

Pinellas County Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 15 August, 2024

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Indicators

Nutrients

Total Nitrogen - Discrete

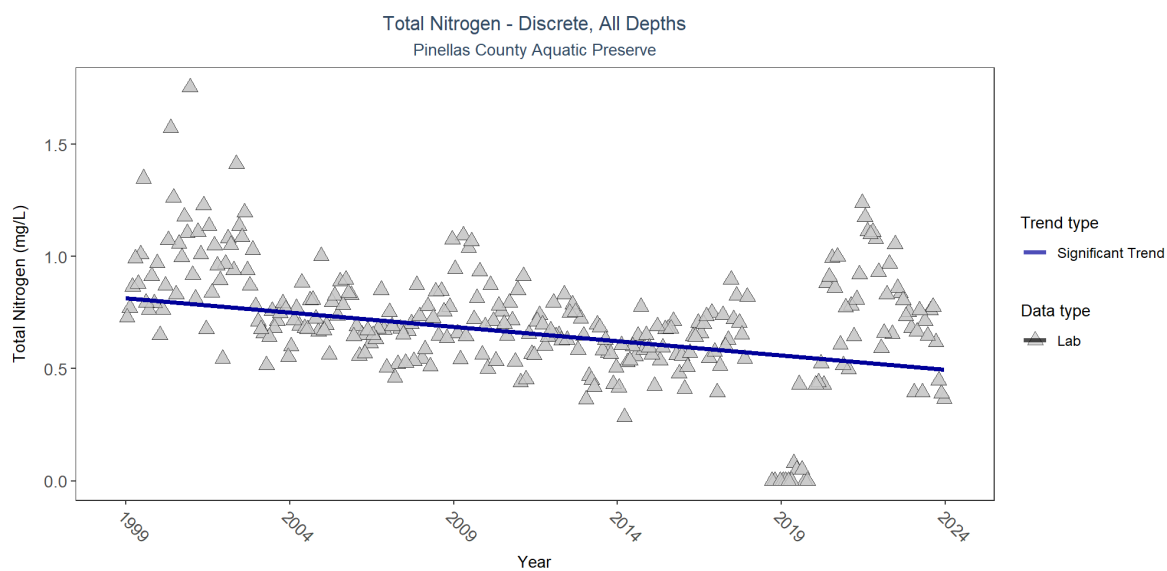


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	15524	25	1999 - 2023	0.598	-0.2933	0.81526	-0.01284	0.0000

Total Phosphorus - Discrete

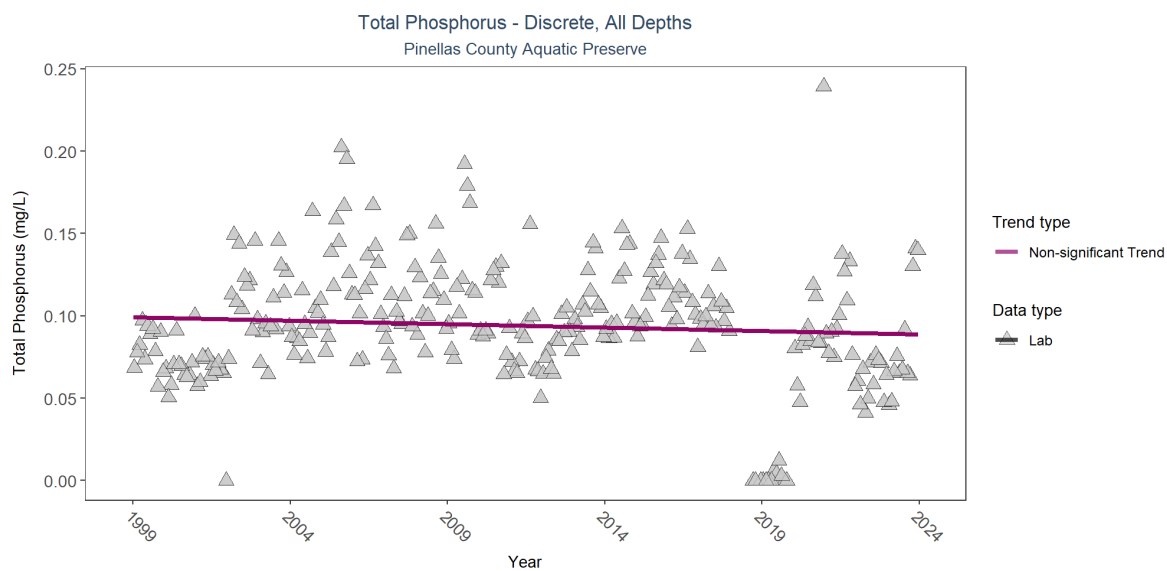


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	15236	25	1999 - 2023	0.09	-0.068	0.09906	-0.00041	0.1076

