



FLOOD AWARENESS AND SAFETY

Annual Emergency Preparedness Publication



Credit: KUOW/Megan Farmer

Skagit River flood waters surround homes east of Mount Vernon on Nov. 16, 2021

DIY PREP KIT: TIPS & TRICKS

THINGS YOU ALREADY HAVE

- **Nonperishable food:** Look for items like granola bars, cereal, peanut butter, canned fruits, veggies, and meat. Check expiration dates and don't forget a manual can opener!
- **Water:** Store commercially bottled water in a cool, dry, dark place. Or, buy food-grade water storage containers (note: replace DIY stored water every 6 months). 1 gallon per person, per day. Try to store a 2-week supply, if possible.
- **First-aid kit:** Your kit should include adhesive bandages, antibiotic ointment, antiseptic wipes, aspirin/ibuprofen, cold compress, non-latex gloves, scissors, gauze, thermometer, tweezers, and prescription medications.
- **Hygiene items:** Set aside toothbrushes and toothpaste, saline solution, glasses/contacts, and feminine supplies.
- **Cash/travelers checks:** Have cash on hand for simple transactions after an emergency.
- **Extra clothes and shoes:** We've all got items that fit but don't wear often. These are perfect for your kit!
- **Face masks and cleaning supplies:** During the COVID-19 pandemic, or during any disease outbreak, it's important to have these supplies.
- **Flashlight and whistle:** Don't forget extra batteries for your flashlight! The whistle can help you signal for help, if needed.
- **Pet supplies:** Don't forget about your furry friends! They'll need food, water, first aid supplies, and treats/toys.
- Don't forget about supplies for others you are responsible for, whether that be children, elderly, or others.

THINGS YOU CAN BUY

- **Container:** Whether it's a storage tub or a backpack, be sure to have a sturdy container to keep your prepped materials in.
- **Iodine/Bleach:** If you're not able to boil water, bleach or iodine can be used to disinfect water. For more info: <https://bit.ly/3Cl5gYm>
- **Matches/lighter:** Store them in a waterproof container.
- **Extra phone chargers:** To help you stay informed and connected.
- **Picnic supplies:** Mess kits, paper plates/cups, paper towels, and disposable utensils can reduce water needs and use.

ARE YOU AT RISK?

Do you live in a flood or channel migration zone?

- msc.fema.gov

GET LOCAL ALERTS

Sign up today for Skagit County's CodeRED emergency notifications.

- skagit911.us

GET INSURANCE

Standard insurance doesn't cover floods. Do you have flood insurance?

- floodsmart.gov

DIY PREP KITS

Make sure you are prepared by completing checklists online.

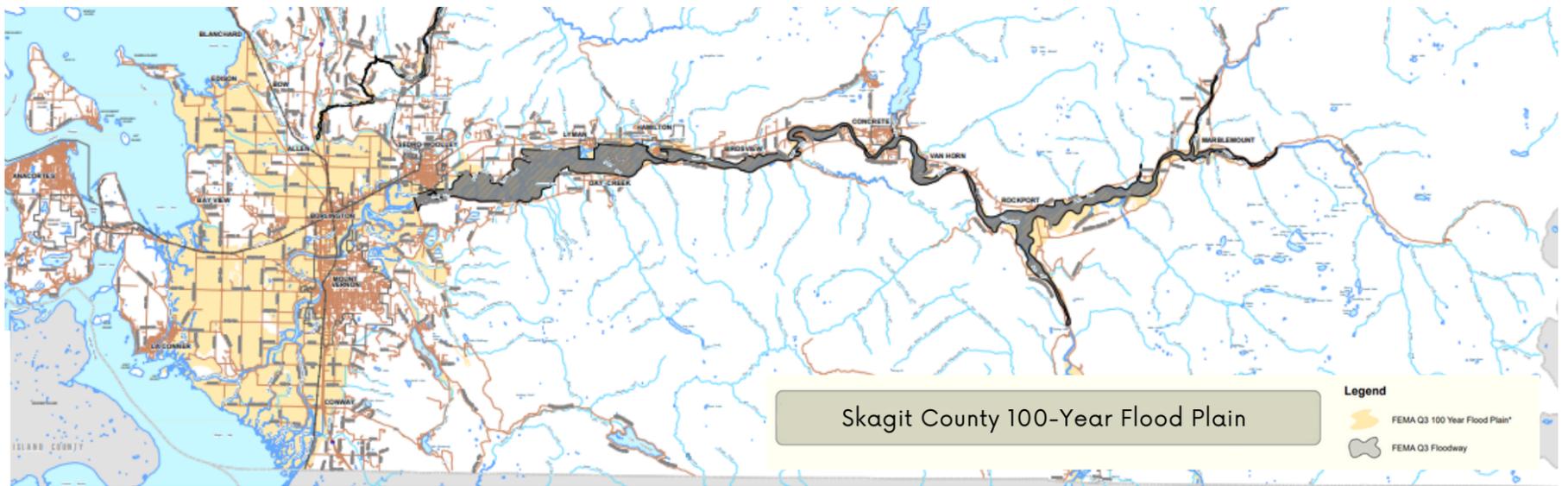
- redcross.org/prepare
- ready.gov/build-a-kit

