

North Fork St. Lucie Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 15 August, 2024

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Indicators

Nutrients

Total Nitrogen - Discrete

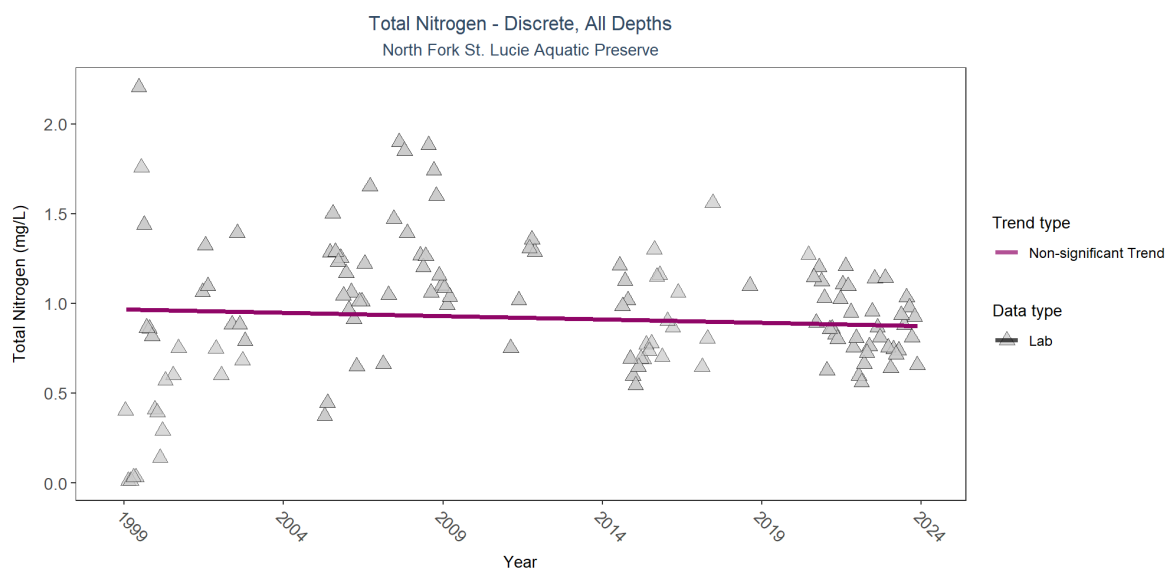


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	528	19	1999 - 2023	1.005	-0.0482	0.9671	-0.00376	0.3706

Total Phosphorus - Discrete

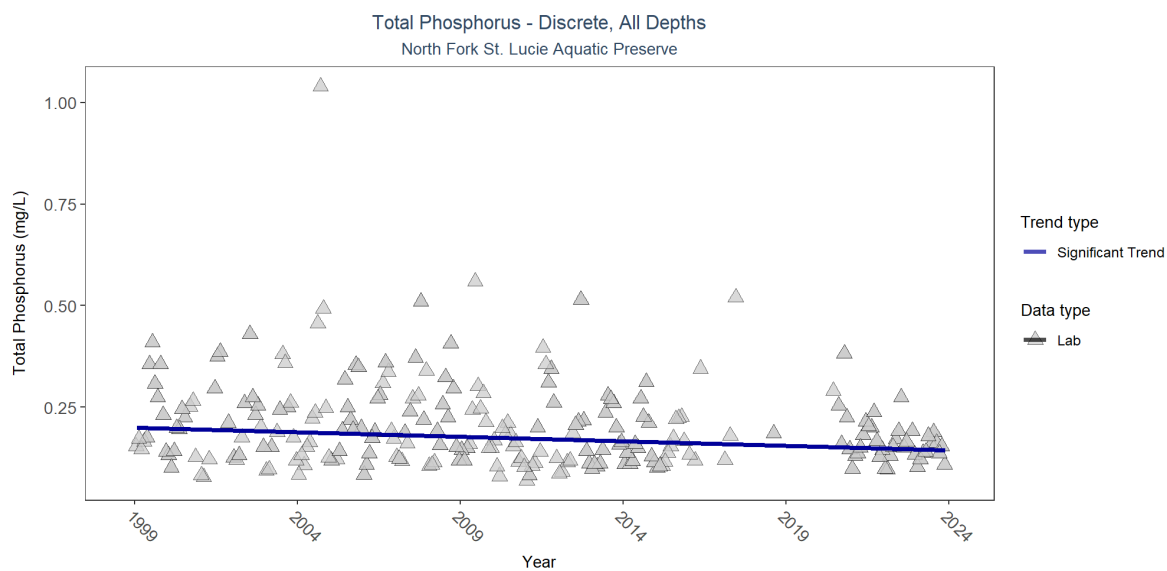


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	989	24	1999 - 2023	0.18	-0.2441	0.19995	-0.00225	0.0000

