

CENTENNIAL WASH NEAR AGUILA
FCD GAGE ID# 29007

STATION DESCRIPTION

LOCATION – The gage site is located approximately 4 miles east of State Route 71 and about 2.5 miles north of US60 along the Arizona and California Railroad. The gaging equipment is located on the south side of the channel by the railroad tracks. Latitude N 33° 58' 2.1", Longitude W 113° 04' 8.7". Located in S11 T7N R8W in the Forepaugh Peak 7.5-minute quadrangle.

ESTABLISHMENT – The District established gaging on June 5, 2001.

DRAINAGE AREA – 93.4 square miles.

GAGE – The recording gage is a pressure transducer type instrument. The PT is located on the south side of the channel. The PT is at elevation 0.0 feet gage height, levels of September 20, 2018.

There is one crest gage at this location. It has a pin elevation of 0.17 feet gage height, levels of September 20, 2018.

There is no staff gage at this location.

ZERO GAGE HEIGHT – The zero gage height is arbitrarily defined as the elevation of the pressure transducer diaphragm at the time of its initial installation. Zero elevation is 2,272.842 feet NAVD 1988.

HISTORY – No previous gaging or history at this location.

REFERENCE MARKS –

BM-50290 is an FCDMC brass cap located about 30 feet north of the station tube on the south side of the fence. It is at elevation 3.084 feet gage height and 2,275.926 feet NAVD88, levels of September 20, 2018

RM-CNTTRIB is an FCD brass cap located near the edge of the stock tank. Elevation 2,275.882 feet NAVD 1988, or 3.040 feet gage height, levels of September 20, 2018. Northing 1081365.45 feet; Easting 350543.006 feet. Monument was established on June 5, 2001.

RM-XS2RB is the right bank stake across from the gage on top of the stock pond embankment. It is at elevation 11.702 feet gage height and 2,284.544 feet NAVD88, levels of September 20, 2018.

RM-XS2LB stake located near the gage standpipe. Elevation 5.268 feet gage height and 2,278.110 feet NAVD88, levels of September 20, 2018.

RP-1 is the most shoreward stake securing the transducer gage on the left bank. It is at elevation 2.038 feet gage height, levels of September 20, 2018.

RP-2 is a rebar located near the BM-50290 brass cap. It is at elevation 3.466 feet gage height, levels of September 20, 2018.

RP-3 is a rebar located near the BM-CNTTIRB brass cap. It is at elevation 3.396 feet gage height, levels of September 20, 2018.

There are three monumented cross sections in the gage reach.

Cross section one is located about 175 feet upstream from the gage. XS1LB is a stake 2,280.581 feet. XS1RB is a stake with elevation 2,284.914 feet.

Cross section two is located at the gage. XS2LB is a stake at elevation 2,277.992 feet. XS2RB is a stake at elevation 2,284.576 feet.

Cross section three is located about 175 feet downstream from cross section two. XS3LB is a stake at elevation 2,278.731 feet. XS3RB is a stake at elevation 2,279.823 feet.

CHANNEL AND CONTROL – The channel is likely a constructed channel to provide protection to the railroad from the broad, flat Centennial Wash drainage from the northeast. The channel bottom is somewhat hard and bumpy. The channel has significant vegetation throughout. The channel is fairly uniform in width and depth with a general trapezoidal shape.

There is no permanent control at low stages. The channel is the control above about one foot depth. The railroad provides a sturdier more defined and higher bank on the south side of the channel than on the north (right) bank.

RATING – The current rating is Rating #2, developed from an HEC-RAS model using surveyed data from the January 11, 2021 survey. The rating takes into account a breach in the levee channel causing most flow to discharge into a channel that parallels the right bank levee.

DISCHARGE MEASUREMENTS – Direct measurements may be difficult. Access to the gage site may be a bit precarious during and immediately following events. The access

roads pass through many smaller channels that would have flooded and may be impassable until some drying occurs. Indirect measurements are possible in the three cross section reach, previously described.

POINT OF ZERO FLOW – Is at about -0.5 feet gage height, levels of September 20, 2018.

FLOODS – The peak discharge of record was 606 cfs at 3.37 feet gage height, recorded on January 21, 2010..

REGULATION – There are several stock ponds upstream

DIVERSIONS – None known

ACCURACY – Fair

JUSTIFICATION – Monitor flows in this tributary to Centennial Wash for early warning to Aguila and Wenden.

UPDATE – January 09, 2023
 E.S. Thomas