

## WILSON CREEK NEAR MILTON RESERVOIR

**LOCATION.**--Lat 39°31'3.47"N, long 120°35'20.37"W referenced to North American Datum of 1927, Tahoe National Forest, on left bank, 1.2 miles from dam at Milton Reservoir.

**DRAINAGE AREA.**--Approximately 1 mi<sup>2</sup>

**ESTABLISHMENT AND HISTORY.**--A small weir and gage was originally installed ~80' upstream of current gage location. This old gage was washed away. The current building was built in the early 2000's and first surveyed in 2004. Continuous data logging began 09/29/2004.

**GAGE.**--Design Analysis H-350 XL datalogger and pressure transducer, H-355 air compressor unit, connected to a Design Analysis H-222 DASE GOES satellite transmitter. Gage is a 4 ft suppressed weir. Outside gage limits are approximately 0.00 to 2.45'.

Elevation of gage is 5,740 ft from topographic map.

**CONTROL.**--The control is a 4 ft wide steel plate rectangular weir, center of weir blade is PZF gage height 0.00' (levels of 8/21/17), with concrete wing walls to both banks about 5 ft downstream of the orifice. The control should be effective at all flows. Control must be routinely checked for debris.

**INDIRECT MEASUREMENT SITE.**--Theoretical rating based on weir design.

**WINTER FLOW.**--May be affected by ice and snow at times.

**REGULATION AND DIVERSIONS.**--Natural flow that is diverted into Milton-Bowman tunnel. Checkboards in the weir box can be moved to divert the flow back into the Middle Yuba.

**ACCURACY.**-- Good for discharges less than 20 ft<sup>3</sup>/s

**COOPERATION.**--Site is operated by Nevada Irrigation District.

**JUSTIFICATION.**--Gain an accurate representation of inflow to the Milton-Bowman Tunnel.

**REMARKS.**--The elevation of the drainage area varies from 5,740 ft at the gage to 8,370 ft near English Mountain. This area is composed mainly of undeveloped forest land. There is very little development upstream, although, there has been some logging. The logging activities will continue. The storms are general frontal types which normally are snow in the winter months.