

## ANTELOPE CREEK FCD GAGE ID# 7168

### STATION DESCRIPTION

**LOCATION** – The gage is located in Yavapai County approximately 1.5 miles upstream of Martinez Creek gage, and about 2.5 miles southeast of milepost 261 at SR89. Access to the gage is by either driving downstream from the dirt road that takes off from SR89, or by driving upstream from the Martinez Creek gage. Either drive can be treacherous with deep sand and high clearance required. Latitude N34° 02' 55.5"; Longitude W112° 46' 46.1". Located in the NW1/4 NW1/4 SE1/4 S09 T8N R5W in the Flores 7.5-minute quadrangle.

**ESTABLISHMENT** – Gaging was established on July 9, 2003.

**DRAINAGE AREA** – The drainage area is approximately 65.1 mi<sup>2</sup>.

**GAGE** – The gage is a pressure transducer type instrument. The transducer diaphragm is at elevation 1.77 feet gage height, levels of July 23, 2015.

There are two crest stage gages at this location. Crest gage #1 is located near the transducer gage. It was found moved and non-usable on the July 23, 2015 visit.

Crest gage #2 is located on the next small channel right of the main channel on the left bank. The pin elevation is 1.17 feet gage height, levels of July 23, 2015.

There is no staff gage at this location.

**ZERO GAGE HEIGHT** – Zero gage height is defined as a point below the current channel level. Zero gage height is equivalent to 2,406.00 feet NAVD 1988.

**HISTORY** – No previous history at this location. Gaging established on July 9, 2003. A precipitation gage, a stage gage (transducer), and two crest gages were installed at the site.

### **REFERENCE MARKS** –

RM-ANTLP is an FCD brass cap located about 150 feet south and west of the gaging site. The brass cap is located on the right bank of the left most channel, just downstream of the gage. Elevation 3.21 feet gage height or 2,409.21 feet NAVD 1988, levels of July 24, 2003.

**CHANNEL AND CONTROL** – The channel is separated and braided at the gage site, upstream several miles, and downstream to the confluence with Martinez Creek, approximately one mile. There are about six small channels that convey water. The two channels that convey the most water are on the extreme ends of the conveyance. The channel where the transducer is located is the second lowest. The lowest channel is approximately 1,100 feet to the right near the right bank of the conveyance area. Total channel width from high bank to high bank is about 1,200 feet.

The channel bottom is a mix of sand and cobbles. Both banks are vegetated with moderate mesquite, greasewood, and palo verde. Low flows are generally more controlled but because of the significant braiding and overbanks, spillage from the main channel produces areas of non-conveyance.

**RATING** – The current rating is Rating #1, applied as of gage installation. The rating is based on survey data from three cross sections. An HEC-RAS model was developed from the survey data. Hand computations were done for flows below 1,000 cfs for individual separated channels.

**DISCHARGE MEASUREMENTS** - An appropriate reach for each channel that had runoff will be necessary for computing a composite runoff for an event.

**POINT OF ZERO FLOW** – The PZF is at 1.8 feet gage height, levels of July 23, 2015.

**FLOODS** – A significant flow event occurred on September 9, 2006 with a peak discharge of 7,000 cfs and 5.22 feet gage height.

**REGULATION** – None

**DIVERSIONS** – None known

**ACCURACY** – Poor

**UPDATE** - August 13, 2015  
DE Gardner