This documents the methodology used to create the damage assessment information for Hurricane Harvey in Texas.

**Area of Interest, Data Sources, and Analysis**

* Area of interest. The initial analysis focused on impacted counties in twelve counties in Texas. Data Sources
  + The parcel data was used from HIFLD. The Land Use code was used to derive a structure type.
  + Inundation extents were created based on event data and is further described in another document. The inundation data layer was used to assign a Z value (Raster value) and associated damage level.
* Analysis. The parcels were overlaid with an inundation layer, assigned a Z value (Raster value), structure type, and damage level.

**Attributes**

*TYPE (text, 50)*

Residential, Manufactured Home, Nonresidential, Government, Public

*DMG\_LEVEL*

|  |  |  |
| --- | --- | --- |
| Category | Description | Notes |
| Affected | > 0 - < = 2’ |  |
| Minor | > 2 - < = 5’ |  |
| Major | > 5’ – 8’ |  |
| Destroyed | > 8’ |  |
| NA | NA | Parcels that did not receive a structure type or had a Z of zero received NA. Note, parcels without a structure type may have a Z value, but since it is assumed there is no structure on the parcel, NA was used for the damage level. |

*IN\_DEPTH*

* Depth of potential flooding in feet based on the inundation layer.

**Assumptions**

* The parcel centroid is where the building was located.
* It is unknown which points are elevated structures. Some of these structures may be elevated above the inundation layer depths and as a result not sustained damage.
* Parcels with PROP\_IND\_T = “Vacant” were removed from the analysis.
* Duplicate APN parcels were removed.
* This methodology does not account for flooding as a result of storm water backups, irrigation ditch failures, flooding from dam or levee breaks, use of spillways and weirs, or resulting wind damage.