

**EAST FORK CAVE CREEK BASIN #3B
FCDMC GAGE ID# 8707**

STATION DESCRIPTION

LOCATION – The gage is located near the southeast corner of Grovers Avenue and 20th Street in Grovers Park. The gage is on the lower basin, basin 3b. The upper basin, 3a, is located to the northeast, on the north side of Grovers Avenue. The gage instrumentation is located at the outlet from the basin. Latitude N33° 38' 44", Longitude W 112° 02' 24". Located in the NW1/4 NW1/4 SE1/4 S34 T4N R3E in the Union Hills 7.5-minute quadrangle.

ESTABLISHMENT – The gage was installed on September 13, 1994.

DRAINAGE AREA – 3.52 mi², of which 1.86 mi² is controlled by basins #1 and #4.

GAGE – The gage is a pressure transducer type instrument, located at 0.15 feet gage height, or 1,419.601 feet NAVD88, levels of December 22, 2015.

There are no staff gages at this location.

There are no crest gages at this location.

ZERO GAGE HEIGHT - Zero is defined as the invert of the inlet, elevation 1,419.451 feet NAVD88.

HISTORY – No history prior to gage establishment. Gage was established on September 13, 1994. Station renamed, basin #3B, because a level station on the upper basin, #3A, was established on October 14, 2015.

REFERENCE MARKS –

BM-4683 is an FCDMC brass cap, stamped '4683', located near the station tube at the southwest corner of the basin. Elevation is 10.059 feet gage height and 1,429.510 feet NAVD88, levels of December 22, 2015.

RP-1 is a white paint spot on top of outlet. Elevation 5.480 feet gage height and 1,424.931 feet NAVD88, levels of December 22, 2015. There was no paint spot at the top of the headwall.

CHANNEL AND CONTROL – The principal outlet for this basin is a 48-inch diameter RCP. The culvert length is unknown since the pipe joins the city storm drain system. There is no defined emergency spillway.

PRINCIPAL OUTLET / EMERGENCY SPILLWAY –

There is one principal outlet which is a 48-inch culvert. The 48-inch diameter RCP has an inlet elevation of 0.00 feet gage height.

There is no defined emergency spillway. However the minimum top of the basin is located at the southwest corner of the basin near the outlet.

The top of the basin ranges from over 20 feet on the north, south, and east sides to a minimum top of basin of 14.27 feet gage height and 1,433.72 feet NAVD88, levels of June 6, 2017.

RATING – The current rating is Rating #2. The primary culvert is rated from the design. The spillway was rated using the weir equation and was developed by T. W. Lehman. Rating #1 was the same as Rating #2 without the spillway rating.

The current capacity rating is Rating #1 which is from the design.

DISCHARGE MEASUREMENTS – Discharge measurements are not possible.

POINT OF ZERO FLOW – The PZF is the inlet invert at 0.00 feet gage height, levels of December 22, 2015.

FLOODS / SIGNIFICANT IMPOUNDMENTS – An event occurred on September 7, 2006 at 4.22 feet and 57 acre-feet.

REGULATION – Natural flows in the wash are impeded by the basin.

DIVERSIONS – None known

ACCURACY – Fair

JUSTIFICATION – Monitor levels in basin.

UPDATE – March 30, 2020
D E Gardner