Water Quality

Dissolved Oxygen - Discrete

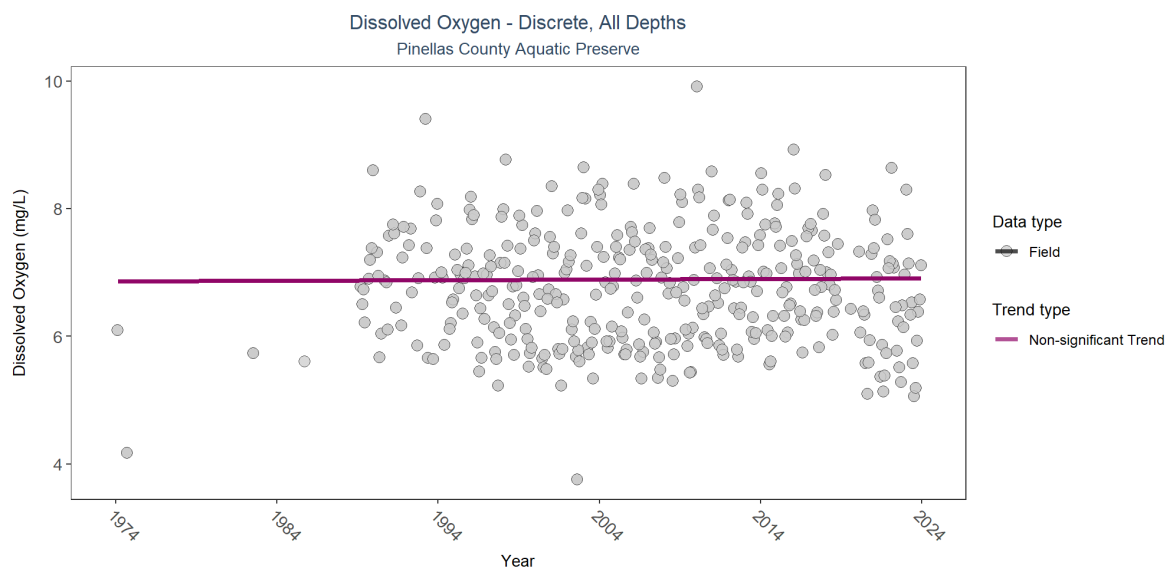


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	90162	38	1974 - 2023	6.6	0.015	6.86404	0.00094	0.7798

