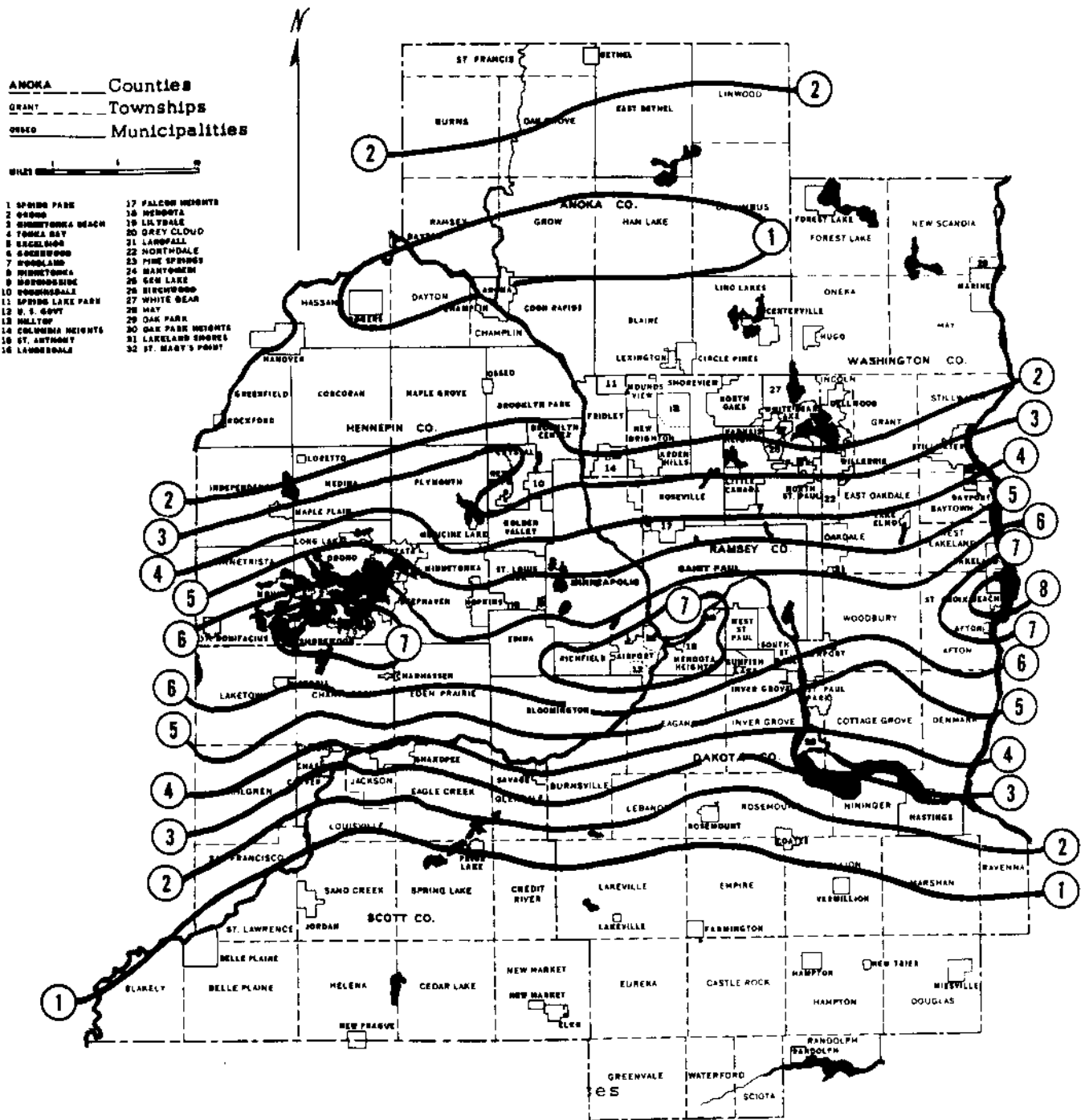
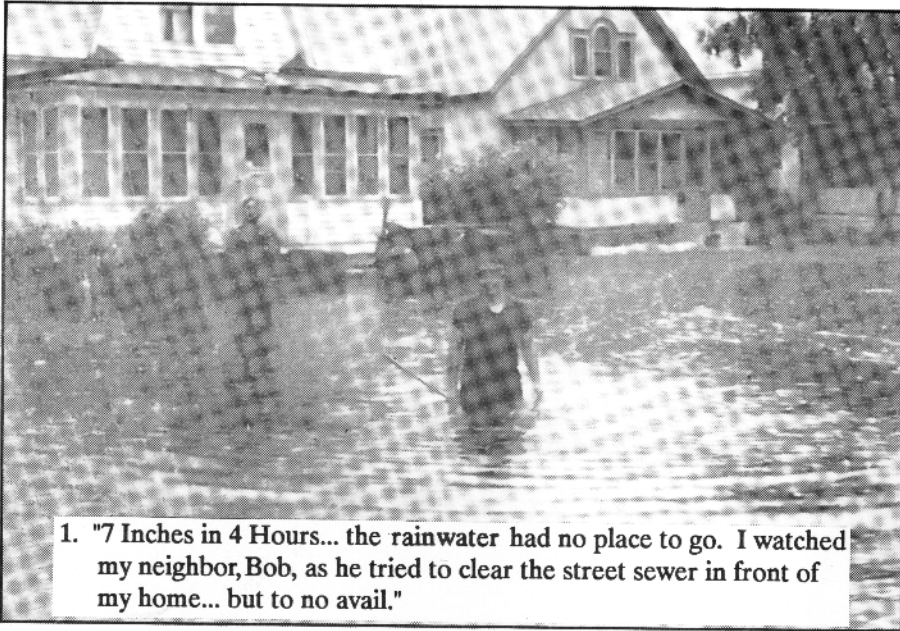