MAKE A PLAN

How will you get alerts and communicate with family? What is your evacuation and shelter plan?

- ready.gov/make-a-plan

ARE YOU AT RISK OF FLOODS?



BE AWARE. BE PREPARED.

Floods are the most common and costly natural disasters in the United States. Just 1 inch of water can cause 25,000 dollars of damage. Additionally, more than 30,000 people in Skagit County live in a 100-year floodplain. That means, there is a great chance of being severely affected by flooding.

Know your property's flood risk.

Do you live in a flood plain? Flood hazard maps help determine the flood risk to your home. Here are some great resources for learning more about your flood risk.

- apps.ecology.wa.gov/coastalatlas/tools/Flood.aspx
- msc.fema.gov/portal/home
- Skagit County Public Works Department (360) 416-1400 | pw@co.skagit.wa.us

Purchase or renew your flood policy today.

Skagit County is considered a Class 6 community under FEMA's rating system. Every flood policy holder is entitled to a 20% reduction in premiums. A policy typically takes 30 days to go into effect. Homeowner policies do not cover flooding, but the National Flood Insurance Program can provide coverage.

Protect your property from damage.

If you live in a flood plain, the Skagit County Planning Department or your city planning department can help you decide how to protect your property from flood damage.

- Options include elevating buildings/structures, dry flood proofing, wet flood proofing, and stocking up and keeping materials on hand for emergency waterproofing.
 - Sandbags are available to the public at several locations around the County. Call the Skagit County Department of Emergency Management for help finding sandbags at (360) 416-1850.

SKAGIT RIVER: A MOVING HISTORY

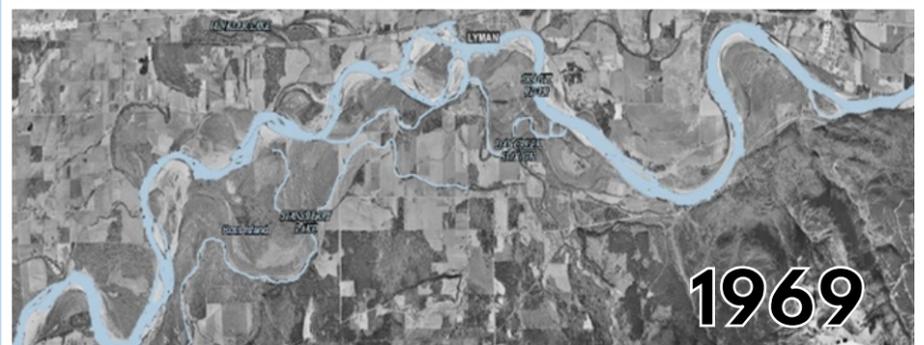
WHERE WILL THE RIVER MOVE?
TAKE A LOOK AT SKAGIT RIVER HISTORY.

Rivers don't just flow - they move! The Skagit River is no exception. While properties within the 100-year flood plain are at risk of flooding, properties near historic river channels are also at risk of damage during flood season.

Skagit County's Lidar Story map and iMap layers show you the bare earth beneath the Skagit River. Historic river channels, oxbows, landslides and other features, are clearly visible. Take a deeper look at skagitcounty.net/lidar.



2017



1969



1937

100-YEAR FLOOD

A 100-year flood is severe and has a 1% chance of being equaled or exceeded in any given year. A 100-year flood can occur several times or never within a 100-year period.