Dissolved Oxygen Saturation - Discrete

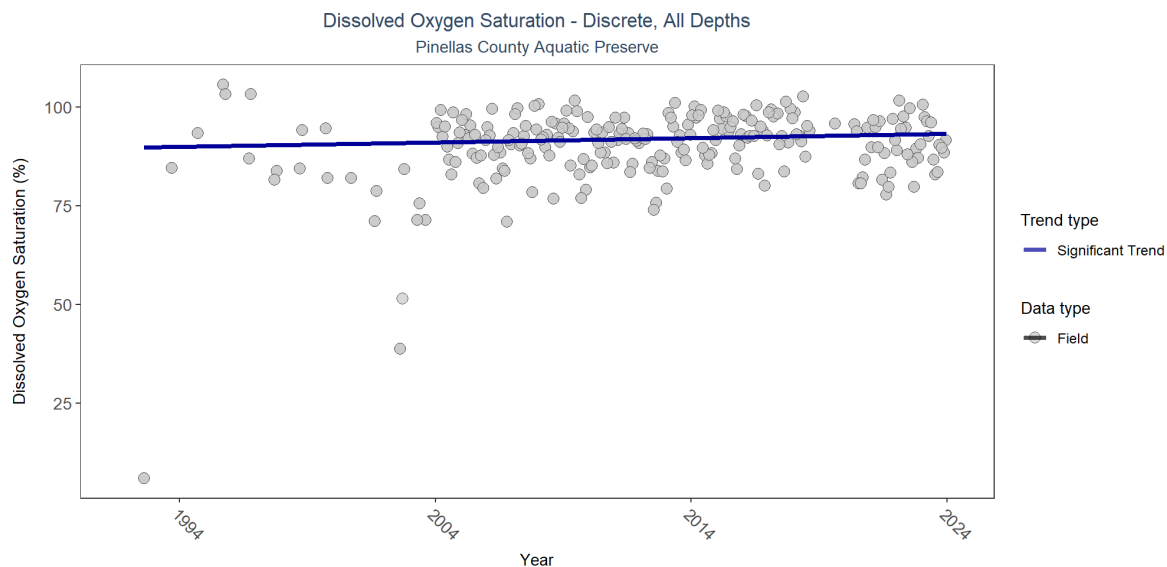


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	29352	32	1992 - 2023	90.9	0.0955	89.6797	0.11219	0.0421

Salinity - Discrete

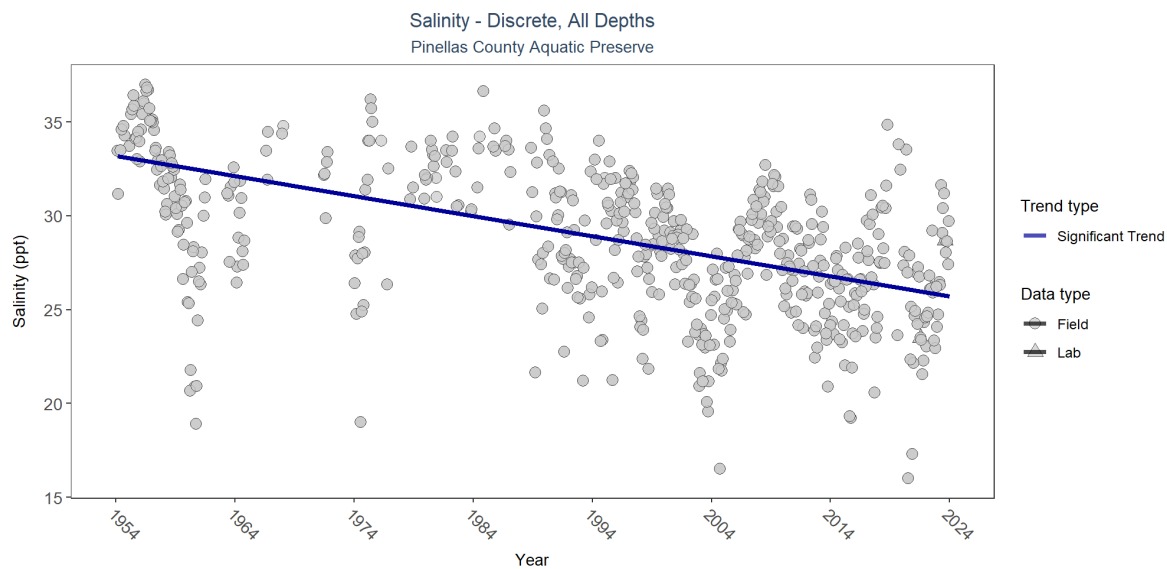


Table 5: Seasonal Kendall-Tau Results for - Salinity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
All	Significantly decreasing trend	87672	63	1954 - 2023	28.96	-0.3909	33.18407	-0.10679	0.0000

