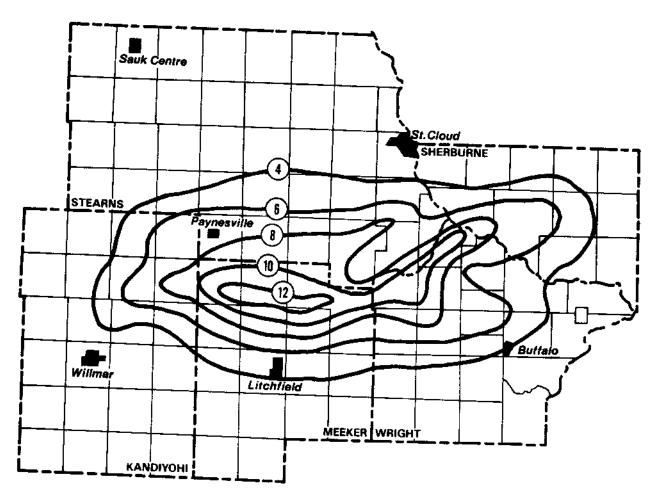


The flash flood on May 6-7, 1983 occurred generally thru most of western Lyon County. The majority of the rains fell between 6 PM and 10 PM on Friday night on the 6th of May. The greatest known amount measured in a rain gage (4" plastic) was 5.78 inches. The 4-inch or greater rainfalls covered an area of 265 square miles. The map was prepared from 51 reports. Downstream flooding was reported on the Cottonwood, Redwood and Yellow Medicine Rivers.

