BULLARD WASH AT VAN BUREN STREET FCD GAGE ID# 89207

STATION DESCRIPTION

<u>LOCATION</u> - The gage is located in the city of Goodyear, near 151st Avenue and Van Buren Street. It is at latitude N 33° 27′ 0.4" and longitude W 112° 22' 58.0". Located in S05 T1N R1W, in the Perryville 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on December 13, 2017.

DRAINAGE AREA – 88.3 mi², from 2001 Flood Insurance Study

<u>GAGE</u> - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.60 feet gage height, levels of March 18, 2025. The PT is on the right bank of the channel under the westbound bridge of Van Buren Street.

There is no crest gage at this site.

There are no staff gages at this site.

ZERO GAGE HEIGHT – Zero gage height has no particular reference to anything. It is defined as 973.554 feet NAVD88, levels of January 30, 2018.

HISTORY – Gaging established on December 13, 2017. No previous gaging history at this location.

REFERENCE MARKS

BM-89207 is an FCDMC brass cap located on the northwest corner of the bridge, near the station tube. It is at elevation 12.209 feet gage height and 985.763 feet NAVD88, levels of January 11, 2018.

RM-1 is a rebar located on the upstream side of the left bank. It is at elevation 11.363 feet gage height and 984.917 feet NAVD88, levels of January 11, 2018.

RM-2 is a chiseled 'X' on the upstream right bank sidewall. It is at elevation 5.453 feet gage height and 979.007 feet NAVD88, levels of January 11, 2018.

RM-3 is a chiseled 'X' on the upstream left bank sidewall. It is at elevation 5.511 feet gage height and 979.065 feet NAVD88, levels of January 11, 2018.

<u>CHANNEL AND CONTROL</u> - The channel is natural up and downstream of the Van Buren bridge. About one quarter mile upstream, and anout 650 feet downstream the channel is less evident and is mainly agricultural fields. For the portion near the bridge, it is mainly lightly vegetated fine clay dirt. Little to no rock and cobble were noted.

The Van Buren Street bridge likely has little effect on flow. There is a 4-foot drop in channel elevation about 30 feet upstream of the bridge. The channel curves downstream of the bridge. This is also where the channel transitions back to agricultural fields.

RATING - The current rating is Rating #1, dated December 13, 2017. The rating was developed using surveyed data in a HEC-RAS model of cross sections up and downstream of the bridge. The rating should be calibrated with indirect measurements to verify its reliability.

<u>DISCHARGE MEASUREMENTS</u> - Direct measurements could be made by wading in the area near the gage. Higher flows can be measured by indirect methods downstream from the culverts.

POINT OF ZERO FLOW – Is about 0.0 feet gage height, levels of July 3, 2017.

FLOODS – No floods recorded since installation.

REGULATION - None

DIVERSIONS - None known

<u>ACCURACY</u> - Poor

<u>JUSTIFICATION</u> – Support of city of Goodyear's flood response plan.

<u>UPDATED</u> - March 18, 2025

E.S. Thomas