

Pine Island Sound Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 15 August, 2024

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Indicators

Nutrients

Total Nitrogen - Discrete

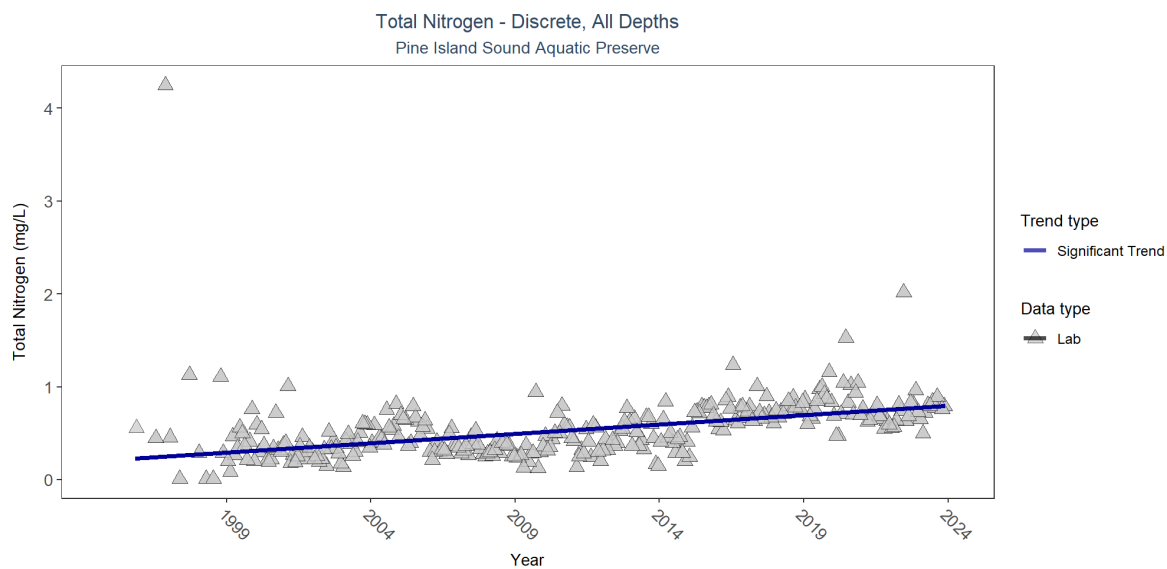


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	4100	29	1995 - 2023	0.53	0.4389	0.213	0.02011	0.0000

Total Phosphorus - Discrete

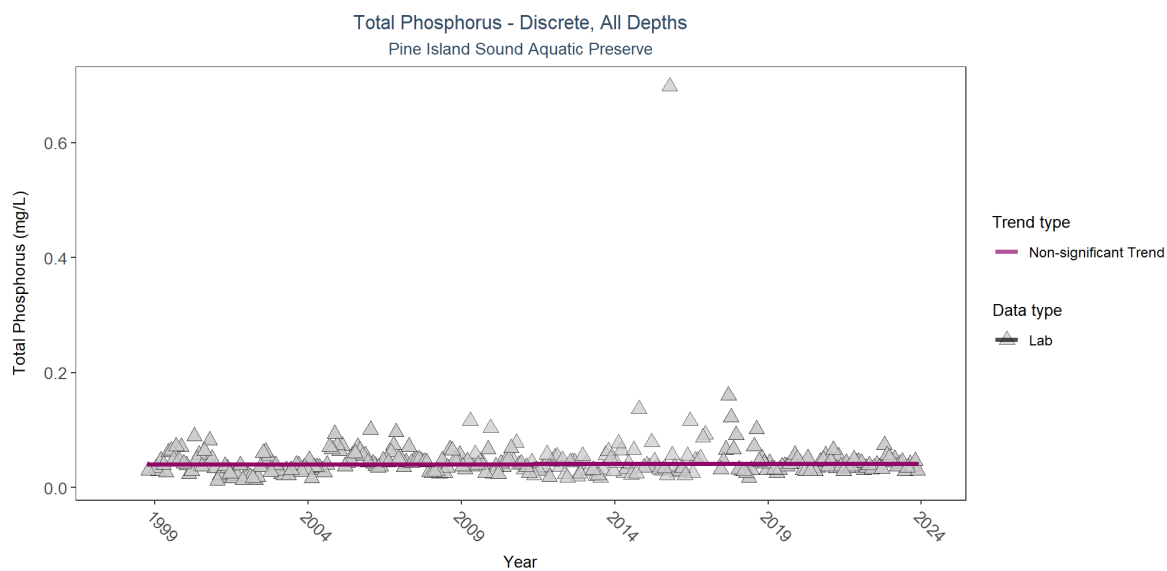


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	2649	26	1998 - 2023	0.036	0.0171	0.04042	0.00004	0.7261

