INDIAN BEND WASH INTERCEPTOR CHANNEL
FCD GAGE ID# 56807 (4623)

STATION DESCRIPTION

LOCATION – The gage site is located along the IBW Interceptor Channel, which is located approximately 1/4 mile south of Indian Bend Road and 1/4 mile west of Pima Road in Scottsdale. The gage is located on the left bank of the channel. Latitude N 33° 31' 59.6"; Longitude W 111° 53' 52.5". Located in the SW1/4 NE1/4 S12 T2N R4E, in the Paradise Valley 7.5-minute quadrangle.

ESTABLISHMENT – Gaging was established on April 21, 1994

DRAINAGE AREA – about 35 mi^2

GAGE – The gage is a pressure transducer type instrument. The PT is at 0.00 feet gage height, levels of March 5, 2019.

There is one staff gage at this site. It is located with the PT and crest gage. The staff gage displays data in gage height, levels of March 5, 2019.

There is one crest stage gage at this location. The pin elevation is at 0.28 feet gage height, levels of March 5, 2019.

ZERO GAGE HEIGHT – Zero gage height is defined as 0.00 on the staff gage. It is equivalent to 1,271.457 feet NAVD88, levels of March 5, 2019.

HISTORY – The District established gaging at this location on April 21, 1994. The gage was removed for golf course construction on June 16, 1999. The gage was reestablished in a low flow part of the channel on January 11, 2000. Datum changed for the new gage. Since the previous references for the old datum were no longer in existence, the difference in the datum is unknown.

REFERENCE MARKS –

BM-INTCPTR is an FCDMC brass cap located near the gage house and along the left side of the golf cart path. The BM was established in November 2000. Elevation 11.363 feet gage height and 1,282.820 feet NAVD88, levels of March 5, 2019.

RM-1 is a rebar on top of the left bank about 100 feet downstream of the station. It is at elevation 10.963 feet gage height and 1,282.420 feet NAVD88, levels of March 5, 2019.

RM-2 is a chiseled 'X' on the curbing along the golf cart path on the streamward side of the path. It is at elevation 10.077 feet gage height and 1,281.534 feet NAVD88, levels of March 5, 2019.

RP-1 is the top of the staff gage post. It is at elevation 5.405 feet gage height, levels of March 5, 2019.

RP-2 is a chiseled 'X' on the downstream side at the middle of the curbing on the golf cart path bridge just upstream of the gage cross section. It is at elevation 0.902 feet gage height, levels of March 5, 2019.

RP-3 is the lower bolt on the upstream side of the staff gage. It is at elevation 1.393 feet gage height, levels of March 5, 2019.

CHANNEL AND CONTROL – The channel upstream and downstream of the gage is contoured into a golf course. For lower flows, a low flow channel exists and is the control for flows under approximately 1,000 cfs. A transition point exists when the low flow channel has reached capacity but the main channel is not yet completely covered. The main channel is the control for higher flows outside of the low flow channel. However, because of the contours of the golf course with greens and rolling hills, the channel is not truly in control until the flow is at least one foot higher than the highest putting green that is in the gage cross section.

RATING – The current rating is Rating #3. It was developed using surveyed cross sections from late 2018. They were used to develop an HEC-RAS model for analysis.

DISCHARGE MEASUREMENTS – Low flow measurements could be taken directly in the low flow channel, golf course operators permitting. Indirect measurements of higher discharges could be taken, again with permission of the golf course operator.

POINT OF ZERO FLOW – The PZF at the gage is at –0.7 feet gage height, about 25 feet downstream of the gage cross section.

FLOODS – A discharge of approximately 480 cfs and 3.35 feet gage height, occurred on August 24, 2006. Runoff of 269 cfs and 2.50 feet gage height, occurred on August 3, 2005. Runoff of 223 cfs and 2.25 feet gage height, occurred on February 14, 2003.

REGULATION – None known

DIVERSIONS – There are some small lakes throughout the golf course that hold some quantity of water.

ACCURACY – Fair

JUSTIFICATION – Monitor inflows into the Indian Bend Wash system for the Scottsdale flood warning project. Floods impact unbridged crossings of the wash downstream, and impact recreational users of the channel also.

UPDATE - July 29, 2019
DE Gardner