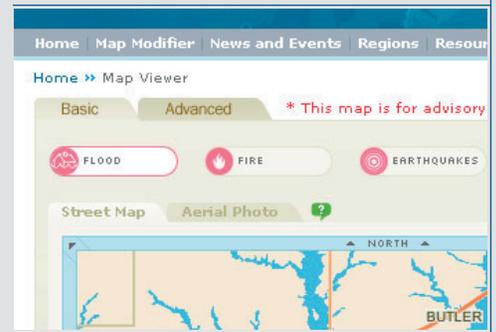


# Multihazard Information Platform

**HAZARDS.FEMA.GOV: STATE-OF-THE-ART TECHNOLOGY  
FOR MAP MODERNIZATION**



## OVERVIEW

Working with FEMA, the National Service Provider, is building a state-of-the-art geospatial infrastructure that will enable all-hazard mapping. This infrastructure, known as the **Multihazard Information Platform (MIP)**, will provide easy access to the latest flood hazard data and maps via the Internet. This application will feature a geospatial data viewer and provide other engineering, mapping, and program tools available on the Internet. The system will allow for multiple participants to use and contribute data. Likewise, information will be available to the users and stakeholders in a public website.

## REPOSITORY

The MIP will provide the repository for the National Flood Layer. It will store not only the final Digital Flood Insurance Rate Map (DFIRM) data, but also intermediate data, which will include the outputs of key steps used to create the DFIRM data. This will include scoping, survey, elevation, hydrology and hydraulics modeling data, Base Flood Elevations (BFEs), flood outlines, and other pertinent data. In addition, the system will include a "federation" feature, meaning that if the data are held elsewhere, the MIP will point to them to the data holder, rather than duplicating them.

Communities will be able to use the repository service in several ways. First

and easiest is that they can simply store their intermediate and final data on the system. Those that wish to create, maintain, and modify data on their own servers can also do so. Once these data are registered with the system, any requests at the national level for these data will be referred, via web mapping services, to the community data store. An advantage of this is that the data are under the community's control.

Note that because intermediate data will be collected as they are created, they will be available to other projects as soon as they are in the MIP (or pointed to by the system). A user will be able to search the system for pertinent data, potentially avoiding costs and saving time.

## WORKFLOW

The MIP will contain the flood mapping process embedded in a workflow engine, from needs assessment through to final DFIRM production. A community will be able to use this workflow capability by letting the MIP follow the status of its flood mapping projects. Community officials will be able to determine the status of all projects in their area of responsibility using the status rollup system. The rollup system will be able to sort projects by schedule, cost, issue, and other factors, allowing the community officials to manage the project more effectively. In addition, the system will be available to contractors who are performing the studies, so the

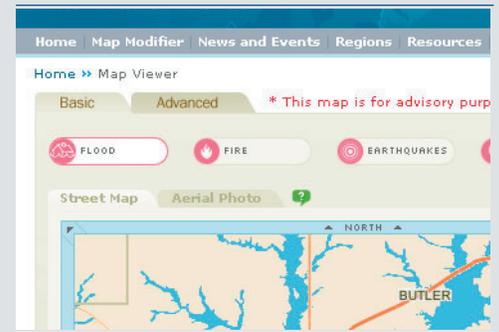
## TRAINING

**The Multihazard Information Platform will provide an e-Learning system that will include not only information about using the system, but also information about flood mapping. With the expected increase in new surveyors and engineers in the flood mapping field, this training material will help to ensure that common vocabulary, methods, and procedures are used by all participants.**



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workflow system will allow up-to-date communication of status and other information. The workflow system will collect the intermediate and final data, not allowing a project to progress until required data are collected accordingly.

## TOOLS

The MIP will not require any particular tool to create data, as long as the data are submitted in accordance with established standards (which will be published on the system). However, the MIP will provide a standard set of tools for those who would like to use them. These tools will be tested against the system's data interchange standards to ensure compatibility, and they will cover the entire process, from needs assessment through final DFIRM production. The first toolset is called WISE, and covers from scoping through flood layer identification. The second toolset is called the Production Line Tool Set (PLTS), and covers through final DFIRM production. Key for users to note is that the only software that will be required is a web browser where the user can download a CITRIX client that then allows them access to the tools.

## QUALITY CHECKING

The MIP will perform quality checking of data to catch common errors. This includes not only checking form and format, but also such things as ensuring that the BFE upstream is not lower than

the BFE downstream. A community's use of these tools will help ensure high-quality data and save them the cost and time required to develop their own tool environment.

## PUBLIC ACCESS

The MIP will be built using Internet technology, so it will include a Web site. Communities can direct citizens and local stakeholders to the system for public access to flood hazard information about the community. The MIP will also contain an extensive library of information about flood hazards. This will include information useful to home and business owners that they can use to not only further understand their flood hazard risk, but what actions to take to protect them, both physically and financially. The system will also contain information for communities to learn how to participate in the Cooperating Technical Partner program.