Water Quality

Dissolved Oxygen - Discrete

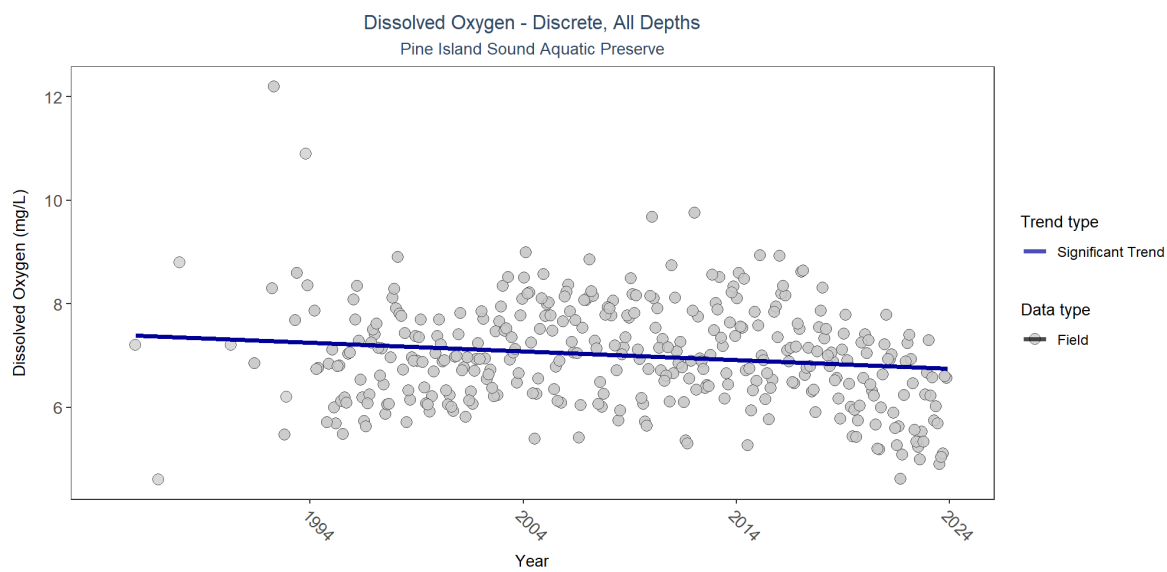


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	27988	37	1985 - 2023	7	-0.1329	7.40149	-0.01695	0.0003

Dissolved Oxygen - Continuous

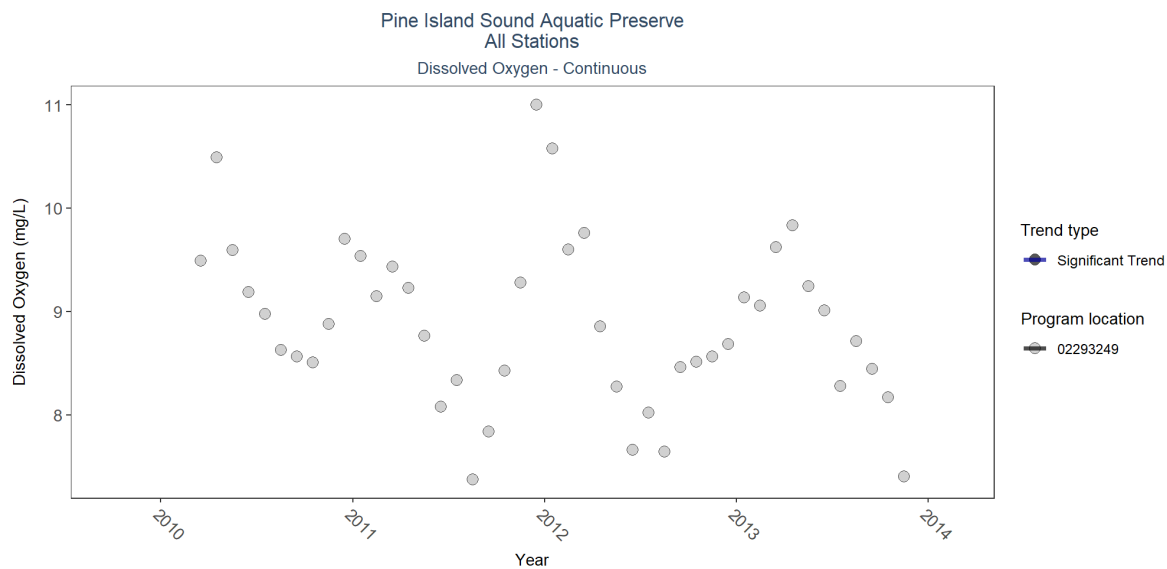


Table 4: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02293249	Insufficient data to calculate trend	1302	4	2010 - 2013	8.8	-	-	-	-

