

SALT RIVER AT 67TH AVENUE
FCD GAGE ID# 5807

STATION DESCRIPTION

LOCATION - The gage is located on 67th Ave and the Salt River, south of Southern Avenue. Latitude 33° 23' 51.1" North; Longitude 112° 12' 12.6" West. Located in S30 T1N R2E, in the Fowler 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed July 14, 2008.

DRAINAGE AREA – 13,430 mi², via USGS Streamstats.

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height -0.35 feet gage height, levels of August 7, 2008. The PT is located on the east side of 67th Avenue.

There is a status sensor located near the PT. It is at elevation 4.1 feet gage height, levels of August 7, 2008.

There is no crest-stage gage at this site.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is the invert of the rightmost culvert on the upstream side of 67th Avenue. It is equivalent to 975.214 feet NAVD88.

HISTORY – Gaging established on July 14, 2008. No previous gaging history at this location.

REFERENCE MARKS

BM-50058 is an FCDMC brass cap located on the top of the upstream headwall of the low-flow culverts. It is at elevation 5.096 feet gage height and 980.203 feet NAVD88, levels of March 17, 2016.

RP-1 is a chiseled 'X' on the left upstream corner of the culvert headwall. Elevation 5.080 feet gage height, levels of March 17, 2016.

RP-2 is the elevation of the top of the status sensor. It is at elevation 4.210 feet gage height, levels of March 17, 2016.

CHANNEL AND CONTROL - The low flow control for this gage is the culverts under 67th Avenue. Once the water level crosses 67th Avenue, the main channel begins to be the control.

There are 4 culverts which are 48-inch reinforced concrete pipe and approximately 62 feet in length.

RATING - The current rating is Rating #1, dated July 14, 2008. The rating was developed from survey data collected from the culverts and the road crossing. The culverts were analyzed using HY-8 program. Flow over the road was estimated from a Manning computation.

DISCHARGE MEASUREMENTS - Direct measurements would be possible in the channel downstream at low flows.

POINT OF ZERO FLOW - The PZF is at about 0.0 feet gage height.

FLOODS – Runoff of about 17,800 cfs and 9.5 feet gage height occurred on January 22, 2010.

REGULATION – Water is regulated by six major SRP dams upstream on both the Salt and Verde Rivers.

DIVERSIONS – Water is diverted to canals on the north and south side of the river about 30 miles upstream.

ACCURACY - Fair

JUSTIFICATION – Monitor flow in the river for MCDOT to manage low-flow road closures.

UPDATED - December 9, 2020
D E Gardner