

Rocky Bayou State Park Aquatic Preserve

SEACAR Water Quality Analysis

Last compiled on 27 January, 2025

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Indicators

Nutrients

Total Nitrogen - Discrete

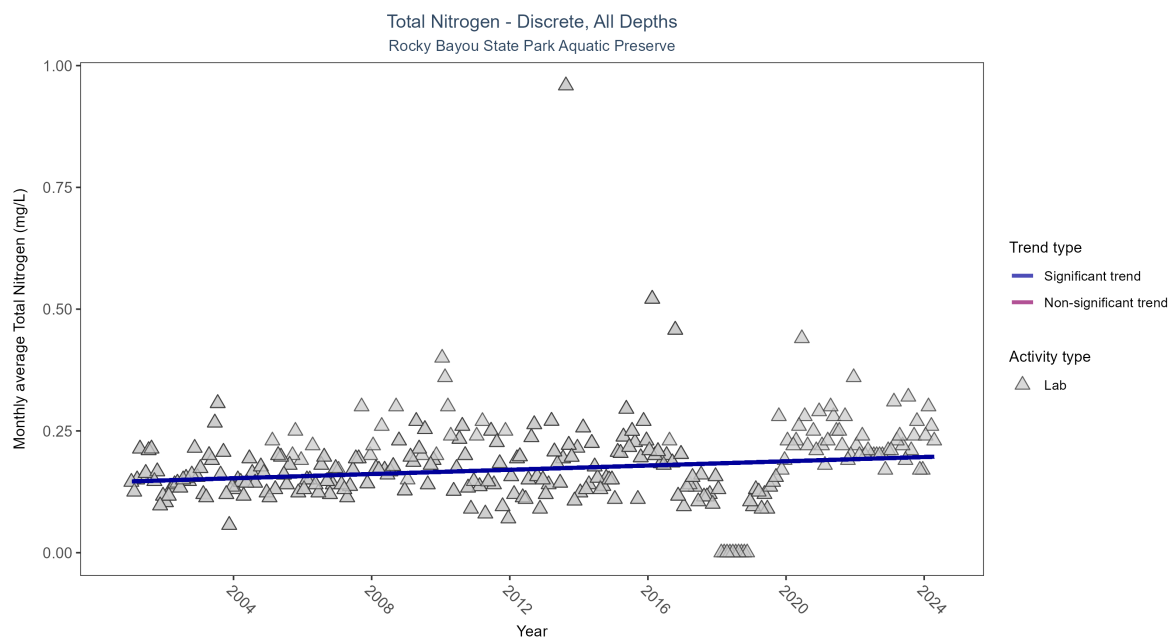


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly increasing trend	635	24	2001 - 2024	0.2	0.1611	0.14624	0.00218	0.0002