Water Temperature - Discrete

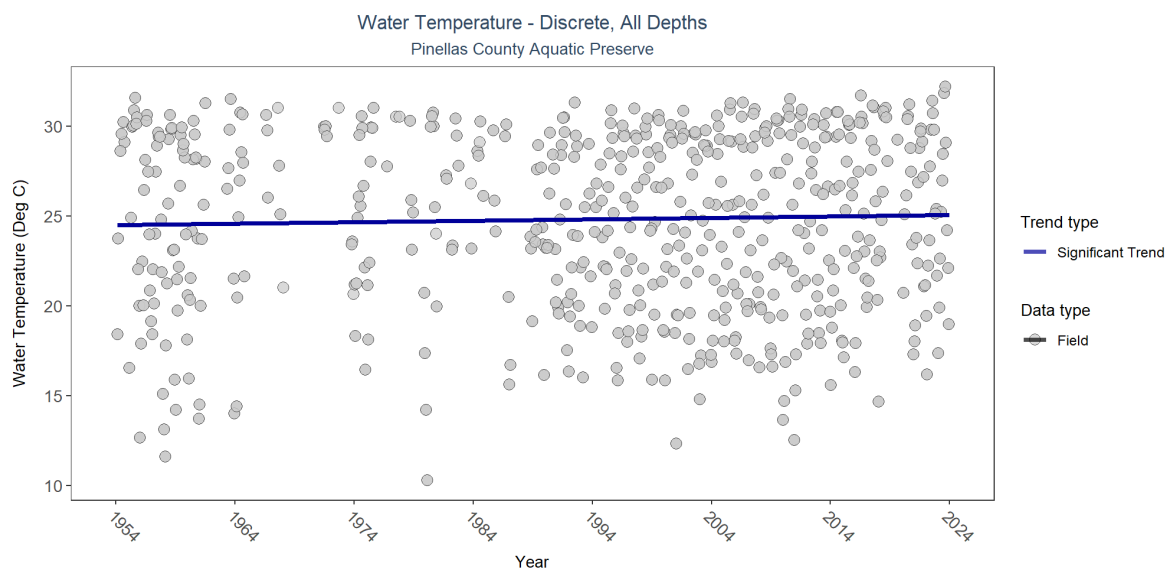


Table 6: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	95789	66	1954 - 2023	26.57	0.0824	24.50867	0.00758	0.0061

Water Temperature - Continuous

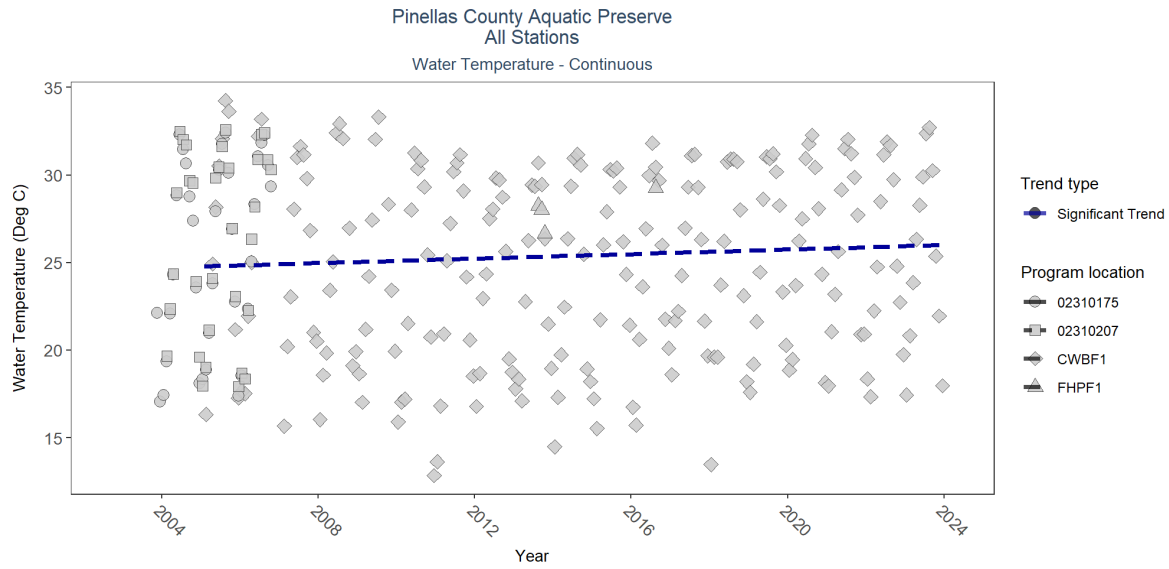


Table 7: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
CWBF1	Significantly increasing trend	1333301	19	2005 - 2023	25.30	0.17	24.8	0.06	0.0008
FHFP1	Insufficient data to calculate trend	12636	2	2013 - 2016	27.90	-	-	-	-
02310175	Insufficient data to calculate trend	1421	4	2003 - 2006	26.50	-	-	-	-
02310207	Insufficient data to calculate trend	1424	3	2004 - 2006	27.55	-	-	-	-