Water Quality

Dissolved Oxygen - Discrete

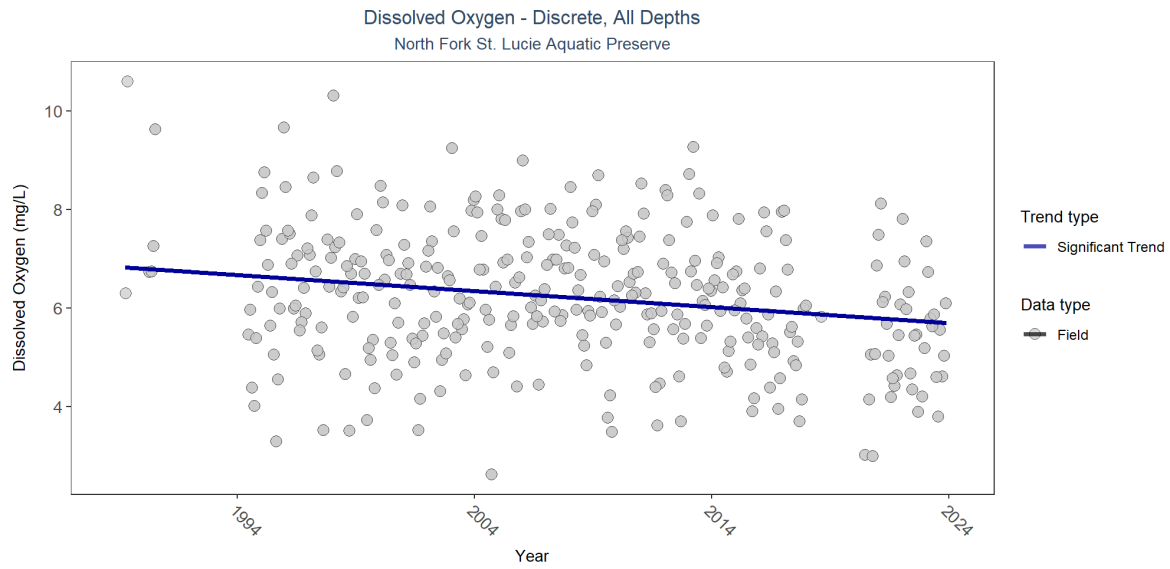


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	5937	31	1989 - 2023	6.2	-0.2037	6.82868	-0.03243	0.0000

Dissolved Oxygen Saturation - Discrete

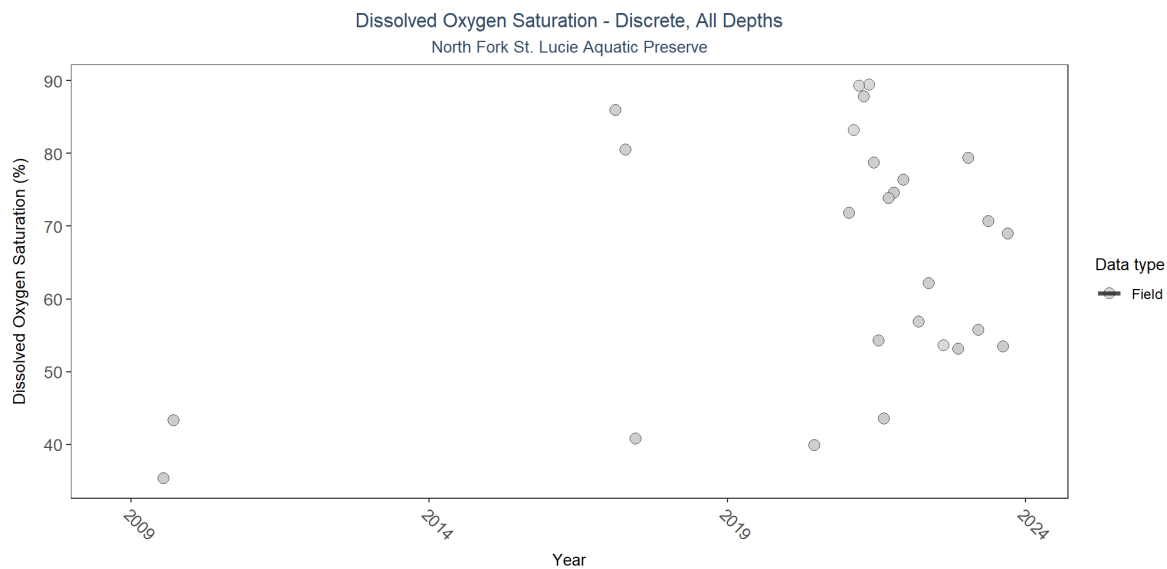


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Insufficient data to calculate trend	77	6	2009 - 2023	69.6	-	-	-	NA