FLASH FLOOD (Minneapolis-St. Paul and Surrounding Area) August 30-31, 1977

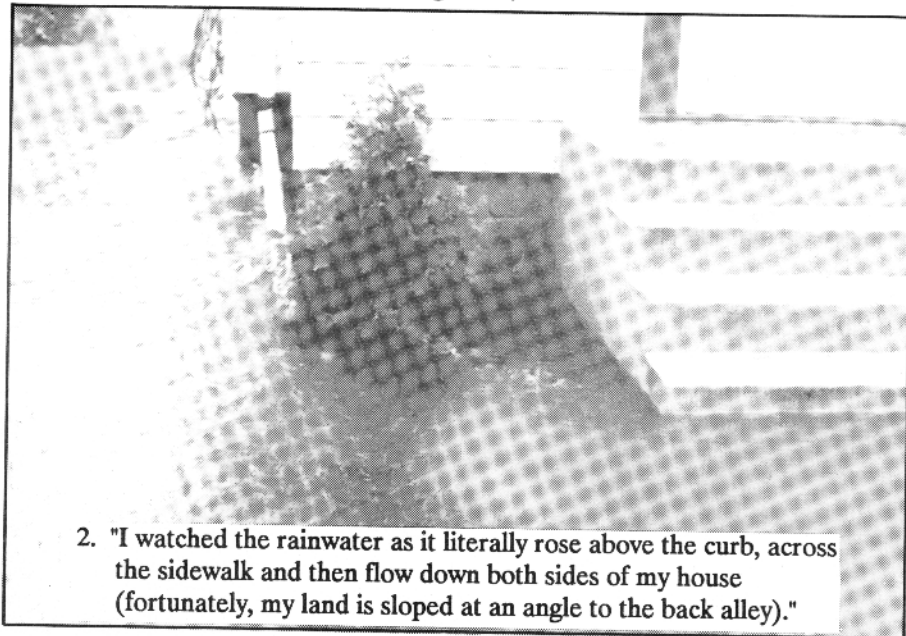


During the evening of August 30th and early morning hours of the 31st, a flash flood occurred in a period of about 4 hours. There were three relatively small areas that received more than 7 inches of rainfall. The first area is the southern shores of Lake Minnetonka; the second area, Richfield, Minneapolis-St. Paul International Airport, northern Bloomington, Mendota Heights, and the very southern parts of Minneapolis and St. Paul; the third area Afton, Lakeland, St. Croix Beach and east into Wisconsin. The 4-inch or more rainfall covered an area of 832 square miles in Minnesota. It began in northern Carver County, then east through southern Hennepin, southern Ramsey, northern Dakota and southern Washington counties. Local flooding was heavy in the 6 to 7-inch rainfall areas. For the flood analysis, 252 reports were used from several precipitation networks.

