

DESCRIPTION OF GAGING STATION ON GARZAS CREEK AT GARZAS ROAD

Location – Lat 36.4913, long -121.7515, at West Garzas Road, Carmel Valley on left bank, downstream side of bridge, or approximately 300 ft. upstream from the Carmel River/Garzas Creek confluence.

Establishment - Continuous recording station established October 1968 by the Monterey County Water Resources Agency (MCWRA) was maintained through September 1978. Established as a staff gage station Nov. 30, 1981 by G. Matthews. Re-established as a recording station Sept. 20, 1991 by G. W. James.

Drainage area - 13.2 sq. mi.

Gage – Campbell Scientific (CS) CR300/CS451-7.25 psig pressure transducer system housed in a 12-inch CMP stilling well and gage shelter. Access door at base of well for silt removal.

Enameled staff gage ranges from 0.00 to 10.0 ft.

History - Gage formerly operated as a continuous recording station by MCWRA 1968 - 1978. Operated by MPWMD as a non-recording station 1981 - 1991. Re-established as a continuous recording station by MPWMD Sept. 1991, which used an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system. On Jan. 17, 1992 the ENMOS system was upgraded and replaced by the existing stilling well that housed a Stevens Type F water level recorder/float system. The Stevens recorder was replaced with the current CS CR300 gaging system on Oct. 14, 2016. The Garzas Creek near Lower Garzas Canyon gaging station located 0.7 miles upstream of West Garzas Road, installed Oct. 24, 2001, supplements the Garzas Creek streamflow record during periods of no flow at Garzas Road.

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

Channel - One channel at all stages. Channel is straight for approximately 200 ft. upstream and 200 ft downstream from gage. Channel at gage is split by center bridge pier, with vertical, concrete bridge abutments as banks. Downstream from gage, banks are moderately sloped and vegetated. Streambed is composed of poorly sorted alluvium.

Control - Low and medium stage control is a cobble riffle at upstream end mid-pier – right side, and riffle immediately downstream of stilling well. High flow control is the natural channel downstream from the gage.

Discharge measurements - Low and medium stage measurements are made by wading within 200 ft. upstream or downstream of the gage. High flow measurements are taken off the downstream side of the bridge at gage.

Floods - Flood of March 10, 1995 reached a stage of 9.28 ft based on recorded stage in the stilling well. Flood of January 10, 1995 reached a stage of 7.98 ft. based on recorded stage. Flood of February 3, 1998 reached a stage of 7.95 ft. also based on recorded stage.

Point of zero flow - Approximately 0.50 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation - Flows affected by operation of Moore's Lake Dam.

Diversion - Flows affected by diversions surrounding Moore's Lake for riparian and domestic use, and by withdrawal of ground water from the Carmel Valley Alluvial Aquifer.

Accuracy - Stage records are good. Computed records are fair due to downstream channel conditions that shift in response to vegetation growth, scour and fill.

Cooperation -