Visualizing Flooding to Develop Education and Outreach Program for a RV Park & Mobile Home Community

Using the Tool

The Maryland Flood Explorer is a valuable tool for visualizing flooding in communities and engaging target audiences in understanding flood risks and inspiring action. Local governments, academics, Extension specialists, nonprofits, and other groups can use it to create tailored educational and outreach materials, foster discussions about flood risks and impacts, and support the planning of resilience strategies and projects.

Example Scenario

A Community Flooding Extension Specialist in Worcester County received a call from a seasonal resident living in an unincorporated area of the county. The resident, representing a small group of lot owners, expressed concerns about flooding in their RV park and mobile home community following a recent storm and requested assistance.

During a site visit, the Extension Specialist learned:

- The property is a cooperative campground where 200 owners share ownership of the entire 25-acre park.
- Occupancy is permitted from April to November.
- The park includes both movable vehicles and permanent structures.
- Lot owners use the park in a variety of ways—some visit for a few weeks during the season, some reside on the property for the entire season in permanent structures, and others share their lot space with family and friends for short-term camping.
- Each lot owner is responsible for obtaining their own flood insurance.

The concerned residents are seeking guidance on how to engage fellow residents, which lots are most at risk now and in the future, and what upgrades might be possible for individual lots. They are also exploring resilience options to protect the entire park from future flooding.

To begin, the Extension Specialist uses the Maryland Flood Explorer to visualize flooding in the community.

Tool in Action

- Open the <u>Maryland Flood Explorer</u> and enter the address of the RV park and mobile home community.
- Click the **Basemaps & Layers** button and enable the following layers (which can be toggled on and off):
 - **Buildings** Identify the locations of permanent structures on the park site.
 - **Parcels** Visualize the full 25-acre property and the 200 individual lots.

Visualizing the RV Park & Mobile Home Community in the FEMA Floodplain

Enable the **Floodplain** layer to identify which lots and permanent structures are located within a FEMA Special Flood Hazard Area. This will help determine which lots are at significant flood risk and require flood insurance, as well as identify lots in lower-risk areas.

The Extension Specialist notes that all but approximately 20 lots are located within the FEMA Special Flood Hazard Area (shown in blue). Even those outside the designated area (shown in orange) may still be at risk due to their proximity to the hazard zone.

The screenshot below could serve as a helpful educational resource for one-on-one conversations with residents, community meetings, or when developing outreach materials about flood risk, insurance requirements, and available flood insurance options.



FEMA Floodplain Layer at RV Park & Mobile Home Community 1% Annual Chance Flood in Blue and 0.2% Annual Chance Flood in Orange

Visualizing the RV Park & Mobile Home Community During Historic Flooding Events The Extension Specialist can use the Maryland Flood Explorer to visualize how this community was impacted by historic flooding events in recent years. Some residents may have experienced these events firsthand; for others, seeing visualizations of past storms may help make the risks feel more tangible.

The screenshots below can be used as educational materials to help understand flood risk, particularly identifying lots that are at significant risk. They can also support planning for potential upgrades to individual lots to better withstand future flooding, as well as guide the development of broader resilience projects for the entire property.

Click the **Scenario Type: Historic Event** to visualize the approximate flooding from previous storm events in this community. Click on **Hurricane Isabel 2003**.

The Extension Specialist notes that, although the community did not experience direct flooding during Hurricane Isabel, surrounding areas and public roads were affected. Additionally, the Specialist observes that approximately one-third of the property is located in a low-lying area (shown in green). Lots situated in these areas may be at risk of flooding, even though they may not be directly influenced by tidal activity. The Extension Specialist may consider conducting an in-person site visit to assess whether this green area is hydrologically connected beneath the road. If water flows freely back and forth under the road, the Specialist should note that this

area—and potentially the community—may be vulnerable to tidal surges from a large storm like Hurricane Isabel.



Hurricane Isabel 2003 Flooding at RV Park & Mobile Home Community

Click the **Scenario Type: Historic Event** to visualize the approximate flooding from previous storm events in this community. Click on **Superstorm Sandy 2012**.

• Click the **Measure Depth** button and select various points within the property to view the estimated water depths throughout the area.

The Extension Specialist notes that the property experienced varying degrees of flooding during Superstorm Sandy, with some lots receiving more than 2.5 feet of water. This screenshot illustrates that the community remains highly vulnerable to similar storm events.



Superstorm Sandy 2012 Flooding at RV Park & Mobile Home Community



Superstorm Sandy 2012 Flooding at RV Park & Mobile Home Community – Water Depth at Various Locations

The screenshots above can be used in educational materials to illustrate the potential impacts if a similar storm were to occur today. These visualizations also help spark discussions about storm preparedness and encourage proactive planning—even in areas that haven't been directly affected in the past. They can support conversations around community resilience projects, lot-specific improvements, and future insurance needs.