

Description Of Notched Box-And-Whisker Plots

Notched box-and-whisker plots were created in this report to display and summarize selected statistical properties of the data sets. These plots have been used to test for statistical significance between data sets at roughly a 95-percent confidence interval, to detect changes in constituent concentration variability over time, and to determine if trends exist. Notched box-and-whisker plots consist of the median, the lower quartile, the upper quartile, the smallest and the largest values in the distribution of a given set of data. The central box represents the values from the lower to upper quartiles (25th to 75th percentile). The middle line represents the median of the data, and the notch in the box is the 95-percent confidence interval of the median. When notches between boxes do not overlap, the medians are considered significantly different. The notched box-and-whisker plot used for these summaries follows McGill, et al., 1978. Immediate visuals of notched box-and-whisker plot are the center, the spread, and the overall range of distribution.

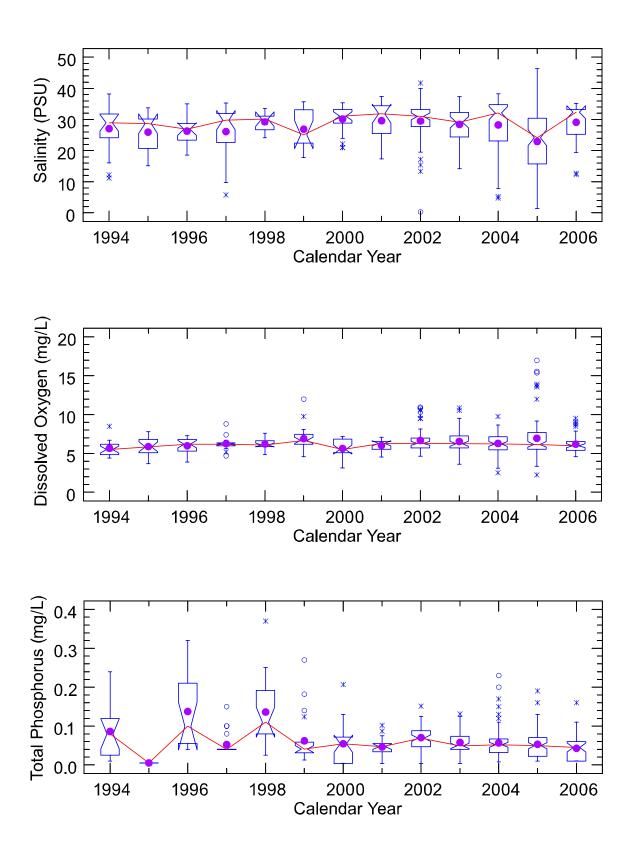
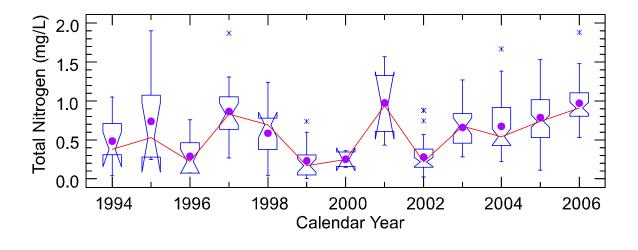
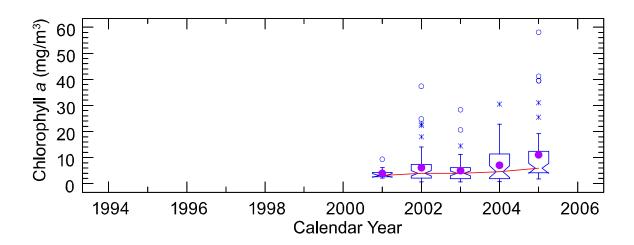


Figure 1a- Notched box and whisker plots of salinity levels, Dissolved Oxygen and Total Phosphorous





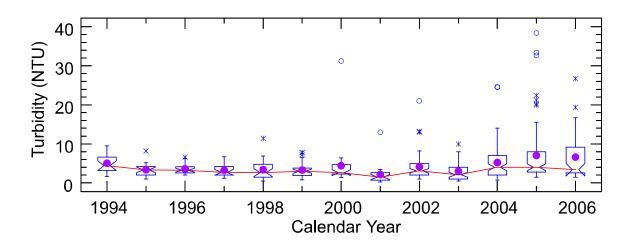
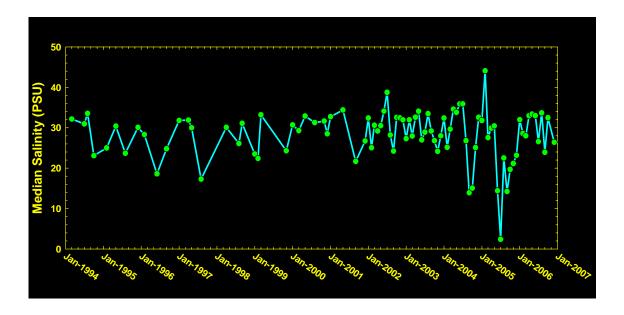
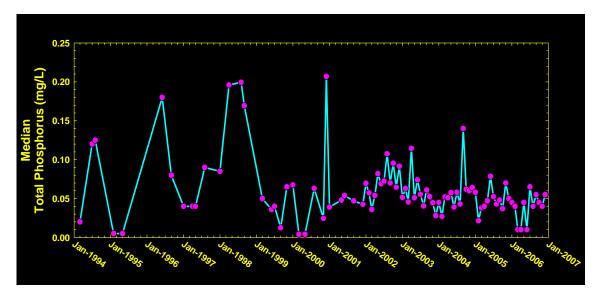