Total Phosphorus - Discrete

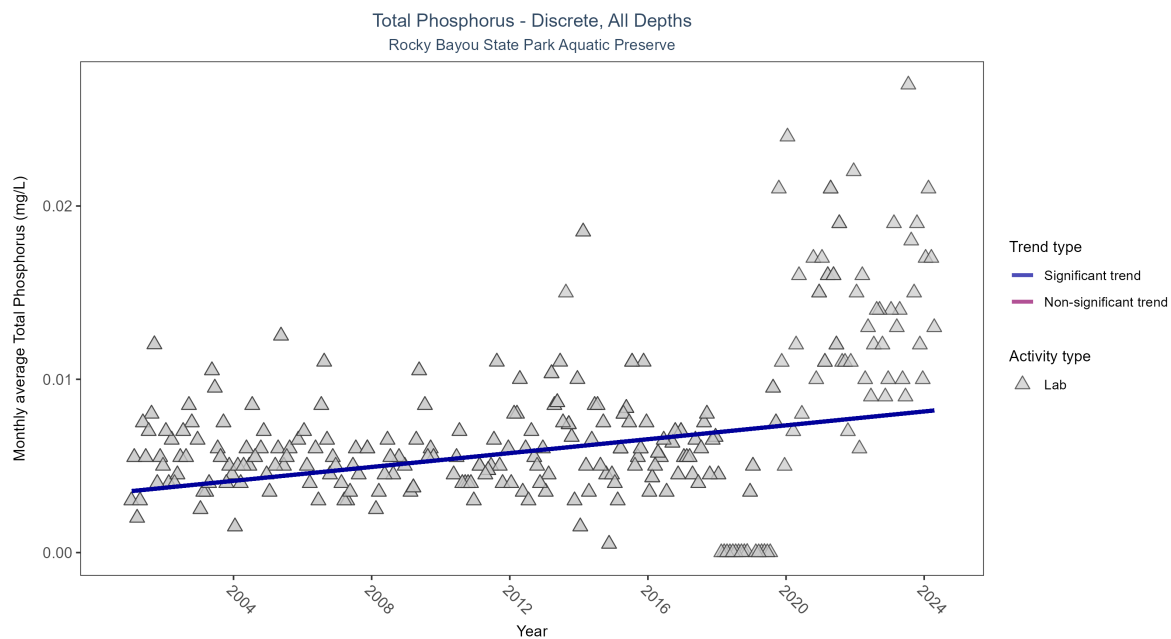


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly increasing trend	465	24	2001 - 2024	0.007	0.2622	0.00354	0.0002	0.0000

Water Quality

Dissolved Oxygen - Discrete

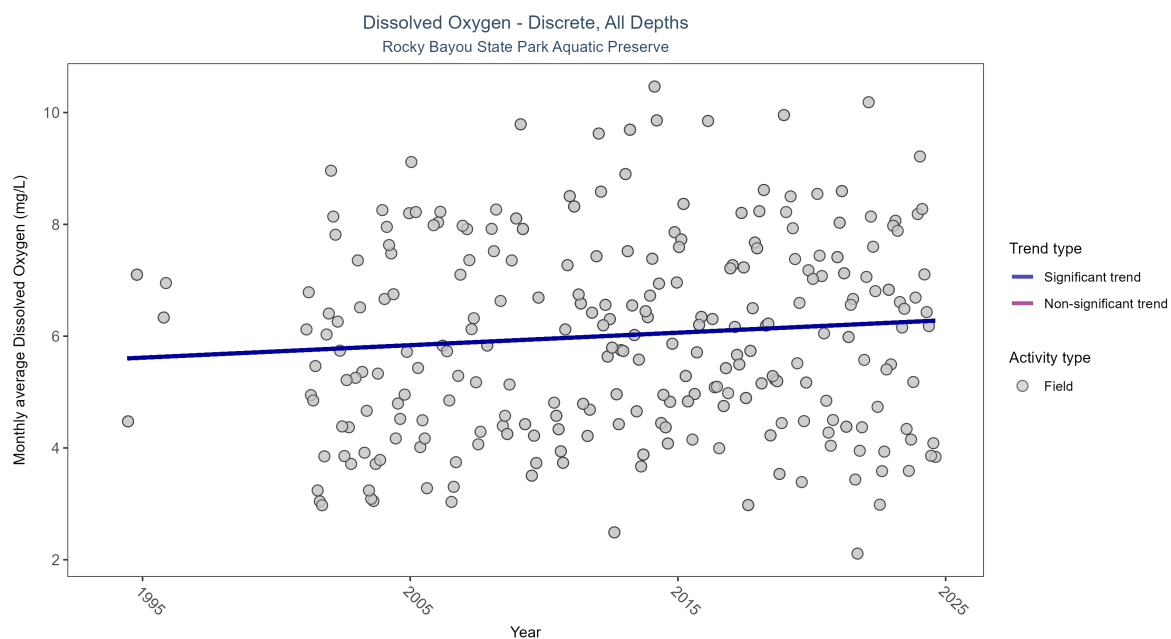


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Significantly increasing trend	770	26	1994 - 2024	6.61	0.1158	5.59271	0.02236	0.0082