Salinity - Discrete

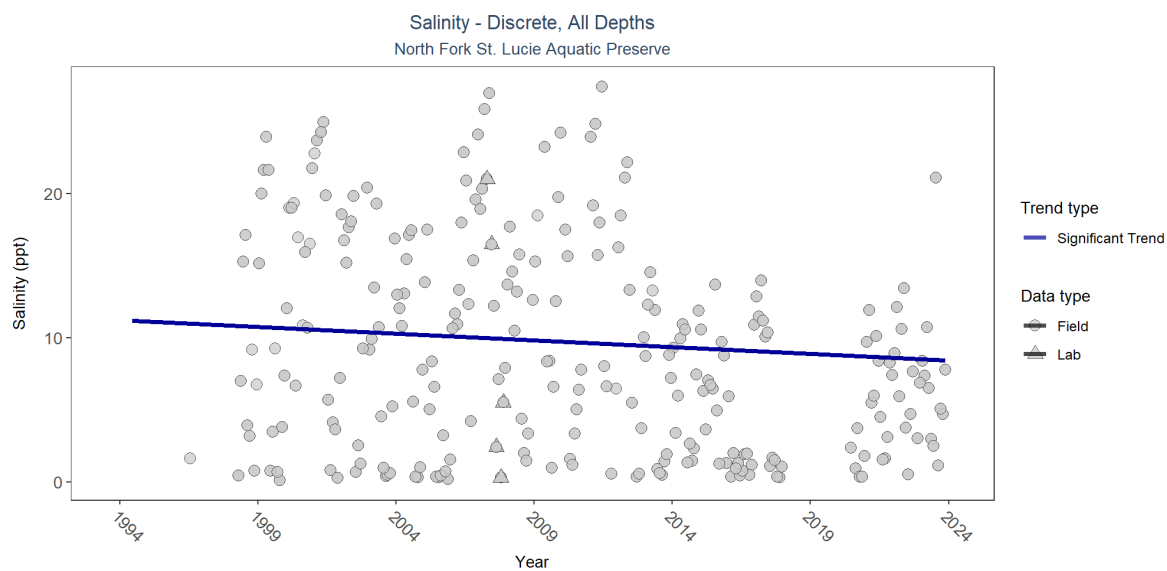


Table 5: Seasonal Kendall-Tau Results for - Salinity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
All	Significantly decreasing trend	5436	28	1994 - 2023	5.405	-0.1193	11.22008	-0.09385	0.0029

