

Local Flood Hazards

Floods of the White River and Killbuck Creek are caused by runoff from general, and/or intense rainfall. Other areas of flooding concern are from the Boland Ditch and Pittsford Ditch. Although floodwaters are not as deep, they still cover streets and yards and can flood cars, garages, basements and lower floors.

Flooding usually occurs during the winter and spring; however, floods have occurred during all seasons of the year and may occur with little or no warning.

Flood flow stages on the White River can rise from normal flow to flood peaks from 24 to 42 hours with channel velocities ranging from 6 to 12 ft. per second. Flood stage in Anderson is 10 ft., with base elevation being 825.02 ft. mean sea level – 1929 General Datum. The U.S. Geological Survey maintains the official gauging site, located on the west bank of the White River, near the old Tenth Street Bridge abutment.

[Click here for Real-time River Information](#)

Properties along these streams range from residential, commercial to industrial, each of which have been severely damaged by the floods of 1913 and 1964. Although large floods have occurred as recent as the July and September 2003 events, studies indicate that larger floods are possible.

Your property may be high enough that it was not flooded recently. However, it can still be flooded in the future because the next flood could be worse. If you are in the floodplain, the odds are that someday your property will be damaged.

Flood and Drainage Information

Drainage Area

White River at Anderson (USGS Gauge) 406.0 square miles

Killbuck Creek 104.0 square miles

Floodplain

Relatively flat 1,400 to 3,200 ft. wide

Slope

White River – Between Muncie and Anderson average 3.94 ft. per mile

89 ft. in 22.6 miles

Killbuck Creek average 3.4 ft. per mile

Elevation at Gauge

White River at USGS Gauging Station (1929 General Datum) 825.02 mean sea level

Flooding

White River begins to overflow its banks at approximately 10 ft.

Velocities

Standard Project Flood – in channel 12 ft. per second
- over bank areas 5 ft. per second

Levee

The levee that runs along the east bank of the White River from the entrance to Edgewater Park north to the Truman Bridge was built sometime between 1940 and 1949 with city funds. The elevation of the levee is 842 ft..

Flood Characteristics

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Flood History

March 25, 1913 - 23.60 ft.

March 23, 1904 - 20.30 ft.

June 14, 1958 - 19.96 ft.

September 3, 2003 - 19.58 ft.

April 21, 1964 - 19.41 ft.

May 18, 1943 - 18.97 ft.

January 22, 1959 - 18.86 ft.

December 31, 1990 - 18.83 ft.

January 15, 1937 - 18.63 ft.

February 15, 1950 - 18.28 ft.

November 15, 1993 - 18.19 ft.

June 29, 1957 - 17.66 ft.

January 31, 1916 - 17.60 ft.

May 14, 1933 - 17.59 ft.

March 5, 1963 - 17.56 ft.

April 15, 1922 - 17.50 ft.

March 21, 1927 - 17.50 ft.

January 5, 1950 - 17.36 ft.

April 12, 1944 - 17.33 ft.

Key Flood Activities

12 ft. Close off Edgewater Park

13 ft. Close off Grand Avenue between Alexandria Pike & Broadway

Notify residents along Short Hazlett, 1st Street & Madison Avenue, 2nd Street & Sycamore Street, and Riverside Drive to prepare for sandbag operations and to make preparations for possible evacuation.

(dependent on forecast and rate of rise)

14 ft. Manhole at Athletic Park behind pool starts to overflow

Killbuck Creek begins to overflow into Aqua Gardens / Shadyside Lake – close off walking paths around lakes

15 ft. Water will be into Derby Downs off Madison Avenue

Water starts approaching 1st Street & Henry Street and the areas of Irondale & Riverside Drive

(sandbagging operations and voluntary evacuations should have already begun)

17 ft. Water from Killbuck Creek and Aqua Gardens / Shadyside Lake will be near Alexandria Pike

17.5 ft. Notify residents in / along the following areas to make preparations for evacuation:

Park Place

Hollywood Estates

Alexandria Pike

Close Cross Street between Alexandria Pike & State Street

Floodwaters will start to fill into Phar-Mor lot

Water Pollution Control – Dewey Street Plant is affected by floodwaters

Athletic Park begins to fill

- 18.5 ft.** Close Alexandria Pike between Cross Street & Lindberg Road
- 19 ft.** Water will start overflowing the levee along 10th Street
Close 8th Street from the top of the Eisenhower Bridge to Park Avenue
Hollywood Estates will begin being affected by floodwaters
Close Main Street between 5th Street & Milton Avenue
- 20 ft.** Expect levee in Park Place to fail
(Predictions) Careful watch of all bridges will need to be conducted
- 24 ft.** Many roads will be impassible
(Predictions) Bridges may be impassible or not safe for vehicular traffic
Most of the northeast and northwest portions of the city will be under water
Evacuations of the following areas should have occurred:
- Park Place
 - Riverside Drive
 - Irondale
 - Alexandria Pike
 - Hollywood Estates
 - Phar-Mor business area
 - Water Pollution Control – Dewey Street Plant
 - Moss Island Road
 - Rose Street
 - Hazlett Street
 - West 1st Street, 2nd Street, 3rd Street, 6th Street and 7th Street
 - Sycamore Street

Future Floods

Floods of the same or larger magnitude as those that have occurred in the past could occur in the future. The Army Corp of Engineers has run models with similar geographical and physiographical characteristics to determine the flooding potential. The models considered storms and floods that have occurred in regions of like topography, watershed cover and physical characteristics. These models have shown with the combination of the most adverse meteorological conditions over the basin, rainfall in excess of any that has been recorded is possible.

Various discussions of future floods have been mentioned as Intermediate Regional Flood and the Standard Project Flood.

Intermediate Regional Flood

The Intermediate Regional Flood is defined as one that could occur once in 100 years, on the average, although it could occur in any year. Or, a one percent chance of occurring in any given year, known as the 100 year flood.

Standard Project Flood

The Standard Project Flood is defined as a major flood that can be expected to occur from a severe combination of meteorological and hydrological conditions that is considered reasonably characteristic of the geographical area. This is also known as the 500 year flood.