Triaging substantial damage inspections

Brazoria County

Discussion
09 October 2017; 10:00 am
Goal of this meeting is to review a triage approach for substantial damage inspections that could support your community in rebuilding more resiliently.

In order to do this we want to:

- **Understand** your efforts to date on assessing substantial damage in your community.
- **Discuss** the extent and location of damage in the community.
- **Confirm/establish** a plan for substantial damage determinations.
- **Identify** areas where FEMA substantial damage taskforce can provide data to support you.

Is there anything else you would like to discuss today regarding substantial damage/improvement?
Proposed agenda

Key questions to be addressed

Introductions
Who is everyone in the room?
What have you already done on assessing substantial damage?

Substantial Damage Background
What is substantial damage?
Why does substantial damage matter?

Substantial Damage Preliminary Assessment
What is the potential substantial damage in your community?
How can the community address substantial damage?
How do you want to confirm the substantial damage assessment?

Potential Areas of FEMA’s Substantial Damage Support
What are the key choices for the community and the options for each?

Next Steps and Decisions
How can the community move forward?
Topics

- Substantial damage background
- Potential areas of FEMA substantial damage support
- Next steps and decisions
Substantial damage is built into your ordinance to improve community resiliency
Three key points about substantial damage

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<tr>
<th>1</th>
<th>2</th>
<th>3</th>
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</table>
| As part of your ordinance, the community needs to determine which structures need to be rebuilt more resiliently after Harvey | Substantially damaged or substantially improved structures have the following characteristics:  
- In the special flood hazard area (SFHA)  
- Lowest floor in the home is below the base flood elevation  
- Damage or improvement exceeds 50% of the building's value | Structures that are substantially damaged or substantially improved have to be mitigated to no longer be below the base flood elevation |
Making substantial damage and substantial improvement determination matters to your community so proper mitigation can occur

**Benefits of re-building resiliently for your community**

**Break the disaster cycle** by improving structures’ resilience

**Save money for property owners** through lower premiums and reduced damage in the next flood

**Get residents back in their homes faster** by unlocking funding and avoiding redoing repairs

**Improve the community’s sustainability** by keeping your community safe and affordable for the long-term
There are five steps in the substantial damage / improvement determination process

1. Triage inspections
   - Use data to identify where substantial damage has or has not occurred to limit the number of inspections that need to occur
   - Some methodologies:
     - Rely on data assessment that was used for triaging
     - NFIP claims adjuster estimates
     - Substantial damage inspection results
     - Contractor estimates

2. Estimate damage
   - Some methodologies:
     - Tax assessed value
     - Sale price of the pre-disaster structure

3. Determine market value of the structure
   - Substantial damage determination occurs when the cost to rebuild the structure is divided by the market value of the structure and the value is greater than 50%

4. Make determination
   - Send a letter to the home owner and recommend including the following information:
     - Long term benefits to their families
     - Mitigation options (e.g. elevation, buy-out, etc)
     - Funding options (e.g. IA and NFIP – ICC)

5. Communicate options to home owner
Topics

- Substantial damage background
- Substantial damage preliminary assessment
- Potential areas of FEMA substantial damage support
- Next steps and decisions
You may have already started conducting your own damage estimates, and we are here to support your efforts

Why are we recommending triaging?

In our experience, it can take months to conduct in-person substantial damage inspections on every flooded property in the SFHA. By quickly triaging properties, communities can:

- Accelerate how quickly property owners can rebuild after the disaster
- Reduce the number of unnecessary inspections by local building officials
- Provide information in a timely way to help property owners make informed decisions about how to spend recovery funds

How did we conduct the initial substantial damage assessment?

- We used the best available data for each structure in the SFHA to add to your initial perspective on what structures are likely to be substantially damaged
- We based this analysis on parcel data, the flood inundation levels, high water mark data, and reports from FEMA/adjuster inspections
- We are happy to share our detailed methodology
Our initial damage assessment shows the following for your community...

<table>
<thead>
<tr>
<th>Damage assessment</th>
<th># of properties in SFHA w/ prelim inspections results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely Substantially Damaged</td>
<td>182</td>
</tr>
<tr>
<td>Cannot Determine</td>
<td>310</td>
</tr>
<tr>
<td>Not Likely</td>
<td>626</td>
</tr>
<tr>
<td>Total in SFHA with prelim inspection results¹</td>
<td>1,118</td>
</tr>
</tbody>
</table>

¹ Based on our digital analysis of the parcels in the Special Flood Hazard Area
Damage classifications were based on a mix of the best available data for each structure in the SFHA, for example...

