Iowa Flood Information System

This one-stop web platform facilitates access to community-based flood conditions, forecasts, visualizations, and inundation maps and flood-related data, information, and applications.
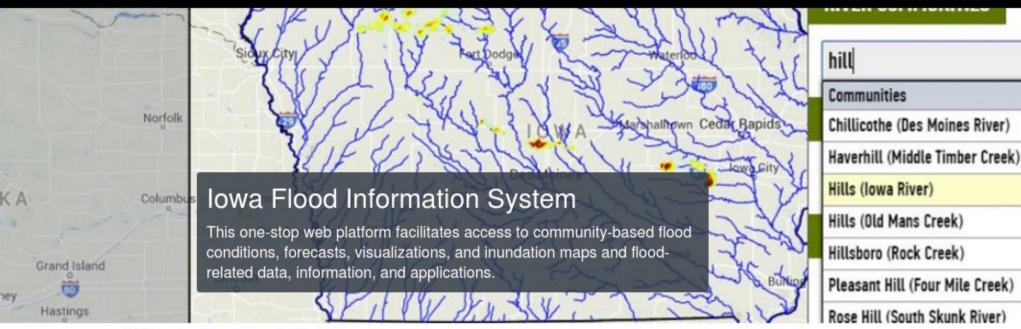
SHARE
TWEET
PRINT

This system offers a user-friendly and interactive environment for over 1,000 communities in Iowa relating to flood conditions, flood forecasts, data visualizations, and flood-related data, information and applications. The tool helps communities make better-informed decisions on the occurrence of floods and alerts communities in advance to help minimize flood damage.

Users can receive flood information via several platforms, including the main website, Twitter alerts, an available web widget, a lightweight mobile application, and through web applications available for Pokki and Chrome. The system also provides a web service for advanced users in research organizations and government agencies using the Representational State Transfer (REST) protocol.

Users can choose many options for exploring and visualizing the effects of floods, including:

- Community-centric watershed and river characteristics, weather (rainfall) conditions, and streamflow data and visualization tools;

- Interactive interfaces that allow access to inundation maps for different stage and return period values, and flooding scenarios with contributions from multiple rivers;

- Real-time and historical data of water levels, stage heights, and rainfall conditions, available in the tool by streaming data from automated Iowa Flood Center bridge sensors, U.S. Geological Survey stream gauges, NEXRAD radars, and National Weather Service forecasts;

- 2D and 3D interactive visualizations, ideal for making the data more understandable to general public; and

- A rainfall-runoff forecast model to provide a five-day flood risk estimate for over 1,000 communities in Iowa.

Users can filter data sources for their communities and selected rivers. Multiple view modes accommodate different user types—from the general public to researchers and decision makers—by providing different level of tools and details. River view mode allows users to visualize data from multiple Iowa Flood Center bridge sensors and U.S. Geological Survey stream gauges to follow flooding condition along a river.

Last modified: 1 February 2018 - 8:39am

Steps to Resilience
This content supports the highlighted step.

1 Explore Hazards
2 Assess Vulnerability & Risks
3 Investigate Options
4 Prioritize & Plan
5 Take Action

Tool Webpage
Iowa Flood Information System ›

Topics
Built Environment › Disaster Planning › Water › Flooding ›

Training/Tutorials
Video Tutorial ›

Partners
Iowa Flood Center ›
IIHR—Hydroscience & Engineering ›
The University of Iowa ›