Salinity - Continuous

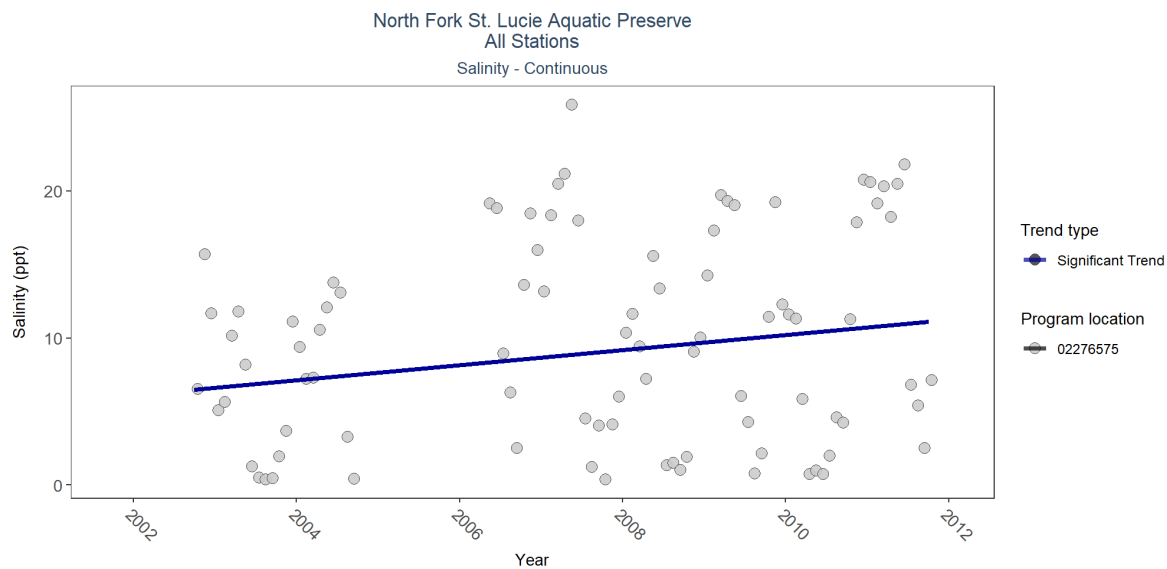


Table 6: Seasonal Kendall-Tau Results for All Stations - Salinity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02276575	Significantly increasing trend	2666	9	2002 - 2011	9.1	0.22	6.08	0.52	0.0174

Water Temperature - Discrete

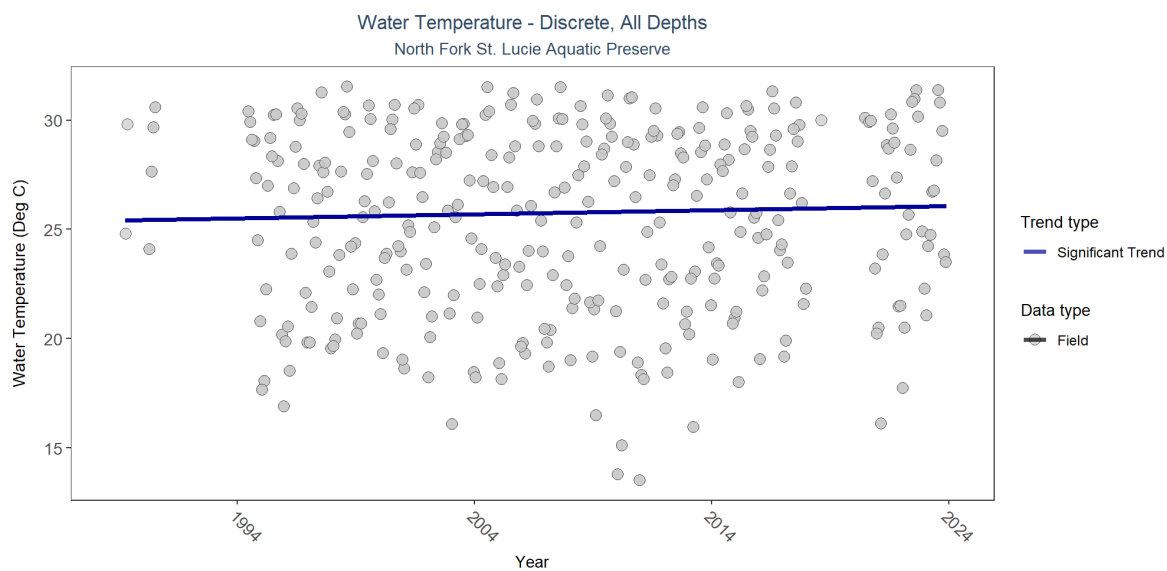


Table 7: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	6076	31	1989 - 2023	26.015	0.0838	25.4208	0.01881	0.0339

