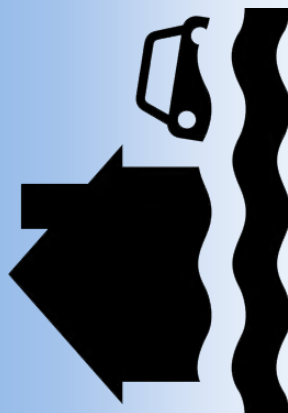




# Monthly Campaign March-Flooding



## Emergency Management & Hazard Mitigation

### What is flooding, and how does it occur?



**FLOOD ALERT**



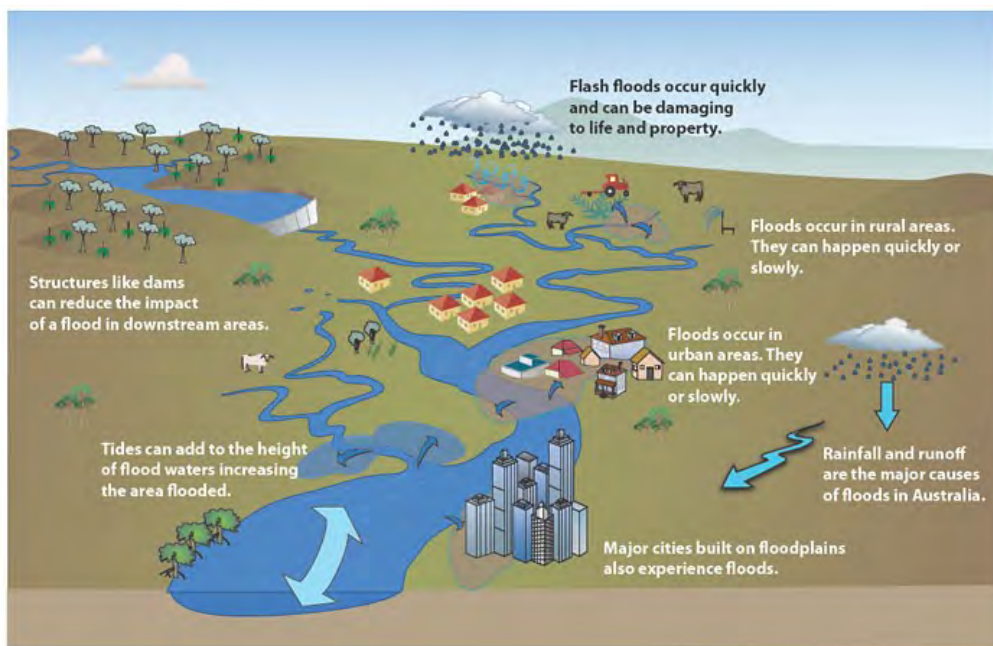
**FLOOD WARNING**



**SEVERE FLOOD WARNING**

- \* Flooding is a temporary overflow of water onto land that is normally dry.
- \* It is the most common natural disaster in the United States.
- \* Flooding can result from rain, snow, coastal storms, storm surge, and overflows of dams and other water systems.
- \* Floods can develop quickly or slowly, depending on the circumstances. Flash floods can come with no warning.
- \* Floods can sometimes cause power outages, disrupt transportation, damage structures, and create landslides.

### Flood Diagram



## Snowmelt Processes

### ❄ Snow Distribution

The path that weather systems take is the most important factor in determining snowpack, but terrain and vegetation also influence how snow accumulates on the ground.

### ❄ Snowpack Characteristics

The temperature and the amount of water in the snowpack are important to the melting process. Before rapid melting can occur, the snowpack as a whole needs to be warmed to 32 degrees Fahrenheit.

### ❄ Snow Energy Exchanges

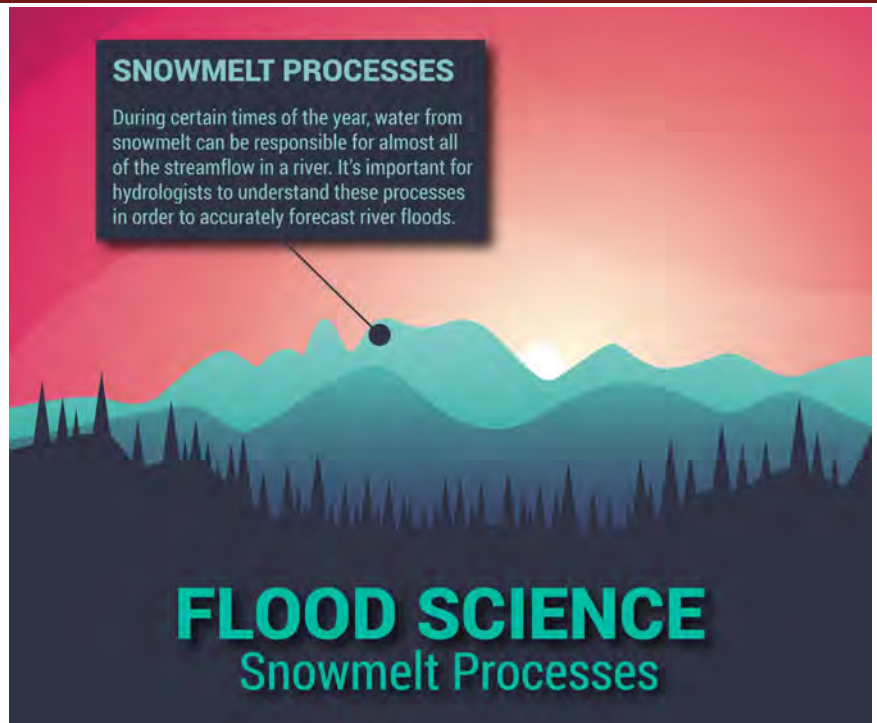
Incoming solar radiation, emitted longwave radiation, turbulent transfer of heat, ground conduction, and heat transferred during rainfall are all important factors in heating and cooling the snowpack.