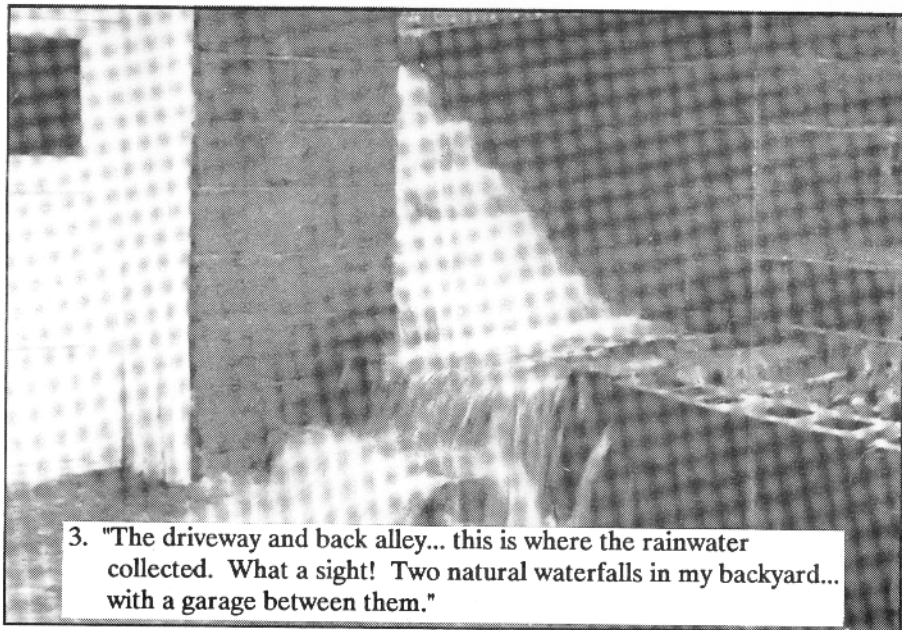
South Minneapolis. "7 Inches of Rain in 4 Hours"... the never-will-be-forgotten flood of August 30, 1977.



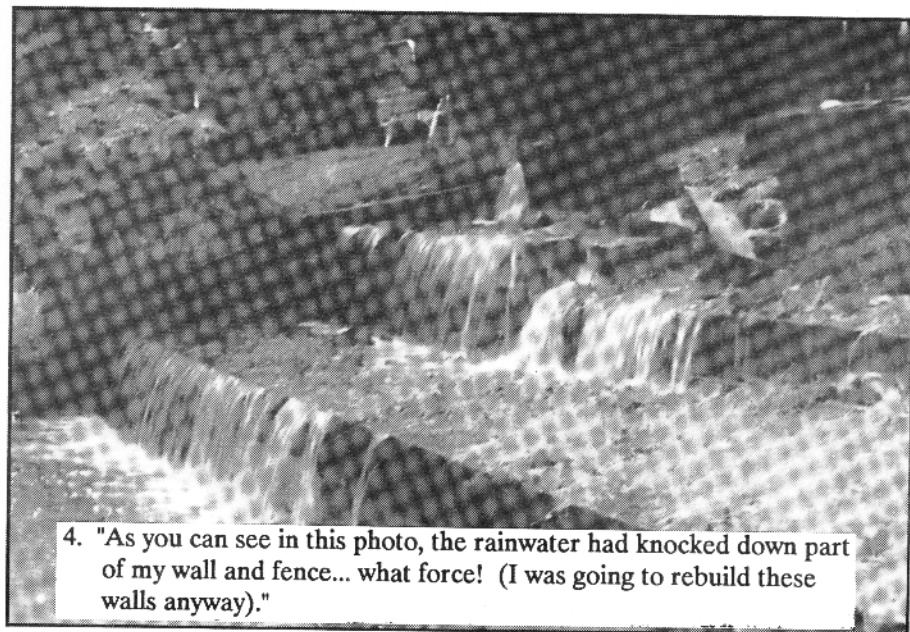
1. "7 Inches in 4 Hours... the rainwater had no place to go. I watched my neighbor, Bob, as he tried to clear the street sewer in front of my home... but to no avail."