Water Temperature - Continuous

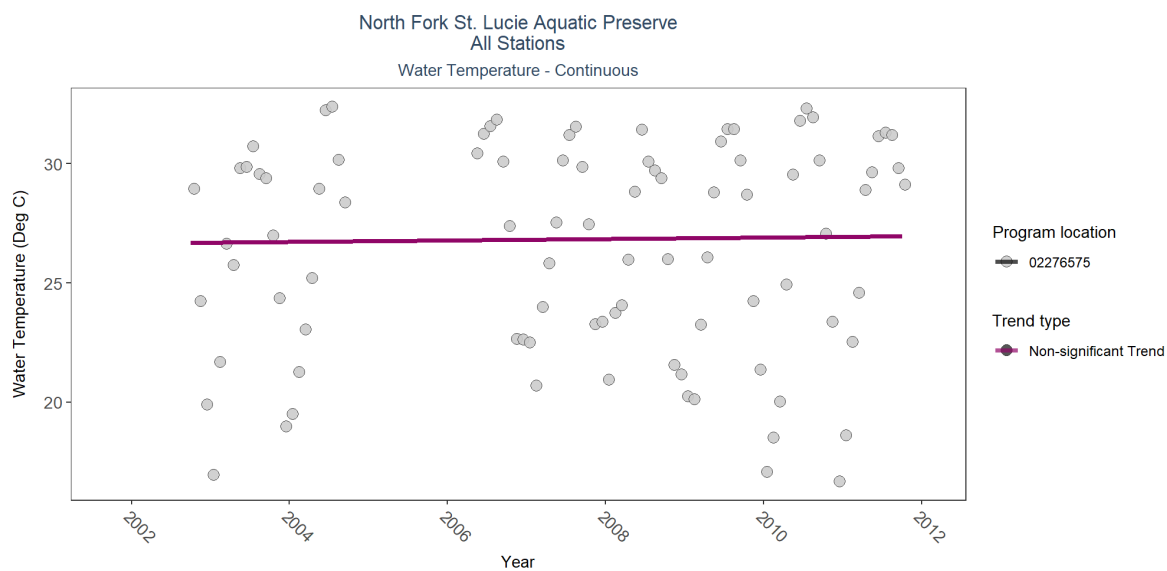


Table 8: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02276575	No significant trend	2664	9	2002 - 2011	27.3	0.06	26.66	0.03	0.4589

pH - Discrete

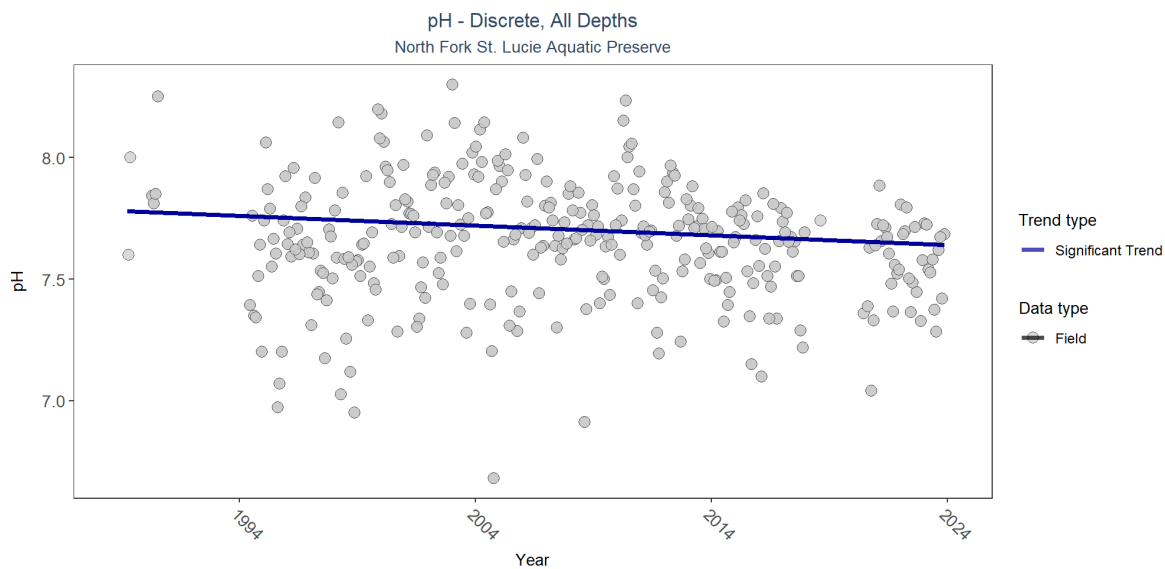


Table 9: Seasonal Kendall-Tau Results for - pH

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	6010	31	1989 - 2023	7.64	-0.1104	7.77963	-0.00395	0.0059

