BULLARD WASH AT INDIAN SCHOOL ROAD FCD GAGE ID# 89507

STATION DESCRIPTION

<u>LOCATION</u> – The gage is located near the intersection of Wigwam Boulevard and Indian School Road. The gage instrumentation is located on the northeast corner of Indian School Road and Bullard Wash. Latitude N 33° 29' 33.0", Longitude W 112° 22' 53.4". Located in the NW1/4 NE1/4 S29 T2N R1W in the Perryville 7.5-minute quadrangle.

ESTABLISHMENT – The gage was installed on June 27, 2006.

DRAINAGE AREA – 14.6 mi²

<u>GAGE</u> – The recording gage is a pressure transducer type instrument. The transducer gage is at 0.10 feet gage height, levels of January 11, 2018.

There is no staff gage at this location.

There is no crest gage at this location.

ZERO GAGE HEIGHT – Zero gage height is defined as the ground at the pressure transducer as installed on December 13, 2017. It is at elevation 1,017.552 feet NAVD88, levels of January 11, 2018.

<u>HISTORY</u> – No previous history at this location. Gaging established on June 27, 2006. Pressure transducer raised to 0.50 feet gage height, effective July 15, 2010. The station was moved to the north side of Indian School Road on December 13, 2017. The transducer was moved from the south to the north side of the left most culvert box.

REFERENCE MARKS –

BM-6868 is an FCDMC brass cap located on the northeast corner of the bridge, near the location of the station tube. It is at elevation 7.288 feet gage height and 1,024.840 feet NAVD88, levels of January 11, 2018.

RM-1 is a rebar located on the upstream right bank near a moderated sized bush. It is at elevation 7.717 feet gage height and 1,025.269 feet NAVD88, levels of January 11, 2018.

RP-1 is a chiseled 'X' on the downstream side on the left bank wingwall. It is at elevation 5.527 feet gage height (5.90 feet gage height, old datum) and 1,023.079 feet NAVD88, levels of January 11, 2018.

RP-2 is a chiseled 'X' on the upstream, left bank wingwall. It is at elevation 5.845 feet gage height and 1,023.397 feet NAVD88, levels of January 11, 2018.

RP-3 is a chiseled 'X' on the north side sidewalk near the center of the wash. It is at elevation 7.013 feet gage height and 1,024.565 feet NAVD88, levels of January 11, 2018.

RP-4 is a chiseled 'X' on the upstream, right bank wingwall. It is at elevation 5.873 feet gage height and 1,023.425 feet NAVD88, levels of January 11, 2018.

RP-5 is a chiseled 'X' on the upstream, center of channel directly in front of center pier (5th from the left or right). It is at elevation -0.03 feet gage height and 1017.52 feet NAVD88, levels of March 18, 2025.

<u>CHANNEL AND CONTROL</u> – At the bridge, the channel goes through a wide 10 barrel 11 foot wide by 5 foot high culvert. Beyond the bridge culverts, the channel transitions to a mostly uniform trapezoidal shape. There isn't really a low flow control. Higher flows are controlled by the culverts.

<u>RATING</u> – The current rating is Rating #3. The rating was developed from an HEC-RAS analysis of an 8 cross section survey done in May 2021. The results are similar to rating #2, but this analysis is more complete in the data collection downstream, and is considered more accurate because of the extra data.

<u>DISCHARGE MEASUREMENTS</u> – Direct current measurements, as well as indirect measurements could be make either upstream or downstream of the bridge.

Downstream access would need to be granted by the community south of Indian School Road.

<u>POINT OF ZERO FLOW</u> – The PZF is 0.00 feet gage height at the left side of the channel near the pressure transducer, levels of January 17, 2018.

FLOODS – A flow of 560 cfs and 2.68 feet gage height occurred on September 27, 2014.

REGULATION – None known.

DIVERSIONS – None known

ACCURACY – Fair

JUSTIFICATION – Monitor flows in Bullard Wash for the Bullard Flood Warning Plan.

<u>UPDATE</u> – March 18, 2025 E. S. Thomas