

**SALT RIVER NEAR VAL VISTA DRIVE
FCD GAGE ID# 39507**

STATION DESCRIPTION

LOCATION - The gage is located on the left (south) bank of the Salt River about 2,000 west of Val Vista Road alignment. Latitude 33° 29' 04.3" North; Longitude 111° 45' 40.2" West. Located in S29 T2N R6E, in the Mesa 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed April 13, 2011.

DRAINAGE AREA – 12,580 square miles from USGS Streamstats.

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.50 feet gage height, levels of February 12, 2019. The PT station is located on the left bank of the river downhill from the station standpipe.

There is no crest-stage gage at this site.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is defined to be 1,240.000 feet NAVD88. It is a point 31.790 feet below the benchmark at this location.

HISTORY – Gaging established on April 13, 2011.

REFERENCE MARKS –

BM-4548 is an FCDMC brass cap located on top of the south bank, just east of the station tube. It is at elevation 31.790 feet gage height and 1,271.790 feet NAVD88, levels of February 12, 2019.

RP-1 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 95 feet south of the transducer gage itself. It is at elevation 22.338 feet gage height and 1,262.338 feet NAVD88, levels of February 12, 2019.

RP-2 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 85 feet south of the transducer gage itself. It is at elevation 18.411 feet gage height and 1,258.411 feet NAVD88, levels of February 12, 2019.

RP-3 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 79 feet south of the transducer gage itself. It is at elevation 15.804 feet gage height and 1,255.804 feet NAVD88, levels of February 12, 2019.

RP-4 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 31 feet south of the transducer gage itself. It is at elevation 10.208 feet gage height and 1,250.208 feet NAVD88, levels of February 12, 2019.

RP-5 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 24 feet south of the transducer gage itself. It is at elevation 7.730 feet gage height and 1,247.730 feet NAVD88, levels of February 12, 2019.

RP-6 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 15 feet south of the transducer gage itself. It is at elevation 4.732 feet gage height and 1,244.732 feet NAVD88, levels of February 12, 2019.

RP-7 is the top of the white painted sign channel to which the PT conduit is attached. It is located about 7 feet south of the transducer gage itself. It is at elevation 2.942 feet gage height and 1,242.878 feet NAVD88, levels of February 12, 2019.

RP-8 is the top of the upstream white painted sign channel at the transducer gage. It is at elevation 2.438 feet gage height and 1,242.438 feet NAVD88, levels of February 12, 2019.

CHANNEL AND CONTROL - The control for this gage is the main channel.

RATING - The current rating is Rating #2, dated July 28, 2023. The rating was derived by adapting Rating #1 with runoff data procured from SRP. Comparing the measured gage height to the discharge of the upstream Granite reef dam to calibrate the discharges determined from Rating #1. Rating 2 replaces Rating 1 for all the gage record back to installation.

DISCHARGE MEASUREMENTS – Direct measurements are not possible at this location. Indirect measurements are possible up and downstream of the gage cross section.

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

FLOODS – The largest event since installation occurred from March to May 2023, with a peak stage of 14.13 feet and discharge of 32,333 cfs. Higher flows have occurred historically.

REGULATION – Several dams upstream regulate flow in the Salt River and Verde River.

DIVERSIONS – Granite Reef Diversion structure diverts water to canals on the north and south sides of the river for irrigation and domestic purposes.

ACCURACY – Fair at lower levels to about 15 feet, and poor at higher stages, because the main channel begins to spill into overbanks in an unorganized manner.

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

UPDATED - January 24, 2024
DE Gardner