Water Clarity

Turbidity - Discrete

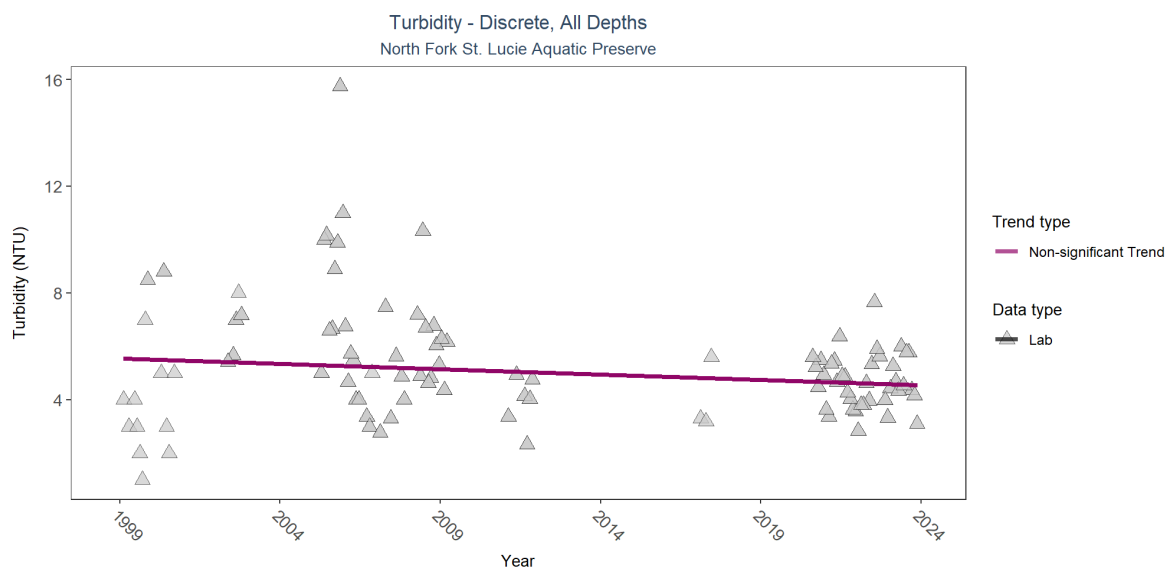


Table 10: Seasonal Kendall-Tau Results for - Turbidity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	484	14	1999 - 2023	5	-0.1698	5.54397	-0.04013	0.1146

Total Suspended Solids - Discrete

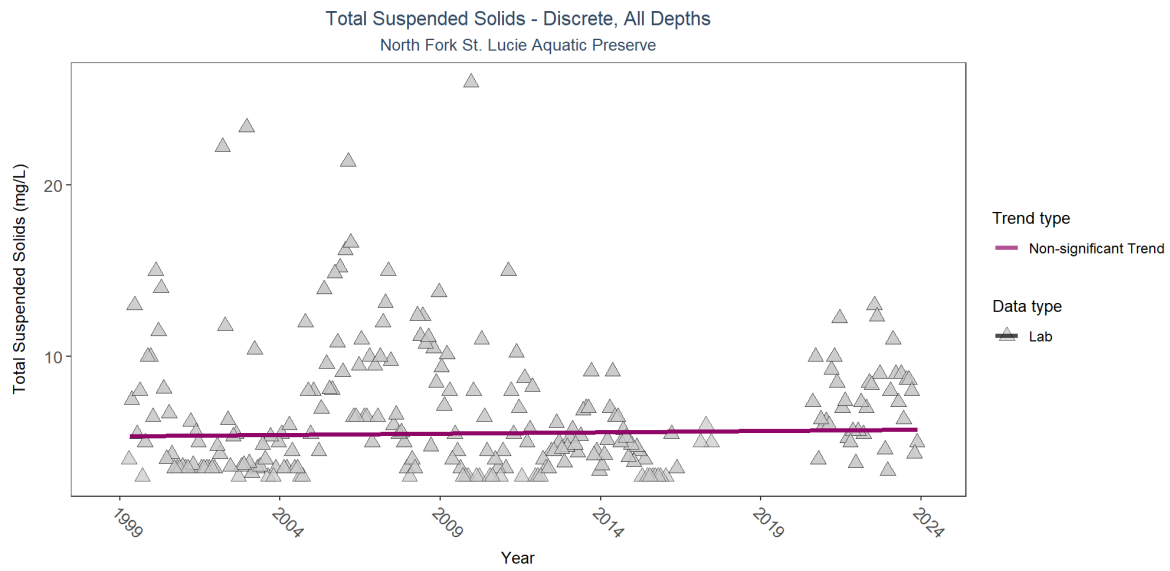


Table 11: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	975	23	1999 - 2023	6	0.0385	5.34547	0.01629	0.3845