PHASE 3 FLOODING

Phase 3 floods inundate low areas near the Skagit River, may cover sections of roads, and occur roughly every few years. They generally cause minimal damage in the Skagit River Valley.

PHASE 2 FLOODING

Phase 2 floods inundate a wider area and may cause significant damage. Phase 2 flooding occurred in 2018, 2016, and 2015, when the Skagit River reached heights above 32 feet on the flood gauge in Concrete.

PHASE 1 FLOODING

Phase 1 floods can cause catastrophic damage. The last Phase 1 flood occurred in November 2021 when the Skagit River reached a height of 38.93 feet on the flood gauge in Concrete, well above the Phase 1 criteria of 37 feet.

FLOOD STAGE

Site-specific river level at which flooding may occur - usually at or above the top of the riverbank. Find a map of flood stages and gauges at skagitcounty.net/riverlevels.

FLOOD WATCH

A flood watch is issued when conditions are favorable for flooding. It does not mean flooding WILL occur, but it is possible. It provides early notice of potential flooding so the community can prepare.

FLOOD ADVISORY

A flood advisory is issued when flooding isn't expected to be severe enough to issue a warning. Flooding may occur and cause significant inconvenience. If caution is not exercised, flooding could lead to threats to life and/or property.

FLOOD WARNING

A flood warning is issued when flooding conditions are imminent or in progress so that residents can prepare and take action. Tune to your local emergency alert systems to find out if you need to evacuate.

DAMAGING FLOOD WATERS



Credit: AP/Elaine Thompson

ACTIONS TO TAKE

DURING A FLOOD WATCH

- ✓ **Know your emergency plan.** Where will you go? How will you get there? Don't forget about your pets, livestock, and other loved ones.
- ✓ **Check and restock your kit.** Make sure you have at least two weeks of food and water for everyone in your home (including pets), as well as flashlights and batteries.
- ✓ **Sign up for alerts.** Timely local weather alerts and warnings can help you make smart decisions. Know the difference between watches, advisories, and warnings.

DURING A FLOOD ADVISORY

- ✓ **Stay informed.** Turn on your TV, radio, and follow social media for the latest updates and instructions.
- ✓ **Know where to go.** You may need to reach high ground quickly and on foot. Make sure you know your primary and backup evacuation routes.
- ✓ **Prepare your home.** Bring in outdoor furniture and move important items to elevated areas. **Do not** shelter in attics.
- ✓ **Prepare your livestock for evacuation.** Learn more at www.ready.gov/pets

DURING A FLOOD WARNING

- ✓ **Take immediate action.** Evacuate if directed or move to higher ground.
- ✓ **Don't walk or drive through floodwaters.** Even small amounts of moving water can sweep people and vehicles away. Low-lying roads and bridges can also be swept away by floodwaters. If floodwaters rise around your car, but the water is not moving, abandon the car and move to high ground.
- ✓ **Avoid bridges.** Fast-moving water can weaken bridge footings making the structure unstable.

DID YOU KNOW?

- Floods are the most common and costly natural disasters in the United States.
- The Skagit River has reached flood stage over 60 times in the past 100 years.
- Floods can happen any time, in any season. Heavy rain, snowmelt, coastal storms, and other weather events can cause flooding - even in areas that haven't flooded previously.
- More than 30,000 people live in Skagit County's 100-year floodplain. If you live near low-lying areas, near a body of water, along a coast, or downstream of a levee or dam - you may be at risk of flooding.



Credit: The Seattle Times/Amanda Snyder

FLOOD INFORMATION

➤ SKAGIT COUNTY DEPARTMENT OF EMERGENCY MANAGEMENT (DEM)

- ☎ (360) 416-1850
- 🌐 skagitcounty.net/dem
- 📘 @SkagitCountyWA
- 🐦 @SkagitGov

➤ SKAGIT COUNTY PUBLIC HEALTH

- ☎ (360) 416-1500
- 🌐 skagitcounty.net/health
- 📘 @SkagitPublicHealth

➤ RIVER LEVEL HOTLINE

- ☎ (360) 416-1404

➤ CENTERS FOR DISEASE CONTROL (CDC)

- 🌐 cdc.gov/disasters/floods/index.html

PROTECT YOUR HEALTH DURING A FLOOD

1. Stay out of floodwater.
2. Chlorinate or boil all water for drinking and food preparation.
3. Prevent injuries and infections of wounds. Seek medical attention if necessary.
4. Protect yourself from animal/insect bites.
5. Promote good hygienic practices and safe food preparation techniques.
6. Throw away any food that has come in contact with floodwater, perishable food that hasn't been refrigerated or frozen properly, or food that shows signs of spoilage. Learn more about food safety after disasters at www.cdc.gov/disasters/foodwater.
7. Be aware of possible chemicals in floodwater.
8. Avoid electrical hazards inside or outside your home.