Dissolved Oxygen Saturation - Discrete

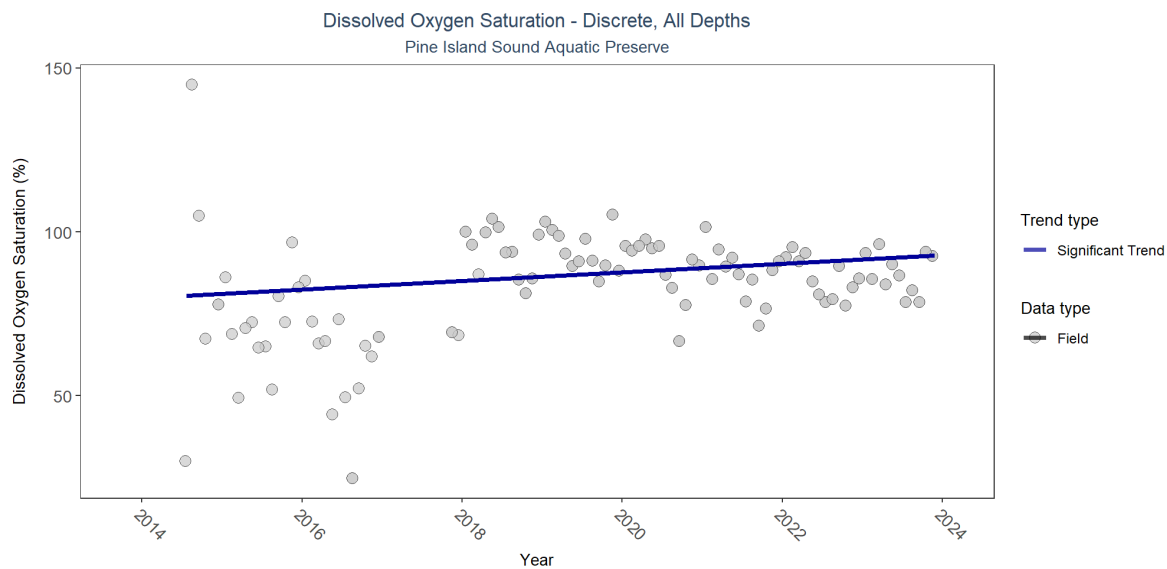


Table 5: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	1780	10	2014 - 2023	91.86372	0.1632	79.84351	1.31567	0.0471

Salinity - Discrete

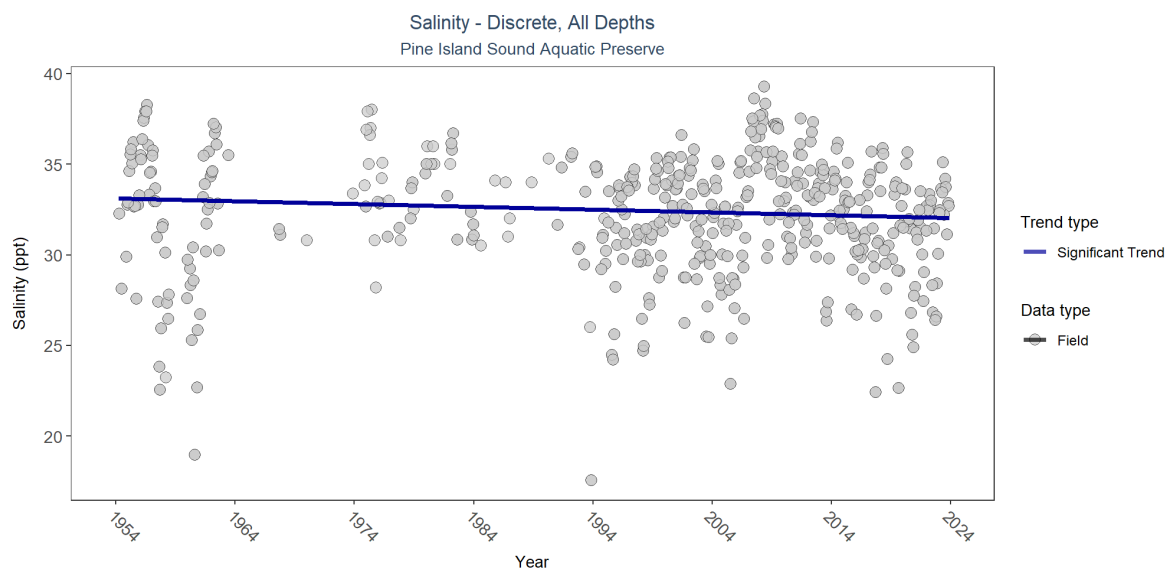


Table 6: Seasonal Kendall-Tau Results for - Salinity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
All	Significantly decreasing trend	26638	62	1954 - 2023	32.9	-0.0805	33.11989	-0.01552	0.0129

Salinity - Continuous

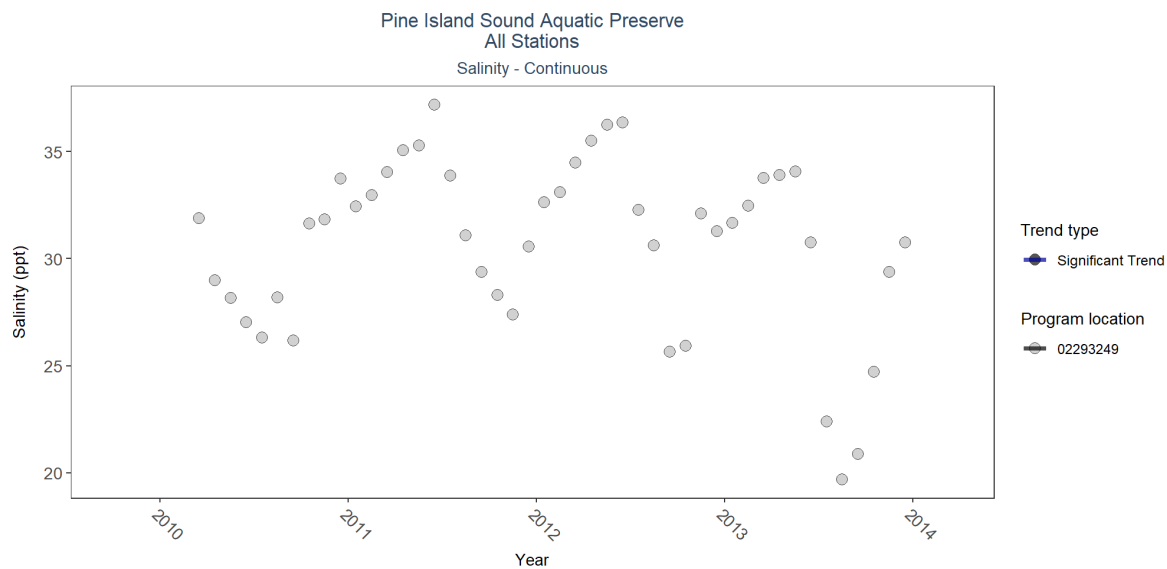


Table 7: Seasonal Kendall-Tau Results for All Stations - Salinity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02293249	Insufficient data to calculate trend	1871	4	2010 - 2013	32	-	-	-	-

