CENTENNIAL TRIBUTARY NEAR DOBBINS ROAD FCD GAGE ID# 22807 (5049)

STATION DESCRIPTION

<u>LOCATION</u> – The station is located in western Maricopa County, southeast of Harquahala Valley. It is near the intersection of Dobbins Road and 435th Avenue. Latitude 33° 21' 55.0" North; Longitude 112° 59' 39.0" West. Located in S05 T1S R7W, in the Gillespie 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed September 26, 2012.

DRAINAGE AREA – 2.47 mi² via USGS Streamstats.

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 1.20 feet, levels of January 24, 2019.

There is one crest-stage gage at this site, with a pin elevation of 1.13 feet gage height, levels of January 24, 2019.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is currently set to a point 1.20 feet below the elevation of the pressure transducer as originally installed. It is equivalent to 1,006.163 feet NAVD88.

<u>HISTORY</u> – Gaging established on September 26, 2012. No previous gaging history at this location. A crest gage was added after installation.

REFERENCE MARKS

BM-50228 is an FCDMC brass cap located on top of the left bank about 20 feet downstream of the station tube. It is at elevation 12.881 feet gage height and 1,019.044 feet NAVD88, levels of January 24, 2019.

RM-1 is a rebar on the left bank about 200 feet upstream from the gage cross section. Elevation is 14.526 feet gage height, levels of January 13, 2015. This reference was not located during the survey of January 24, 2019.

RM-2 is a rebar on the right bank about 200 feet upstream from the gage cross section. Elevation is 11.012 feet gage height, levels of January 13, 2015. This reference was not located during the survey of January 24, 2019.

RM-3 is a rebar on the left bank at the gage cross section. Elevation is 12.184 feet gage height and 1,018.347 feet NAVD88, levels of January 24, 2019.

RM-4 is a stake on the right bank at the gage cross section. Elevation is 10.252 feet gage height and 1,016.415 feet NAVD88, levels of January 24, 2019.

RM-5 is a rebar on the left bank about 200 feet downstream from the gage cross section. Elevation is 11.469 feet gage height and 1,017.632 feet NAVD88, levels of January 24, 2019.

RM-6 or XS3RB is a rebar on the right bank about 200 feet downstream from the gage cross section. Elevation is 8.032 feet gage height and 1,014.195 feet NAVD88, levels of January 24, 2019.

RM-7 is a rebar on top of the left bank about 40 feet upstream of the station tube. It is at elevation 13.525 feet gage height and 1,019.688 feet NAVD88, levels of January 24, 2019.

RP-1 is the sign channel post securing the transducer gage. It is at elevation 1.761 feet gage height, levels of January 24, 2019.

<u>CHANNEL AND CONTROL</u> - The channel is natural downstream from the gage. The level sensor is located on the left bank of the wash.

The control for the gage is not well defined at low flows. The channel is the control at higher stages.

<u>RATING</u> - The current rating is Rating #2, dated October 01, 2019. The rating developed from geometry of three cross sections input as an HEC-RAS model. No direct or indirect measurements have been made as of this date.

<u>DISCHARGE MEASUREMENTS</u> - Direct measurements could be made in the natural wash. Indirect measurements could be made in a section about 200 feet upstream and downstream from the gage.

POINT OF ZERO FLOW - The PZF is at about 1.0 feet gage height as of January 2020.

<u>FLOODS</u> – The highest discharge recorded is 269 cfs and 2.82 feet gage height from an event of March 1, 2014.

REGULATION - None

DIVERSIONS - None

ACCURACY - Fair

<u>JUSTIFICATION</u> - Monitor flows from a tributary into Centennial Wash from this location upstream of the railroad crossing of Centennial Wash.

<u>UPDATED</u> - January 9, 2024 ES Thomas