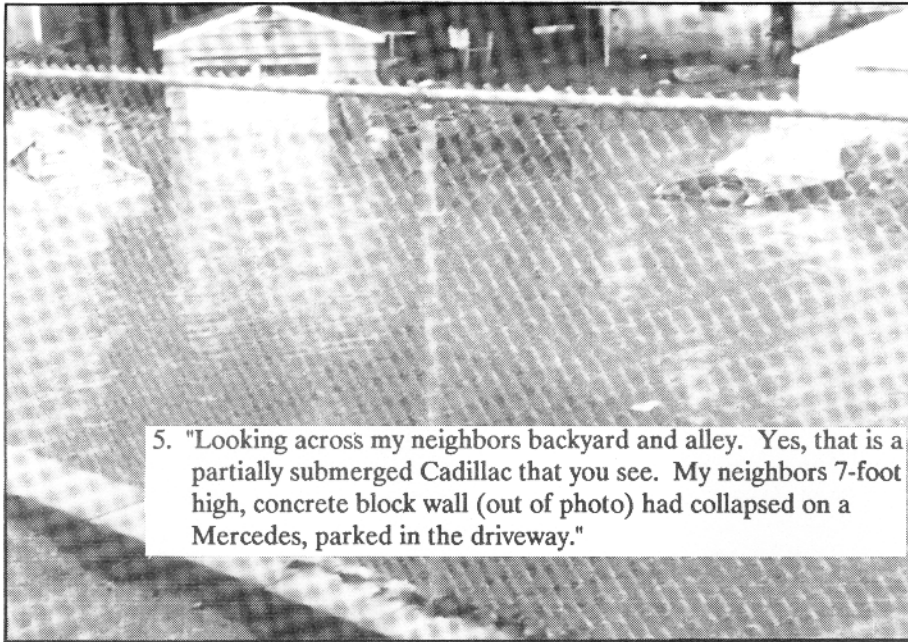
2. "I watched the rainwater as it literally rose above the curb, across the sidewalk and then flow down both sides of my house (fortunately, my land is sloped at an angle to the back alley)."



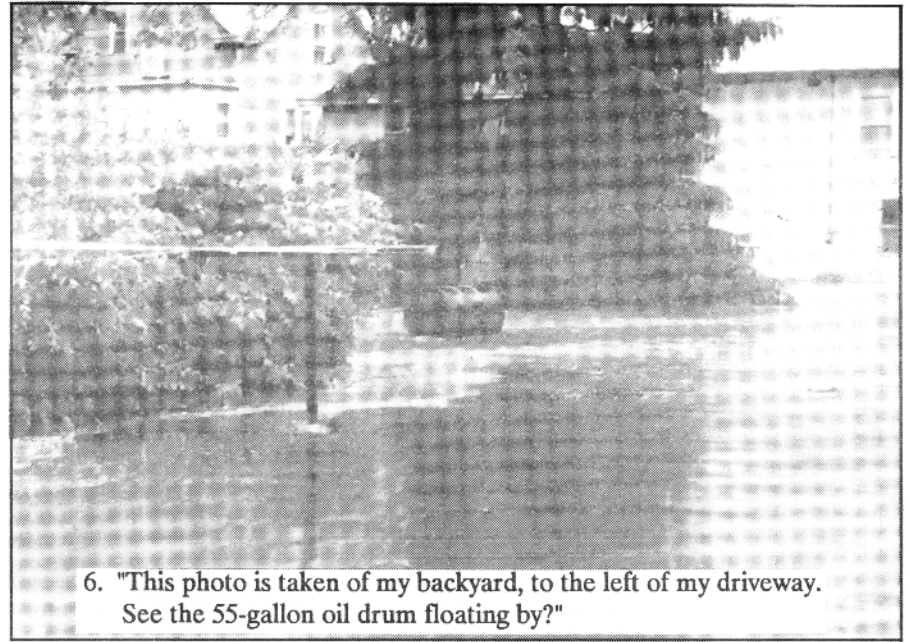
3. "The driveway and back alley... this is where the rainwater collected. What a sight! Two natural waterfalls in my backyard... with a garage between them."