Water Temperature - Discrete

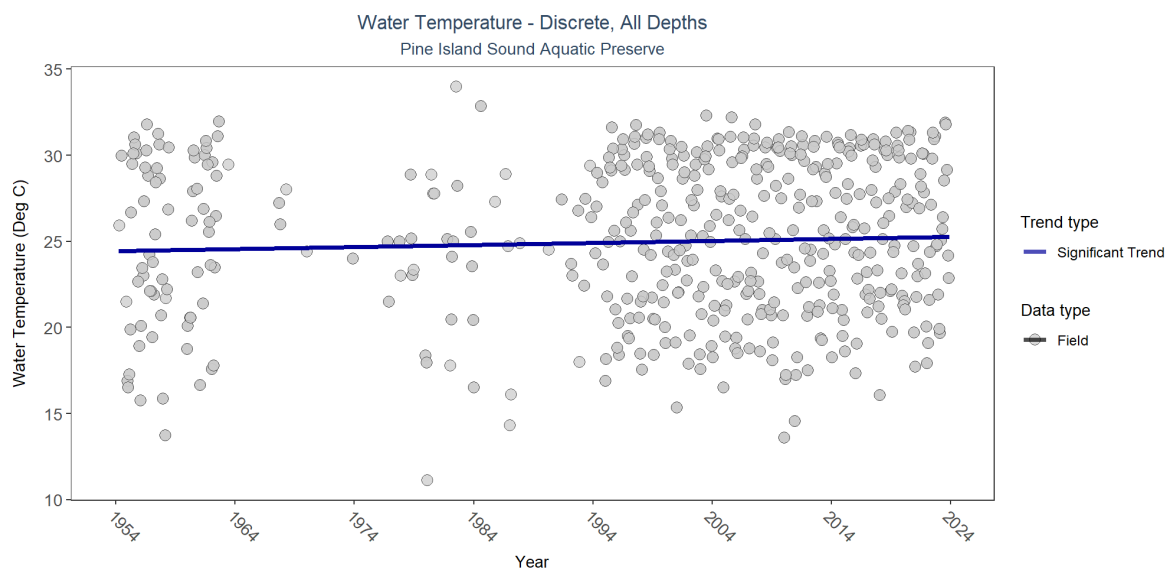


Table 8: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	29796	60	1954 - 2023	26.2	0.107	24.43794	0.01199	0.0010

Water Temperature - Continuous

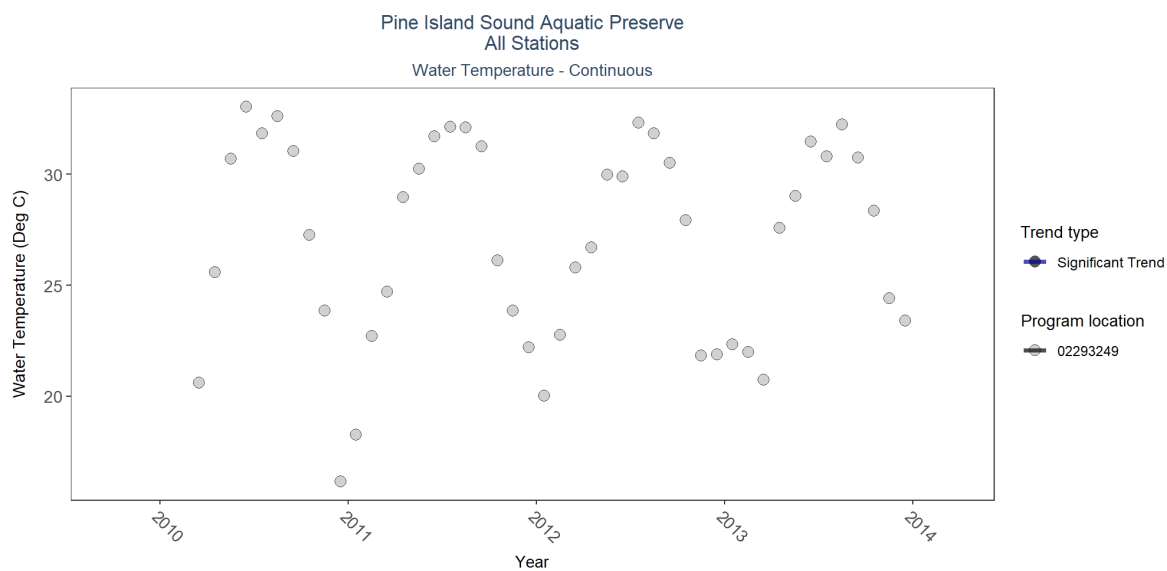


Table 9: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02293249	Insufficient data to calculate trend	2445	4	2010 - 2013	28.1	-	-	-	-

