

FLOODING

Causes of Floods

Spring Thaw

A snowy winter means that when the snow melts, there will be more water too. If snow melts quickly, the ground can become so wet that it cannot hold more snowmelt. Then the water starts forming puddles, pools, and small rivers. The water finds its way to larger rivers that flow to the ocean. A large runoff means a greater chance of flooding.

Ice Jams

Ice jams typically occur during a spring thaw but can happen in the middle of winter if the weather suddenly becomes warm. Ice breaks up into large chunks in a lake or river and blocks the usual flow of water. Then the water begins flooding the area around the ice jam.

Heavy Rain

Heavy rain is any rain that comes down hard enough to form puddles and small rivers of water leading toward lower ground. This rain can happen very quickly, or it can happen over a longer period of time when the ground has gotten so full of water that it can no longer absorb the rain that is falling. This can be the result of a storm or a hurricane.

Rainy Season

A rainy season is a time of the year when it typically rains. Some areas receive very little rain all year *except* during the rainy season. In the southwestern United States, often a lot of rain falls very fast during the rainy season. The ground in these areas may be rocky, dry, and unable to absorb the rain. Flooding is common.

Ground Damage

Not only do plants soak up rain, but their roots hold the ground in place. Human activity or natural disasters such as fires can strip land of trees and other plants. This leaves the land open to flooding. With no roots or leaves for the water to collect on and little else to soak up the rain, the ground can flood quickly. It can also be washed away.

WOWSER!

Areas of Missouri, Illinois, Arkansas, Kentucky, Tennessee, and other states in the Mississippi River Basin had 10–20 inches more than usual of rain from January to May 2011.

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Discussion questions.

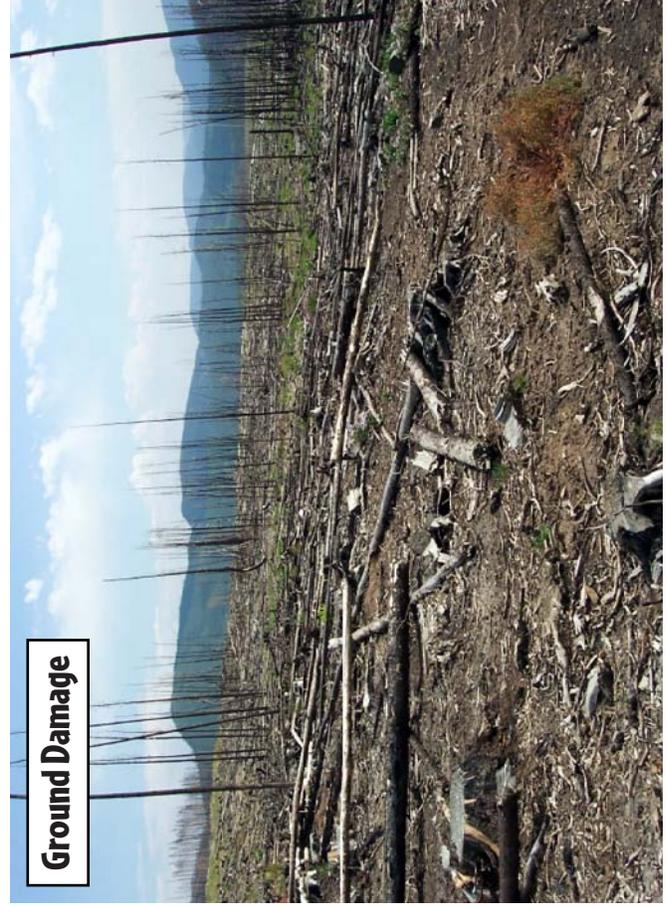
1. Which of these causes of floods is most likely to occur in your town? How does knowing this help you be more prepared in case it happens?
2. When you are talking about possible flooding, why does it matter what the ground does with moisture?
3. Take a minute. In a minute, list as many factors as you can that contribute to floods.

