DEADMAN WASH AT SR303L FCDMC GAGE ID# 62107

STATION DESCRIPTION

<u>LOCATION</u> – 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 S18 T5N R2E, in the Biscuit Flat 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed September 5, 2019.

DRAINAGE AREA – 20.1 mi² via UGSG Streamstats.

<u>GAGE</u> - The gage is a pressure transducer type instrument. The PT diaphragm is at 0.80 feet gage height, levels of September 5, 2019.

There is one crest gage at this location. Located on the same pier as the PT at an elevation of 0.33 feet gage height.

There is no staff gage at this location.

ZERO GAGE HEIGHT – Zero gage height is defined as 1,533.000 feet NAVD88, levels of September 5, 2019.

<u>HISTORY</u> – Gaging established on October 17, 2019. No previous gaging history at this location.

REFERENCE MARKS -

BM-62213 is an FCDMC brass cap located about 90 feet downstream of the southeast corner of the eastbound bridge. It is at elevation 4.537 feet gage height and 1,537.537 feet NAVD88, levels of September 5, 2019.

RM-1 is a rebar located near the benchmark. It is at elevation 4.917 feet gage height and 1,537.917 feet NAVD88, levels of September 5, 2019.

RM-2 is a rebar located about 90 feet downstream of the southwest corner of the eastbound bridge. It is at elevation 1.231 feet gage height and 1,534.231 feet NAVD88, levels of September 5, 2019.

RP-1 is the lower bolt on the upstream side of the transducer gage. It is at elevation 1.623 feet gage height, levels of September 5, 2019.

<u>CHANNEL AND CONTROL</u> – The channel is somewhat ill-defined at the bridge crossing, though the bridge abutments will contain the water within that area. About 75 feet downstream of the eastbound bridge, the natural channel resumes with a severe elevation drop to the natural channel bottom. The channel at this point heading downstream is narrow with steep side slopes.

The control for the gage cross section is a natural low point at the particular bridge pier to which the transducer gage is attached. The width contraction at the gage is the control for flows greater than a foot in stage. Below this there is no natural or manmade control.

RATING - The current rating is Rating #1, dated September 5, 2019. The rating was developed from a HEC-RAS multi cross section survey. Data were input to create a model for analysis.

<u>DISCHARGE MEASUREMENTS</u> – Direct measurements would have to be evaluated during an event. Indirect measurements are best done in the channel downstream from the bridge.

POINT OF ZERO FLOW - The PZF is at approximately 0.0 feet gage height, levels of March 20, 2019.

FLOODS – The largest event recorded occurred on September 1st, 2023. The measured gage height was 3.28 feet and 3,607 cfs.

REGULATION – None known.

DIVERSIONS - None known.

ACCURACY - Fair

<u>JUSTIFICATION</u> – Monitor flows into New River Dam.

<u>UPDATED</u> - January 10, 2024 E.S. Thomas