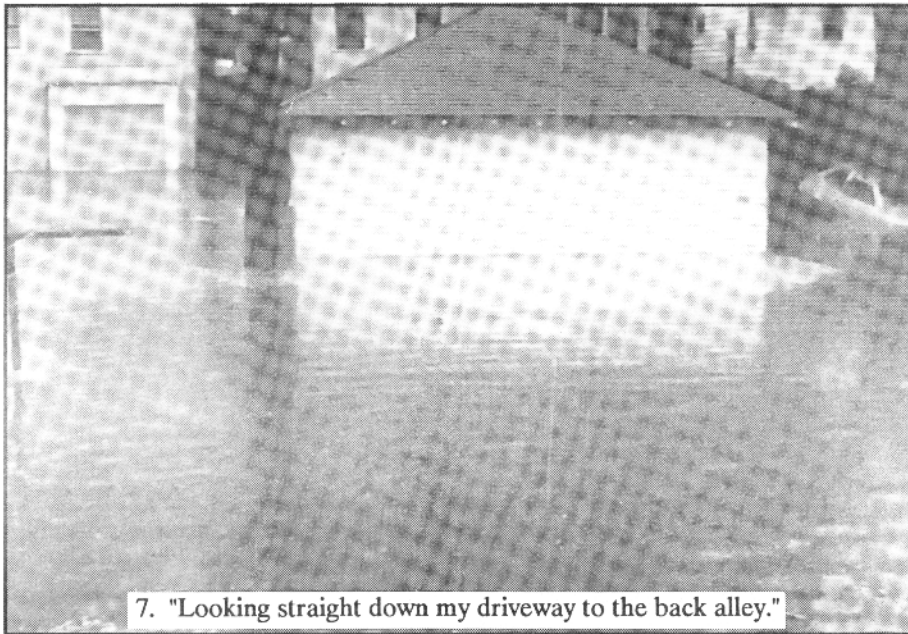
4. "As you can see in this photo, the rainwater had knocked down part of my wall and fence... what force! (I was going to rebuild these walls anyway)."



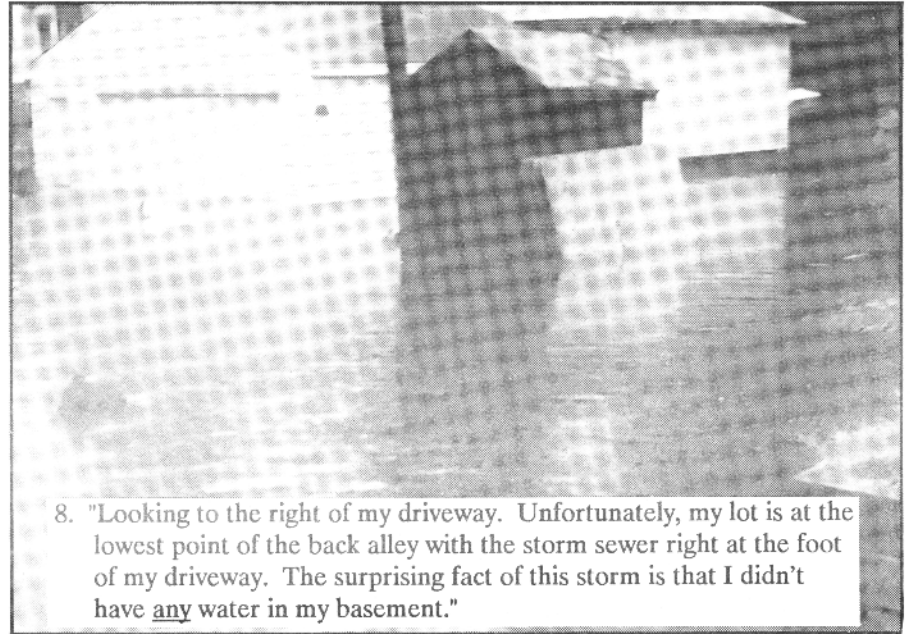
5. "Looking across my neighbors backyard and alley. Yes, that is a partially submerged Cadillac that you see. My neighbors 7-foot high, concrete block wall (out of photo) had collapsed on a Mercedes, parked in the driveway."