Dissolved Oxygen Saturation - Discrete

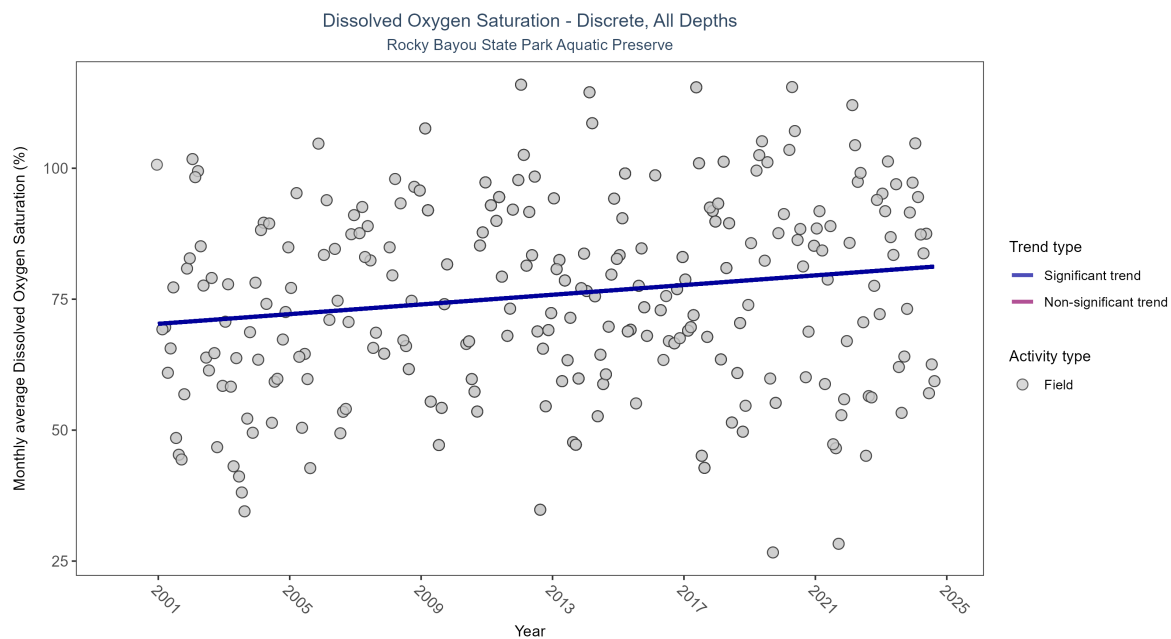


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Significantly increasing trend	731	25	2000 - 2024	89.3	0.1513	69.83519	0.4625	0.0009

