure when the proposed elevation is lower than the BFE
- Construction management and supervision
- Contractor’s overhead and profit
- Sales taxes on materials

- Structural elements and exterior finishes, including:
 - Foundations
 - Monolithic or other types of concrete slabs
 - Bearing walls, tie beams, trusses
 - Joists, beams, subflooring, framing, ceilings
 - Interior non-bearing walls
 - Exterior finishes
 - Windows and exterior doors
 - Roofing, gutters, and downspouts
 - Hardware
 - Attached decks and porches
- Interior finish elements, including:
 - Floor finishes
 - Bathroom tiling and fixtures
 - Built-in cabinets
 - Interior doors
 - Interior finish carpentry
 - Built-in bookcases and furniture
 - Hardware
 - Insulation
- Utility and service equipment, including:
 - Heating, ventilation, and air conditioning (HVAC) equipment
 - Plumbing fixtures and piping
 - Electrical wiring, outlets, and switches
 - Light fixtures and ceiling fans
 - Security systems
 - Built-in appliances
 - Central vacuum systems
 - Water filtration, conditioning, and recirculation systems

Costs That May be Excluded from SI/SD Determinations. Items that can be excluded are those that are not directly associated with the building. The following list characterizes the types of costs that may be excluded:

- Clean-up and trash removal
- Costs to temporarily stabilize a building so that it is safe to enter to evaluate and identify required repairs
- Costs to obtain or prepare plans and specifications
- Land survey costs
- Carpeting and recarpeting installed over finished flooring such as wood or tiling
- Outside improvements, including landscaping, irrigation, sidewalks, driveways, fences, yard lights, swimming pools, pool enclosures, and detached accessory structures
- Costs required for the minimum necessary work to correct existing violations of health, safety, and sanitary codes
- Plug-in appliances such as washing machines, dryers, and stoves

Sources of Cost Information. The cost of improvements and the costs of repairs are necessary to make the SI/SD determination. The following are acceptable methods to determine the costs:

- Itemized costs of materials and labor or estimates of materials and labor that are prepared by licensed contractors or professional construction cost estimators.
- Building owners may submit cost estimates that they prepare themselves. Owners will need to provide as much supporting documentation as possible, such as pricing information from lumber companies and hardware stores. The estimate must include the value of labor, including the value of the owner's labor.

Donated/Discounted Materials. The value placed on all donated or discounted materials should be equal to the actual or estimated cost of such materials and must be included in the total cost. The applicant should provide cost estimates of the value of donated/discounted materials based on actual or estimated costs.

Owner/Volunteer Labor. The normal "market" value or "going rate" for labor must be included in the estimate of the cost of improvements and the costs to repair. The value placed on labor should be estimated based on applicable minimum-hour wage scales for the skill and type of construction work that is done.

Determining Market Value

Generally, market value can be explained as the price a willing seller and buyer agree upon. The market value of a building reflects its original quality, subsequent improvements, physical age of building components, and current condition. For purposes of determining SI/SD, market value pertains only to the structure in question; the value of the land, landscaping, detached accessory buildings, etc., must be subtracted from the equation.

When work is an improvement, the market value is the building's market value "before the 'start of construction' of the improvement." When work is repair of substantial damage, the market value is the building's market value "before the damage occurred."

Acceptable estimates of market value can be obtained from these sources:

- Appraised value developed for property tax assessment purposes.
- Detailed estimates of the structure's actual cash value, including depreciation.
- An independent appraisal by a licensed professional appraiser.

The appraised value will customarily be used by the community unless the owner chooses to determine market value by a professional appraiser at the owner's expense. Whatever method is used, the closer the estimate falls relative to the 50% threshold, the more precise the market value figure needs to be. In such circumstances, the community may require the owner to submit an appraisal from an independent professional appraiser.

If you have any questions about these requirements, contact **Community Official** at (000)-000-0000 or **EMAIL**.

Protect Your Home From Flood Damages

Under the National Flood Insurance Program (NFIP), the Increased Cost of Compliance (ICC) program may provide additional financial assistance to either elevate or remove flood damaged structures from the floodplain. The ICC applies to flooded structures that are either substantially damaged or located in a community with cumulative substantial damage provisions in its ordinance. It provides funding for a suite of measures often known as FRED (floodproofing, relocation, elevation, or demolition).

The two most common types of ICC mitigation used are:

Relocation:

Relocating structures to higher ground or purchasing flood prone property is the safest way to protect against flooding and reduce the liability and cost to the community. Relocation can be expensive, but in the long run it is not as costly as repetitive flood damages and high flood insurance premiums.

Elevation:

There are three methods used to elevate a structure:

Construction on crawlspace



Elevation on compacted fill



Elevation on post, piers, etc.



The elevation method is dependent on the base flood elevation level, structure's condition, flood hazard, local floodplain regulations, and owner's financial condition. When elevating, it is essential for all utilities (air conditioner, water heater, furnace, etc.) to be elevated to or above the Base Flood Elevation.

Owners who have standard flood insurance coverage have paid for and are eligible to receive ICC benefits if the local official determines that a structure located in a Special Flood Hazard Area has been substantially damaged by a flood or cumulatively damaged by flooding beyond 50% of the value of the structure when the damage occurred.

ICC does not normally cover buildings in B, C, X, or D Zones. However, if the community can document that it is regulating an area outside of the Special Flood Hazard Area (advisory or preliminary BFEs provided by FEMA), ICC will be available.

For more information, visit:

<https://www.fema.gov/media-library/assets/documents/12164?id=3010>