

Spur Lake Staff Gauge Install Notes. (document date 8/15/2019, corrected 9/3/2019)

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The Spur Lake gauge was installed on July 23, 2019. This occurred after some lake level data was recorded by Jim Cripean. His previous readings were recorded as the water depth over/under the top of the south culvert inlet (East Stella Lake Road).

When I installed the lake gauge, I also recorded the top elevation of the same culvert to enable Jim to convert his data to the equivalent lake gauge reading for data entry into SWIMS. The conversion factor is as follows:

$$GE_{RM1} = 100'$$

$$BS1 = 3.45'$$

$$HI1 = 103.45'$$

$$FS_{\text{top of culvert}} = 5.02' \quad \text{elevation} = 98.43'$$

$$FS_{\text{Spur Lake water elevation}} = 5.11' \quad \text{elevation} = 98.34$$

$$\text{July 23, 2019 Lake Level Gauge Reading} = 5.20'$$

**The top of the culvert is equivalent to a lake level gage reading of:  $5.20 + 0.09 = 5.29$**

If a water level measurement was above the top of the culvert:  $5.29' + (x/12'') = \text{conversion}$

If a water level measurement was below the top of the culvert:  $5.29' - (x/12'') = \text{conversion}$