

DESCRIPTION OF GAGING STATION ON HITCHCOCK CREEK

Location – Lat 36.4730, long -121.7251, one quarter mile southwest along Esquiline Road, Carmel Valley at second foot bridge crossing creek, or approximately 250 ft. upstream from the Carmel River/Hitchcock Creek confluence.

Establishment - Staff gage station established Apr. 2, 1986 by T. Lindberg. Re-established as a recording station Oct. 17, 1991 by G. W. James.

Drainage area - 4.6 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.

History - No other gages have been operated on this stream. Station was non-recording until Water Year (WY)1992 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer was installed. Due to technical difficulty with this recording equipment, continuous records of flow were not computed until WY 1994. The gage was relocated to the foot bridge immediately upstream from the former site and was upgraded with a CS BDR-320 recorder Dec. 8, 1995. Two subsequent recorder upgrades include a CS CR510 and a CS CR300 installed Nov. 15, 1999 and June 5, 2019, respectively.

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

Channel - Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Banks are steep and rocky. Streambed is composed primarily of cobble. Creek flows over bank at approx. stage 6 ft.

Control - Low and medium stage control is the channel at the gage. High flow control is the bridge immediately downstream from the gage.

Discharge measurements - Low and medium stage measurements are made by wading within 100 ft. upstream or downstream of the gage. High flow measurements are taken off the upstream side of the bridge at gage.

Floods - Flood of February 7, 1998 reached a stage of 7.31 ft. current datum, and the creek flowed out of its banks during this event. At the former gage location approx. 100 ft. downstream of the current site, the Flood of March 10, 1995 reached a stage of 7.05 ft based on former gage datum, and flowed over bank as well.

Point of zero flow -2.30 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. Stage discharge relationship should be fairly stable due to presence of bridge immediately downstream from gage.

Cooperation -