

# FLOOD SAFETY

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## Storms and Flooding:

During storms, floods are one of the most common disasters that towns suffer. The elements are at their worst if you live by the coast. Wind speeds can reach upwards of 65 miles per hour. Waves from the ocean can reach up to 16 feet high coming in every 4 seconds. The sand of the beach can recede 82 feet during these storms and vicious floods can ravage your town. With sea levels rising every year, things could get worse.

## What is a Flood?

A flood is the overflow of a stream channel that occurs when a discharge exceeds the capacity of a channel. This is the most common, yet destructive form of natural disaster (Essentials of Geology, 11<sup>th</sup> Edition)

Most floods are caused by atmospheric processes that can vary greatly in both time and space. An hour or less of intense thunderstorm rainfall can trigger floods in small valleys. However, floods can become large if there is a large amount of rainfall. Floods can become regional as the seasons change, or some floods can result as a failure of human technology, such as a dam failure. Some floods can get so bad that they become flash floods, which can be incredibly deadly.

## Signs of an Impending Flood:

Floods are most likely to occur after a time of heavy rain fall

Floods often occur within 6 hours of heavy rainfall

Pay attention for National Weather Service Watches and Warnings:

Watches- indicates conditions make it likely for a flood to occur

Warning- indicates that flood is inevitable within the next hour

## How to Prepare for a Flood:

Monitor your surroundings and pay attention to weather forecasts.

Stock up on Supplies- Bottled water, canned food, medicine, toiletries, batteries, flash light

Have a second, safe location to evacuate

Move valuable property to the highest point of your house

Have alternative travel routes and a car with a full tank of gas

Disconnect all electronics

Seal vents to basement

Tie down all lawn furniture you do not want to lose

Never drive through a flood covered roads

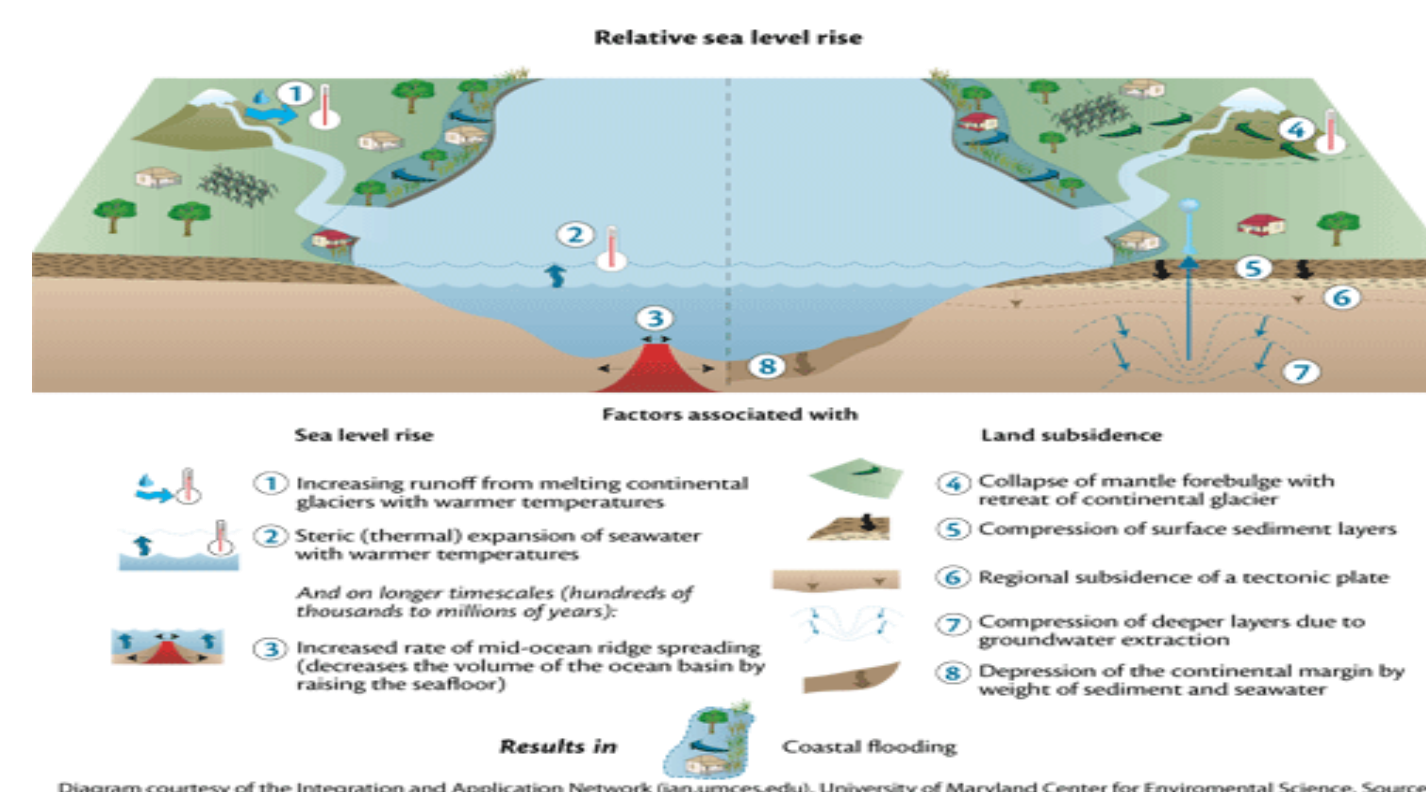
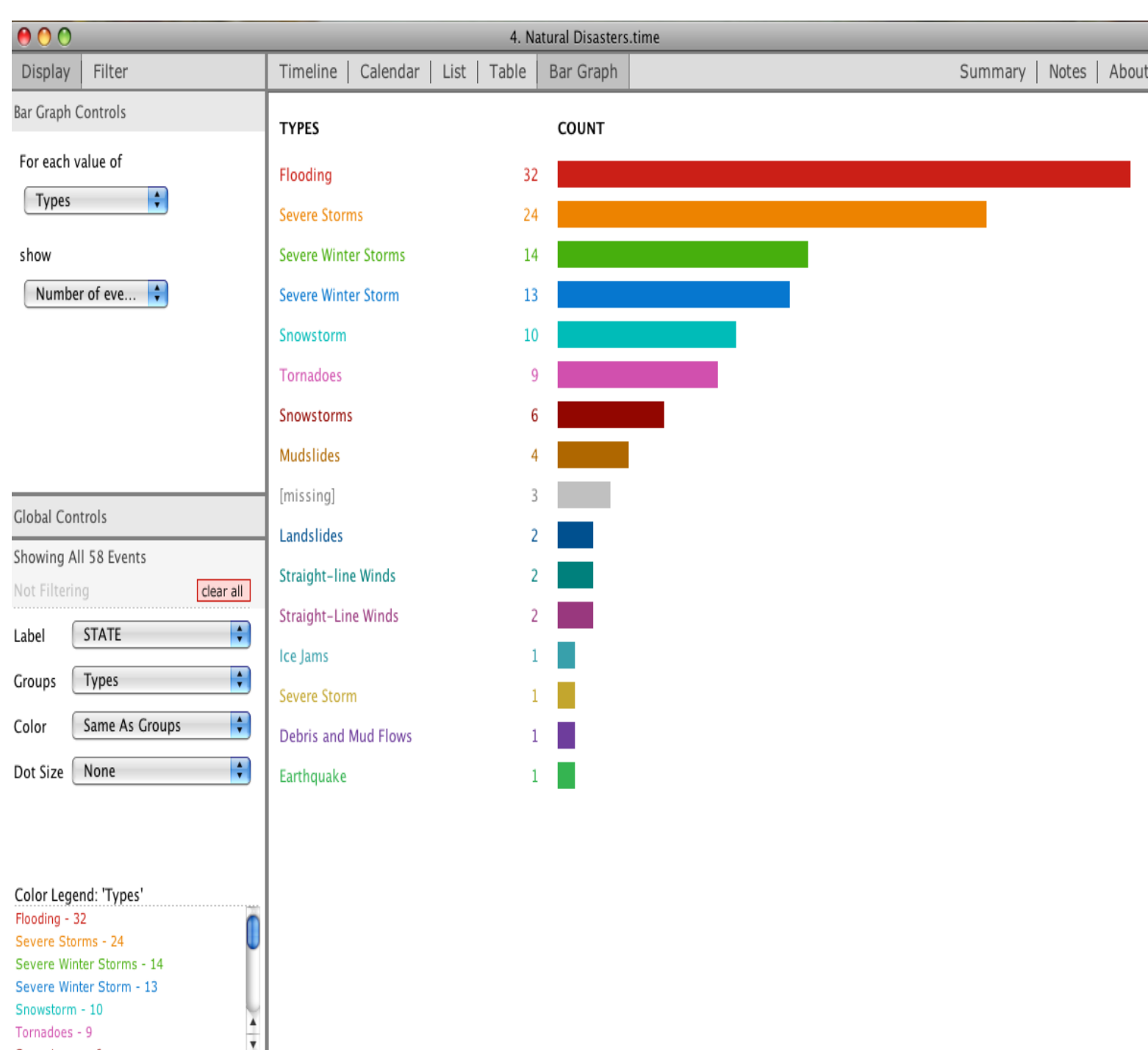