<table>
<thead>
<tr>
<th>Damage classifications</th>
<th># of structures</th>
<th>Examples of how we came to this damage classification</th>
</tr>
</thead>
</table>
| Likely Substantially Damaged | 182             | - Structures where damage is predicted to greatly exceeds 50% of building value  
|                              |                 | - **Example:** Slab-on-grade single family housing with more than 6 feet of water in the house |
| Cannot Determine             | 310             | - Structures where damage is predicted to be between 40-60% of building value  
|                              |                 | - **Example:** Apartments/condos with less than 5 feet of water in the building |
| Not Likely                   | 626             | - Structures where damage is predicted to be less than 40% of building value  
|                              |                 | - **Example:** Structures with 1-2 feet of flooding or minimal damage |

We can provide you with a summary file of these properties and the criteria used to make the damage assessment once you sign the information sharing agreement.
How do you want to confirm the substantial damage assessment?

For each damage class, you have options for how to reach a final determination.

**Likely substantially damaged according to our model**
- You conduct drive-by survey
- You conduct full SD inspection
- Request FEMA inspection support

**Cannot determine using our model**
- Conduct full inspection yourself
- Request FEMA inspection support

**Not likely substantially damaged**
- You let property owners know immediately
- You conduct a drive-by survey

- Drive-bys allow you to come to a determination more quickly, and provide notice to property owners sooner
- No detailed damage inspections by FEMA or contractors can take place without a signed Letter of Introduction from you

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1 If your community's ordinance includes a cumulative SD determination, then you need to cross reference your historical records for the property.

*Pre-decisional - Proprietary and Confidential*
Once you make the determination, you can help your community rebuild resiliently by ...

**Actions you should take to expedite recovery**

- Notify owners substantial damage status and appeal process
- Document in your permit system the substantial damage determinations
- Provide advice to owners on their options for elevation, relocation, demolition
- Notify insurance policyholders about Increased Cost of Compliance (ICC) availability
- Monitor reconstruction to ensure resilient rebuilding
- Begin working with State and FEMA on how to fund floodplain recovery

**Not substantially damaged**

- Notify owner of determination
- Document in your permit system the substantial damage determinations
- Encourage mitigation or resiliency measure, but allow permitting for rebuilding at current standard
- Provide advice to owners about resiliency
Topics

- Substantial damage background
- Substantial damage preliminary assessment
- Potential areas of FEMA substantial damage support
- Next steps and decisions
If you are interested in further damage assessment data products, we can provide you with the following…

<table>
<thead>
<tr>
<th>Questions you may be facing....</th>
<th>How you could use data to find an answer...</th>
<th>Data available...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which structures were damaged and to what extent?</td>
<td>Use SD mapbook or excel list of substantial damage to view the damage</td>
<td>Substantial Damage Assessment Analysis</td>
</tr>
<tr>
<td>Which structures need inspection?</td>
<td>Use the excel list of substantial damage and inspect structures coded as “cannot determine”</td>
<td>Substantial Damage Assessment Analysis</td>
</tr>
<tr>
<td>Which structures can be rebuilt without elevation/mitigation?</td>
<td>Use the excel list of substantial damage to identify properties that were unlikely to be substantially damaged</td>
<td>Substantial Damage Assessment Analysis</td>
</tr>
<tr>
<td>What flood insurance does my community have?</td>
<td>Use the NFIP Insurance summary to review number of properties with insurance, type of insurance, zone of properties, and total coverage</td>
<td>NFIP Insurance summary</td>
</tr>
<tr>
<td>Where are my repetitive loss/severe repetitive loss structures?</td>
<td>Use the Repetitive Loss/Severe Repetitive Loss list to identify which address have been affected by multiple floods</td>
<td>Rep Loss/Severe Rep Loss list</td>
</tr>
<tr>
<td>Which properties are subject to floodplain building standards?</td>
<td>Use the list of address in the effective 100-year floodplain</td>
<td>Properties in SFHA fields</td>
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</tbody>
</table>
Topics

- Substantial damage background
- Substantial damage preliminary assessment
- Potential areas of FEMA substantial damage support
- Next steps and decisions
Next steps

- Determine approach for identifying substantial damage
- Request data from FEMA-SD taskforce
- Notify community members of substantial damage determination
- Inform residents about permitting and substantial damage requirements, so they know when they need a permit to rebuild

Are there additional immediate next steps that we can support you in?