DESCRIPTION OF GAGING STATION ON POTRERO CREEK

Location - Lat 36.5333, long -121.8689, at Valley Greens Road, Carmel Valley upstream of culvert on right bank.

Establishment - Staff gage station established Jan. 4, 1982 by G. Matthews. Re-established as a recording station Nov. 30, 1993 by G. W. James.

Drainage area - 5.2 sq. mi.

<u>Gage</u> - 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 4.10 ft.

History - Station was non-recording until Water Year 1994 when an Environmental Monitoring Systems (ENMOS) recorder and pressure transducer system was installed. The gage was relocated to the opposite (right) bank and upgraded with a CS BDR-320 recorder Nov. 28, 1995. The previous gage datum was maintained despite the gage relocation. The BDR-320 was replaced with a CS CR510 recorder Nov. 12, 1999. Current CS CR300 recorder installed May 30, 2019.

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

<u>Channel</u> - Channel is straight for approximately 100 ft. upstream and 100 ft downstream from gage. Banks are steep composed of mud and clay. Streambed is sandy.

<u>Control</u> - Control at low and medium stages is a rip-rap riffle 15 ft. downstream of gage. High flow control is the twin culverts 30 ft. downstream of gage.

- <u>Discharge measurements</u> Low and medium stage measurements are made by wading within 100 ft. upstream of the gage. High flow measurements are taken off the upstream side of the golf cart bridge 200 ft. upstream of gage. Maximum wading stage is 2.4 ft. gage datum (approximately 90 cfs).
- <u>Floods</u> Flood of February 3, 1998 reached a stage of 9.1 ft. gage datum indicated by the recorder, and flowed over Valley Greens Road during the peak. Flood of March 10, 1995 reached a stage of 4.9 ft. based on recorder stage verified by high water marks.

Point of zero flow - 0.60 ft., gage datum. Varies due to scour and fill at control.

Winter flow - No ice.

Regulation -

<u>Diversion</u> – Ground water production wells upstream of gage.

<u>Accuracy</u> - Stage records are fair. Stability of stage discharge relationship depends on condition of rip-rap riffle 15 ft. downstream of gage as it stabilizes sands at the gage, or debris loading at the twin culverts 30 ft. downstream.

Cooperation -