

FLOOD RECOVERY – POST FLOOD DAMAGE ASSESSMENT AND DATA COLLECTION PROTOCOLS

3.1 INTRODUCTION



After flood waters subside and response efforts are substantially completed, the recovery process begins. Citizens need to understand how to safely reenter their homes. Business and residents may also need to know how to safely rebuild. Damages must be documented for insurance purposes, grants, or other assistance applications. A coordinated effort to accomplish these and other post flood damage assessment and data collection activities is outlined in a post-flood damage assessment protocol and a post-flood data collection protocol.

3.2 POST-FLOOD DAMAGE ASSESSMENT AND DATA COLLECTION PROTOCOL

A post-flood damage assessment protocol gives the community a defined plan to make sure community ordinance requirements are met and damage is properly assessed. Also, a post-flood data collection protocol provides a way to take advantage of the opportunity to gather data that will improve the tools for evaluating future flood risks and possible alternatives to reduce those risks. Columbus has a procedure that has been used in the past but it was not documented. In order to document the procedures and to provide enhancements of existing functions and additions to better accomplish City goals, meetings were held between the City Planning Department and Code Enforcement Departments to create written protocols for both post-flood damage assessment and post-flood data collection protocols. These protocols outline specific tasks and associated responsible parties to complete the post-flood damage assessments and data gathering. Following is an outline of each of the protocols.

Post-Flood Damage Assessment Protocol

1. Evaluate Damage to Structures – the Emergency Management Agency (EMA) is responsible for conducting the initial damage assessment and coordinating with the Red Cross, the Indiana Department of Homeland Security



(IDHS) and the Federal Emergency Management Agency (FEMA) regarding damage assessments during larger flood events. The EMA leaves a door hanger on each structure assessed and creates a database for the City.

2. Identify Damage Areas in the Special Flood Hazard Area (SFHA) – the City Planning Department uses flood maps to identify damaged structures (as evaluated by the EMA) in the SFHA.
3. Distribute Outreach Materials – City Planning and Code Enforcement distribute information to the public and media.
4. Review Permit Application and Verify SFHA Status – the owner obtains an estimate to repair the flood-related damage to their structure. On a case-by-case basis, City Planning will review SFHA status. If the structure is not in the SFHA, then the application proceeds to Step 6 of this protocol.
5. Cost Estimate to Repair Damage to Structures in the SFHA – City Code Enforcement determines the assessed value of the damaged structure and determines if there is cumulative damage from previous floods.
6. Issue Local Permits – City Code Enforcement issues local permits for repairs.
7. Inspect Repairs and Document Damage – City Code Enforcement conducts an inspection of the repairs and updates the database with a list of permits obtained and work completed. City Planning updates the database to document any repetitive loss structures.
8. Documentation – City Planning maintains all flood-related records, depth of flooding documentation, and repetitive loss information.

Post-Flood Data Collection Protocol

- Coordinate collection of aerial photography of the flooded areas



- Coordinate collection of high water marks along the streams and in flooded areas
- Coordinate collection and capture of data on observed rainfall depths and patterns
- Coordinate collection and capture of Advanced Hydrologic Prediction Service (AHPS) observed and forecast flood stages
- Compare the extent of observed flooded areas to Flood Insurance Rate Maps (FIRMs)

A more in-depth description of the resources available for post-flood data collection is included in **Appendix 4**. Because the flood data collection and damage assessment activities are a part of or are closely tied to flood response, a copy of the post-flood damage assessment protocol and the post-flood data collection protocol are integrated into the Flood Response and Evacuation Plan which was created as a stand-alone document.

3.3 RECOMMENDATIONS – POST FLOOD PROTOCOL

Based on the discussions above regarding flood response tools and plans, the following recommendations are made:

- a) Update the appropriate section of the Flood Response and Evacuation Plan (FREP) as City permit processes or regulations change, or as use of the protocol show the need for revisions/additions.
- b) Add information about permitting requirements and processes to the materials that will be distributed immediately after a flood event.
- c) Develop task checklists that can be provided to owners of damaged structures.
- d) Develop post flood data collection record keeping procedure.
- e) Inform the Indianapolis NWS office of areas/roads flooded in a given event so they can add the information to their web site .



