

DESCRIPTION OF GAGING STATION ON TULARCITOS CREEK

Location – Lat 36.4582, long -121.7073, beneath bridge at San Clemente Drive, Carmel Valley, or approximately one-half mile upstream from the Carmel River/Tularcitos Creek confluence.

Establishment - Staff gage station established Jan. 8, 1982 by G. Matthews. Re-established as a recording station Oct. 8, 1991 by G. W. James.

Drainage area - 56.3 sq. mi.

Gage – Campbell Scientific (CS) CR300 data recorder/CS451-7.25 psig pressure transducer system. Gage housing consists of a steel recorder shelter atop existing 12-inch CMP stilling well. Access door at base of well for silt removal. Two enameled staff gages attached to right bridge abutment range from 2.20 - 6.60 ft.

History - No other gages have been operated on this stream. This station was non-recording until Water Year 1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. This system was upgraded and replaced with a float gage (stilling well) Aug. 18, 1992. Float gage upgraded to current CS equipment Oct. 13, 2016.

Prior to the flood of March 10, 1995, a remnant bridge pier (5 ft. high by 15 ft. long by 18 in. wide) split high flows at the gage. Following this flood, the pier fell over at the gage site and created single channel flow at the gage.

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

Channel - One channel at all stages. Right bank is vertical concrete bridge abutment, left bank moderately slopes to left concrete bridge abutment. Prior to March 10, 1995, channel at gage was split by mid-channel bridge pier at high flows. Channel bed is composed of mud and sand and remnant bridge pier that was deposited horizontally at gage.

Control - Low and medium stage control is a riffle approx. 30 ft. downstream from gage, affected by seasonal aquatic vegetation growth. High flow control is channel.

Discharge measurements - Low and medium stage measurements are normally made by wading 300 ft. upstream of the gage, or at the gage. High flow measurements are taken from the downstream side of the bridge at the gage, or by the slope area method. Maximum wading stage is 5.5 ft. gage datum, or 130 cfs.

Floods - Flood of February 7, 1998 reached a stage 10.77 ft. based on survey of high-water marks (HWM) at the gage. Flood of March 10, 1995 reached a stage of 9.94 based on HWM and recorded stage.

Point of zero flow - Approx. 3.2 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

Diversion – Ground water production wells upstream of gage.

Accuracy - Stage records are good. Computed flows are fair to good.

Cooperation -