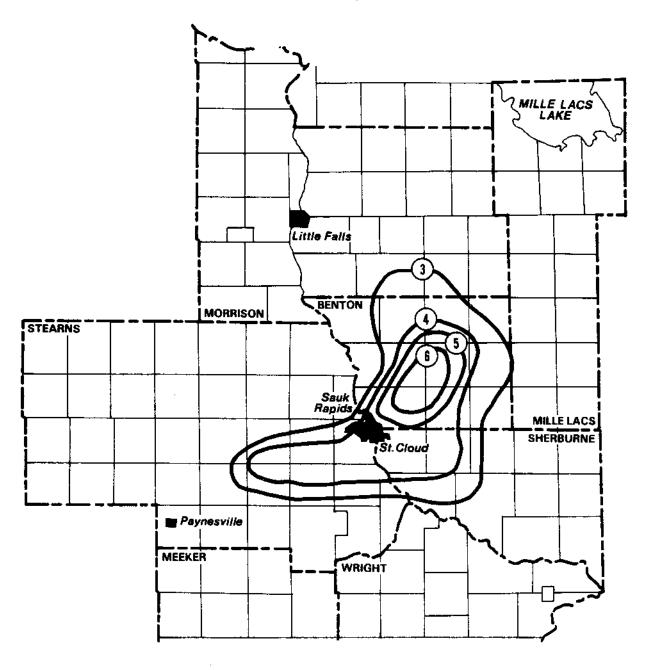
#### FLASH FLOOD

# (Kandiyohi, Meeker, Stearns, Wright & Sherburne Counties) June 21, 1983



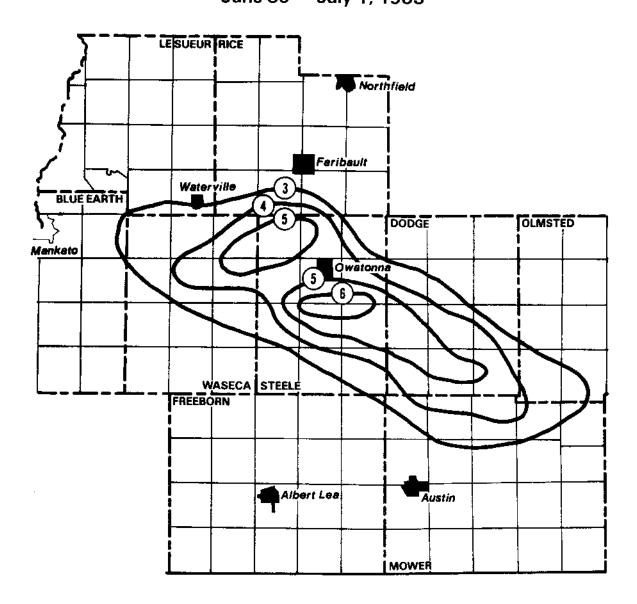
This flash flood occurred on June 21, 1983 and extended across 5 counties (Kandiyohi, Meeker, Stearns, Wright and Sherburne). Much of the rains fell in two periods, the first from 2 AM to 6 AM and the second from 11 AM to 2 PM. The greatest amount recorded in a Soil and Water Conservation District rain gage (4 inch dia, 11 inch high, plastic) was 9.68 inches, one mile west of Watkins in Meeker County. However, there were 3 locations in Meeker County that farmers reported an unofficial 12 inch amount. Four inches or more of precipitation occurred over a 1,330 square mile area, compared to 700 to 800 square miles for a typical flash flood (Rochester 1978). This report was prepared from 71 reports collected by the SWCD's in the above 5 counties.

FLASH FLOOD (Stearns, Sherburne & Benton Counties) June 25-26, 1983



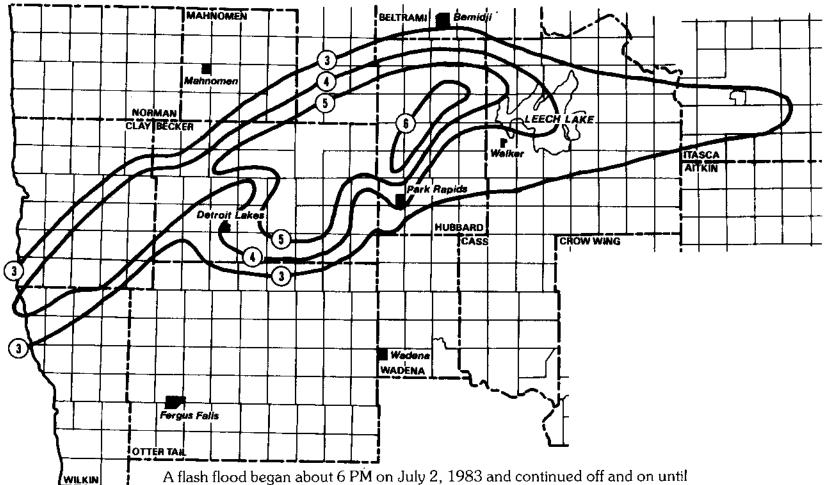
The flash flood occurred on June 25-26, 1983 through Stearns, Sherburne and Benton Counties. The rains began about 11 PM on the 25th and fell off and on until about 10 AM on the 26th. The heaviest rains fell in central Benton County with more than 6 inches. However, the areas of 4-inches and greater in Stearns and Sherburne Counties had had 4 to 6 inches of rain, 5 days before on June 21st. Four inches or more of precipitation occurred over a 350 square mile area. The report was prepared from 48 reports collected by the SWCD's from the above counties.

## WASECA & OWATONNA AREA FLASH FLOOD (Waseca & Steele Counties) June 30 — July 1, 1983



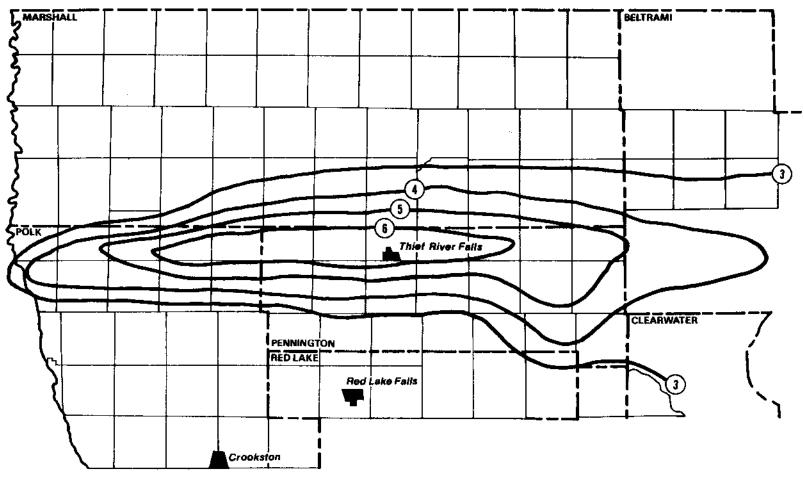
The flash flood began about 7 PM on June 30, 1983 and continued into the early hours of July 1, 1983. Most of the rain fell in about 3 hours before midnight. An unofficial amount of 6.1 inches was reported about 6 miles southeast of Owatonna in Aurora Township. Because of prior wet conditions there was considerable run-off. The 4-inch rainfall amounts covered an area of 550 square miles. This study was prepared from 56 reports collected by the Soil and Water Conservation Service Offices.

