

**SALT RIVER NEAR BELOW GRANITE REEF  
FCD GAGE ID# 75307**

**STATION DESCRIPTION**

**LOCATION** - The gage is located on the right (north) bank of the Salt River about ½ mile downstream from Granite Reef Diversion structure. Latitude 33° 30' 53.0" North; Longitude 111° 41' 56.4" West. Located in S13 T2N R6E, in the Granite Reef Dam 7.5-minute quadrangle.

**ESTABLISHMENT** - The gage was installed April 2, 2012.

**DRAINAGE AREA** – 12,919 square miles, from USGS Streamstats.

**GAGE** - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 6.94 feet gage height, levels of October 26, 2023. The PT station is located on the right bank of the river.

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 as an elevation 4.25 feet below the pressure transducer from the survey of February 8, 2017. The zero elevation is located somewhere in or below the ground level, under water in the mostly permanent pond that exists at the gage site. Zero gage height is defined as 1,276.000 feet NAVD88.

**HISTORY** – Gaging established on April 2, 2012. No known previous gaging history at this location. Elevations updated based on survey of February 8, 2017. Transducer gage conduit was replaced with the elevation changed slightly in late 2017.

**REFERENCE MARKS**

BM-4583 is an FCDMC brass cap located on top of the right bank at the Arizona Canal service road. It is at elevation 48.690 feet gage height, and 1,324.690 feet NAVD88, levels of March 1, 2018.

RM-1 is an SRP brass cap located about 30 feet east of the station tube located below the top of the right bank. It is at elevation 22.928 feet gage height, and 1,298.928 feet NAVD88, levels of March 1, 2018.

RM-2 is a rebar located shoreward from the station tube. It is at elevation 24.755 feet gage height and 1,300.755 feet NAVD88, levels of March 1, 2018.

RP-1 is a white paint spot on top of a large granite outcrop about 80 feet streamward from the station tube. It is at elevation 17.359 feet gage height and 1,293.359 feet NAVD88, levels of March 1, 2018.

RP-2 is a white paint spot on the top of a rock outcrop about 25 feet southwest of the station tube. It is at elevation 16.235 feet gage height and 1,292.235 feet NAVD88, levels of March 1, 2018.

**CHANNEL AND CONTROL** - The control for this gage is the main channel. Lower flows are contained in the narrow main channel to about 10 feet gage height. Above that, the wide left over bank begins to convey water. The full width of the channel flows at levels above about 20 - 25 feet gage height.

**RATING** - The current rating is Rating #2, dated July 28, 2023. The rating was created by calibrating rating #1 with discharge data and measured gage height from the immediately upstream SRP dam release.

**DISCHARGE MEASUREMENTS** – Direct measurements are not possible at this location. Indirect measurements are possible in a suitable reach downstream of the gage.

**POINT OF ZERO FLOW** - The PZF has not been determined. There appears to some base flow or base water level from perched ground water and tail water flow from this diversion dam at this location.

**FLOODS** – Several small runoff events have occurred since installation. The largest to date occurred on March to May , 2023, with a peak stage of 19.25 feet and discharge of 32,500 cfs.

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

**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 to good

**JUSTIFICATION** – Monitor flow in the river for MCDOT to manage low-flow road closures, and provide inflow information to Tempe Town Lake.

**UPDATED** -                July 28, 2023  
                                      ES Thomas