Figure 1b- Notched box and whisker plots of Total Nitrogen, Chlorophyll a, Turbidity





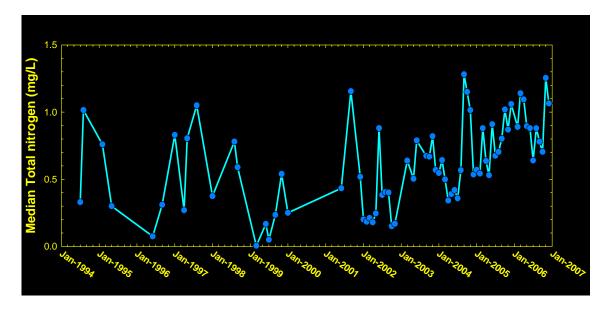
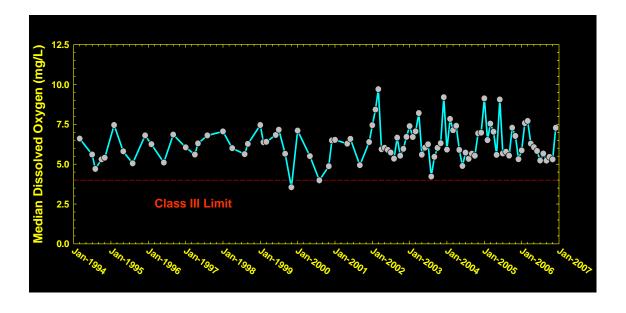
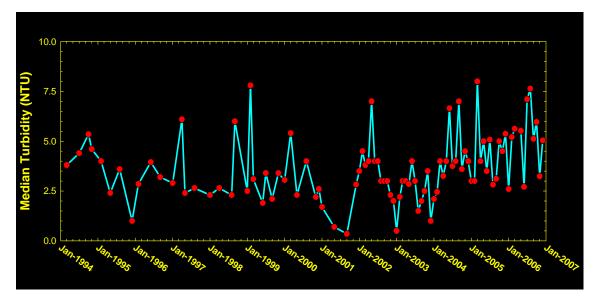


Figure 2a- Plots for Salinity, Total Phosphorous and of Total Nitrogen from 1994 to 2007





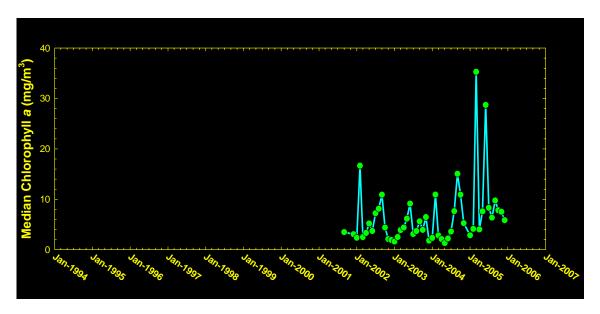
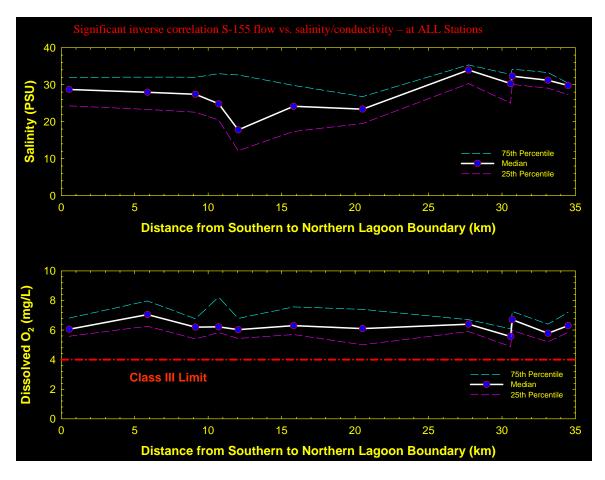


Figure 2b- Plots for Dissolved Oxygen, Turbidity and Chlorophyll-a from 2001 to 2007