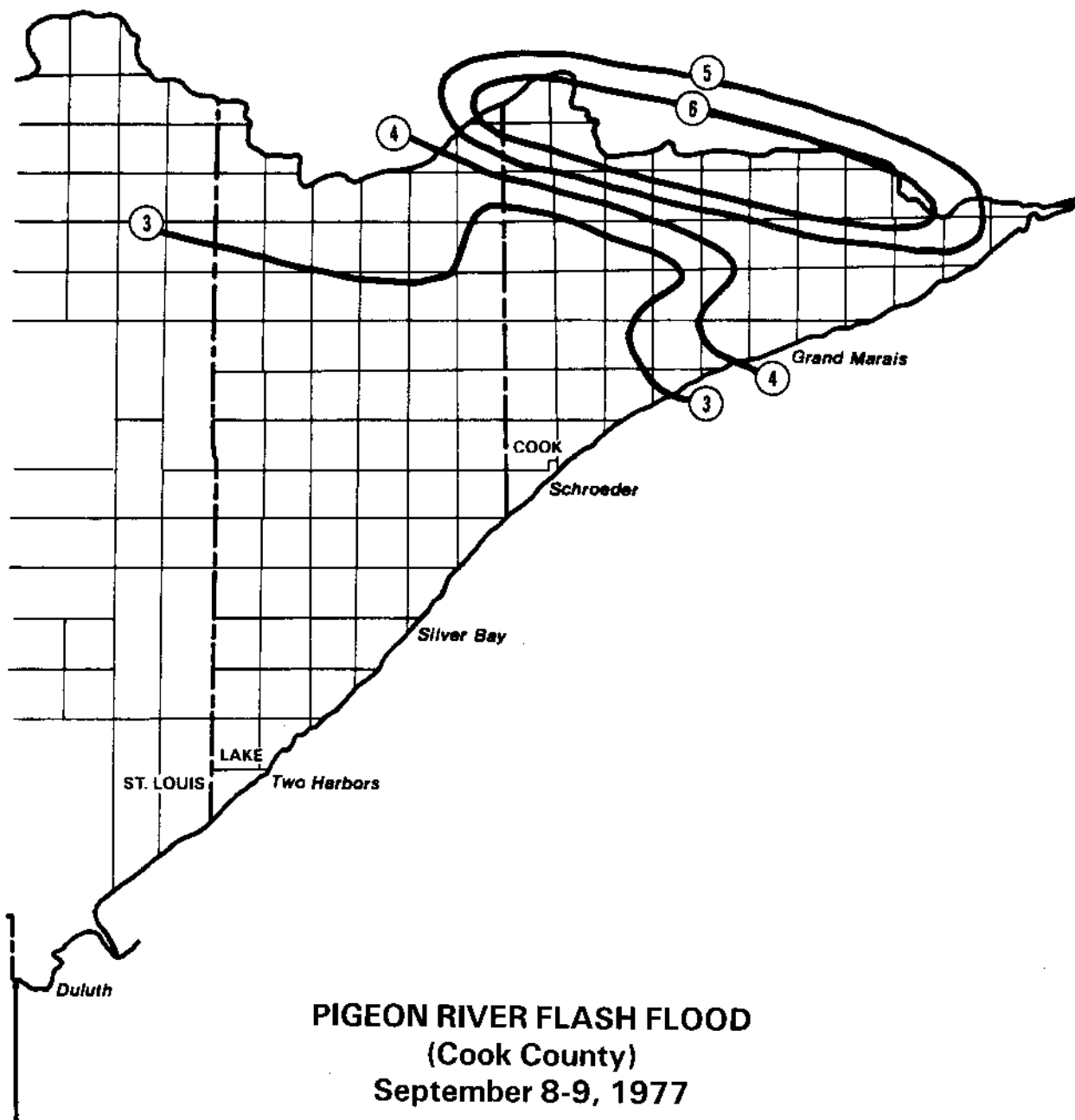
6. "This photo is taken of my backyard, to the left of my driveway. See the 55-gallon oil drum floating by?"