pH - Discrete

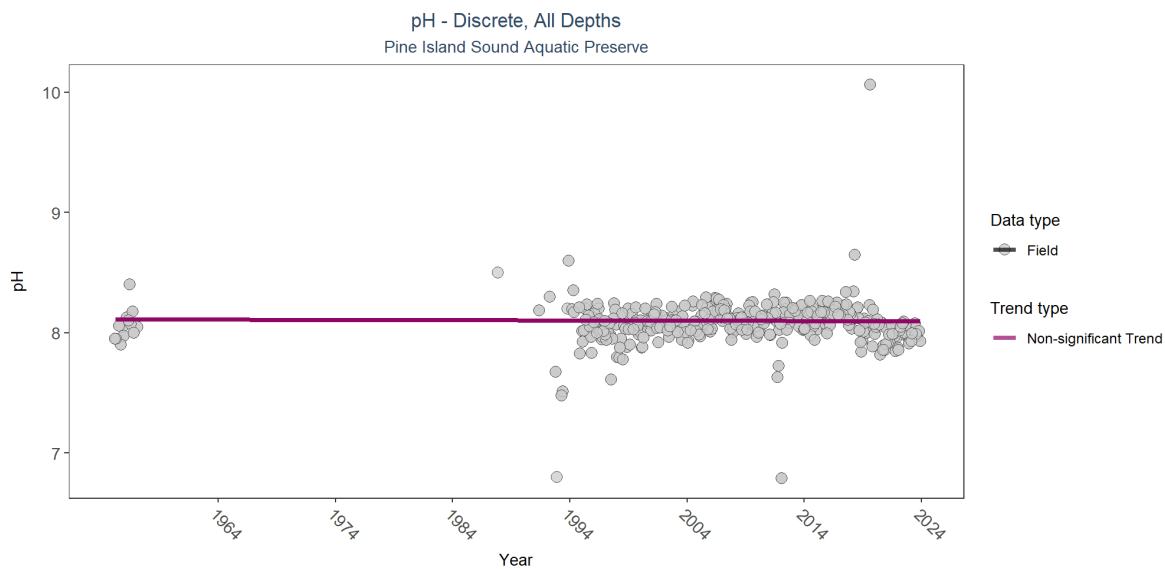


Table 10: Seasonal Kendall-Tau Results for - pH

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	25506	37	1955 - 2023	8.1	-0.0142	8.11172	-0.00021	0.7035

pH - Continuous

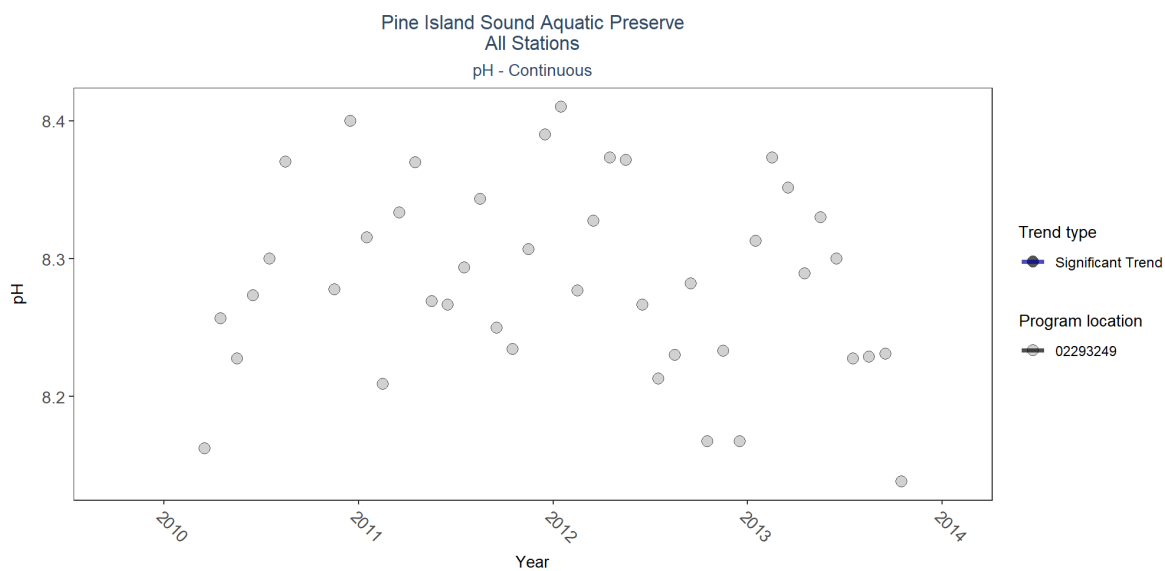


Table 11: Seasonal Kendall-Tau Results for All Stations - pH

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02293249	Insufficient data to calculate trend	1164	4	2010 - 2013	8.3	-	-	-	-