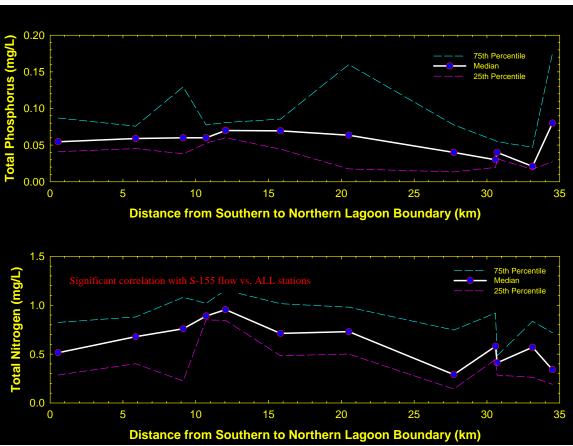


Figure 3a and 3b – All LWL stations plotted from South to North for Salinity, DO, TP, TN

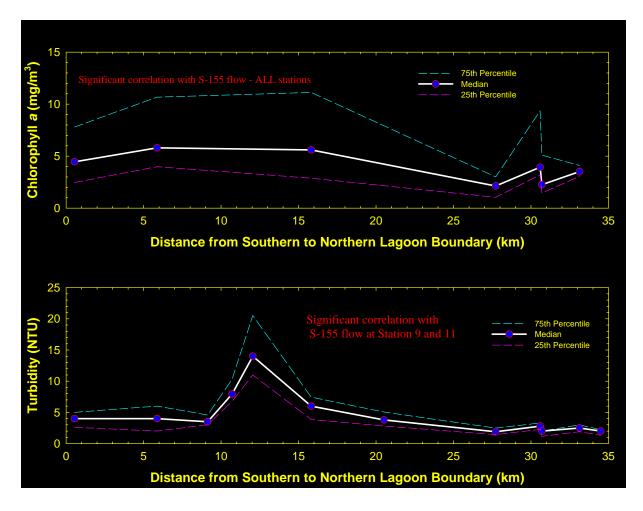


Figure 3c- All LWL stations plotted from South to North for Chlorophyll-a, Turbidity

Results for: 1994-2006 only

Parameter	Mean	Q1	Median	Q3
TOTN	0.67	0.40	0.64	0.89
TPO4	0.06	0.03	0.06	0.08
CHLA	7.42	2.76	4.93	8.82
DO	6.44	5.52	6.20	7.05
TSS	22.94	10.00	16.00	31.60
TURB	4.39	2.00	3.00	5.38

Results for: 2001-2006 only

Parameter	Mean	Q1	Median	Q3
TOTN	0.69	0.40	0.57	0.83
TPO4	0.07	0.05	0.06	0.08
CHLA	7.66	2.79	5.11	9.00
DO	6.91	5.76	6.58	7.50
TSS	13.79	8.70	12.20	15.10
TURB	4.19	2.00	3.00	6.00

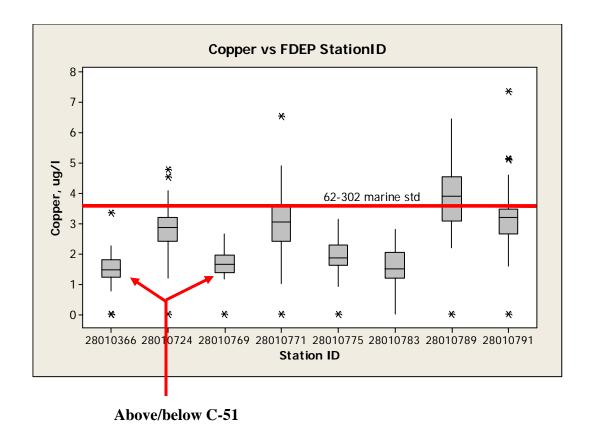


Figure 4a - Whisker plots for Copper of former FDEP stations LWL 1, 3, 9, 11, 13 (Figure 16) respectively. Station 280107989 and 28010791 are located outside the LWL.

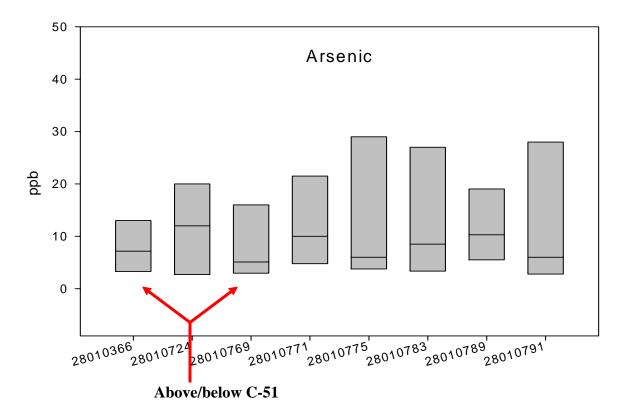


Figure 4b - Whisker plots for Arsenic of former FDEP stations LWL 1, 3, 9, 11, 13 (Figure 16) respectively. Station 280107989 and 28010791 are located outside the LWL.