

Started on 4/4/2019

Update graph for Water Temp (WT) of American River to include recent years.

HAR doesn't have data needed.

CDEC has William B Pond (AWP) and Watt Bridge (AWB)

AWB will be used (first complete year in 1999) AWP first year in 2001

Hourly only went to 2007

Converted from every 15 minute increments to Daily mean

Deleted values include Water Temperature values of:

32 or lower

119 and higher

Histogram with bins of 0.1°F (32-112) was analyzed to see what values didn't have multiple entries for each continuous bin. This was used to establish probable lower and upper bounds of realistic temperatures.

Values that fell within 5 degrees outside these bounds (on the histogram) were analyzed to see if they "jumped" from the values before and after on the timeseries, if they did they were omitted. If not, the bound was changed to include those values.

Lower bound was changed from 44.1 to 43.7 and upper bound is 76.4

Values outside of bounds will be deleted.

Values that jump 10 degrees will be deleted (must be done after outliers are removed, or correct values will be marked)

Values missing or incorrect were averaged using the value before and after the gap, if the gap was less than 40 increments (15 minute increments)

The Std Deviation was calculated for each month for the error bars.

For the bar graphs, the daily mean was converted to monthly mean (originally was given in every 15 minute increments).

8/12/2004 didn't have a date value so it had to be added in, there are potentially other values that may not have a date value.