

NEW RIVER AT SR303L FCDMC GAGE ID# 62213

STATION DESCRIPTION

LOCATION – The station is located at the Loop 303 freeway crossing of Deadman Wash, about three miles west of I-17. Latitude 33.78128°; Longitude -112.19381°. Located in S14 T5N R1E, in the Biscuit Flat 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed and functional as of December 12, 2019.

DRAINAGE AREA – 122.2 mi² via UGSG Streamstats.

GAGE - The gage is a RADAR type instrument. The radar sensor is installed above the channel at elevation 23.76 feet gage height, levels of December 17, 2019.

There is one crest-stage gage located on the streamward side of the upstream pier 3 of the westbound bridge. It has pin elevation of 4.31 feet gage height, levels of December 17, 2019.

There is no staff gage at this location.

ZERO GAGE HEIGHT – Zero gage height is defined as 1,490.000 feet NAVD88, levels of September 5, 2019.

HISTORY – Gaging established on December 12, 2019. No previous gaging history at this location.

REFERENCE MARKS -

BM-62217 is an FCDMC brass cap located on top of the right bank just downstream of the eastbound freeway lanes. It is at elevation 14.950 feet gage height and 1,504.950 feet NAVD88, levels of September 5, 2019.

RM-1 is a rebar located near the benchmark. It is at elevation 15.966 feet gage height and 1,505.966 feet NAVD88, levels of September 5, 2019.

RP-1 is a rebar located about 50 feet upstream of pier 4 of the westbound bridge. It is at elevation 4.973 feet gage height and 1,494.973 feet NAVD88, levels of September 5, 2019.

RP-2 is a rebar located about 25 feet right of the upstream pier 4 of the eastbound bridge. It is at elevation 4.342 feet gage height, levels of September 5, 2019.

RP-3 is a bolt in the upstream pier 4 of the westbound bridge. It is at 4.770 feet gage height, levels of December 17, 2019.

CHANNEL AND CONTROL – The channel is control at all flows. The channel has two ‘main’ low-flow channels that carry flow independently below about four feet gage height. Above this elevation, the full main channel conveys water. Full channel flow begins above about 5 feet gage height.

RATING - The current rating is Rating #1, dated December 12, 2019. 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 have to be evaluated during an event. Indirect measurements are best done in the channel upstream from the bridge.

POINT OF ZERO FLOW - The PZF is at approximately 2.0 feet gage height, levels of March 20, 2019.

FLOODS – The largest event recorded occurred on March 13th, 2020. Measuring 4.81 feet gage height or 3,107 cfs. The largest known event occurred around august 19th 2014 and projected to have a flow of approximately 46,000 cfs.

REGULATION – None known.

DIVERSIONS - None known.

ACCURACY - Fair

JUSTIFICATION – Monitor flows into New River Dam.

UPDATED - December 18, 2019
D E Gardner