



MEMORANDUM

Date: May 6, 2020

To: Local Floodplain Managers and Building Officials

From: Michelle Staff, Floodplain Policy Coordinator, Dam Safety and Floodplain Section

RE: Local Substantial Damage Plan Template

The attached Substantial Damage Plan Template is provided to help you be prepared for the next flood in your community. After a flood, it is important that damage assessments occur quickly, before residents begin repairing their flooded homes. This plan will help your response by:

- assigning staff roles and responsibilities,
- explaining why it is important to coordinate in advance of a flood with your emergency management staff and county/township assessor,
- developing a damage assessment process, and
- obtaining the equalized assessed value on damaged buildings.

To help you the Wisconsin Department of Natural Resources (WDNR) has developed two documents as attachments to this template:

- Flood Damage Assessment Packet (Appendix A)
- Substantial Improvement/Substantial Damage Permit Packet (Appendix B)

The Federal Emergency Management Agency (FEMA) has also developed the manual [Substantial Improvement /Substantial Damage Desk Reference](#), FEMA P-758, May 2010. The FEMA manual goes into detail on every step of the damage assessment process.

Finally, the WDNR recommends FEMA's Substantial Damage Estimator (SDE) software. The software provides a data base for collecting the inspections data, a manual that explains each step of the damage estimate process, and damage inspection forms. The SDE tool can be found online, is free and is supported by the documents listed below.

- [SDE Read Me – SDE 3.0 Tool Installation Guide.pdf](#)
- [FEMA P-784, Substantial Damage Estimator \(SDE\) User Manual and Field Workbook: Using the SDE Tool to Perform Substantial Damage Determinations](#) (August 2017)
- [FEMA Substantial Damage Estimator Best Practices](#) (August 2017)

If you have any questions, please contact Michelle Staff at [Michelle.Staff@Wisconsin.gov](mailto:Michelle.Staff@Wisconsin.gov) or (608) 266-3093.

**TEMPLATE**

# [INSERT COMMUNITY NAME] SUBSTANTIAL DAMAGE PLAN

[Original date of plan]

[Date of last review]

## **Staff Roles, Responsibilities and Training**

List the staff that will be responsible for the following actions

- Obtaining High Water Marks/Windshield Survey
- Post-Flood Inspections
- Damage Estimations
- Substantial Damage Determinations
- Post Flood Permitting
- Providing Flood Insurance/ICC Information

The plan should address training sources and even annual training goals. Training of those in charge of implementing this plan should be done on a routine basis. Training can be obtained through webinars and conference offered by The Association of State Floodplain Managers (ASFPM) webinars and conferences; and The Wisconsin Association for Floodplain, Stormwater and Coastal Management (WAFSCM). DNR State NFIP Coordinator also conducts trainings, for building officials, zoning officials or other statewide organizations as requested. Finally, the FEMA Emergency Management Institute (EMI) has online and in person training opportunities. You can locate all these training opportunities are located on the website of these organizations.

### **Highwater Marks/Windshield Survey**

The plan should explain the use of these surveys to get quick data on the highwater marks and flooded structures. The plan should include: When initial sweeps should be done, what information should be collected, how the information will be used and what safety precautions workers follow in the affected areas. Coordinate with Emergency Manager in your community to understand the importance of this role. Community Service Officers in your Police Department may be able to fill this role. Building inspectors may also be available, as inspections are often suspended during flooding. The chosen staff should be trained so they understand where to expect flooding, how to spot signs of flooding and what to photograph and take notes on (water against buildings with address noted, depth of water at mailboxes or signposts, and debris lines.)

### **Post-Flood Inspections**

The plan should clearly assign responsibility for completing these inspections in a timely manner and pre-select the inspection forms to be used. The state's Flood Damage Assessment Plan (Appendix A) and [FEMA P-784, Substantial Damage Estimator \(SDE\) User Manual and Field Workbook: Using the SDE Tool to Perform Substantial Damage Determinations](#) both have inspection sheet options. If you are going to utilize other technologies resources such as GIS, GPS, etc., add these other sources to your plan. Make sure to include in your substantial damage plan, how to calculate substantial damage, if it is not possible to inspect the interiors of flooded structures. This may due to unforeseeable circumstances

such as an owner who will not allow an interior inspection, unpassable roads, too many damaged structures to individually inspect, etc. In spite of these difficulties, the community is still responsible to complete a substantial damage inspection. The owner of the damaged structure can assist with the estimation process by providing interior photos and/or videos of the damage structure. If the owner does not to provide additional information, the community must use the best available information that they have to determine if the structure is substantially damage.

Due to the 2020 COVID-19 pandemic, the utmost precautions should be taken for the health and safety of volunteers, employees and public. The building inspection process across the country has changed and many are using inexpensive virtual tools to perform inspections such as Facetime, Skype, Google Duo and Microsoft Teams. Your community may consider conducting substantial damage inspections using these other methods until the health crisis is over.

### **Damage Estimations**

The plan should establish how your community will estimate damages. If a large number of structures are located in your floodplain, FEMA's SDE software is highly recommended. The database can be prepopulated with addresses and flood map information to increase post-flood efficiency.

If FEMA's SDE software is chosen, FEMA offers two Independent Study Courses:

1. IS-284.a [Using the Substantial Damage Estimator 3.0 Tool](#)
2. IS-285 [Substantial Damage Estimation for Floodplain Administrators](#).

Same day training of inspectors or data entry staff can be used, but advanced training is preferred.

### **Substantial Damage Determinations**

The plan should establish the source or sources of the equalized assessed value of buildings. Typically, communities use City/Village/County/Township assessor's data. It is recommended that you coordinate early access to this data, before the flood occurs, as well as determine how the data will be quickly accessed during the Substantial Determination process. Often assessment data for non-residential or larger residential buildings, like apartments and condominiums, is not online. Establish a process for getting this data efficiently, in advance if possible. The plan should include a damage determination letter template that can be used to send to property owners along with assigning who would be responsible to complete this important step.

### **Post-Flood Permitting**

Consider including the use of the state's Substantial Improvement/Substantial Damage Permit Packet (Appendix B) to track damage repairs. Wisconsin communities are required to track addition, repairs and improvements to floodplain homes on a cumulative basis. This means that repairs and improvements need to be tracked over time, so the cumulative improvements/repairs do not exceed or equal 50% of the equalized assessed value of the structure. The permit packet helps to consistently organize reviews over time.

### **Flood Insurance/ICC Information**

The plan should include information and publications to give to citizens regarding flood insurance. After flooding events, citizens who have flood insurance will need to make claims as soon as practicable. FEMA has many publications that communities can either get for free or copy to give to citizens to help them with the flood insurance process and/or to explain the benefits of flood insurance. In addition, NFIP flood insurance policies provide additional monies to substantially damaged homes. The Increased Cost of Compliance (ICC) part of a standard NFIP Flood Insurance Policy, is there to help the policy

holder offset the cost of complying with the floodplain zoning ordinances. Finally, after experiencing a flood event, many citizens who did not have flood insurance will become interested in purchasing it to protect their financial assets from future flood losses.

**Floodplain maps**

In your community plan include maps of the floodplain showing addresses and street names. These maps should be readily available for use during a flood event and will be used to define, highwater marks, flooded homes and track inspections. If possible, work with your local or county GIS department to create maps showing addresses, road names, one-foot contours, floodplain limits and base flood elevations at intervals throughout the floodplain.

**Appendix A State Flood Damage Assessment Plan**

**Appendix B. Substantial Improvement/Substantial Damage Permit Packet**