pH - Discrete

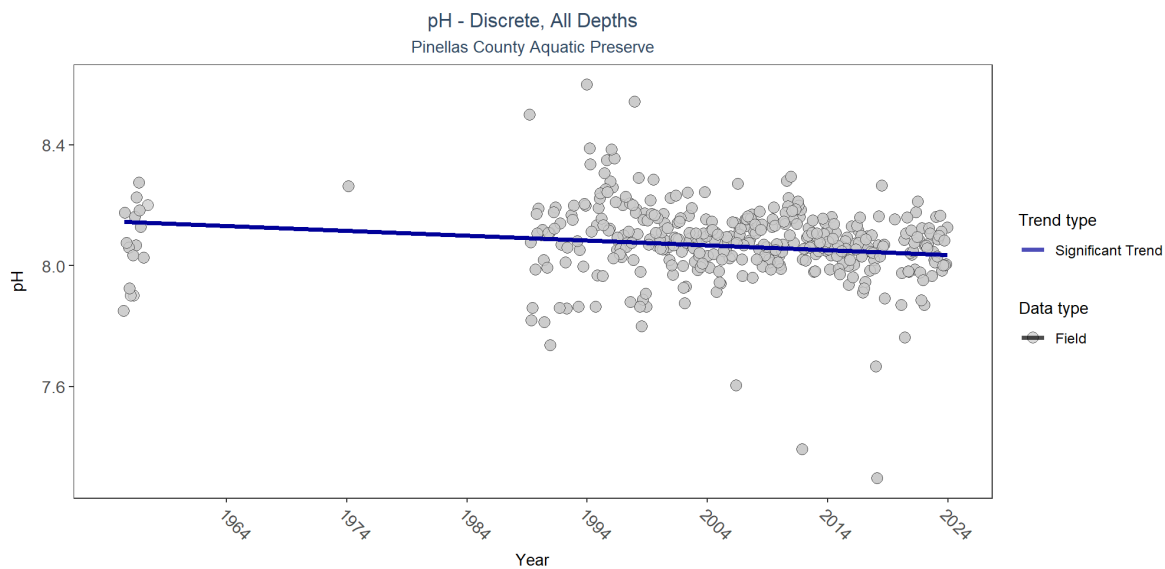


Table 8: Seasonal Kendall-Tau Results for - pH

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	85325	39	1955 - 2023	8.1	-0.149	8.14505	-0.0016	0.0000