Chlorophyll a, Uncorrected for Pheophytin - Discrete

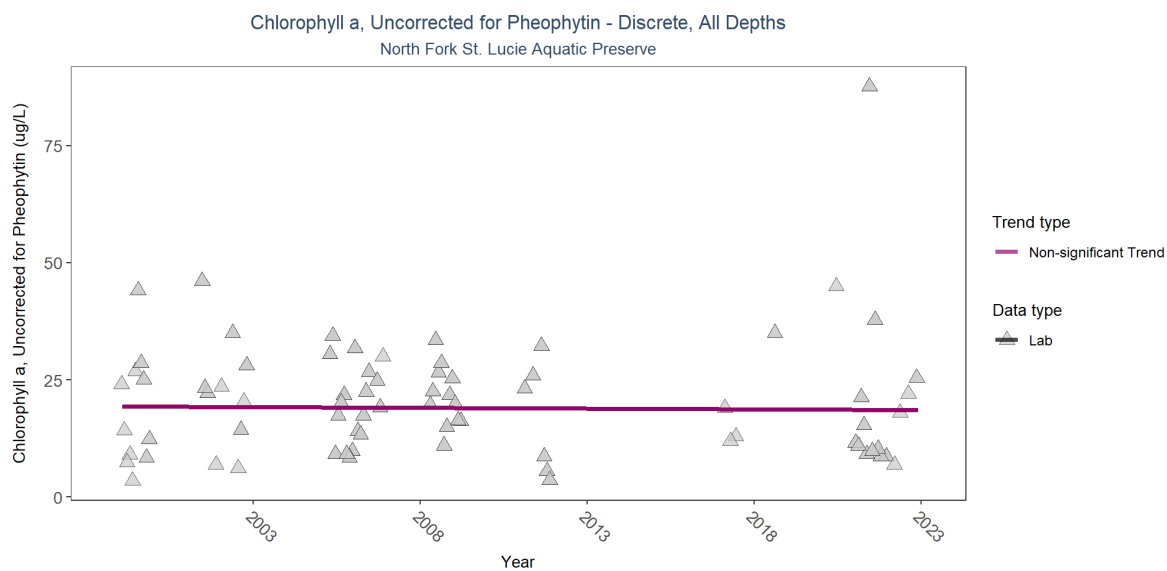


Table 12: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	374	13	1999 - 2022	15	-0.077	19.33548	-0.03125	0.7143

Chlorophyll a, Corrected for Pheophytin - Discrete

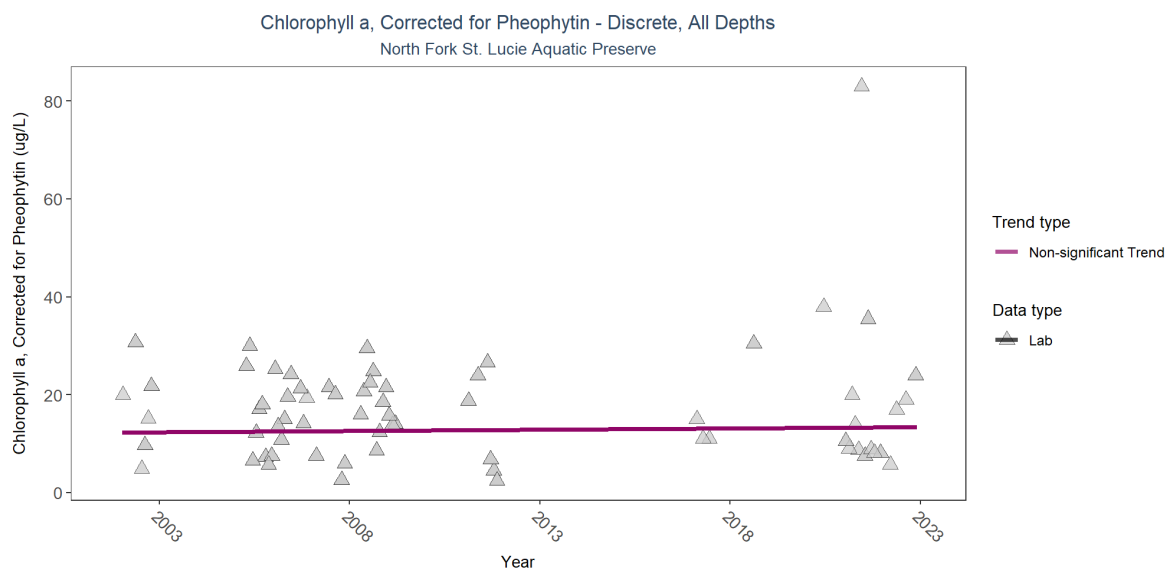


Table 13: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	340	12	2002 - 2022	12	-0.0018	12.23563	0.0525	0.8256

