CLINE CREEK FCD GAGE ID# 66007

STATION DESCRIPTION

<u>LOCATION</u> - The gage is located on Tonto National Forest land just east of 12th Street and about one mile north of Circle Mountain Road in the New River area. Gaging equipment is located on the right (north) bank. Latitude N 33° 54′ 2.7″; Longitude W 112° 03′ 18.5″. Located in the SE1/4 S33, T7N, R3E, in the Daisy Mountain 7.5- minute quadrangle.

ESTABLISHMENT – Gaging was established on November 20, 2001.

DRAINAGE AREA - About 10.8 square miles.

GAGE - This gage is a pressure transducer type instrument. The current gage elevation is -0.05 feet gage height, levels of January 28, 2025.

There are no staff gages at this location.

There is no crest gage at this site.

<u>HISTORY</u> - Gaging established on November 20, 2001. Crest-stage gage added in July 2002. The level sensor setup was altered after being destroyed in the January 2010 event, with an effective date of March 1, 2010. The gaging setup was destroyed following the event of August 19, 2014, and replaced with a temporary setup. The current transducer / crest gage setup was done on December 10, 2014. Gage ID changed from 5583 to 66007 on April 23, 2020. Transducer gage elevation found to be 0.20 feet gage height during survey of November 30, 2020. The change was made retroactive to October 1, 2020.

ZERO GAGE HEIGHT – Zero gage height is at elevation 2,171.07 feet NAVD88.

REFERENCE MARKS –

RM-CLINE is an FCD brass cap located just north of the gage standpipe. Elevation is 2,181.10 feet NAVD88, or 10.03 feet gage height, levels of November 29, 2001. Northing 1055397.457 feet, Easting 658028.179 feet. Gage height levels established with a standard rod and level based on the absolute difference between RM-CLINE and the pressure transducer diaphragm elevation on November 29, 2001.

RP-1 is a chiseled 'X' on a rock that is about 20 feet streamward from RM-CLINE. Elevation is 10.11 feet gage height, or 2,181.18 feet NAVD 88, levels of December 16, 2014. This RP was established on January 28, 2025.

<u>CHANNEL AND CONTROL</u> -- The channel is a natural stream with a sandy bottom. Both overbanks, when present, are heavily vegetated with mesquite, palo verde, cat claw, and other various flora. The main channel is mostly clear of any vegetation

Just upstream of the gage cross section, the channel low flow is split. Downstream, there are various splits and high flow channels that can convey flow. In some locations, either bank is nearly vertical. Both overbanks can be somewhat wide. In other words, there are widely variable channel conditions.

<u>RATING</u> - The current rating at the site is Rating #3. Rating 3 was developed from a seven cross section survey collected on November 30, 2020. It is not significantly different from the previous rating.

<u>DISCHARGE MEASUREMENTS</u> - Low flow measurements could be done at the 12th Street crossing of the wash about 600 feet downstream from the gage. Higher flows can be verified from indirect measurements. A suitable reach for an indirect measurement is a reach immediately upstream from the gage cross section. The magnitude of the flood will also determine the reach size and location.

POINT OF ZERO FLOW – The PZF was found to be -0.3 feet gage height, levels of January 28, 2025.

FLOODS – Runoff of 1,227 cfs and 4.68 feet gage height occurred on January 21, 2010. A flood of 5,850 cfs at gage height 8.15 feet, occurred on August 19, 2014.

REGULATION - None known

DIVERSIONS - None known.

ACCURACY - Poor to fair considering the splits and overflows that could occur in the wash.

<u>JUSTIFICATION</u> - Monitor flows for flood warning to residents in the New River and Desert Hills areas.

<u>UPDATE</u> - January 28, 2025 ES Thomas