Water Clarity

Turbidity - Discrete

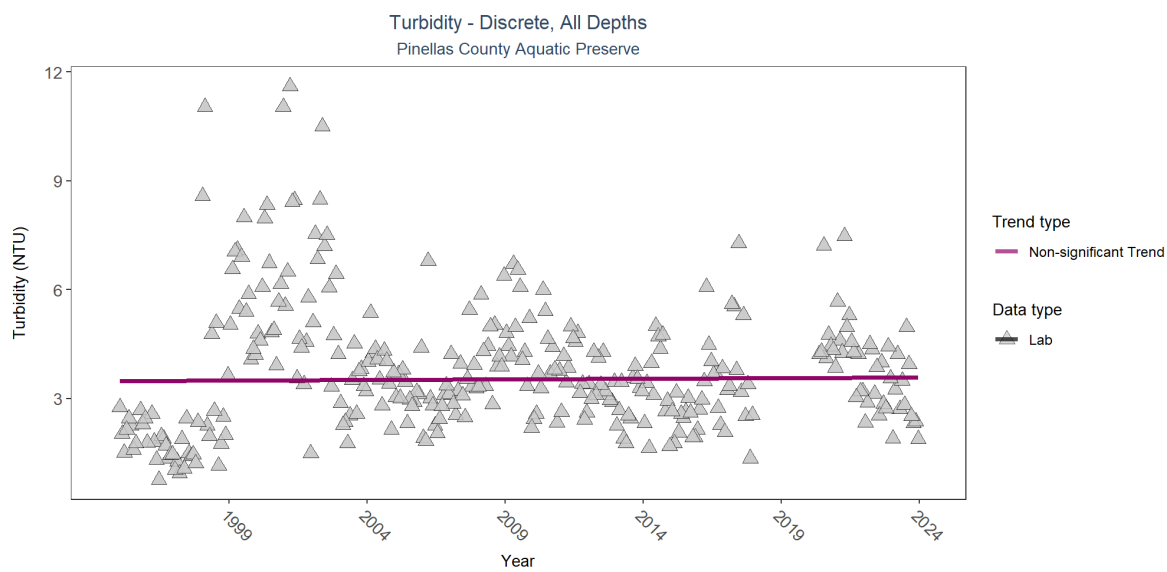


Table 9: Seasonal Kendall-Tau Results for - Turbidity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	20740	27	1995 - 2023	2.5	0.0086	3.49202	0.00298	0.8038

Total Suspended Solids - Discrete

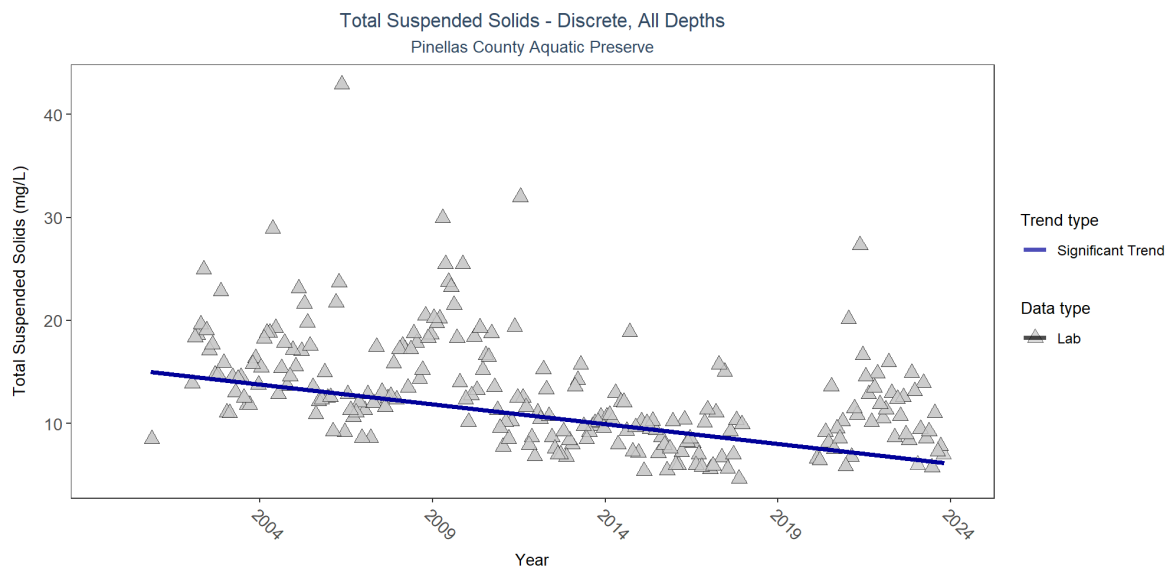


Table 10: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	11748	21	2000 - 2023	10	-0.3786	15.29408	-0.38253	0.0000