Fig. 2: [http://ian.umces.edu/blog/wp-content/uploads/2012/01/iil\\_diagram\\_relative\\_sea\\_level\\_rise\\_shifting\\_sands3.png](http://ian.umces.edu/blog/wp-content/uploads/2012/01/iil_diagram_relative_sea_level_rise_shifting_sands3.png)



[http://www.ready.gov/sites/default/files/Floods%201.1.1.0%20Tab%202%20of%204\\_1.jpg](http://www.ready.gov/sites/default/files/Floods%201.1.1.0%20Tab%202%20of%204_1.jpg)

Fig. 1: <https://drawingbynumbers.org/sites/drawingbynumbers.org/files/Picture%2013.png>

## Flood Prevention:

Elevate the furnace, water heater, air conditioner and other utilities.

Install "check valves" in sewer traps to prevent flood water back ups.

Construct interior barriers to stop low level floodwater from entering basements.

Seal walls in basements with waterproofing compounds to avoid seepage.

Consult <http://dnr.wi.gov/emergency/flood.html>

**Remember:** Floods can easily be deadly if the proper precautions are not taken

- If there is heavy rainfall, pay close attention to weather forecasts
- If floods are predicted, try and go somewhere safe or get to higher ground
- Secure family, home, and possessions
- Turn off electricity
- Wait until it is safe to return
- BE PREPARED- make a plan

Sources:

[http://www.ready.gov/sites/default/files/Floods%201.1.1.0%20Tab%202%20of%204\\_1.jpg](http://www.ready.gov/sites/default/files/Floods%201.1.1.0%20Tab%202%20of%204_1.jpg)

[http://ian.umces.edu/blog/wp-content/uploads/2012/01/iil\\_diagram\\_relative\\_sea\\_level\\_rise\\_shifting\\_sands3.png](http://ian.umces.edu/blog/wp-content/uploads/2012/01/iil_diagram_relative_sea_level_rise_shifting_sands3.png)

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<http://www.susquehannafloodforecasting.org/before-during-after.html>

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