

How to Conduct a Tabletop Exercise of the SDRP

A Substantial Damage Response Plan (SDRP) lays out in advance the steps that a community should follow when a flooding emergency occurs. It should guide a floodplain administrator's team through an evaluation of the flooding event, its likely impacts, and the necessary scale of response in terms of staff and other resources.

To ensure that the SDRP provides effective guidance when a fast response is essential, communities should evaluate their SDRPs periodically through a tabletop exercise. Such exercises can be carried out as stand-alone activities to train new staff or to remind existing staff and partners of their responsibilities during a substantial damage event. The exercise also can be included as a component of an exercise of the community's broader emergency operations plans.

Define the Flood Scenarios

Any tabletop exercise of the SDRP should be run for multiple flood scenarios:

- A minor flooding event that does not trigger the SDRP because it is unlikely to result in flood damage of any structures
- A moderate flooding event that triggers the SDRP because it is likely to result in damage of structures but has the potential for substantial damage of only a few structures and can be responded to with existing community staff
- A major flooding event that triggers the SDRP because it is likely to result in damage of structures, has the potential for substantial damage of many structures, and requires additional response support from outside agencies

An official other than the floodplain administrator should identify the characteristics of flood scenarios to be evaluated in the exercise and provide the information to the floodplain administrator and their team. The following sections describe characteristics that should be defined for each scenario.

Hazards Other Than Flooding

If a community identifies other non-flood related exposures that can result in substantial damage (wind, rockslide, etc.), it would be beneficial to include tabletop exercises for those hazards as well.



FEMA

Type of Flooding

Select a specific type of flooding—such as riverine flooding, flash flooding from heavy rainfall, coastal flooding, etc.—or a combination of flooding types. Different flood types are likely to occur in different areas and have different damage impacts. This information will help the team assess whether the same flooding conditions are likely to occur over the entire community or only in specific locations. Knowing the flood type also allows judgment on how likely it is that the community will experience additional damage from wave action, scouring, or hydrodynamic pressure and debris flow.

Flood Height or Magnitude

Select a flood height or magnitude to be evaluated in each flood scenario. Examples include 1 foot below base flood elevation, the forecast storm surge for a category 1 hurricane, 2 feet above ground level, etc. The response team will use this information to determine flood heights across the community.

Flooding Location

Select a location where the selected flood height occurs. Examples include a highwater mark in a neighborhood, a river/tidal gauge, a water body, etc. This will help the team to determine whether the flooding is likely to be localized or to have occurred throughout the community, based on the team's knowledge and expertise and available mapping, modeling, and structure inventories.



Figure 1. A tabletop exercise for disaster response team members

Assess the Scenarios

Once the flood scenarios are provided to the floodplain administrator and support staff, the group should use the SDRP to answer questions that will drive the following components of response:

Pre-Flood Event Preparation

- Does the flooding scenario result in the triggering of the SDRP?
- Does the flooding scenario result in the need for substantial damage determinations?
- Does the scale of the flooding event result in the need for outside staff/support? If so, who is contacted and what requests will be made?
- What public outreach materials need to be developed/distributed?

Inspections and Damage Determinations

- What properties or neighborhoods require inspection?
- How many inspectors are available for the event and where will they be assigned?
- What meetings or training sessions are necessary for inspectors?
- What type of review of structures will take place?
- What outreach materials, notifications, etc. must be distributed before the inspection team conducts its work?

Post-Determination Response Procedures

- What should be done with the information from inspections?
- What follow up actions are needed for properties that have been inspected?
- What follow up actions are needed for properties that have been determined to be substantially damaged?
- How will the structure inventory database be updated?

Secondary Exercise: Assess Damage

A secondary exercise can take place to help train or maintain the skillset of the team of inspectors. Photos of flood damaged structures can be shown to the inspection teams for evaluation. The team should discuss and determine which of the following damage levels apply to each structure:

- Obvious substantial damage (more than 60% damaged)
- Potential substantial damage (40 to 60% damaged)
- Not substantially damaged (less than 40% damaged)

If inspectors require additional training on the Substantial Damage Estimator 3.0 Tool, training is available at https://emilms.fema.gov/is_0284a/curriculum/1.html.