Salinity - Discrete

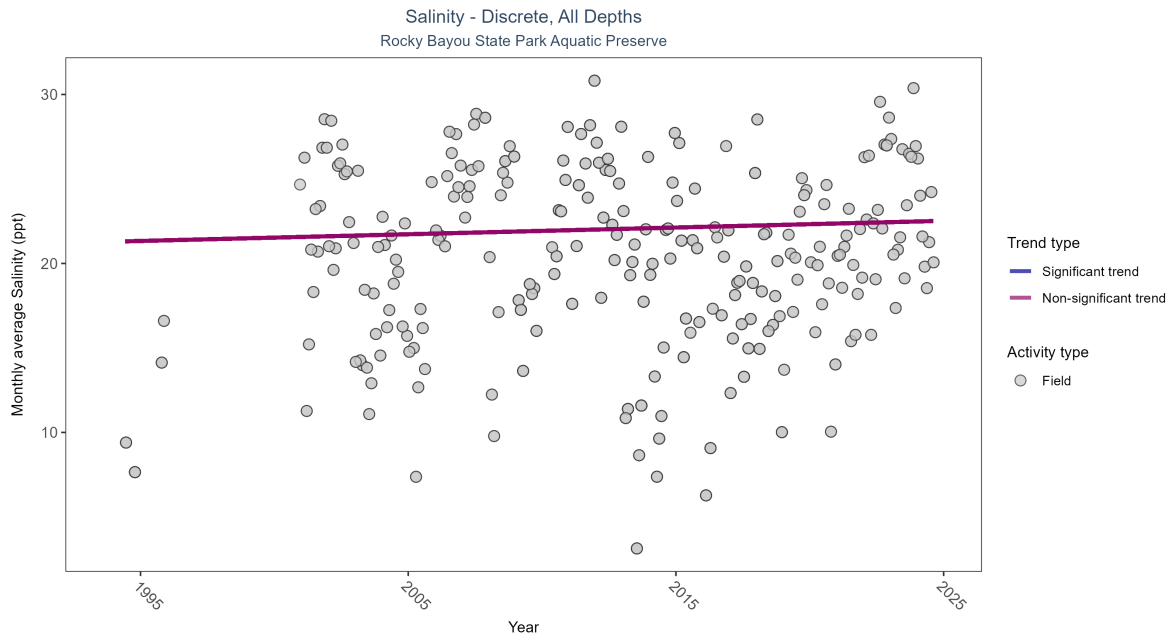


Table 5: Seasonal Kendall-Tau Results for - Salinity

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
All	No significant trend	756	27	1994 - 2024	22	0.0502	21.2907	0.03974	0.2844

Water Temperature - Discrete

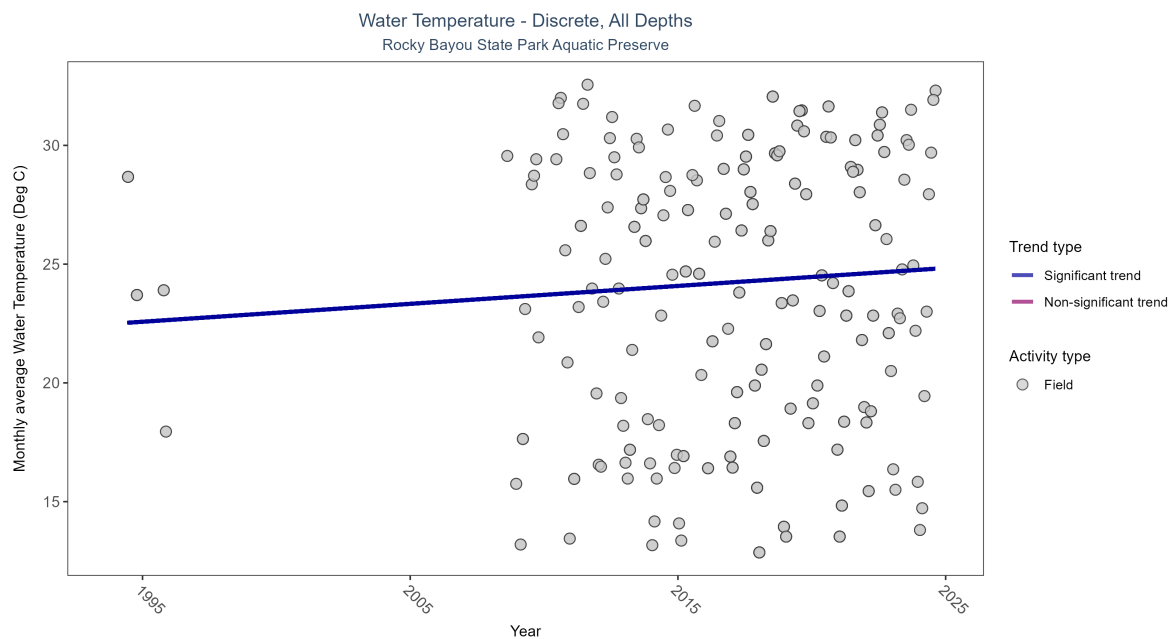


Table 6: Seasonal Kendall-Tau Results for - Water Temperature

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Significantly increasing trend	576	19	1994 - 2024	24.33331	0.1517	22.49902	0.0754	0.0063

