Denver
July 9, 1953

Rainfall Data: [click here]

Damage Estimate: The day after the storm, $1,500,000 estimated damage was caused to Denver homes, automobiles, and businesses along with at least $500,000 in damage to city streets, sewer systems, utilities and construction projects. Two days after the storm, the Denver Post printed that the damage caused by the storm could reach $3 million.

Deaths: 0

The storm, dubbed by the Denver media as the third largest cloudburst in Denver’s history at the time, was caused by a rare mixture of moisture-laden air from the southeast, a warm sun, and a cool Canadian current. The day before the storm, Denver was covered by a weak front of very humid air which was then warmed by radiative heating. The warm bottom layer was carried by convection currents to the upper side and then this cloud layer was literally “dumped over” by the warm air currents colliding with cool Canadian air. The result was a deluge centered over downtown and east Denver. In downtown Denver, three-quarters of an inch of rain fell in five minutes and nearly one inch of rain fell in one half hour. The downtown weather station reported that a total of 1.43 inches fell Thursday evening. The rain was very concentrated – Lakewood, Golden, Englewood and north Denver only received a sprinkle of rain.

The flooding was a result of rainwater and overland flow. Denver’s sewers, even though some systems were newly rebuilt and expanded, were overwhelmed by the heavy downfall. Overworked water mains literally blew up. The pressure caused by the sudden dumping of water from loaded storm sewers into already full mains caused heavy sewer pipes to explode sending up geysers as high as eight feet.

The Montclair and Mayfair areas east of Denver were among the hardest-hit in the city. In these neighborhoods dozens of homes had basements "flooded to their ceilings and houses without basements were flooded to levels of two or more feet.” During the height of the storm, floodwaters in this area were at a level of more than five feet. In addition, four hospitals in east Denver experienced flooding. National Jewish in particular had extensive, costly damage.

The downtown area was also hit very hard. Almost every basement in downtown Denver was flooded. In some places the flood swept into the first floors of downtown stores.

The rushing floodwaters caused heavy road damage. Streets caved in beneath cars and the waters gouged out deep holes in the pavement. There were also several reports that the floodwaters had ripped out chunks of pavement and then deposited them onto flooded lawns.
## Rainfall Data:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Peak Rainfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/9</td>
<td>Lowry Air Force Base</td>
<td>3.9” in 7 hrs.</td>
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<tr>
<td>7/9</td>
<td>Denver WSO City</td>
<td>1.36” in 1 hr., nearly .75&quot; fell in 5 minutes and 1&quot; fell in 30 minutes.</td>
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**Sources:**
- The Denver Post, July 10-11, 1953