

GALLOWAY WASH
FCD GAGE ID# 20607

STATION DESCRIPTION

LOCATION - The gage is located in the town of Cave Creek, just north of Cave Creek Road on Galloway Road. It is at latitude N 33° 49' 54.1" and longitude W 111° 55' 43.3". Located in S34 T6N R4E, in the Cave Creek 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on August 16, 2016.

DRAINAGE AREA – 6.6 mi²

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.15 feet gage height, levels of July 3, 2017. The PT is on the right side of the rightmost culvert.

There is one crest-stage gage at this site. The pin elevation is at 0.31 feet gage height and 2,285.310 feet NAVD88, levels of July 3, 2017.

There are no staff gages at this site.

ZERO GAGE HEIGHT – Zero gage height is defined as the concrete apron for the culverts. It is defined as 2,285.00 feet NAVD88, levels of October 10, 2016.

HISTORY – Gaging established on August 16, 2016. No previous gaging history at this location.

REFERENCE MARKS

BM-1 is a large FCDMC brass cap located on the top of the right side of the upstream headwall. It is at elevation 7.076 feet gage height, or 2,292.076 feet NAVD88, levels of July 3, 2017.

BM-20607 is a small FCDMC brass cap located near the station tube. It is at elevation 7.417 feet gage height, or 2,292.417 feet NAVD88, levels of July 3, 2017.

RM-1 is a chiseled 'X' on the upstream headwall near the center. It is at elevation 7.07 feet gage height and 2,292.07 feet NAVD88, levels of January 28, 2025.

RM-2 is a chiseled 'X' on the downstream headwall near the center. It is at elevation 6.29 feet gage height and 2,291.29 feet NAVD88, levels of January 28, 2025.

RM-3 is a chiseled 'X' on the downstream floor of the culvert between the second and third culvert from the right. It is at elevation -1.21 feet gage height and 2,283.79 feet NAVD88, levels of January 28, 2025.

CHANNEL AND CONTROL - The channel is natural upstream and downstream of Galloway Road. There is a set of 8 10-foot wide by 6-foot high culverts that allow flow to pass under Galloway Road. The culverts can pass the approximate 100-year flow of about 9,500 cfs.

The culverts are the control for flows in the wash. The road elevation of Galloway Road is at about 8.3 feet gage height, and flow will begin to flow across the road as a broad crested weir. There is a low dip in the road north of the wash that has a minimum elevation of about 7.2 feet gage height.

RATING - The current rating is Rating #2, dated March 10, 2025. The rating was developed using surveyed data in a HEC-RAS model of cross sections and culverts. The rating should be calibrated with indirect measurements to verify its reliability.

DISCHARGE MEASUREMENTS - 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 0.1 feet gage height, levels of October 12, 2016.

FLOODS – Largest event recorded occurred on August 23rd 2018 had a depth of 2.52 feet and 1,518 cubic feet per second of discharge.

REGULATION - Undetermined

DIVERSIONS - None known

ACCURACY - Poor

JUSTIFICATION - Monitor flows in this wash for unbridged road crossings downstream at School House Road and Spur Cross Road.

UPDATED - January 28, 2024
E.S. Thomas