

**HASSAYAMPA RIVER NEAR MORRISTOWN
FCD GAGE ID# 45507 (5223)**

STATION DESCRIPTION

LOCATION – The gage is located about three miles northwest of Morristown and about 6 miles south of Wickenburg. Gaging equipment is located on the left bank side of a small hill just off of US60. Latitude N 33° 53' 05.6", Longitude W 112° 39' 42.1". Located in the SW1/4 SE1/4 S03 T6N R4W in the Wickenburg 7.5-minute quadrangle.

ESTABLISHMENT – Gaging was established on May 7, 1996. The USGS has operated a gaging station at this location since 1938.

DRAINAGE AREA – The drainage area is about 796 mi².

GAGE – The gage is a pressure transducer type instrument. The transducer diaphragm is at elevation 7.25 feet gage height, levels of February 21, 2018.

There is no crest gage at this location.

There are two staff gages at this location, one inside, and one outside of the stilling well. Both read in gage height and are ranged from 0.00 to 23.70 feet.

ZERO GAGE HEIGHT – Is defined as 0.00 feet on the staff gages. It is equivalent to 1,832.621 feet NAVD88, levels of February 21, 2018.

HISTORY – The USGS operated a continuous recording station from October 1938 to June 1947. Partial recording station 1954, 1956, 1964 to 1981, (annual maximums). October 1981 to September 1991 (flow above 500 cfs only.) Continuous recording station October 1991 to present. District installed gaging in May 1996. A reach is setup for determining channel changes from large events.

REFERENCE MARKS –

BM-1 is a brass cap cemented at base of bedrock cliff, 19 feet upstream from gage, elevation 8.292 feet gage height, levels of July 27, 1999. It was not found during the 2018 survey because it was under at least 7 feet of sediment.

BM-2 is a brass cap cemented at base of rock cliff of the left bank, 51.5 feet upstream from gage, elevation 8.760 feet gage height and 1,841.381 feet NAVD88, levels of February 21, 2018. It was dug out, but found to be about 3 feet below the sediment that accumulated.

RM-3 is a brass cap cemented in bedrock approximately six feet downstream from gage on left bank, about 6 feet above channel bottom. Elevation 13.138 feet gage height and 1,845.759 feet NAVD88, levels of February 21, 2018.

RP-1 is top of top bolt at add-on section of gage well, 3 inches to right of old outside backing board upstream side of well. It is at elevation 10.432 feet gage height, levels of February 21, 2018.

RP-2 is a rebar in the center of the channel under the cableway. It is at station 0+97 of the cableway. It is at elevation 7.291 feet gage height and 1,839.913 feet NAVD88, levels of February 21, 2018. It is unlikely this reference will survive significant flows intact.

RP-3 is the top of the red rock in near RP-2 at about station 1+00 of the cableway. It is at elevation 7.655 feet gage height and 1,840.276 feet NAVD88, levels of February 21, 2018. It is unknown whether this reference will remain as well as it doesn't seem visible in previous photos since 2000.

CHANNEL AND CONTROL – The channel is an approximately 200-foot wide sand channel that is subject to considerable shifting at all stages. Shifting sediment tends to isolate the gage from flow at low stages.

RATING – The USGS maintains ratings at this location. The current rating is USGS rating #6.

DISCHARGE MEASUREMENTS – Direct measurements can be obtained by wading at low flows or by use of cableway at high flows. Indirect measurements are possible in the channel change reach upstream and downstream of the gage.

POINT OF ZERO FLOW – The PZF has not been recently determined.

FLOODS – Historic maximum recorded by USGS was 47,500 cfs on September 5, 1970. Peaks recorded by District since installation include 16,900 cfs at 14.21 feet gage height on January 22, 2010, and 15,606 cfs at 14.19 feet gage height on July 18, 2015.

REGULATION – None known

DIVERSIONS – Some diversions in the upper part of the watershed.

ACCURACY – Fair above 1,000 cfs

UPDATE February 22, 2018
 D E Gardner