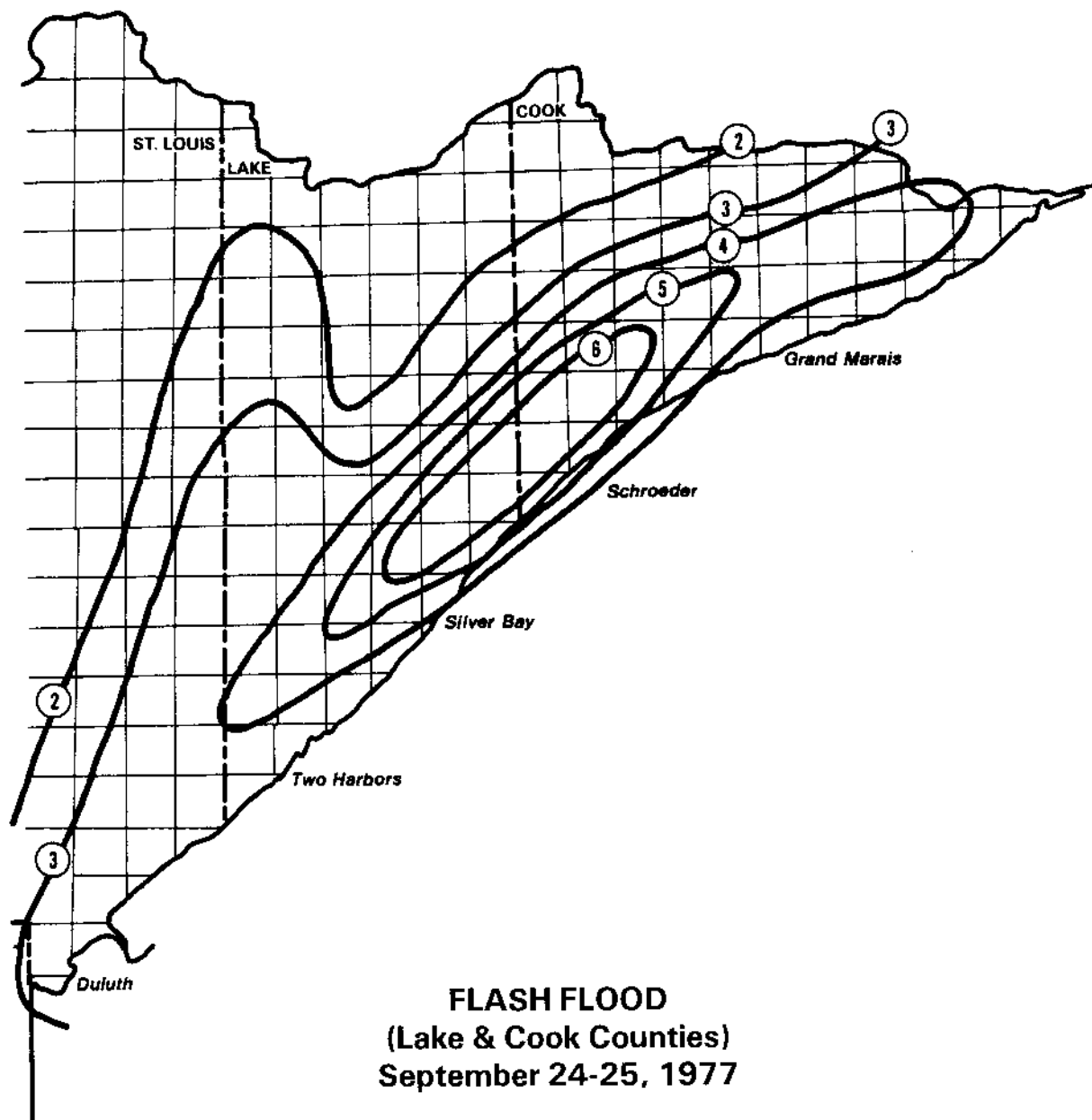
7. "Looking straight down my driveway to the back alley."



8. "Looking to the right of my driveway. Unfortunately, my lot is at the lowest point of the back alley with the storm sewer right at the foot of my driveway. The surprising fact of this storm is that I didn't have any water in my basement."

