SYCAMORE CREEK FIRE FCD GAGE ID# 81807 (Transducer) / 81813 (Radar)

STATION DESCRIPTION

LOCATION - The gage is located in northeast Maricopa County about 5 miles west of Mt. Ord, and just north of the old SR87 crossing of Sycamore Creek. Latitude 33° 55' 58.2" North; Longitude 111° 28' 46.0" West. Located in S25 T7N R8E, in the Reno Pass 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed June 26, 2012.

DRAINAGE AREA – 20.2 mi²

<u>GAGE</u> – There is a pressure transducer type instrument. The transducer diaphragm is at 3.16 feet gage height and 3,786.83 feet NAVD88, levels of July 8, 2020. The transducer is located in the low flow. ID is 81807.

There is a status sensor at the site. It is in the low flow channel, at elevation 2.60 feet gage height, levels of July 8, 2020. ID is 81809.

There is a radar gage located near the main gage cross section. It is mounted in the trees on the left bank. ID is 81813. The sensor is at elevation 18.50 feet gage height, levels of July 8, 2020.

There is no crest-stage gage at the gage cross section.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height was arbitrarily chosen during the first survey. It is equivalent to 3,783.674 feet NAVD88, levels of July 8, 2020.

<u>HISTORY</u> – Gaging established on June 26, 2012. No previous gaging history at this location. The transducer gage was lowered and was co-located with the status sensor on June 30, 2020.

REFERENCE MARKS

RM-1 is a USGS aluminum tablet located near the gage cross section. It has elevation of 6.283 feet gage height and 3,789.957 feet NAVD88, levels of July 8, 2020.

RM-2 is a rebar located on the left bank in the gage cross section. It is at elevation 8.269 feet gage height and 3,791.943 feet NAVD88, levels of July 8, 2020.

RM-3 is a rebar located on the right bank in the gage cross section. It is at elevation 10.486 feet gage height and 3,794.160 feet NAVD88, levels of July 8, 2020.

RM-4 is a rebar in the ground about 25 feet upstream of RM-3 on the right bank. It is at elevation 12.335 feet gage height and 3,796.009 feet NAVD88, levels of July 8, 2020.

RM-5 is a rebar near the road almost flush with the ground. It is also known as TBM-2019. It is at elevation 8.936 feet gage height and 3,792.610 feet NAVD88, levels of July 8, 2020.

RM-6 is a stake driven into the ground about 10 feet north of the USGS benchmark. It is at elevation 6.386 feet gage height and 3,790.060 feet NAVD88, levels of July 8, 2020.

RP-1 is a nail driven into a stump about 15 feet east northeast of the station house. It has not been found during recent surveys..

RP-2 is presumed missing and no longer valid.

RP-3 is the top of the status sensor on July 8, 2020. It is at elevation 2.809 feet gage height.

RP-4 is a chiseled 'X' on a rock on the right bank lower bench about 30 feet upstream of the gage cross section. It is at elevation 5.932 feet gage height, levels of July 8, 2020.

<u>CHANNEL AND CONTROL</u> – The channel has a trapezoidal shape, with a relatively flat bottom with a bottom width of about 30 feet. The left bank rises sharply. The right bank has an overbank width of about 60 feet before the right bank rises sharply.

The control for the gage is not defined at low flows. The channel is the control at higher stages.

RATING - The current rating is Rating #3, dated June 3, 2025. The rating was developed from a June 3, 2025 survey of four cross sections.

<u>DISCHARGE MEASUREMENTS</u> - Direct measurements would be possible in the channel at low flows. The distance from the office may make it impossible to do.

POINT OF ZERO FLOW - The PZF varies often and was found to be at about 0.0 feet gage height in July 2020.

<u>FLOODS</u> – Several large runoff events have occurred, with the largest being 7,906 cfs and 11.96 feet gage height, on August 16, 2012. Another event occurred on September 7, 2012 with a peak stage of 8.59 feet, and peak discharge of 3,187 cfs.

REGULATION - None known.

DIVERSIONS - None known

ACCURACY - Fair

 $\underline{\hbox{\it JUSTIFICATION}}$ - Monitor flows in Sycamore Creek because of severe burn of upper watershed in May-June 2012.

<u>UPDATED</u> - June 3, 2025

E S Thomas