

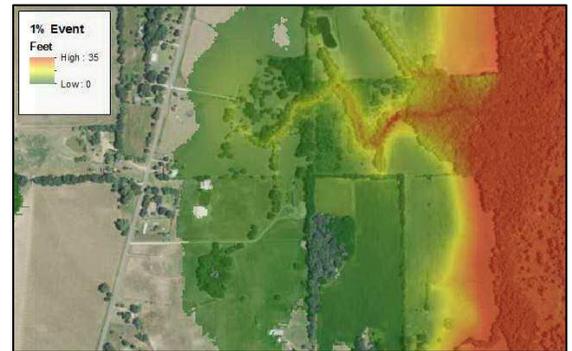
## Identifying Structures For Elevation/Acquisition

Depth Grid data delivered in the Flood Risk Database (FRD) allows community officials to better understand, investigate and communicate the variability of flood depths in areas identified as flood prone. Depth grids illustrate the flood depth in feet above the ground surface. Depth Grids may be prepared for a variety of potential flood occurrences; the most common depth grid is that prepared for the 1% annual chance flood event.

Communities may review the flood depth at site-specific locations using the approach outlined below. Flood depth information allows communities to convey flood risk in simple terms, and provides a data point to prioritize between elevation/acquisition projects. This calculated structure-specific information also informs grant applications.

### Ingredients:

- Depth Grids (Depth\_01pct, etc.)
- Address Location Points (or Building Footprints)



### Using Depth Grids to identify appropriate mitigation actions:

- Step 1:** Using ArcMap 9.x/10.x, use **ADD DATA** to navigate to the Flood Risk Database and add Depth\_01pct.
- Step 2:** **ADD** local data. Ideally this would be address points, but other data could be used.
- Step 3:** Using the address points, **EXTRACT** the raster values to the points.
- Step 4:** From the attribute table, **EXPORT** the address/owner information.
- Step 5:** Once exported, the data can be sorted based on the depth of flooding. Those properties could then be targeted for contact to discuss mitigation actions which are most appropriate. For instance, properties at risk of greater flood depths may be better off elevating the entire structure, whereas properties prone to shallow flooding may be able to utilize dry flood proofing techniques such as waterproofing the lowest portions of the structure.

## Evidence Drawn From Depth Grids

### Elected Officials and Community Staff

- Relay variability of flood risk within the identified Special Flood Hazard Areas on FIRMs
- Identify populations and areas within the community at risk during various storm events
- Identify road crossings that may become impassable during a storm event and plan accordingly
- Perform Cost benefit depth-damage calculations
- Provide a visualization tool to help building permits and inspections staff explain flood risk to developers
- Assist with developing more stringent development/building codes
- Assist emergency response staff identify high risk areas
- Highlight areas of the community for outreach and education efforts

### Planning Staff

- Assist with mitigation prioritization activities and projects
- Assist with advance recovery planning and disaster preparedness
- Depict high flood risk areas for future planning needs
- Assist with Capital Improvements planning by guiding infrastructure investment away from high risk areas

### Engineering and Technical Staff

- Data point for use in prioritizing mitigation projects
- Helps screen potential projects for cost effectiveness
- Informs development decision making for risk prone infrastructure

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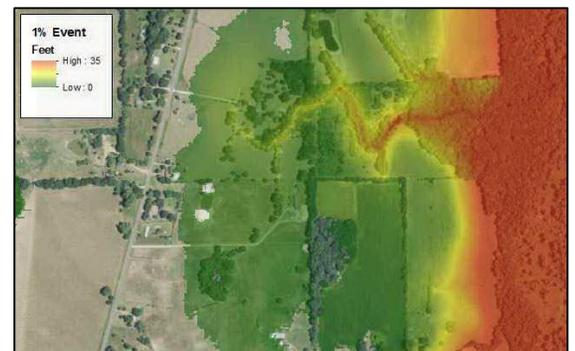
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