

# Twin Buttes Wash FCD Gage ID# 73207

## Station Description

**LOCATION** - The station is located about 2 miles northwest of the Loop 303 on Vistancia Blvd. Latitude 33.73843°; Longitude -112.31956°. Located in S25 T5N R1W, in the Calderwood Butte 7.5-minute quadrangle.

**ESTABLISHMENT** - The gage was installed October 1, 2015, however stream data was not consistently received until December 9, 2015.

**DRAINAGE AREA** - 7.1 mi<sup>2</sup> via UGSG Streamstats.

**GAGE** - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.75 feet, levels of January 13, 2016.

There is one crest gage at this location, and it is near the transducer gage. It has a pin at elevation 0.92 feet gage height, levels of September 25, 2018.

There is no staff gage at this location.

**ZERO GAGE HEIGHT** - Zero gage height is defined as 1,346.268 feet NAVD88, levels of September 25, 2018.

**HISTORY** - Gaging established on October 1, 2015. However, due to radio issues for the wireless PT transmitter, no data are available prior to December 9, 2015. No previous gaging history at this location.

### **REFERENCE MARKS -**

BM-50732 is an FCDMC brass cap located downslope from the station tube. It is at elevation 14.972 feet gage height and 1,361.240 feet NAVD88, levels of September 25, 2018.

RM-1 is a 3/8-inch rebar about 30 feet streamward from the BM and station tube. It is at elevation 13.778 feet gage height, or 1,360.046 feet NAVD88, levels of September 25, 2018.

RM-2 is a rebar in the same vicinity as the BM and RM-1. It is at elevation 13.715 feet gage height and 1,359.983 feet NAVD88, levels of September 25, 2018.

RM-3 is a rebar on the left bank about 25 feet shoreward from the transducer gage pier. It is at elevation 6.931 feet gage height and 1,353.199 feet NAVD88, levels of September 25, 2018.

RP-1 is a rebar on the left bank in the gage cross section. It is at elevation 8.996 feet gage height and 1,355.264 feet NAVD88, levels of September 25, 2018.

RP-2 is a rebar on the right bank in the gage cross section. It is at elevation 7.535 feet gage height and 1,353.803 feet NAVD88, levels of September 25, 2018.

RP-3 (renamed from RP-1) is the top of the junction box at the PT. It is at elevation 2.393 feet gage height, levels of September 25, 2018.

**CHANNEL AND CONTROL** - The channel approaches Vistancia Blvd from the northwest, and then turns in a more southerly direction at the Vistancia bridge.

The control for the gage is not defined at low flows. The channel is the control at most stages.

**RATING** - The current rating is Rating #1, dated December 9, 2015. The rating was developed from a HEC-RAS multi cross section survey. Data were input to create a model for analysis.

**DISCHARGE MEASUREMENTS** - Direct measurements would be difficult at all but the lowest flows. Indirect measurements may be able to be taken downstream in a suitable section that has not yet been identified.

**POINT OF ZERO FLOW** - The PZF is at approximately 0.2 feet gage height, levels of January 13, 2016.

**FLOODS** - The maximum flood recorded since installation is 714 cfs at 3.93 feet gage height on August 12, 2018.

**REGULATION** - None known.

**DIVERSIONS** - None known.

**ACCURACY** - Fair

**JUSTIFICATION** - Monitor flows in Twin Buttes Wash in support of the city of Peoria flood warning plan.

**UPDATED** - January 8, 2019  
D E Gardner