



CITY OF  
**ISSAQUAH**  
WASHINGTON

**You live in a floodplain.**  
**Are you ready?**

[issaquahwa.gov/flood](http://issaquahwa.gov/flood)

October 2016



# History of Flooding in Issaquah

Historically, areas within Issaquah that are located along streams and prone to flooding were developed as farmlands, which are only minimally affected by high water. Early newspaper accounts wrote of flooded farmlands, washed-out roads and an occasional flooded basement.

However, as development progressed to the edges of streams, and bridges were built for roads, flood impacts and damages increased. Flooding now affects large urbanized areas of Issaquah, which until only a few decades ago was farmland, impacting commercial and residential properties.

High water and flooding most commonly occur from October through April during periods of intense rainfall or rapid snowmelt. Flooding conditions typically occur when rainfall exceeds about 4 inches in 24 hours and the ground was frozen or saturated prior to the rain event.

Since 1975, significant floods have occurred in 1986, 1990 (twice), 1996 and 2009. None of these floods were larger than a 25-year event.

The February 1996 and January 2009 floods represent the most damaging floods in Issaquah's recent history,

and were very similar. These floods impacted both commercial and residential areas, with total flood losses in the millions of dollars. The same areas are typically hit by flooding, given their lowlying locations in the floodplain.

However, the City takes every opportunity to reduce flooding where feasible (see sidebar at right). The fact that a large flood occurs one year doesn't mean it won't happen the next year. Plus, as demonstrated in 1990, more than one large flood can occur in a single winter. Thus, the threat of severe flooding is the same each year and citizens should remain prepared.

## What's a 100-Year Flood?

The term "100-year flood" is misleading. It is not the flood that will occur once every 100 years.

Rather, it is the flood elevation that has a 1 percent chance of being equaled or exceeded each year. That means the 100-year flood could occur more than once in a relatively short period of time.

The 100-year floodplain - the area predicted (using hydraulic modeling) to be inundated by the 100-year flood - is used as a standard for floodplain management and flood insurance.

elevation, and ensuring that development does not cause flood elevations to rise on neighboring properties. However, residential and commercial development is not allowed in floodways. If a structure located in a floodway is significantly damaged (more than 50 percent of the value of the structure), it can be rebuilt only after the Department of Ecology determines it is safe to do so.

## Building in a Floodplain

In general, most development activities are allowed in floodplains if they are built to certain standards.

These standards include very specific building requirements, such as raising the first floor elevation — including the underfloor and utilities — to one foot above the 100-year flood

