

Common misconceptions about the October 1983 flood

If your house was not flooded or damaged in the 1983 flood, it is not in the floodplain, and you shouldn't be concerned about flooding.

FALSE! Most washes in Pima County, particularly the smaller washes, did not flood during the October 1983 storm. Therefore, the 1983 flood doesn't serve as a good indicator of whether a house is or isn't in the floodplain. Some washes in Pima County have not flowed for many years, but are capable of conveying very big floods. In addition, erosion zones can shift between floods. The best way to determine if your property is flood prone, or in an erosion-hazard zone, is to contact the Pima County Regional Flood Control District.

Because we have had the 100-Year flood, we will be safe from flooding for another 100 years.

FALSE! Floods have no memory of the past. 100-year floods can occur in consecutive years, as happened in Phoenix on the Salt River in 1978, 1979 and 1980. Pima County was a presidentially-declared flood disaster area four times between 1977 and 1983. (October '77, March '78, December '78 and October '83) Floods that are smaller or larger than the 100-year flood can also cause major damages.

The October 1983 flood was the 100-year flood on every wash.

FALSE! Not exactly. Except on the Santa Cruz River, Brawley Wash and Rillito Creek, flooding did not reach 100-year levels. Most small washes in Pima County experienced relatively minor flooding during October 1983. See the table on the next page for a listing of 1983 flood peaks and recurrence intervals.

October 1983 flood discharges

Wash Name	Peak Gauged Discharge	Recurrence Interval
Santa Cruz River near Nogales	16,200 c.f.s.	25-year
Santa Cruz River at Congress St.	52,700 c.f.s.	100-year
Santa Cruz River at Cortaro Rd.	16,200 c.f.s.	100-year
Rillito Creek	29,700 c.f.s.	100-year
Tanque Verde Creek	8,600 c.f.s.	50-year
Cañada del Oro Wash	6,600 c.f.s.	4-year
Pantano Wash	12,000 c.f.s.	10-year
Rincon Creek	5,640 c.f.s.	15-year
Sabino Canyon Creek	6,300 c.f.s.	25-year
Brawley Wash	19,100 c.f.s.	100-year
Los Robles Wash	12,500 c.f.s.	80-year
Pima Wash at Oracle Rd.	460 c.f.s.	3-year
Alamo Wash	1,680 c.f.s.	30-year
Rob Wash	396 c.f.s.	3-year
Cholla Wash	764 c.f.s.	20-year
Cemetery Wash	456 c.f.s.	5-year
Craycroft Wash	557 c.f.s.	5-year
Flowing Wells Wash	984 c.f.s.	4-year
Flato Wash	820 c.f.s.	3-year
Demetrie Wash	10,500 c.f.s.	unknown
Lee Moore Wash	10,000 c.f.s.	unknown

² c.f.s. = cubic feet per second

For source information contact Pima County Regional Flood Control District.

For more information, please contact:

Floodplain Management Division
97 E. Congress St., 3rd Floor
Tucson, AZ 85701
(520) 243-1800 • www.rfcd.pima.gov

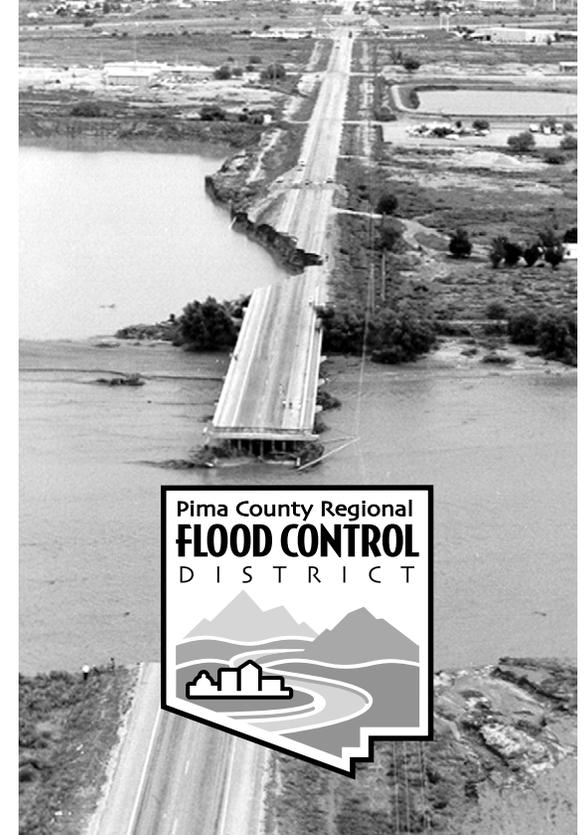


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The floods of October

1983



public information series

October 1983 Flood Facts

Hydrology: Approximately seven inches of rain fell over Pima County within a seven-day period (4 inches in a single day), the result of a stalled weather system called Tropical Storm Octave. This extreme rainfall was preceded by the wettest September on record, which helped increase runoff rates. The floods on the Santa Cruz River and Rillito Creek were the largest measured in Tucson history.

Damages: 13 people died in the flood, including two Public Safety Officers attempting a river rescue. 221 people were injured, and 11 were hospitalized. 400 persons were rescued or evacuated from flooded areas.

Within the Santa Cruz River Basin, 154 residences were destroyed, 160 received major damage, and 222 experienced minor damage. Nearly 80 claims were processed by the Federal Emergency Management Administration.

5,852 people received temporary shelter in Red Cross Emergency Centers, and 11,440 people received other forms of assistance. Total flood damage was estimated at \$226.5 million including \$58 million in damages to public facilities in Tucson and Pima County.

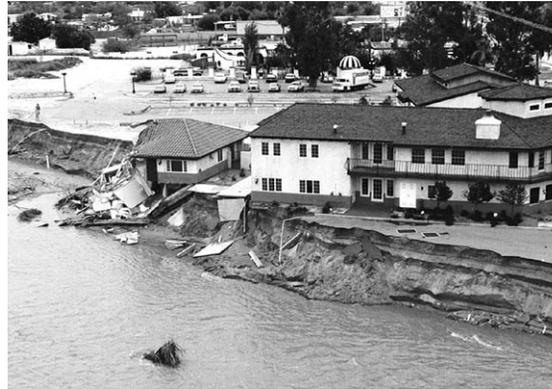
Some successes: The \$4 million Rio Nuevo and Rillito Creek bank protection (west of Oracle Rd.) projects prevented an estimated \$15 to \$20 million in damages.



Almost all of the flood damages sustained were to structures built prior to floodplain management regulation in Pima County.

Soil-cement bank protection installed before the flood by the Flood Control District sustained only minor damage.

Damages were caused by:



Erosion

Bank erosion up to several hundred feet along major watercourses was common, especially near channel bends and constrictions.



Inundation

Overbank flooding was common in areas such as Marana, where the Santa Cruz River peaked at 65,000 c.f.s. and the water spread 3 miles wide.



Bridge failure

35 of 42 major bridges in Pima County were closed during the 1983 flood. 19 bridges remained closed after the flood, resulting in a repair bill of \$46.4 million, not including \$600,000 per day cost to the public in increased travel time, accidents and congestion.



Utility failure

Utilities located in or near watercourses were damaged by floodwaters, resulting in power outages and broken water and sewer lines. In addition to the loss of power and water supply to thousands of homes, 8,000 feet of sewer line was destroyed, causing raw sewage to be dumped into the rivers. Two sewage treatment plants were also damaged.