pH - Discrete

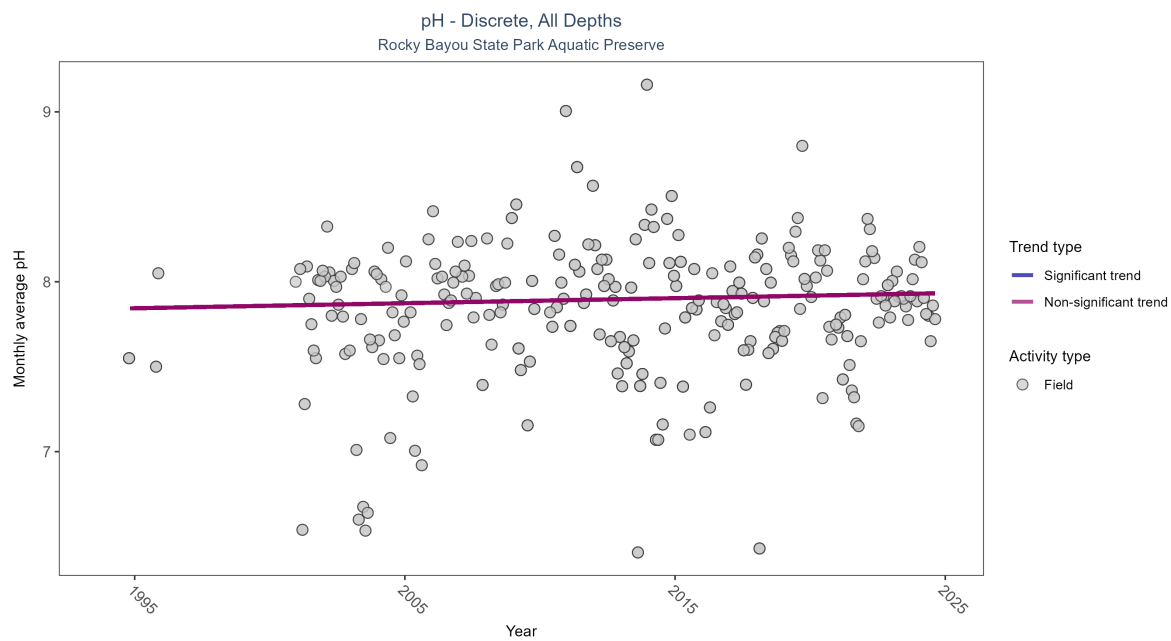


Table 7: Seasonal Kendall-Tau Results for - pH

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	No significant trend	766	27	1994 - 2024	7.9	0.049	7.84104	0.00297	0.2436

Water Clarity

Turbidity - Discrete

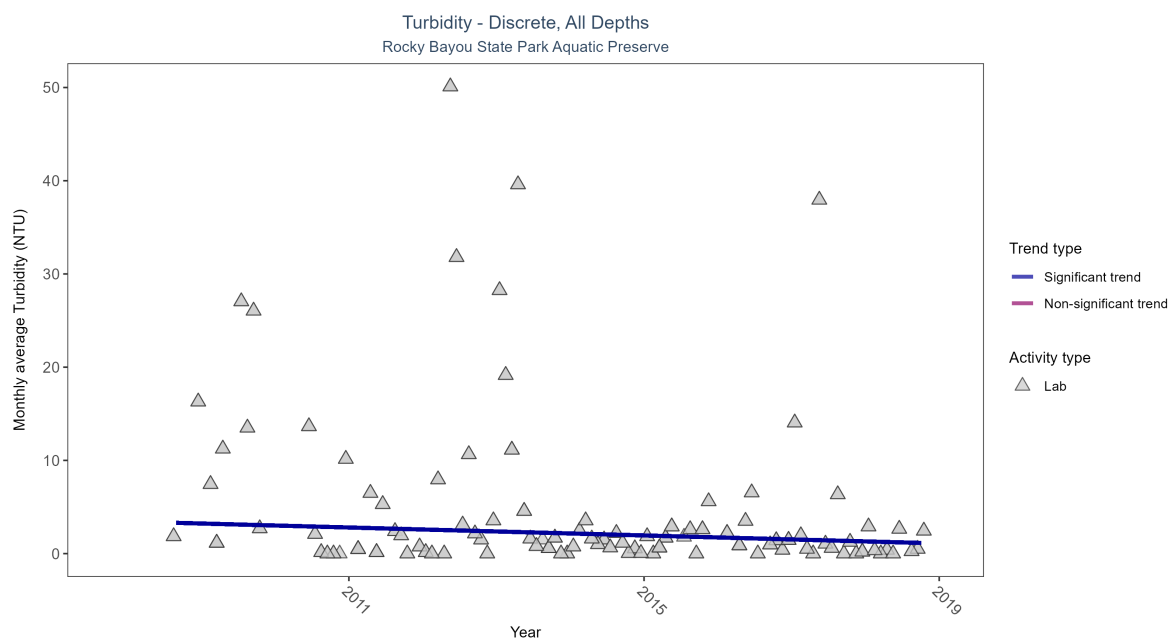


Table 8: Seasonal Kendall-Tau Results for - Turbidity

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly decreasing trend	222	11	2008 - 2018	1	-0.2377	3.44167	-0.21339	0.0034