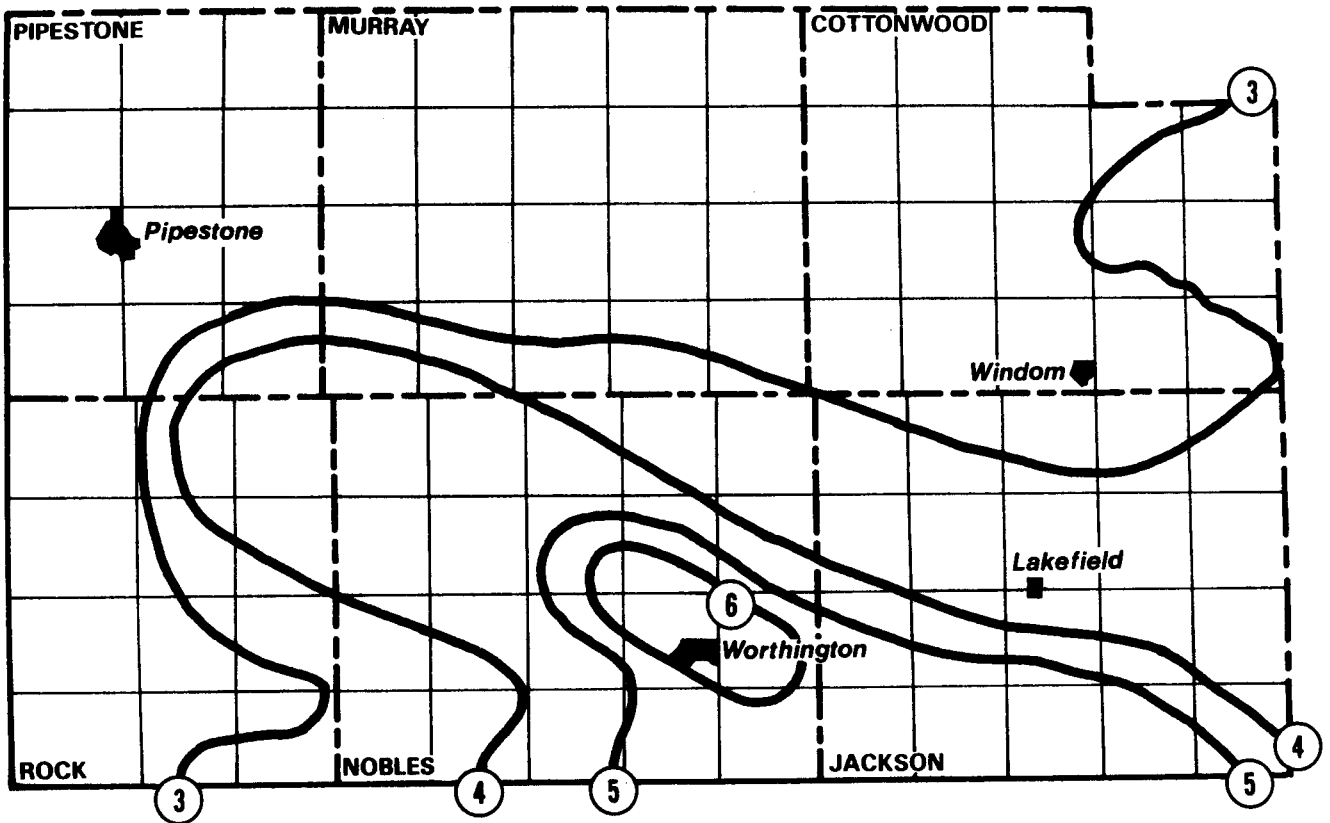


The greatest rainfall amount recorded was 6.66 inches at Popular Lake. The area covered by 4-inch rainfalls or more was about 1,000 square miles in Minnesota and about 1,000 square miles in Canada.



Heavy rains occurred on the evening of September 23rd and through the afternoon of the 24th along the north shore of Lake Superior. The heaviest amounts of 6 inches or more were generally inland from the shoreline, about 5 to 10 miles beginning in the Finland area and extending northeast about 40 miles. The 4-inch or more rainfall covered an area of 1,550 square miles.

**WORTHINGTON FLASH FLOOD
(Nobles County)
September 30, 1977**



During a flash flood in the Worthington area, most of the rain fell between 1 AM and 5 PM on September 30, 1977. The heaviest amount reported was 6.6 inches at the NWS COOP station in Worthington. The 4-inch or more rainfall began in northeast Rock County and extended northwest-southeast through Nobles County into southwest and southern Jackson County. The 4-inch area covered 650 square miles in Minnesota.