

Frequently asked questions during flood events.

Where can I get detailed river information including current stages and forecast stages?

Detailed river information is available from our Advanced Hydrologic Prediction Service page. This page can be found at <http://www.crh.noaa.gov/ahps2/index.php?wfo=grr>.

I have seen the river forecasts change occasionally...Why the change?

Hydrologists use computer models to produce a river forecast. One important input to the models is rainfall. Each new model run incorporates the latest new rainfall in the last 24 hours. If additional heavy rain has fallen since the previous forecast, the new river forecast will likely change to reflect the new data. In addition to actual rainfall, river forecasts also use the amount of future or forecast rainfall expected during the next 24 hours. This can change greatly and can have a major impact on the river forecast. In addition, the forecasts may be adjusted based on actual flow measurements taken during the event by [U.S. Geological Survey](http://www.usgs.gov) (USGS) hydrologic technicians. Visit the USGS at <http://water.usgs.gov/>.

How do you measure the current water levels?

The National Weather Service relies heavily on a network of river gages operated by the [U.S. Geological Survey](http://www.usgs.gov) (USGS). Data is received from these river gages either by phone telemetry or satellite. In addition, during times of flooding, USGS technicians are out taking flow measurements and relaying that back to the NWS and other agencies which provides vital information for our river flood warning and forecast program.



USGS Hydrologist making measurements during high flow.

What is a river stage?

A river stage represents the level of the water surface of a river or stream above an established datum at a given location.

What is meant by the term flood stage?

Flood stage is an established gage height for a given location above which a rise in water surface level begins to create a hazard to lives, property, or commerce. The issuance of flood warnings for river locations is linked to flood stage. Flood stage is not necessarily the same as bankfull stage.

What is the meaning of a "100 year" flood?

The 100-year flood or x-year flood refers to the probability of those events occurring. That is, for a 100-year flood, there is a 1% chance in any given year of having a flood of that magnitude. For a 500-year flood, there is a 0.2% chance of having a flood of that magnitude occurring.

It should be stressed that the 100-year and 500-year events are independent events, from the perspective of probability. That means that if one of those events occurs, it has no effect on future events occurring. In other words, if a 100-year flood event occurs, that does NOT mean that people are “safe” for 99 years. The risk of having the flood in any given year is the same, regardless of if it occurred recently.

If your building is in the 100-year floodplain and has a 30 year Mortgage... it has a 26% chance of experiencing a 100-year flood during the life of the loan (vs. 4% chance of a fire).

What should I do in preparation for a flood?

Make an itemized list of personal property well in advance of a flood occurring. Photograph the interior and exterior of your home. Store the list, photos and documents in a safe place.

Memorize the safest and fastest route to high ground. Assemble a disaster supplies kit containing: first aid kit, canned food and can opener, bottled water, extra clothing, rubber boots and gloves, NOAA Weather Radio, battery-operated radio, emergency cooking equipment, flashlight and extra batteries.

If you live in a frequently flooded area, keep sandbags, plastic sheets and lumber on hand to protect property. Install check valves in building sewer traps to prevent flood water from backing up into the drains of your home.

Know the elevation of your property in relation to nearby streams and other waterways, and plan what you will do and where you will go in a flood emergency.

What should I do when a flood threatens?

If forced to leave your property and time permits, move essential items to safe ground, fill tanks to keep them from floating away and grease immovable machinery.

Store a supply of drinking water in clean bathtubs and in large containers.

Get out of areas subject to flooding. This includes dips, low spots, floodplains, etc.

What should I do during a flood?

Avoid areas subject to sudden flooding.

Even six inches of fast moving floodwater can knock you off your feet, and a depth of two feet will float your car! Never try to walk, swim or drive through such swift water.

Do not attempt to drive over a flooded road. STOP! Turn around and go another way.

Keep children from playing in floodwaters or near culverts and storm drains.

What should I do after a flood?

Boil drinking water before using. If fresh food has come in contact with floodwaters, throw it out.

Seek necessary medical care at the nearest hospital. Food, clothing, shelter and first aid are available at Red Cross shelters.

Use flashlights, not lanterns or torches, to examine buildings. Flammables may be inside.

Do not handle live electrical equipment in wet areas. Electrical equipment should be checked and dried before being returned to service.

Is flood damage covered by my homeowners insurance?

Flood damage is excluded in nearly all homeowners and renters insurance policies but, if desired, can be purchased as a separate policy.

Where can I find information about flood insurance?

The official site of the National Flood Insurance Program is at <http://www.floodsmart.gov>.

Where do I get flood insurance?

Any licensed property/casualty insurance agent can sell a flood insurance policy. If you experience trouble in locating an agent, contact the National Flood Insurance Program's (NFIP) agent referral program at 1-888-CALL FLOOD.

Is there a waiting period before my flood insurance policy becomes effective?

There is a 30-day waiting period before a new or modified flood insurance policy becomes effective.

Are all flood insurance policies the same?

Flood insurance coverage can be purchased for homes and businesses – separate coverage must be purchased for the building and its contents.

Do I need to live in a floodplain to get flood insurance?

You do not need to live in a floodplain to purchase flood insurance – coverage is available to any building located in a community that has qualified for the National Flood Insurance Program. For a listing of Michigan communities participating in the NFIP, you may visit

<http://www.fema.gov/fema/csb.shtm>.

What about flood safety?

More than half of all flood related fatalities are a result of driving into hazardous water covered roadways. In 2008, Michigan experienced 4 flood related deaths, of which 3 involved vehicles. If you encounter a flooded roadway follow this simple advice: Turn Around, Don't Drown! Learn more about flood safety and the Turn Around, Don't Drown campaign.

<http://tadd.weather.gov/tadd-intro.shtml>