Total Suspended Solids - Discrete

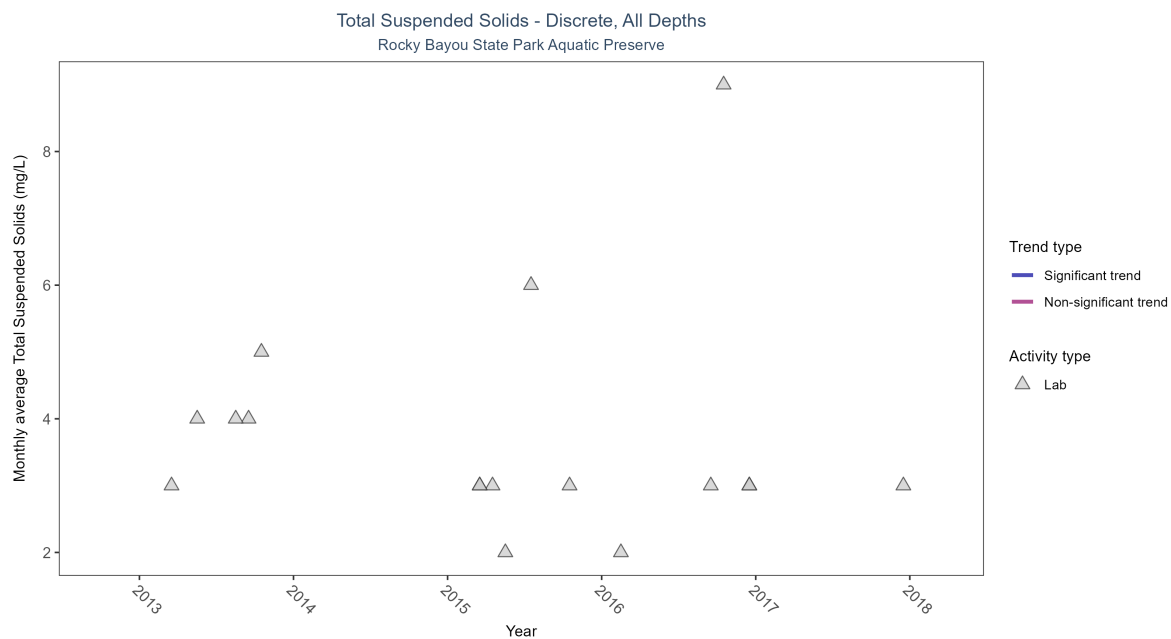


Table 9: Seasonal Kendall-Tau Results for - Total Suspended Solids

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Insufficient data to calculate trend	17	4	2013 - 2017	3	-	-	-	NA