WHAT TO DO AFTER A FLOOD



Credit: AP/Elaine Thompson

RETURNING HOME SAFELY

- Return home only when authorities say it is safe to do so.
- Let friends and family know you're safe.
- Contact your insurance agent or insurer as soon as possible to file a claim.
- Continue listening to local news for updated information.
- Beware of areas where floodwaters have receded and watch out for debris on or near the road. Road closure and cautionary signs are put in place for your safety. Pay attention to them and don't drive around barricades.
- Before entering your home, check around for signs of structural damage like foundation issues or gaps around doors or windows. Look through your windows to make sure it's safe inside!
- Turn off power at the main breaker or fuse box. Make sure electrical and gas systems and appliances are safe and functioning properly before use.
- If power lines are down outside your home, do not step in puddles or standing water. Report them immediately to the power company.
- Dispose of any food that has come into contact with flood water and perishable food that has not been properly refrigerated or frozen.
- Photograph damage to your property and contact your insurance agent. Do what you can to prevent further damage, like putting a tarp over a damaged roof.
- The Red Cross may provide you with vouchers for essentials like groceries, medication, clothing, and a flood clean up kit.

Is your home and/or property safe to occupy after a flood? Call Skagit County Planning and Development Services at (360) 416-1320 to arrange a post-damage assessment.

FEMA and/or your insurance company may require an assessment. Skagit County inspectors will visit the site to:

- Inspect the interior and exterior of buildings, including foundations, framing, siding, plumbing, heating/cooling systems, drywall, etc.;
- Document observed damage and the percentage of each component affected;
- Determine the highest water level that was in the building;
- Classify damage as minor, major, or destroyed.

Find Initial Damage Assessment forms online at skagitcounty.net/dem

PROTECTING YOUR HEALTH

- ✓ **PROTECT YOUR WATERSOURCE.** Floodwaters can pollute wells with silt, contaminants, and/or bacteria. What can you do?
 - Once floodwaters recede below the wellhead, contact Skagit County Public Health for information about residential well or water testing.
 - Large pieces of debris in floodwaters can expose wiring, dislodge part of your well, or crack the well casing. Do not turn on your well pump until the well has been assessed and/or repaired.
- ✓ **MOLD AND INDOOR AIR QUALITY.** Mold growth may be a risk if floodwaters entered your home. Here's how to reduce the risk:
 - Remove as much standing water as possible from floors, carpets, etc. Completely remove wet materials that can't be dried within 48 hours.
 - Dry the inside of your home. Open windows, closets, doors, the attic, eaves, and other vents.
 - Warm the house at least 15 degrees higher than the outside temperature.
 - Remove baseboards and drill/punch holes in the wall 2 inches above the floor to dry areas between walls.
- ✓ **AVOID CARBON MONOXIDE (CO) POISONING.** Using alternative sources of fuel for heat, cooking, or electricity can cause CO to build up in enclosed spaces. CO is odorless and can be deadly to people and pets.
 - Do not use BBQs, propane heaters, generators, or gas ranges indoors.
 - Have a battery-operated CO detector in your home.
 - Symptoms of CO exposure include headache, dizziness, weakness, nausea/vomiting, chest pain, and confusion. If you suspect CO poisoning, immediately call 911 and promptly go outside to get fresh air.
- ✓ **BE SEPTIC SMART.** Your septic systems may not function properly after a flood. Minimize water use until floodwaters completely recede.
 - If your toilets and sinks don't drain properly, don't use the system until drains properly flow again.
- ✓ **PROPERLY DISPOSE OF WASTE.** Bag up any garbage and food contaminated by floodwaters and place in containers to keep away from rodents. Dispose of flood-damaged carpeting and furniture. Remove and dispose of dead animals as soon as possible.
 - Skagit County transfer stations may accept waste at no charge after a flood. The county will provide disposal information as soon as possible.