Water Clarity

Turbidity - Discrete

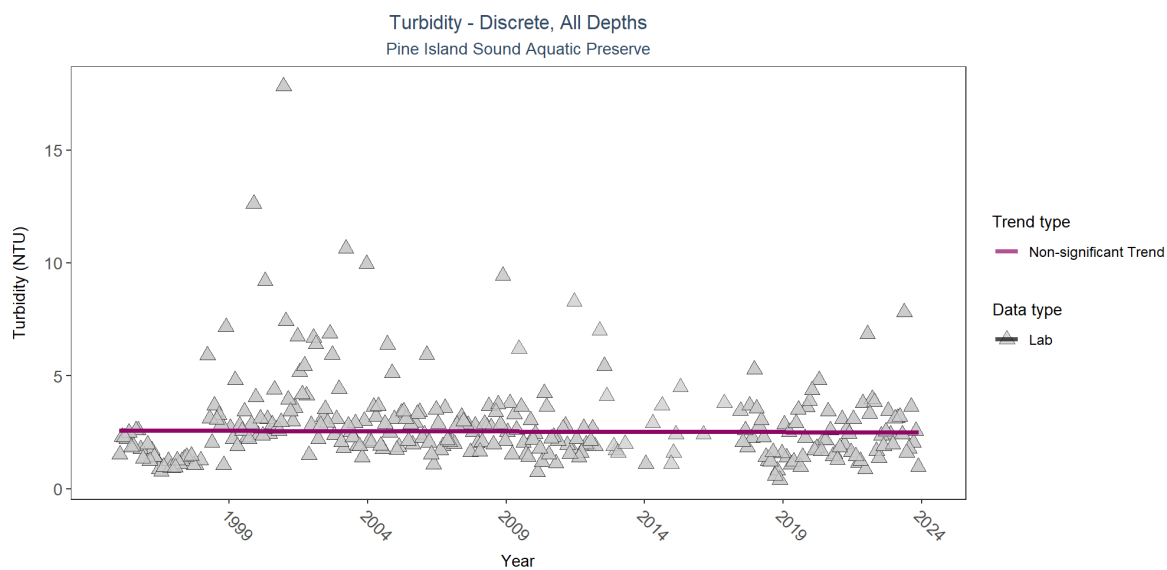


Table 12: Seasonal Kendall-Tau Results for - Turbidity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	5445	29	1995 - 2023	1.9	-0.0117	2.57389	-0.00238	0.8524

Turbidity - Continuous

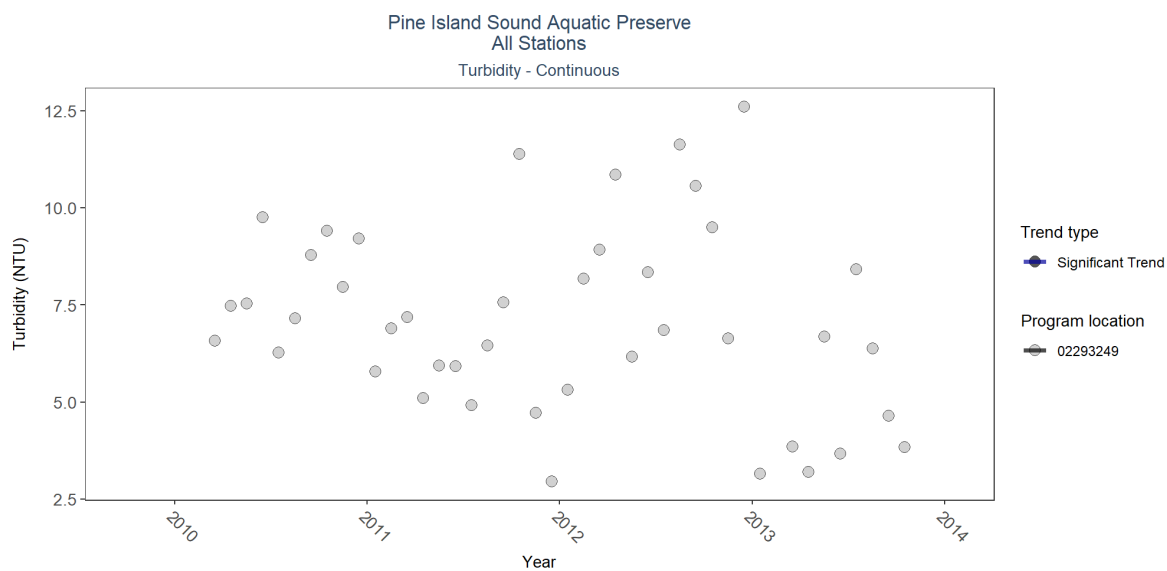


Table 13: Seasonal Kendall-Tau Results for All Stations - Turbidity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02293249	Insufficient data to calculate trend	1174	4	2010 - 2013	5.4	-	-	-	-

