

SKUNK TANK WASH
FCD GAGE ID# 64707

STATION DESCRIPTION

LOCATION - The gage is located about 1/4 mile south of Desert Hills Drive along 7th Avenue. Latitude 33° 50' 23.6" North; Longitude 112° 04' 58.1" West. Located in S29 T6N R3E, in the New River SE 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on March 2, 2006.

DRAINAGE AREA – 1.3 mi²

GAGE - The gage is a pressure transducer type instrument. The transducer diaphragm is at elevation 0.50 feet gage height, levels of February 7, 2019. The PT is located on the upstream (east) side of 7th Avenue.

There is one crest-stage gage at this site. It has a pin elevation of 0.80 feet gage height.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is defined as the bottom of the left upstream culvert. It is equivalent to 1,853.960 feet NAVD88, levels of February 26, 2020.

HISTORY – Gaging established on March 2, 2006. No previous gaging history at this location.

REFERENCE MARKS

BM-4885 is an FCDMC brass cap, located south of the station tube. It is at elevation 7.669 feet gage height and 1,861.629 feet NAVD88, levels of February 7, 2019.

RM-1 is a chiseled 'X' on top of the upstream headwall. It is at elevation 8.182 feet gage height and 1,862.142 feet NAVD88, levels of February 7, 2019.

RM-2 is a chiseled 'X' on top of the downstream headwall. It is at elevation 8.150 feet gage height and 1,862.110 feet NAVD88, levels of February 7, 2019.

RP-1 is a sign channel closest to the upstream headwall used in bank protection. It is at elevation 6.379 feet gage height, levels of February 7, 2019.

RP-2 is the top bolt on the right side of the transducer housing, securing the transducer housing. It is at elevation 1.157 feet gage height, levels of February 7, 2019.

CHANNEL AND CONTROL - The channel at the gage approaches the gaged culvert from the northeast. The channel is forced at an angle through the culvert and under 7th Avenue. It then discharges back to the natural channel configuration downstream of 7th Avenue.

The control for the gage is the two-barrel culvert. Gaging is on the upstream side of the culvert. The culverts are identical 5-foot diameter corrugated steel pipes. Both culverts have invert elevation of 0.00 feet gage height. The culverts are 54 feet in length. There appears to be positive slope on the culverts. The invert of the left culvert downstream is 0.12 feet gage height, and the invert of the right culvert downstream is 0.36 feet gage height, levels of February 7, 2019.

RATING - The current rating is Rating #2, dated October 1, 2019. The rating was developed from surveyed data collected in February 2020 and used in an HEC-RAS model of the culvert and cross sections.

DISCHARGE MEASUREMENTS - Direct measurements could be made in the natural wash downstream from the culvert.

POINT OF ZERO FLOW - The PZF is at about 0.2 feet gage height at the downstream left culvert invert.

FLOODS – The peak flood of record is 1,278 cfs, at 7.63 feet gage height, occurred on July 23, 2021.

REGULATION - None known.

DIVERSIONS - None known

ACCURACY - Fair

JUSTIFICATION - Monitor flows in support of the Desert Hills flood warning plan, and to know inflow into Skunk Creek.

UPDATED - January 10, 2024
D E Gardner