## Flood Management Efforts

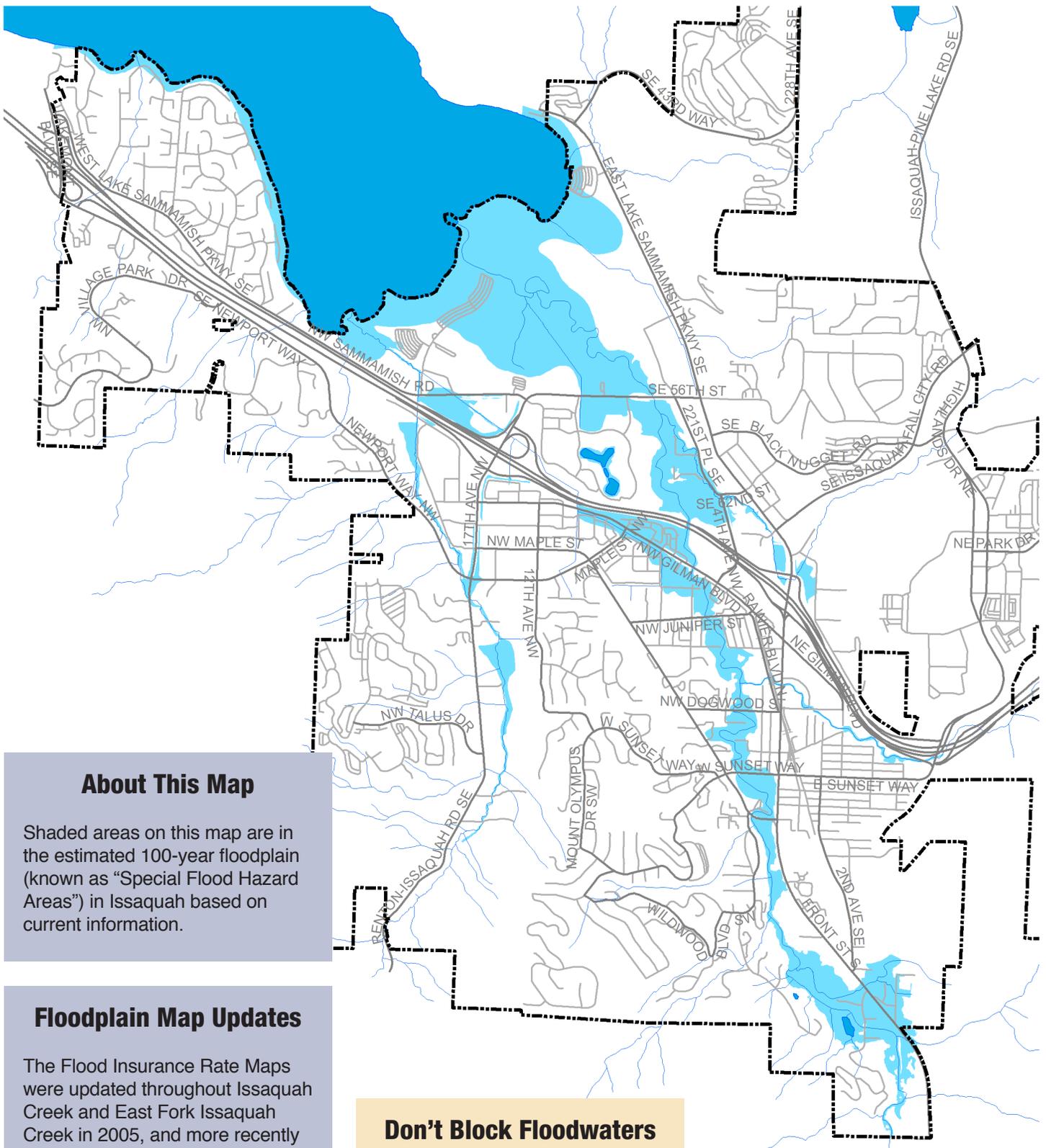
Since much of the City is located in a floodplain, it would be very difficult for the City to eliminate flooding. Nevertheless, there are many actions that the City has taken in recent years to manage flooding and reduce flood hazards. The overall approach to managing flooding in Issaquah includes the following:

- Purchase and remove homes in the floodplain and purchase and preserve undeveloped lots.
- Improve stream channels in areas of high flood losses.
- Replace bridges that cause flood constrictions.
- Provide information on flood hazards and preparedness to City residents.
- Encourage property owners to flood proof homes and purchase flood insurance.
- Seek federal grants to help property owners with home elevations and flood proofing.

Over the past 10 years and continuing into the future, the City, other public agencies and large property owners will have invested tens of millions of dollars in capital improvements that have a direct benefit toward reducing flooding in Issaquah.

Examples include buyouts of flood-prone homes and open space; flood improvement projects on Issaquah and Tibbetts creeks; replacement of eight major bridges; a flood warning system; improved floodplain mapping; and a 25 percent discount on flood insurance to property owners and residents as a result of the City's participation in FEMA's Community Rating System. The City replaced the last major bridge, at Northwest Dogwood Street, in 2015.

# Issaquah Floodplains



## About This Map

Shaded areas on this map are in the estimated 100-year floodplain (known as “Special Flood Hazard Areas”) in Issaquah based on current information.

## Floodplain Map Updates

The Flood Insurance Rate Maps were updated throughout Issaquah Creek and East Fork Issaquah Creek in 2005, and more recently in localized areas. Current floodplain maps can be found on the City’s website ([issaquahwa.gov/flood](http://issaquahwa.gov/flood)) and on FEMA’s website ([msc.fema.gov](http://msc.fema.gov)).

## Don’t Block Floodwaters

It is illegal to dump debris, fill or yard waste in streams or drainage ditches. This law helps flood water drain quickly to reduce flooding.



# Flood Warning System

The Issaquah Flood Warning System provides residents and businesses with information on impending flood conditions so that they can take proper defensive actions and prepare themselves. Depending on your location and the extent of the flooding, the system can usually provide three to four hours of lead time.

The City of Issaquah posts flood phase information (typically Phase 2 or higher) via:

- TV Station: ICTV Channel 21
- Radio Station: 1700 AM
- Website: [issaquahwa.gov](http://issaquahwa.gov)
- Twitter: @cityofissaquah

The Issaquah Flood Warning System does not take the place of individuals and neighborhood groups making their own flood disaster plans.

