

**WAGNER WASH AT SUN VALLEY PARKWAY
FCD GAGE ID# 44707**

STATION DESCRIPTION

LOCATION - The gage is located at the Sun Valley Parkway crossing of Wagner Wash, which is just south of the Bell Road alignment. It is at latitude N 33° 38' 07.0" and longitude W 112° 41' 25.9". Located in S05 T3N R4W, in the Daggs Tank 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed on February 16, 2017.

DRAINAGE AREA – 27.7 mi² via USGS Streamstats

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.05 feet gage height, levels of May 25, 2017. The PT is located on the left side of center set of the main culverts, and downhill from the station tube.

There is one crest gage at the site and it is located near the pressure transducer instrument. The pin elevation is 0.33 feet gage height, levels of May 25, 2017.

There are no staff gages at this site.

ZERO GAGE HEIGHT – Zero gage height is defined as elevation 1,434.800 feet NAVD88, as surveyed on March 29, 2017. The inlet to the culvert near the pressure transducer is at approximately 0.000 feet gage height.

HISTORY – Gaging established on February 16, 2017. No previous gaging history at this location. A crest gage was added on May 24, 2017.

REFERENCE MARKS –

BM-50447 is an FCDMC brass cap located about 12 feet due south of the station tube. It is at elevation 7.292 feet gage height and 1,442.092 feet NAVD88, levels of May 25, 2017.

BM-1 is a MCDOT brass cap located on the top of the right side of the left most set of the main culverts. It is at elevation 7.427 feet gage height and 1,442.227 feet NAVD88, levels of March 28, 2017.

RP-1 is a chiseled 'X' on top of the headwall of the culvert above the PT. It is at elevation 7.414 feet gage height and 1,442,214 feet NAVD88, levels of May 25, 2017.

RP-2 is a chiseled 'X' on the right wingwall of the culvert just left of the gaged culvert, and the same culvert as the benchmark brass cap. It is at elevation 3.694 feet gage height and 1,438.494 feet NAVD88, levels of May 25, 2017.

RP-3 is a chiseled 'X' on the top of the right side of the downstream headwall of the main culverts. It is at elevation 6.925 feet gage height, and 1,441.725 feet NAVD88, levels of May 25, 2017.

CHANNEL AND CONTROL - The channel is natural upstream and downstream of the Sun Valley Parkway crossing. At Sun Valley Parkway, there are a total of 7 sets of 3 culverts each.

For the main water crossings, there are 3 sets of 3 culverts each, for a total of nine culverts. The dimensions are 14-foot wide by 6-foot high. There are 12 additional culverts divided equally between left and right overbanks that convey higher flows.

The main culverts are full at about 6 feet gage height, which is at about 9,000 cfs. The road elevation of Sun Valley Parkway is at a minimum elevation of 9.7 feet gage height on the extreme right side.

RATING – The current rating is Rating #1. The rating was developed from an HEC-RAS model of multiple cross sections upstream and downstream of the road crossing, and included culvert dimensions and cross sections.

DISCHARGE MEASUREMENTS - Direct measurements could be made by wading in the area near the gage. Higher flows can be measured by indirect methods downstream from the culverts.

POINT OF ZERO FLOW – Is about 0.0 feet gage height, levels of March 29, 2017.

FLOODS – The peak flow recorded was 1,358 cfs at 2.97 feet gage height on August 16, 2018. A smaller peak of 917 cfs at 2.70 feet gage height occurred on July 31, 2021.

REGULATION - Some may occur in the watershed for cattle watering, but none are known.

DIVERSIONS - None known

ACCURACY - Fair

JUSTIFICATION - Monitor flows in this wash for long term data collection.

UPDATED - December 14, 2023
DE Gardner