

Blue Tank Wash FCD Gage ID# 52707

Station Description

LOCATION - The station is located about 3.3 miles northeast of the Town of Wickenburg, about 1,000 feet downstream of the Blue Tank Road crossing about 1.2 miles north of Constellation Road. Latitude 34.00753°; Longitude - 112.6966°. Located in S29 T8N R4W, in the Sam Powell Peak 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed May 29, 2019.

DRAINAGE AREA - 9.3 mi² via UGSG Streamstats.

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at 1.10 feet gage height, levels of June 20, 2019.

There is no crest gage at this location.

There is no staff gage at this location.

ZERO GAGE HEIGHT - Zero gage height is defined as 2,436.284 feet NAVD88, levels of June 20, 2019.

HISTORY - Gaging established on May 29, 2019. No previous gaging history at this location.

REFERENCE MARKS -

BM-50527 is an FCDMC brass cap located about 12 feet downstream of the transducer gage on the right bank. It is at elevation 4.095 feet gage height and 2,440.379 feet NAVD88, levels of June 20, 2019.

RM-1 is a chiseled 'X' on the rock directly above the transducer conduit and pull box. It is at elevation 2.418 feet gage height and 2,438.702 feet NAVD88, levels of June 20, 2019.

RM-2 is a chiseled 'X' on the rock downstream of the transducer on the right bank near to the BM. It is at elevation 2.651 feet gage height and 2,438.935 feet NAVD88, levels of June 20, 2019.

RM-3 is a chiseled 'X' on a rock on the left side of the main channel about 90 feet downstream from the gage cross section. It is at elevation -0.413 feet gage height and 2,435.871 feet NAVD88, levels of June 20, 2019.

RM-4 is a chiseled 'X' on a rock on the right side in the main channel about 60 feet upstream. It is at elevation 3.696 feet gage height and 2,439.980 feet NAVD88, levels of June 20, 2019.

RP-1 is a white paint spot on the left bank in the gage cross section. It is at elevation 7.079 feet gage height, levels of June 20, 2019.

RP-2 is a white paint spot on the right bank in the gage cross section. It is at elevation 7.937 feet gage height, levels of June 20, 2019.

RP-3 is the top upstream bolt securing the transducer conduit housing. It is at elevation 1.949 feet gage height, levels of June 20, 2019.

CHANNEL AND CONTROL - The channel is a natural sand channel that varies from having wide overbanks on the right bank or left bank, with little or no overbank on the opposite bank. It contracts to its narrowest width at the gage cross section where the top width is approximately 65 feet.

The width contraction at the gage is the control for flows greater than a foot in stage. Below this there is no natural or man-made control.

RATING - The current rating is Rating #1, dated May 29, 2019. The rating was developed from a HEC-RAS multi cross section survey. Data were input to create a model for analysis. Rating Updated in 2024 based on cross sections taken in the same year.

DISCHARGE MEASUREMENTS - Direct measurements would be difficult due to the distance from the office and accessibility during flow since access to the gage is through the wash. A suitable indirect measurement reach has not yet been identified.

POINT OF ZERO FLOW - The PZF is at approximately 0.3 feet gage height, levels of June 20, 2019.

FLOODS - No flows have been recorded since installation.

REGULATION - None known.

DIVERSIONS - None known.

ACCURACY - Fair

JUSTIFICATION - Monitor flows in Blue Tank Wash for road crossing downstream.

UPDATED - June 24, 2019

D E Gardner