Residents and businesses are encouraged to stay informed of changing conditions and make preparations early in case of major flooding. For more information, including real-time

data of the upstream gauge at Hobart, go to [issaquahwa.gov/flood](http://issaquahwa.gov/flood).

The National Weather Service also broadcasts flood warnings for Issaquah Creek (along with other rivers in the region) based on its forecasts and/or observations at the downstream gage near Lake Sammamish State Park.

When these warnings occur, residents should also monitor the City's Flood Warning System for current, local conditions.

Issaquah Flood Phases	Phase 1 INSIGNIFICANT	Phase 2	Phase 3	Phase 4 SEVERE
<b>Extent of Flooding</b>	<ul style="list-style-type: none"> <li>• insignificant</li> <li>• flood watch phase</li> </ul>	<ul style="list-style-type: none"> <li>• localized flooding in flood-prone areas</li> <li>• a few street closures due to water on roadway</li> </ul>	<ul style="list-style-type: none"> <li>• considerable flooding on Issaquah Creek, Tibbetts Creek and the East Fork of Issaquah Creek</li> </ul>	<ul style="list-style-type: none"> <li>• extensive flooding similar to January 2009 or greater throughout Issaquah and Tibbetts creek valleys</li> </ul>
<b>Issaquah Creek level</b>	<ul style="list-style-type: none"> <li>• upstream gauge reads 6.5 feet and rising</li> <li>• heavy rains expected to continue</li> </ul>	<ul style="list-style-type: none"> <li>• upstream gauge reads 7.5 feet and rising</li> </ul>	<ul style="list-style-type: none"> <li>• upstream gauge reads 8.5 feet regardless of trend</li> </ul>	<ul style="list-style-type: none"> <li>• upstream gauge reads 9 feet regardless of trend</li> </ul>
<b>Action by City</b>	<ul style="list-style-type: none"> <li>• Public Works Operations and Police departments notified</li> <li>• stand-by monitoring begins</li> </ul>	<ul style="list-style-type: none"> <li>• Public Works Operations begins flood-fighting activities</li> </ul>	<ul style="list-style-type: none"> <li>• full flood-fighting effort in effect</li> </ul>	<ul style="list-style-type: none"> <li>• maximum flood-fighting effort in effect</li> <li>• City prepares for possible disaster</li> </ul>
<b>Action by Resident</b>	<ul style="list-style-type: none"> <li>• always be prepared with household flood strategy</li> <li>• monitor Issaquah's Flood Warning System and weather reports</li> </ul>	<ul style="list-style-type: none"> <li>• initiate household flood strategy</li> <li>• frequently-flooded areas can expect flooding</li> <li>• monitor Issaquah's Flood Warning System and weather reports</li> </ul>	<ul style="list-style-type: none"> <li>• evacuate if necessary</li> <li>• monitor Issaquah's Flood Warning System and weather reports</li> <li>• block basement drains</li> </ul>	<ul style="list-style-type: none"> <li>• evacuate if necessary</li> <li>• if not, make sure that you are ready to withstand the full extent of the flood with ample supplies</li> </ul>

# Flood Insurance FAQs



Flood insurance is required if you get federally-backed financing to buy, build or improve a structure in a 100-year floodplain.

Lending institutions that are federal regulated or federally insured must determine if the structure is located in a SFHA (Special Flood Hazard Area – the 100-year floodplain) and must provide written notice requiring flood insurance.

In addition to insuring structures, flood insurance is also available for building contents for both owners and renters. The federal government subsidizes flood insurance to make it more affordable.

For more information on FEMA and flood insurance, go to [floodsmart.gov](http://floodsmart.gov).



**A flood-prone apartment complex on Issaquah Creek during a minor November 2001 flood.**

## How do I get flood insurance?

To buy a flood insurance policy, call your insurance agent or contact the National Flood Insurance Program (NFIP) at 1-888-379-9531 or [floodsmart.gov](http://floodsmart.gov) to obtain the name of an agent in your area who writes flood insurance policies.

## How do I get a copy of the flood insurance map for my area?

Find current floodplain maps on the City ([issaquahwa.gov/flood](http://issaquahwa.gov/flood)) and FEMA's website ([msc.fema.gov](http://msc.fema.gov)) websites.

## Should I buy flood insurance if it is not required, such as if I own my house free and clear?

We recommend that all property owners, if located in the mapped 100-year floodplain, purchase flood insurance. It is the best means of recovery from flood damage. You will need to evaluate your own site conditions to

determine whether flood risks are high enough to warrant insurance.

