

NOAA Knows...

Floods

From the beginning of time, the power of water has captured the human imagination and influenced how culture evolved throughout the world.

It's the topic of popular bible stories, global legends and Greek mythology. It can be beautiful, like the cascading falls of Niagara. It can be useful, like the mighty Colorado River — providing hydro-electrical power to millions of people. It also can be a destructive and deadly force of nature when heavy rain, melting snow, coastal storms and undersea earthquakes cause it to flow in unexpected places.



NOAA understands the dangers of floods. Each year in the United States alone, nearly 100 people are killed by floodwaters, which cause an average of \$7 billion in property damage. By planning ahead for this threat and making wise decisions, people can minimize their physical and economic risk.

NOAA: Bringing Information to You

The National Weather Service can help. We issue flood forecasts, watches and warnings for every U.S. community every day of the year. Meteorologists and hydrologists at 122 weather forecast offices, 13 river forecast centers and nine national centers use cutting edge technology to monitor the atmosphere, rivers and streams, develop river forecasts, and issue watches and warnings for floods and flash floods.

Understanding Your Risk

Monitor local flood threats with the click of a mouse at www.water.weather.gov. Water-level gauges in areas with flooding in the forecast will appear purple for major flooding, red for moderate flooding, orange for minor flooding, yellow for near-flood stage, and green for no flooding.

NOAA also provides new flood inundation maps to show which parts of a given city will likely be submerged when we predict a flood. This tool helps local officials decide whether to bring in sand bags, move property or evacuate people from threatened areas. Inundation maps are posted at www.weather.gov/ahps/inundation.php. The National Weather Service continues to add new locations to this tool.

Know What to Do: Turn Around, Don't Drown

Most flood-related deaths occur in motor vehicles when people attempt to drive through flooded roadways. Don't underestimate the power of flowing water across a road!



It's an incredibly senseless way to die and is completely avoidable. NOAA has adopted the flood safety slogan: **Turn Around, Don't Drown!** and hopes you will remember this when you're faced with a flooded roadway and an important decision to make.

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It only takes six inches of slow-moving water to lose control of a big, heavy vehicle, and to knock people off their feet.

Review flood safety and preparedness tips so that you will know what to do if you are suddenly faced with a flood. Great resources include www.floodsmart.gov and www.nws.noaa.gov/floodsafety/index.shtml.

Take Action

In Advance:

- ▶ Create an evacuation plan *before* a flood.
- ▶ Discuss flood plans with your family; everyone should know what to do in case family members are not together during a flood.
- ▶ Purchase flood insurance: talk to your insurance agent about coverage options.

When Floods Strike:

- ▶ Get to higher ground, away from the flooded area.
- ▶ Use a battery-operated **NOAA Weather Radio All Hazards** to receive up-to-date emergency information.
- ▶ Evacuate immediately, if advised to do so.
- ▶ Do *not* cross a flooded road. It may be more dangerous than it appears.



- ▶ Be especially cautious at night when it is more difficult to see a flood.
- ▶ Keep emergency supplies on hand, such as non-perishable food, medicine, maps, a flashlight and first-aid kit.

Flood Facts

- ▶ Since 1900, floods have killed more than 10,000 people in the U.S.
- ▶ Motorist can lose control of their vehicles in just six inches of water.
- ▶ Most homeowners insurance does *not* cover flood damage.
- ▶ Floods are the second-most common of all natural disasters, after wildfires.
- ▶ Mud slides result from long, heavy rain on hillsides causing soil, large rocks, boulders, and homes to slip free.
- ▶ Heavy spring floods often occur when rain and warm temperatures cause snow to melt rapidly.



- ▶ Ice jams occur as melting snow and heavy rain break frozen rivers into large ice flows often piling up at bridges and narrow passages causing water to backup and overflow riverbanks.

- ▶ Most flash floods are caused by slow moving thunderstorms, those that move repeatedly over the same area or heavy rain from tropical storms and hurricanes. They can develop *within minutes*, depending on the intensity and duration of the rain, the topography, soil conditions and ground cover.

For more information, visit www.water.weather.gov.

To learn more about NOAA, visit www.noaa.gov.