### FLASH FLOOD (Clay, Becker, Hubbard & Cass Counties) July 2-3, 1983



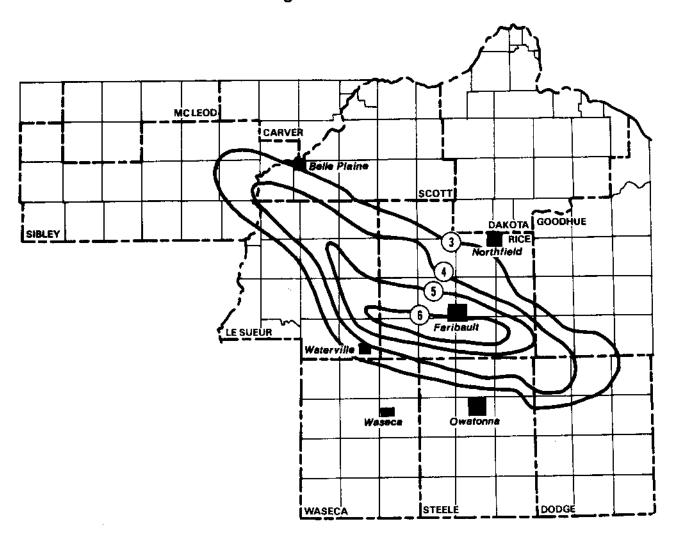
A flash flood began about 6 PM on July 2, 1983 and continued off and on until after midnite into the afternoon of July 3. Most of the rains fell the evening of July 2 before midnight. The heavy rain pattern was oriented to the northeast from central Becker County to north central Hubbard and then east into the northwest part of Cass County. The greatest amount of rainfall unofficially reported was 7.5 inches north of Park Rapids. The District Forestry Office gage at Guthrie recorded 6.25 inches, but the gage overflowed. A nearby unofficial gage recorded 7 inches. The 4-inch rainfall amount covered an area of 2,200 square miles, which is more than 2 ½ times the average of flash floods in Minnesota.

## THIEF RIVER FALLS FLASH FLOOD (Pennington County) August 20-21, 1983



This flash flood began Saturday evening, August 20, 1983 about 6 PM in northwestern Polk County and ended in eastern Pennington and Beltrami Counties about 2 to 3 AM on August 21. Most of the rains fell during a 5-hour period. The greatest amount recorded by a Soil and Water Conservation District observer or National Weather Service cooperative observer was 6.97 inches at Thief River Falls. Four inches or more of precipitation occurred over a 880 square mile area. This study was prepared from 48 reports collected by the Soil and Water Conservation Districts and County Soil Conservation Service Offices.

FLASH FLOOD (LeSueur & Rice Counties) August 25, 1983



The flash flood on August 25, 1983 began about midnight with off and on showers and thunderstorms until about 6 AM. There were some light showers that continued into the early forenoon. The heavier rain patterns were oriented to the southeast from the northwest part of Le Sueur County to the northwest part of Dodge County. Six inches or more of rain fell across southern Rice County. An unofficial 7 inches was reported 4 miles southeast of Faribault. The 4-inch or greater rainfall amounts covered an area of 620 square miles. This study was prepared from 44 reports collected by the Soil and Water Conservation Districts and Soil Conservation Service Offices.