## I've lived here forever and have never been flooded. Why do I need flood insurance?

Because of the infrequent occurrence of flood events, floodplain maps are based on a number of factors, to estimate the extent of a 100-year flood. The fact that a flood has not occurred within memory does not mean one will not happen in your neighborhood.

## What does the City do to make flood insurance more affordable?

The City participates in the Community Rating System, which is a voluntary FEMA program that reduces National Flood Insurance Program (NFIP) premiums, if the City implements additional flood hazard management activities. The current Class 5 rating gives residents and businesses in the City a 25 percent discount on their flood insurance premiums.

## Do you have to be located in a floodplain to obtain flood insurance?

No, flood insurance is available to any property owner or renter located in Issaquah. Many areas in Issaquah outside of the mapped floodplain are potentially susceptible to flooding, to varying degrees.

## Homeowner Flood Insurance Affordability Act of 2014

As of April 1, 2015, every new or renewed NFIP policy includes an annual surcharge required by the Homeowner Flood Insurance Affordability Act of 2014.

The surcharge amount depends on the use of your insured building and the type of policy insuring the building, regardless of its flood zone or date of construction.

To learn more about recent changes, go to [floodsmart.gov](http://floodsmart.gov).



# Flood Preparedness

## Before the Flood

1. See if you are in a flood-prone area, based on previous experience (talk to your neighbors) or look at the map on page 3. More detailed mapping information is available from the Public Works Engineering Department.
2. Get familiar with the Issaquah Flood Warning System, as outlined in this flyer.
3. Each year, review what you need to do before, during and after a flood. This includes:
  - Make sure all family members know the emergency phone numbers.
  - Learn the safest route from your home or business to safe, high ground.
4. Work with neighbors and share information on preparedness and previous experiences. Remember, the next flood may be greater than anything you have seen before.
5. Take actions to minimize damages:
  - Set up your own neighborhood notification network.
  - Keep a portable radio, emergency cooking equipment, flashlights, fresh batteries, non-perishable food and drinking water on hand.
  - Store valuables at a higher elevation (second story if possible).
  - Store household chemicals above flood levels.
6. Ensure that underground storage tanks are fully secure.
7. Purchase flood insurance to protect your structure and possessions from flood damage losses. Homeowner's insurance typically doesn't cover flood loss.
8. If your home has a history of flooding, be prepared to place sandbags around your home (see Sandbag Guidelines).
9. Consider long-term measures to reduce flooding impacts, such as flood-proofing and elevating your house.

## During the Flood

1. Keep a battery-powered radio tuned in to a local station, such as the City's 1700 AM. Follow all emergency instructions.
2. If you are caught in your building by rapidly-rising waters, call 911 for help, then move to a higher floor. Take warm, weatherproof clothing, a flashlight, and a radio with you.
3. Do not walk, wade, or drive in flooded areas. This is the most common cause of death in floods.
4. If you evacuate by car, do not drive where there is water over the road. If your car stalls in a flooded area, abandon it as soon as possible and walk to safety from the direction you came.
5. Block basement drains to prevent sewage and flood waters from entering your home.
6. When flooding is imminent, and only if time and safety permits, close the main gas valve.
7. Do not touch any electrical equipment unless it is in a dry area.

## After the Flood

1. Before re-entering your home, check for structural damage that could cause building collapse. Be cautious of potential gas leaks, electrical shorts and live wires.
2. Document your losses, both in writing and with photographs.
3. If you have flood insurance, contact your agent for flood loss claims.
4. Follow procedures for safe cleanup of household items, food, water supply and property. For more information, go to [www.kingcounty.gov/health-services/health/preparedness/disaster](http://www.kingcounty.gov/health-services/health/preparedness/disaster).
5. Contact the Development Services Department at 425-837-3100 regarding any questions on repairs that normally require a building permit, such as foundation repairs, drywall and insulation replacement.

## Stay Connected

During floods, join us on social media for the latest updates about flood conditions and resources, as well as the City's response efforts. Visit [issaquahwa.gov/social](http://issaquahwa.gov/social) to connect.

At other times, join the conversation to learn about what the City of Issaquah does each day, and how you can become part of the discussion.

# Flood Preparedness



Being prepared is essential if you live in a flood hazard area. Make sure you plan ahead on what to do during a flood and have provisions stocked in case access is blocked.