Secchi Depth - Discrete

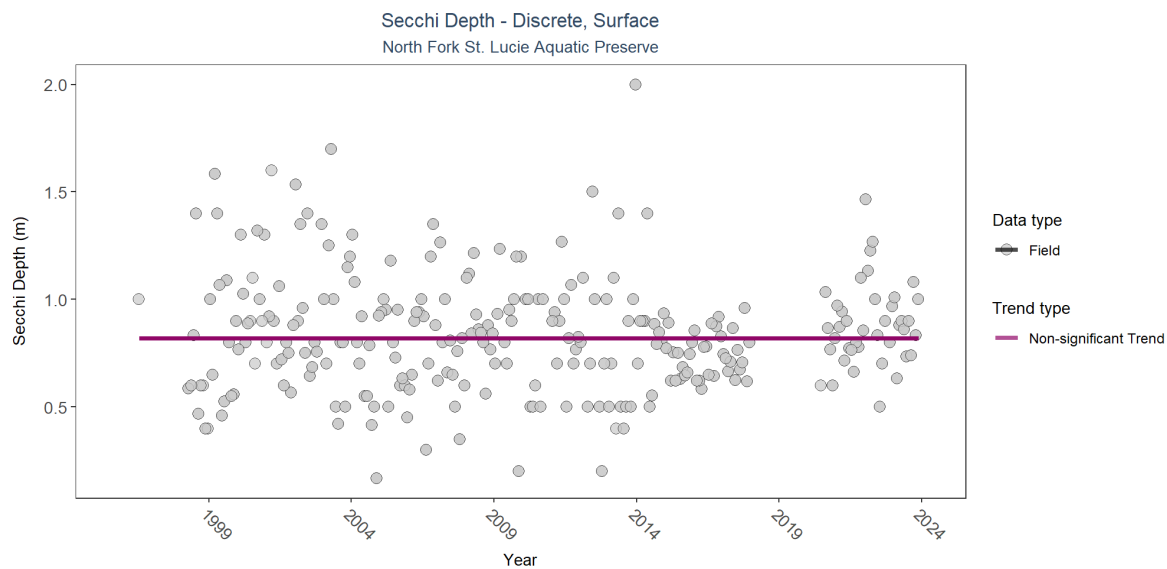


Table 14: Seasonal Kendall-Tau Results for - Secchi Depth

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	1610	25	1996 - 2023	0.8	-0.0227	0.81922	0	0.6425

Colored Dissolved Organic Matter - Discrete

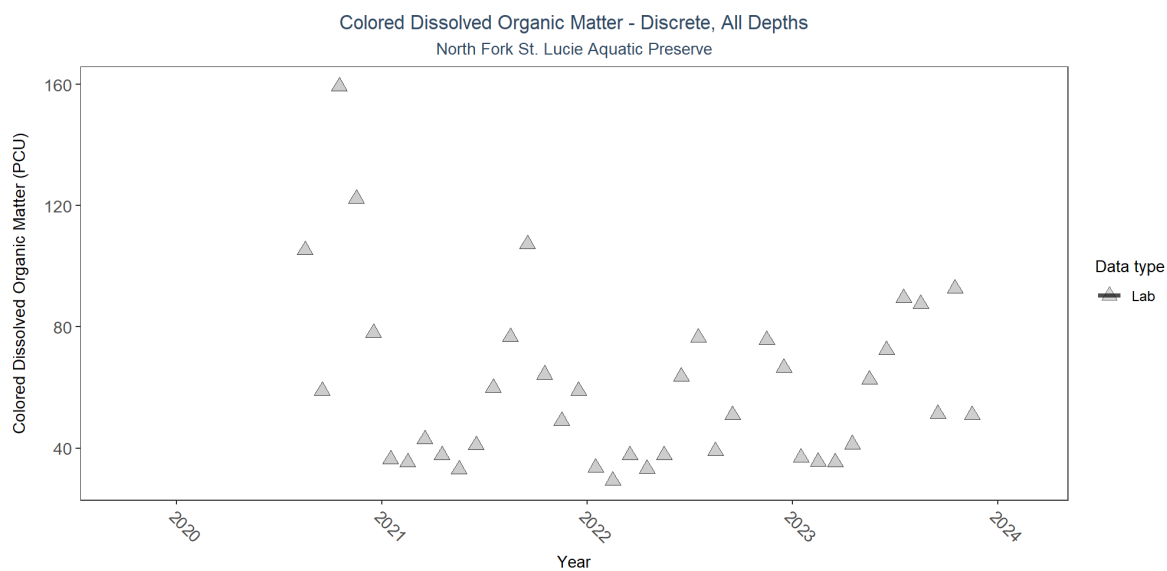


Table 15: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	114	4	2020 - 2023	50	-	-	-	NA