Chlorophyll a, Uncorrected for Pheophytin - Discrete

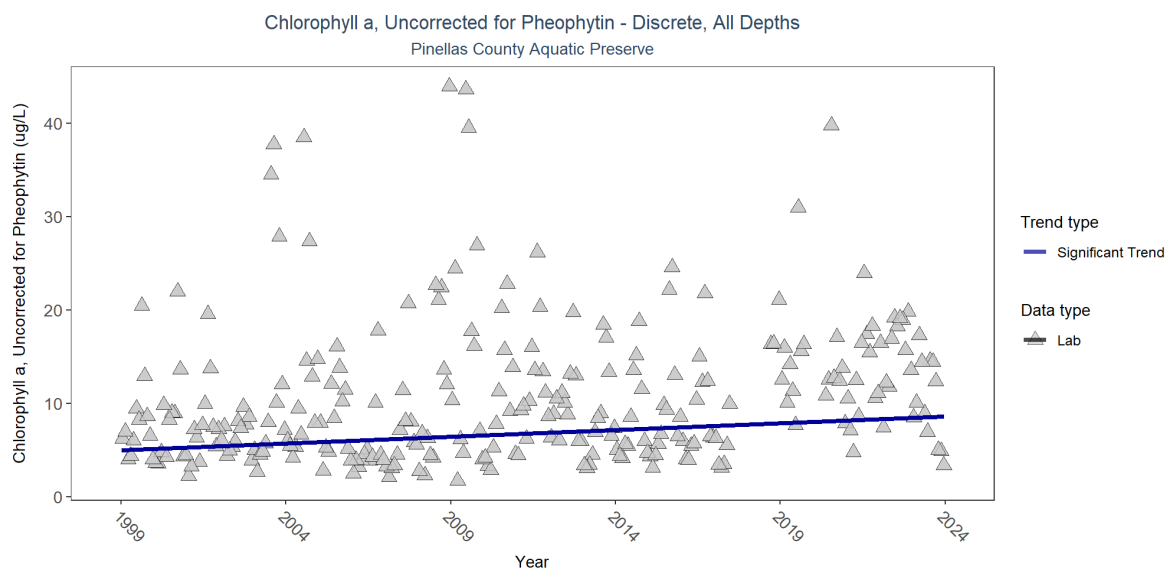


Table 11: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	6191	25	1999 - 2023	6.3	0.2107	4.97691	0.1461	0.0000

Chlorophyll a, Corrected for Pheophytin - Discrete

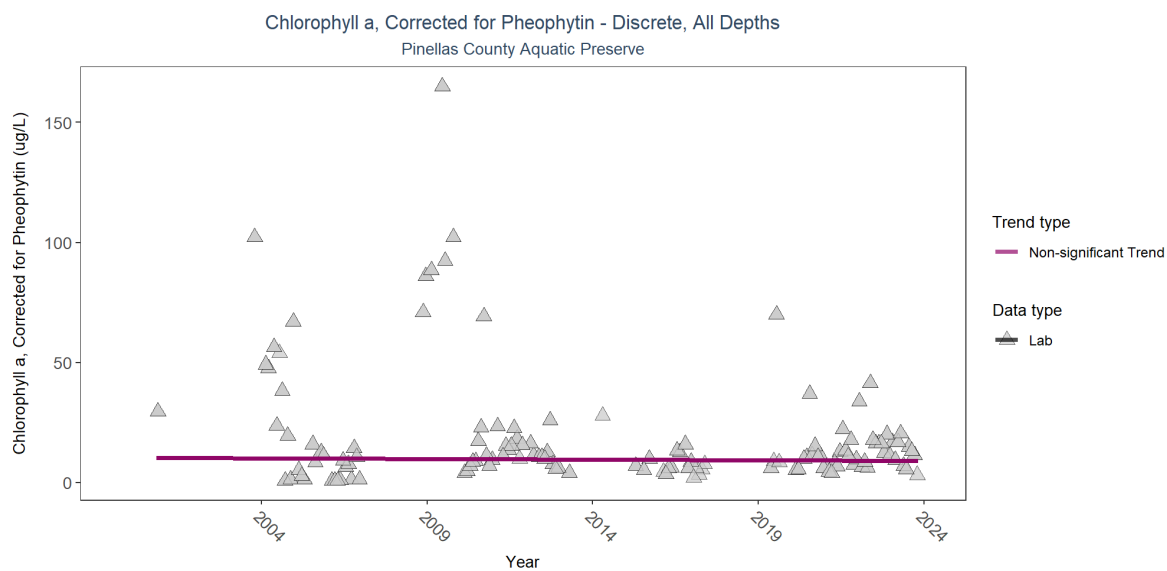


Table 12: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	3049	20	2000 - 2023	5.8	-0.001	10.24559	-0.04533	0.7374