## Sandbag Guidelines

The City delivers sand and bags upon request during normal working hours from October through April. This service is also available during phases 2, 3 and 4 of a flood event. Citizens are encouraged to request and place sandbags prior to flooding. Call 425-837-3470 to request sand and bags.

### Instructions

1. Place sandbags close (3 to 5 feet) to your structures. DO NOT place along property lines or along stream banks.
2. Fill bags two-thirds to three-fourths full and interlock when stacking.
3. Plan ahead for bag placement. Do not create a problem for your neighbors.
4. Do not place bags or divert water onto a roadway or reroute a stream.
5. Sandbag placement locations are subject to City approval.
6. Sand and bag deliveries will be made as long as access to your property is safe.
7. Sandbags are provided for the protection of your structures only. Do not attempt to divert waters from your property.
8. Do not dump sand into the creek or on its banks—store for future use.
9. The City does not collect used sandbags or sand on private property.
10. Failure to comply with these guidelines may result in termination of sand and bag service to your property.



A flood-prone home on Issaquah Creek during a minor November 2001 flood.

## Preparedness Checklist

Procedures	Supplies
family meeting place	food and drinking water
evacuation routes	first aid kit
emergency housing	medicines
pets/livestock	blankets and warm clothing
flood insurance	raingear and waterproof tarp
emergency info	portable radio and batteries
phone numbers near phone	candles and flashlight
sand and bags	shovels

## Contact Information

<b>Emergency</b>	<b>911</b>
<b>Public Works Operations</b>  For assistance with drainage and flood problems, and to request sand and sandbags, call from 7:30 a.m.-4 p.m. on weekdays or anytime during Phase 2 or higher. When calling, be prepared to give your name, address and delivery location. Please remain calm and patient.	<b>425-837-3470</b>
<b>Flood Phase Info</b>	<b>1700 AM Radio</b>  <b>ICTV Channel 21</b>  <a href="http://issaquahwa.gov/flood">issaquahwa.gov/flood</a>  <b>Twitter: @cityofissaquah</b>
<b>Public Health - Seattle &amp; King County</b>	<b>For cleanup procedures following events: 206-296-4600</b>  <b>For household hazards information: 206-296-4692</b>



# Flood Preparedness

If you have any questions regarding flooding, call the Public Works Engineering Department at 425-837-3400.

The department can provide information on floodplain management, development standards, floodplain maps and other topics.

Staff are available to make site visits to review flood and insurance, drainage and sewer problems, as well as provide information on retrofitting techniques.

## City Floodplain Information Services

City staff can assist residents and property owners with floodplain information, including:

- Whether your property is located in a special flood hazard area (100-year floodplain or floodway).
- The Flood Insurance Rate Map (FIRM) zone and Base Flood (100-year) Elevation for your property.
- Whether an elevation certificate is available for your existing structure.

## Localized Flooding

To prevent any localized flooding, residents can help out by keeping the storm drains near their homes clear of debris and leaves.

For larger stormwater issues, call the Public Works Operations Department at 425-837-3470.



The City replaced the bridge at Northwest Dogwood Street to address flooding issues.

## Additional Flood Resources

Many agencies have websites with flood-related information:

City of Issaquah  
Flooding Information:  
[issaquahwa.gov/flood](http://issaquahwa.gov/flood)

City of Issaquah  
Emergency Preparedness:  
[issaquahwa.gov/em](http://issaquahwa.gov/em)

Real-time stream gauge information:  
[kingcounty.gov/environment/waterandland/flooding/warning-system](http://kingcounty.gov/environment/waterandland/flooding/warning-system)

Take Winter By Storm:  
[takewinterbystorm.org](http://takewinterbystorm.org)

King County  
Emergency Preparedness:  
[kingcounty.gov/prepare](http://kingcounty.gov/prepare)

King County Environmental Services:  
[kingcounty.gov/environment](http://kingcounty.gov/environment)

King County Health:  
[kingcounty.gov/healthservices](http://kingcounty.gov/healthservices)

FEMA Disaster Preparedness and Assistance:  
[fema.gov](http://fema.gov)

FEMA  
National Flood Insurance Program:  
[floodsmart.gov](http://floodsmart.gov)

National Weather Service:  
[wrh.noaa.gov/sew](http://wrh.noaa.gov/sew)

U.S. Geological Survey  
Flood Hazards:  
[wa.water.usgs.gov/water\\_issues/flood.htm](http://wa.water.usgs.gov/water_issues/flood.htm)

U.S. Army Corps of Engineers:  
[nws.usace.army.mil](http://nws.usace.army.mil)