

**BENDER WASH
FCD GAGE ID# 40507**

STATION DESCRIPTION

LOCATION - The gage is located approximately eight miles east of Gila Bend along I-8. Latitude 32° 54' 22.9" North; Longitude 112° 33' 11.1" West. Located in S15 T6S R3W, in the Bosque 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on May 12, 2004. The gage at the new location was installed on May 22, 2017.

DRAINAGE AREA – Approximately 69.5 mi²

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 1.20 feet gage height, levels of January 4, 2018.

There are two crest gages.

There is an FCDMC crest gage located about 50 feet downstream from the station. It is on the left bank. The pin is at elevation 0.44 feet gage height and 1,200.646 feet NAVD88, levels of January 4, 2018.

There is a USGS crest gage. It is located about 330 feet upstream from the FCDMC station. The pin is at elevation 4.13 feet gage height, levels of January 4, 2018.

There are no staff gages at this site.

ZERO GAGE HEIGHT – Zero gage height is equivalent to 1,200.205 feet NAVD88.

HISTORY – Gaging established by the USGS on September 7, 1963 at a location about 0.65 miles downstream. Gage moved to present site on August 26, 1966. Gage discontinued from October 1, 1979 to October 31, 1990. Reactivated on October 31, 1990. District established an ALERT gage at the location on May 12, 2004. Station was removed for construction activities in October 6, 2015. The station was re-installed on May 23, 2017. All previous gaging and references were destroyed with the exception of BM-6963. An FCDMC crest gage was installed in October 2017.

REFERENCE MARKS

BM-6963 is an FCD brass cap located about 420 east (upstream) of the pressure transducer. It is located on a flat surface along the rock face of the left bank. It is at elevation 9.535 feet gage height and 1,209.740 feet NAVD88, levels of January 4, 2018.

It had previously been at 7.252 feet gage height in the old gage datum, levels of October 7, 2015.

RM-1 is a rebar, painted white, set south of the station about 40 feet. It is at elevation 10.840 feet gage height and 1,211.045 feet NAVD88, levels of January 4, 2018.

RM-2 is a rebar, painted white, set atop the left (south) bank about 60 feet upstream (east) of the station. It is at elevation 9.117 feet gage height and 1,209.322 feet NAVD88, levels of January 4, 2018.

RM-3 is a rebar on the left bank, about 110 feet upstream (south) of the station tube. It stands about 1 foot above ground level. It is at elevation 13.296 feet gage height and 1,213.501 feet NAVD88, levels of January 4, 2018.

RP-1 is the top of the right bolt holding the PT conduit near the bottom of the conduit run. It is at elevation 1.659 feet gage height and 1,201.864 feet NAVD88, levels of January 4, 2018.

RP-2 is the top of a flat granite rock on the left bank, about 60 feet upstream from RP-1. It is about 10 feet stream-ward and in line with RM-2. It is at elevation 4.783 feet gage height and 1,204.988 feet NAVD88, levels of January 4, 2018.

RP-3 is a bolt in the rock about 5 feet downstream from the USGS crest-stage gage. It is at elevation 7.185 feet gage height and 1,207.390 feet NAVD88, levels of January 4, 2018.

RP-4 is a bolt in the rock about 5 feet upstream from the USGS crest-stage gage. It is at elevation 7.596 feet gage height and 1,207.801 feet NAVD88, levels of January 4, 2018

CHANNEL AND CONTROL - The sand and bedrock channel at the gage is straight and constricted by a steep bedrock/caliche outcrop on left bank and freeway embankment on the right bank. The control is not currently defined and is subject to shift during flows in the next several years until the channel re positions itself following construction activities which altered the channel bottom.

RATING - The current rating is rating #5 based on survey preformed on July 23, 2024.

DISCHARGE MEASUREMENTS - Direct measurements would be difficult to obtain due to time to reach site from the office and would also be difficult because of access to the channel during times of flow. Indirect measurements could be obtained in the channel reach.

POINT OF ZERO FLOW – The PZF is at about 0.5 feet gage height, near the transducer, levels of January 4, 2018.

FLOODS – The largest runoff recorded by the FCDMC gage occurred on July 21, 2013 with a peak discharge of 2,490 cfs at 7.10 feet stage. The USGS recorded a peak flood of 10.78 feet gage height and 8,250 cfs on September 7, 2002.

REGULATION - None known

DIVERSIONS - None known

ACCURACY -Fair

JUSTIFICATION - Monitor flows in the wash for early notification to the town of Gila Bend.

UPDATED - December 19, 2023
ES Thomas