CAUSES OF FLOODS



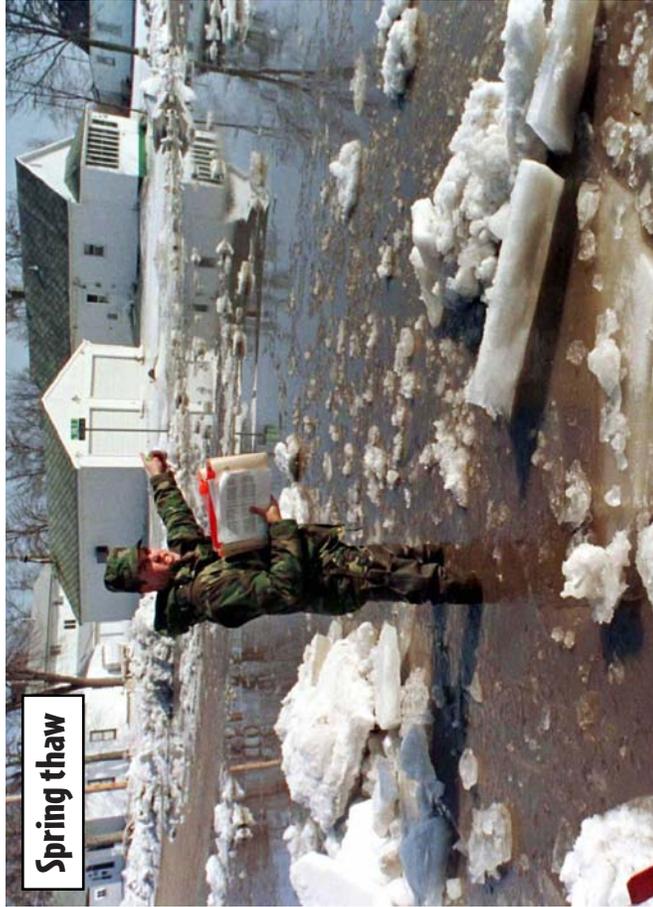
Ice Jams

Vermont: Ice chunks clog the Winooski River.



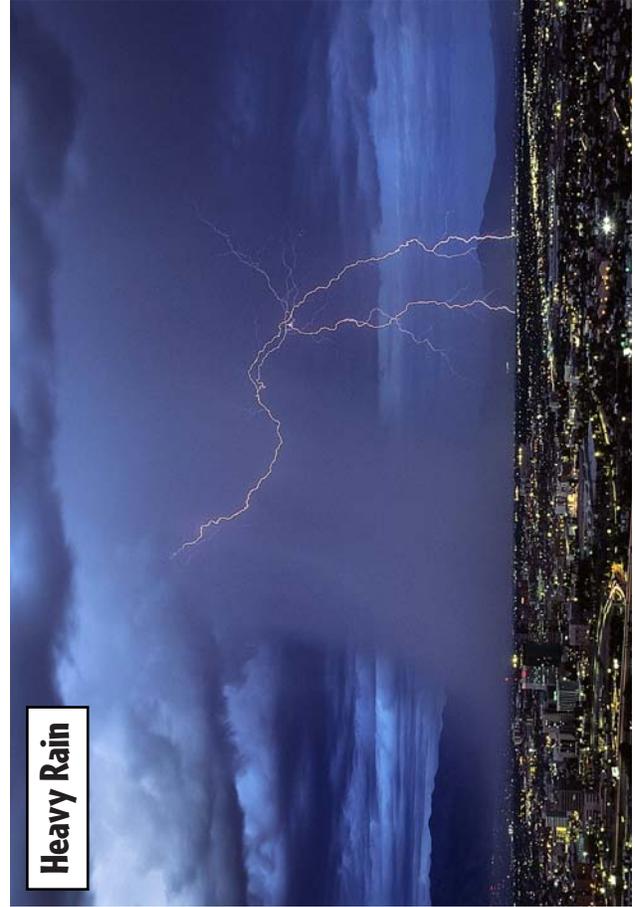
Ground Damage

Alberta, Canada: Land after a forest fire



Spring thaw

Minnesota: Melting snow can mean floods up north and farther downstream.



Heavy Rain

Arizona: Late summer is rainy season in Tucson, where floods are often small but sudden.