

**GREENE WASH AT SR 84
FCD GAGE ID# 64007**

STATION DESCRIPTION

LOCATION – The gage station is located approximately 1.5 miles east of the town of Stanfield on SR 84. The gage site is about one mile upstream from Greene Wash joining Santa Rosa Wash. The PT is located on the center pier of the bridge. Latitude N 32° 52' 45.3", Longitude W 111° 56' 02.6". Located in the SW1/4 SE1/4 SE1/4 S21 T6S R4E in the Stanfield 7.5-minute quadrangle.

ESTABLISHMENT – The gage was established by the District on March 23, 1994.

DRAINAGE AREA – 1,729 mi².

GAGE – The gage is a pressure transducer type instrument on the center pier of the downstream side of the bridge. The PT diaphragm is at elevation 0.00 feet gage height, levels of March 30, 2016.

The staff gage at this location is faded and unreadable.

There are two four-foot crest gages at this location. The lower crest gage has a pin elevation of 0.490 feet gage height. The upper crest gage has a pin elevation of 4.420 feet gage height, levels of March 30, 2016.

ZERO GAGE HEIGHT – Zero is defined by the former staff gage zero, in gage height datum. Zero gage height is at 1,295.416 feet NAVD88, levels of March 9, 2020.

HISTORY – No previous history at this location. The station was established by the District on March 23, 1994. The original gage datum was defined using the PZF from the August 30, 1994 survey as 0.0 feet gage height. Two crest gages were installed July 23, 1997. The gage datum was redefined to correspond with the painted staff gage (white with black numbers incremented in tenths) after the August 20, 1997 survey. The new datum was applied to the gage record back to the beginning of Water Year 1997. The new datum is 1.37 feet lower than the previous datum from installation through Water Year 1996. Slope area survey markers were established on May 18, 2000 in three cross sections approximately 300 feet downstream from the bridge.

REFERENCE MARKS –

BM-793 is an FCDMC brass cap located on the top of the left bank near the station tube. It is at elevation 13.044 feet gage height and 1,308.300 feet NAVD88, levels of March 30, 2016.

RM-1 is an ADOT brass cap located on the northeast corner of the SR-84 bridge. It is at elevation 16.177 feet gage height and 1,311.589 feet NAVD88, levels of March 30, 2016.

RM-2 is a chiseled 'X' on the concrete near the base of the downstream side of bridge pier to which the PT, crest gage, and staff gage are located. Elevation is -0.106 feet gage height and 1,295.306 feet NAVD88, levels of March 30, 2016.

RM-3 is an ADOT brass cap located on southwest corner of the SR-84 bridge. It is at elevation 15.973 feet gage height and 1,311.385 feet NAVD88, levels of March 30, 2016.

RP-1 is a bolt connecting the crest gage to the concrete pier. Elevation is 3.44 feet gage height and 1,298.35 feet gage NAVD88, levels of January 30, 2025.

CHANNEL AND CONTROL – The channel is trapezoidal in shape with natural bottom and levied banks on both sides. Approximately 1.5 miles downstream, the channel joins Santa Rosa Wash.

The control for this site is relatively insensitive and is channel control through the range of stages until the bridge becomes impacted at higher stages. A small low flow channel passes under the bridge near the PT and controls flow until the large primary channel begins to control above about one foot gage height.

RATING – The current rating is Rating #4, dated October 1, 2019. It was developed from a six cross section survey in March 2020, using the data in an HEC-RAS model.

The previous rating is Rating #3 and is a revision of rating #2 following a slope-conveyance measurement for the event of September 5, 1997. Rating #2 used rating #1 and modified its datum for Water Year 1997. Rating #1 was developed using surveyed cross sections in an HEC-2 model step backwater analysis by T. M. Donaldson.

DISCHARGE MEASUREMENTS – Wading measurements can be made in the channel downstream of the bridge. High flow measurements could be taken from the bridge, traffic permitting. A slope area section beginning approximately 300 feet downstream of the gage has been established for slope area surveying.

POINT OF ZERO FLOW – The PZF was measured to be -3.8 feet gage height, levels of March 30, 2016.

FLOODS – A flood 1,391 cfs at 3.67 feet occurring on August 2nd, 2006. A flood of 680 cfs at 2.11 feet gage height occurred on January 7, 1995. A flood of 870 cfs at 2.63 feet gage height occurred on February 17, 1995. A flood of 450 cfs at 1.96 feet gage height occurred on September 5, 1997. All are in WY1997 datum.

REGULATION – None known

DIVERSIONS – Santa Cruz River and Greene Canal are connected in some manner upstream from this station.

ACCURACY – Fair

JUSTIFICATION – Monitor flows to the Gila River through Santa Rosa Wash below Maricopa Road for impacts on Holly Acres near the Salt and Gila confluence.

UPDATE – January 30, 2025
E.S. Thomas