

DESCRIPTION OF GAGING STATION ON ROBINSON CANYON CREEK

Location – Lat 36.5179, long -121.8119, on left bridge abutment of downstream-most bridge on Robinson Canyon Road, Carmel Valley.

Establishment - Staff gage station established Jan. 6, 1982 by G.M. Kondolf, cooperating with MPWMD. Re-established as a recording station Oct. 18, 1991 by G. W. James.

Drainage area - 5.4 sq. mi.

Gage - Campbell Scientific (CS) CR300 data recorder/CS451-7.25 psig pressure transducer system. Gage housing consists of steel recorder shelter with two-inch galvanized pipe used as conduit and intake. Enameled staff gage ranges from 0.00 to 6.66 ft. Crest stage gage (CSG) five ft. downstream from staff (pin elevation = 3.43 ft. gage datum).

History - No other gages have been operated on this stream. Station was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. High flows in January & February 1993 severely scoured the control at the gage and prompted relocation of the gage to the current site upstream at the bridge on Mar. 11, 1993. A new gage datum was established due to this relocation. Three subsequent upgrades/replacements include the installation of CS BDR-320, CS CR510, and CS CR300 recorders on Oct. 26, 1993, Nov. 16, 1999, and Nov. 8, 2018, respectively.

Reference and benchmarks - Staff gage is only datum reference (gage datum).

Channel - One channel at all stages. Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Banks at gage are vertical, concrete bridge abutments. Streambed is composed primarily of boulder, cobble and sand.

Control - Low flow control is a riffle 3 ft. downstream of gage. High and medium flow control is the natural channel downstream of the gage.

Discharge measurements - Low and medium stage measurements are normally made by wading within 100 ft. downstream of the gage. Station lacks a high flow measuring facility. Bridge at gage is not ideal due to horizontal skew, and traffic concerns. High flows defined by the slope area method. Maximum wading stage is 4.0 ft. gage datum (approx. 60 cfs).

Floods - Flood of February 3, 1998 reached a stage of 8.9 ft. (adjusted to current datum) based on the crest stage gage (CSG) at the former gage site 37 ft. downstream (this event overtopped the current CSG). Flood of March 10, 1995 reached a stage of 6.9 ft. gage datum based on CSG and recorder. Flood of Feb. 20, 2017 reached stage 6.9 ft. based on recorder.

Point of zero flow - 1.30 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversions - Ground water production wells upstream of gage.

Accuracy - Stage records are fair to good at current gage location. Stage discharge relationship is fairly stable, but will shift during high flow events due to scour.

Cooperation -