



# Natural Resources

## Floodplains

Floodplains range from narrow, confined channels in the steep valleys of hilly regions, to wide, flat areas in the plains. The amount of water in the floodplain is a function of the size and topography of the contributing watershed, the regional and local climate, and land use characteristics. In steep valleys, flooding is usually rapid and deep, but of short duration, while flooding in flat areas is typically slow, relatively shallow, and may last for long periods of time. The cause of flooding in large rivers is typically prolonged periods of rainfall from weather systems covering large areas. These systems may saturate the ground and overload the rivers and reservoirs in numerous smaller basins that drain into larger rivers.

A flood is the rising and overflowing of a water body, especially onto what is normally dry land. Floods are natural events that are considered hazards only when people and property are affected. Generally, Rice County has been susceptible to both slow rising flooding and rapid rising flash flooding.

Flash floods involve a rapid rise in water level, high velocity, and large amounts of debris, which can lead to significant damage that includes the tearing out of trees, undermining of buildings and bridges, and scouring new channels. The intensity of flash flooding is a function of the intensity and duration of rainfall, steepness of the watershed, stream gradients, watershed vegetation, natural and artificial flood storage areas, and configuration of the streambed and floodplain. Dam failure and ice jams may also lead to flash flooding. Urban areas are increasingly subject to flash flooding due to the removal of vegetation, covering of ground cover with impermeable surfaces, and the inadequacy of constructed drainage systems.

## The Floodplain

Under state law, the floodplain is considered to be the land adjoining lakes and rivers that is covered by the "100-year" or "regional" flood. This flood is considered to be a flood that has a one percent chance of occurring in any given year. The natural floodplain is an important part of our water system. It affects storm runoff, water quality, vegetative diversity, wildlife habitat, and aesthetic qualities of our rivers and lakes. Large portions of the floodplain store and later release flood waters, which reduce river flood stages.

The floodway is the land immediately adjoining a river channel that is the natural conduit for flood waters. The floodway must remain open in order to allow flood waters to pass. When the floodway is obstructed by buildings, structures, or debris' flood waters will be dammed up and will flood even greater areas.

The flood fringe is the remainder of the floodplain lying outside of the floodway. This area is generally covered by shallow, slow moving flood waters. Development is normally allowed in the flood fringe provided that residential buildings are placed on fill so that the lowest floor, including the basement, is above the flood protection elevation.

## Flood Zones

The Federal Emergency Management Agency (FEMA) has studied and mapped the major flood-prone areas of Rice County. Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

The term "100-year flood" is often misleading. It is not a flood that will occur once every 100 years. Rather, it is the flood elevation that has a one percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time. The 100-year flood, which is the standard used by most federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. A structure located within a special flood hazard area shown on a map has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage.

<b>Rice County Communities Participating in the National Flood Insurance Program</b>		
<b>County</b>	<b>Community Name</b>	<b>Participation in the National Flood Insurance Program (NFIP) as of 2/18/2015</b>
<b>Rice</b>	Bridgewater	Participating in NFIP
<b>Rice</b>	Dennison	Participating in NFIP
<b>Rice</b>	Dundas	Participating in NFIP
<b>Rice</b>	Faribault	Participating in NFIP
<b>Rice</b>	Lonsdale	Participating in NFIP (No Special Flood Hazard Areas)
<b>Rice</b>	Morristown	Participating in NFIP
<b>Rice</b>	Nerstrand	NOT Participating in NFIP (FEMA Mapped High Risk Areas)
<b>Rice</b>	Northfield	Participating in NFIP
<b>Rice</b>	Rice County	Participating in NFIP

Interactive Rice County Floodplain map:

<http://www.arcgis.com/home/webmap/viewer.html?webmap=91d6ccb152814a7e836ac529068a2f9d>

Rice County Floodplain maps and ordinance

<http://www.co.rice.mn.us/184/Floodplain-Management-Information>

MNDNR Floodplain site

[http://www.dnr.state.mn.us/waters/watermgmt\\_section/floodplain/index.html](http://www.dnr.state.mn.us/waters/watermgmt_section/floodplain/index.html)