### ❄ Weather Factors

Strong winds and high dew point temperatures aid in melting by limiting the effects of evaporative cooling and allow the layer directly above the snowpack to remain warm due to turbulent mixing. Rain falling on a snowpack can accelerate the melting process.

### ❄ Where the Water Goes

Once rapid melting begins, the water will either infiltrate into the soil, run off into streams and other bodies of water, pool in place and potentially refreeze as ice, or a combination. Ice jam flooding can occur if the river channel has excessive ice cover.



## What to do in a Flood Warning

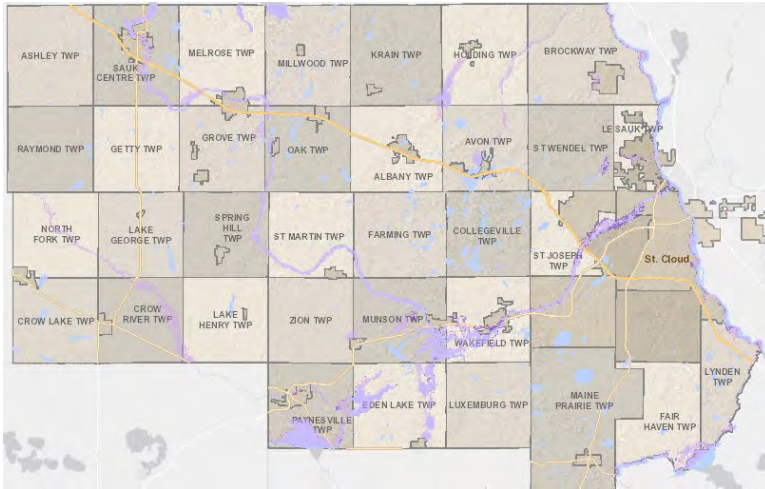


- ❄ Seek shelter immediately
- ❄ Do not walk, swim, or drive through the flood.
- ❄ Stay off bridges over fast-moving water.

### *Determine your best protection based on the type of flooding-3 Options*

1. Evacuate if told to do so
2. Move to higher ground or a higher floor
3. Stay where you are

## Stearns County 100 & 500 Year Floodplain-FEMA Floodplains (2011)



❄ The light purple lines are depicting the 100-Year Floodplain and the dark purple lines are depicting the 500-Year Floodplain.

❄ Being located within a 100-year floodplain means that the area is predicted to flood during a 100-year storm, which has a 1% chance of occurring in any given year. The same goes for the 500-year floodplain except at a 1 in 500 chance.

## Flood Insurance

- ❄ Homeowner's policies do not cover flooding. Get flood coverage under the National Flood Insurance Program (NFIP).
- ❄ Stearns County Emergency Management has been working with the cities and townships within the County to pass a Resolution for the NFIP that would allow citizens to have access to purchase flood insurance.



*“Great floods have flown From simple sources.” - William Shakespeare*

## Take an Active Role in Your Safety!



### BUY FLOOD INSURANCE

Learn your flood risk and find an agent near you with the One-Step Flood Risk Profile at [FloodSmart.gov](https://www.floodsmart.gov). Typically, it takes 30 days for a new flood insurance policy to take effect, so get or renew your policy now.



### KNOW YOUR STUFF

Thoroughly document your belongings to support a flood insurance claim. Visit [knowyourstuff.org](https://www.knowyourstuff.org) to create your home inventory.



### MAKE A PLAN

Create and share a family emergency plan. Make sure it includes evacuation routes from home, work, and school. Assemble a safety kit with drinking water, canned food, first aid supplies, blankets, a radio, and a flashlight. Learn more at [ready.gov/floods](https://www.ready.gov/floods).



## Did you know?

- \* Flash floods are the #1 weather-related killer in the United States.
- \* Wetlands in the U.S. save more than \$30 billion in annual flood damage repair costs.
- \* Damages from flood losses have increased to an average \$10 billion per year.
- \* Over the past century, we have experienced more intense and frequent storms.



## CONTACT US

(320) 259-3940

Erin Tufte  
Erin.tufte@co.stearns.mn.us

Kristen Tschida  
kristen.tschida@co.stearns.mn.us

Alison Voigt  
alison.voigt@co.stearns.mn.us

## Emergency Management &

### Prepare, Response, Recovery & Mitigation

#### Prepare to handle an emergency

- \* Plan to help save lives and help response and rescue operations
- \* Create an evacuation plan
- \* Stock food and water

#### Respond safely to an emergency

- \* Putting your preparedness plan into action to save lives and prevent further property damage
- \* Seek shelter

#### Recover from an emergency

- \* Taking action to try and return to a normal and safe situation after the emergency
- \* Get financial assistance to help pay for repairs

#### Mitigation to prevent future emergencies or at least minimizing their effects

- \* Purchase flood insurance
- \* Any other activities that prevent or reduce the chance of an emergency occurring.



## Resources

FEMA's Flood Map Service:  
<https://msc.fema.gov/>

FEMA's NFIP Info:  
<https://bit.ly/2vrxVAO>

National Weather Service  
Flood Map Prediction:  
<https://bit.ly/31SnxIK>

RAVE System Sign Up:  
<https://bit.ly/2SqntNa>

MN DNR Floodplain Mngt:  
<https://bit.ly/39AEES5>

Stearns County Flood Page:  
<https://bit.ly/37rxKx1>

U.S. Army Corps of Engineers:  
<https://bit.ly/2Sp1hTE>