Pin2Flood

*Instant Flood Maps For First Responders*

What is Pin2Flood?

Pin2Flood is an application which allows the on-scene first responders to make their own flood maps - on demand! By 'dropping a pin' at the water's edge on the map, the application automatically returns the boundary of the flood waters, along with identifying impacted address points & roadways.

Locate water's edge   **Drop pin on map**   **Flood inundation returned**
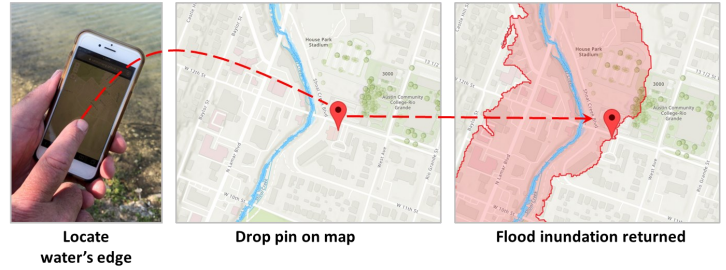
Pin2Flood is currently two applications—one for field responders and one for emergency managers. With both apps simultaneously displaying the same data, the result is a common operating picture with real-time flood impact maps.
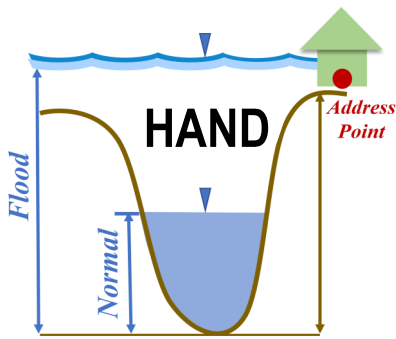
What is the science behind it?

HAND

Flood   *Normal*   *Address Point*

The general concept of HAND (Height Above Nearest Drainage) is simple—it is elevation contours based on the stream bed elevation rather than on sea level. HAND provides a 'topographic map' of water coverage at 1 foot depth increments. When a first responder drops a pin at water's edge, the system looks up the closest HAND contour at that location and immediately displays the flood inundation. While the math to generate HAND is complicated, the results are quick and easy to use.

Why do responders need it?

How many times has a responder tried to 'describe' the flood in front of them to a Chief or Emergency Manager? Not only is it difficult, both parties are required to verbally describe changes during the flood such as additional homes being impacted or more roads being closed.

Pin2Flood not only provides the current boundary of the flood based on a pin drop, but it also provides a common language to work from. Pin2Flood is accessible in the field and the emergency operations center—displaying the same results!

What can it do for responders?

**42 homes
Response from both sides of creek**

With Pin2Flood's output being a flood boundary, we have the ability to identify impacted homes, population, and roads within the flooded area. Pin2Flood can also inform regional and state Emergency Managers on flood severity and the need for additional resources. Finally, the exportable data can be used for damage assessments with observed flood extent.

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