Total Suspended Solids - Discrete

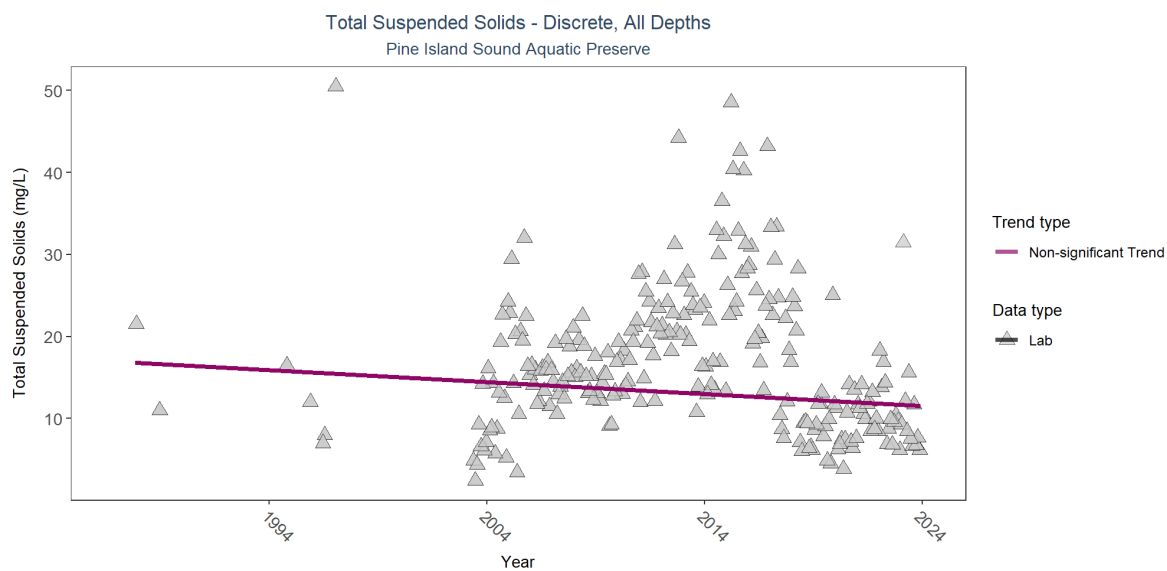


Table 14: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	2520	27	1987 - 2023	12.8	-0.0598	16.89323	-0.14458	0.1886

Chlorophyll a, Uncorrected for Pheophytin - Discrete

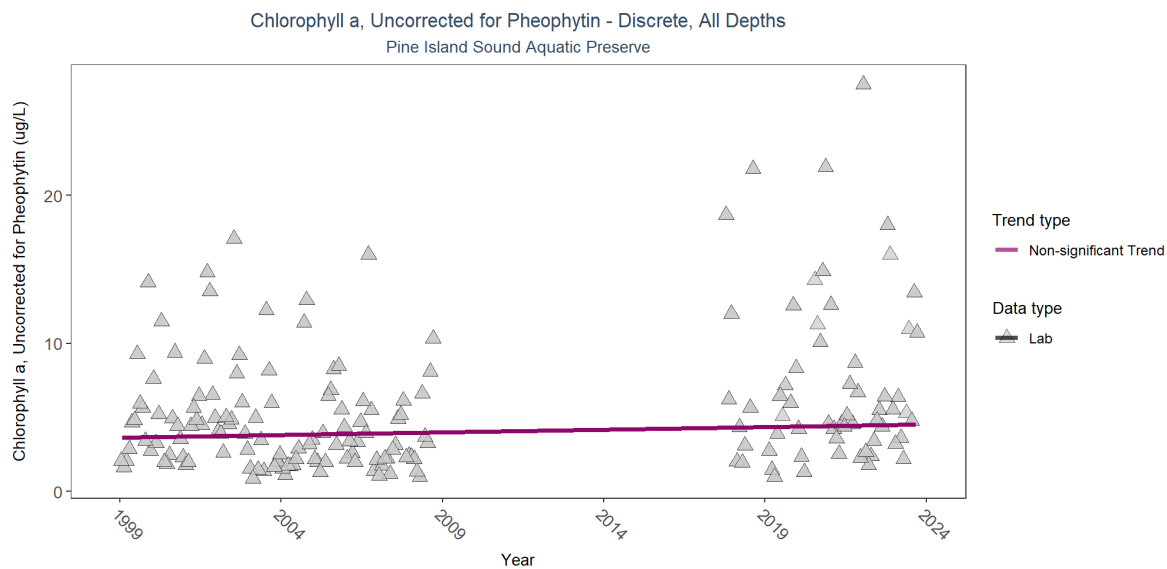


Table 15: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	959	17	1999 - 2023	3.6304	0.1107	3.64344	0.03517	0.0621

Chlorophyll a, Corrected for Pheophytin - Discrete

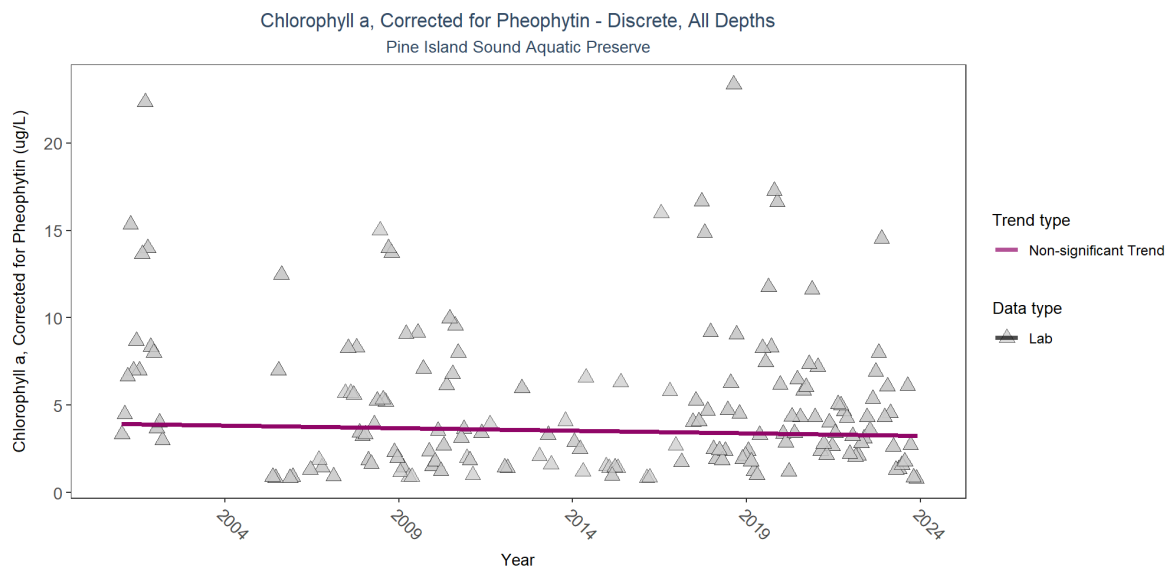


Table 16: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	2027	21	2001 - 2023	3.15	-0.0649	3.94047	-0.03	0.3183