Secchi Depth - Discrete

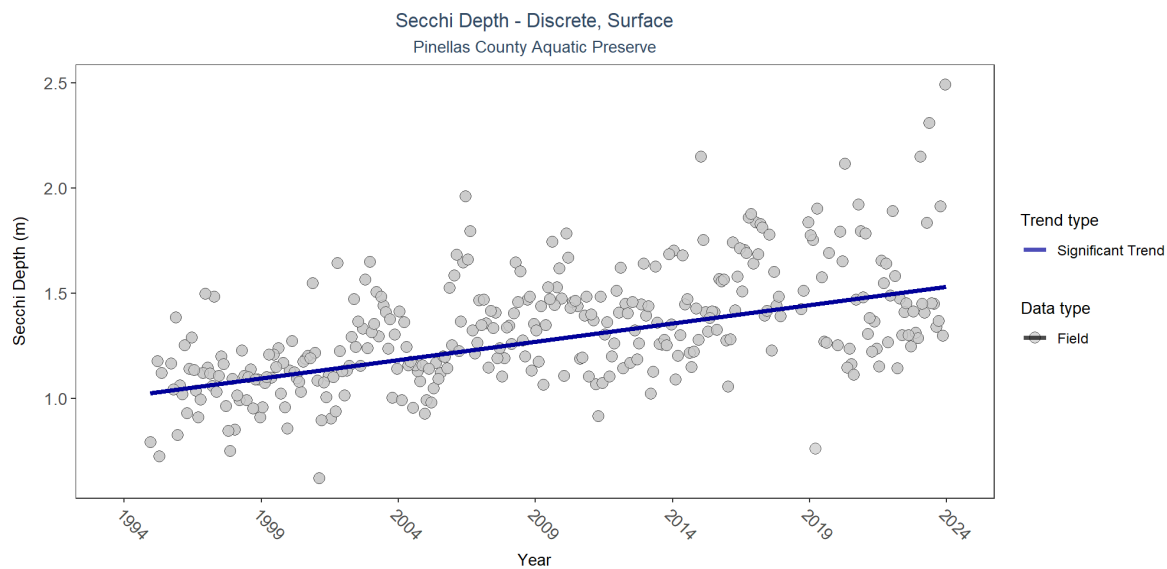


Table 13: Seasonal Kendall-Tau Results for - Secchi Depth

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	25859	30	1994 - 2023	1.2	0.42	1.00944	0.0174	0.0000

Colored Dissolved Organic Matter - Discrete

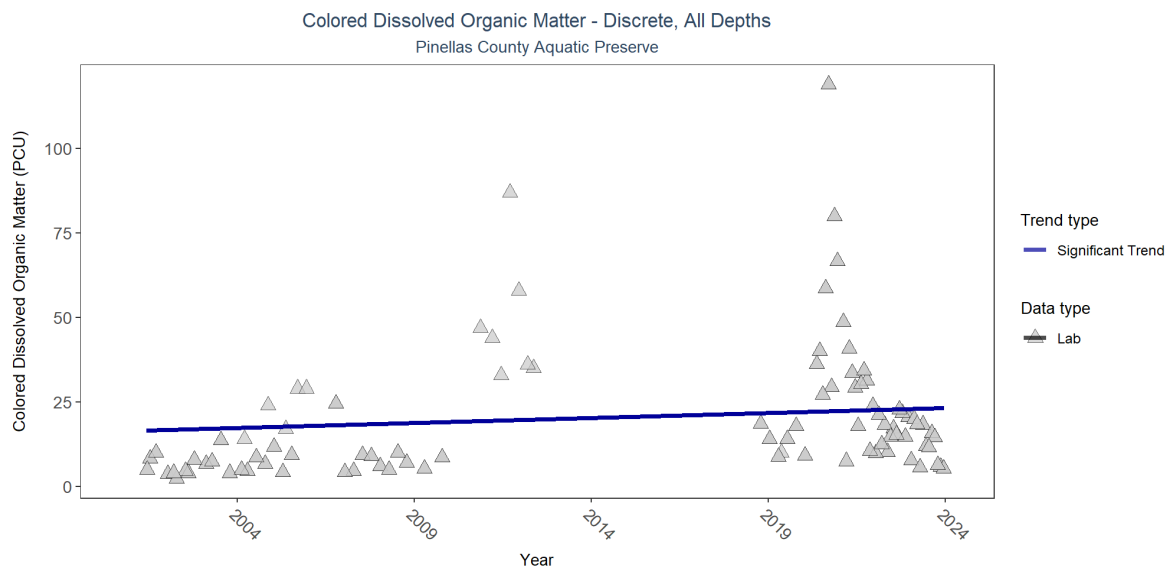


Table 14: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	828	18	2001 - 2023	10	0.1524	16.39878	0.29291	0.0037