Secchi Depth - Discrete

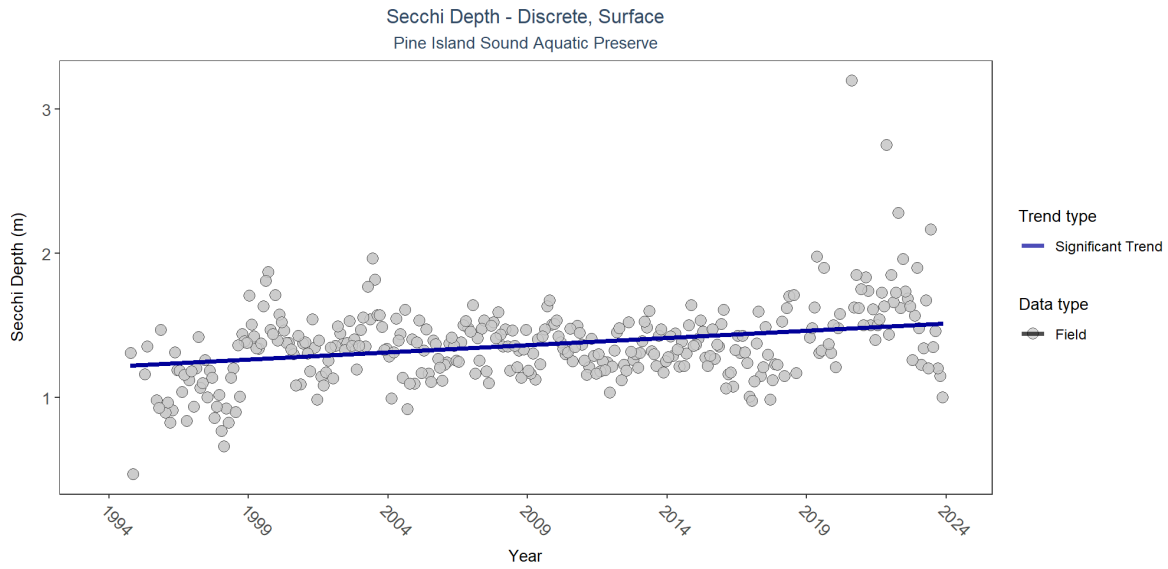


Table 17: Seasonal Kendall-Tau Results for - Secchi Depth

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	16231	30	1994 - 2023	1.2	0.2259	1.216	0.00996	0.0000

Colored Dissolved Organic Matter - Discrete

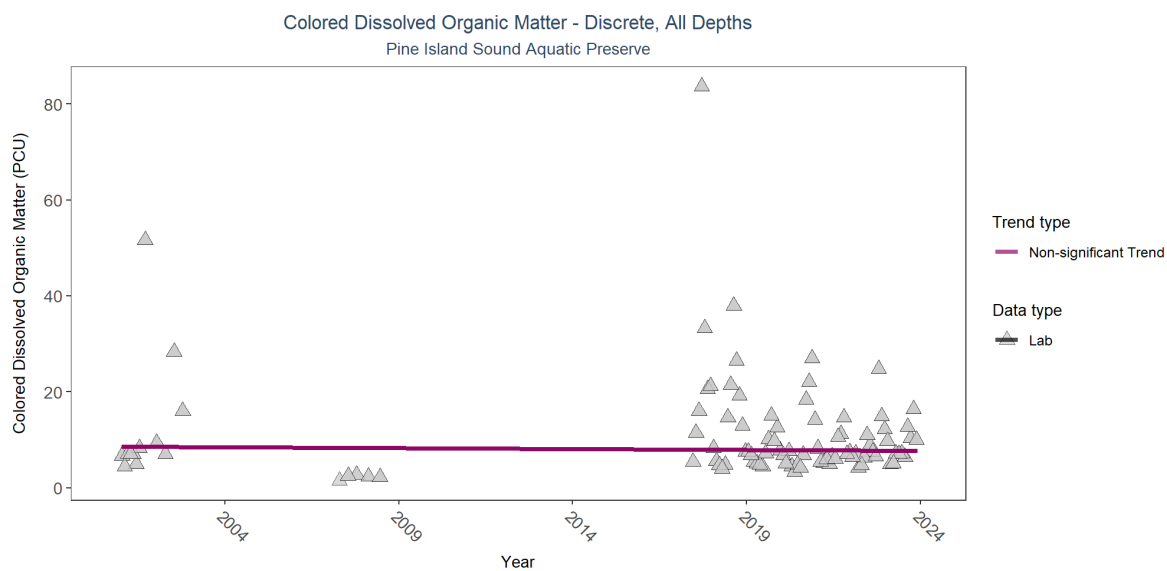


Table 18: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	1179	11	2001 - 2023	7.23	-0.0591	8.58231	-0.03672	0.6210