Chlorophyll a, Uncorrected for Pheophytin - Discrete

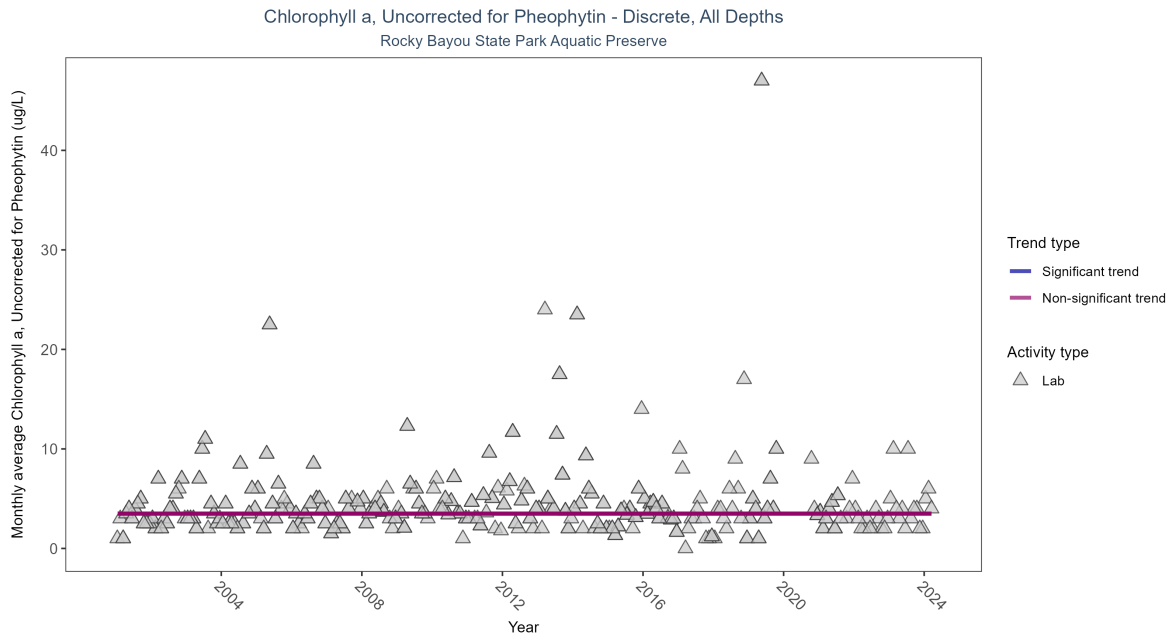


Table 10: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	No significant trend	452	24	2001 - 2024	3.5	-0.017	3.49741	0	0.7800

Chlorophyll a, Corrected for Pheophytin - Discrete

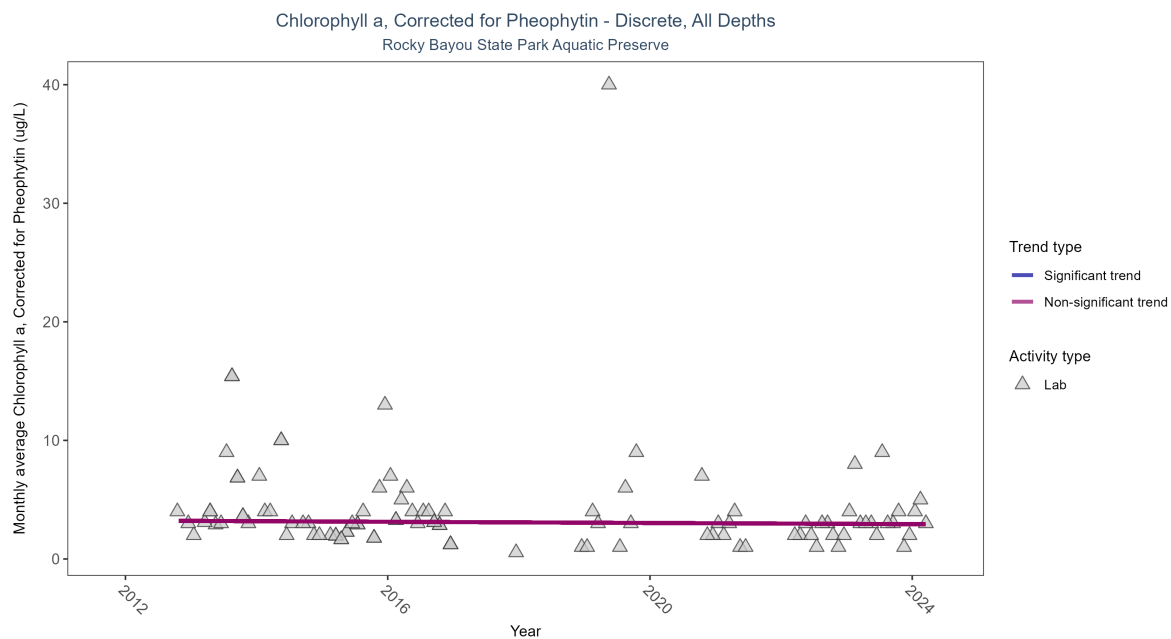


Table 11: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	No significant trend	103	13	2012 - 2024	3	-0.1845	3.23571	-0.025	0.0504

Secchi Depth - Discrete

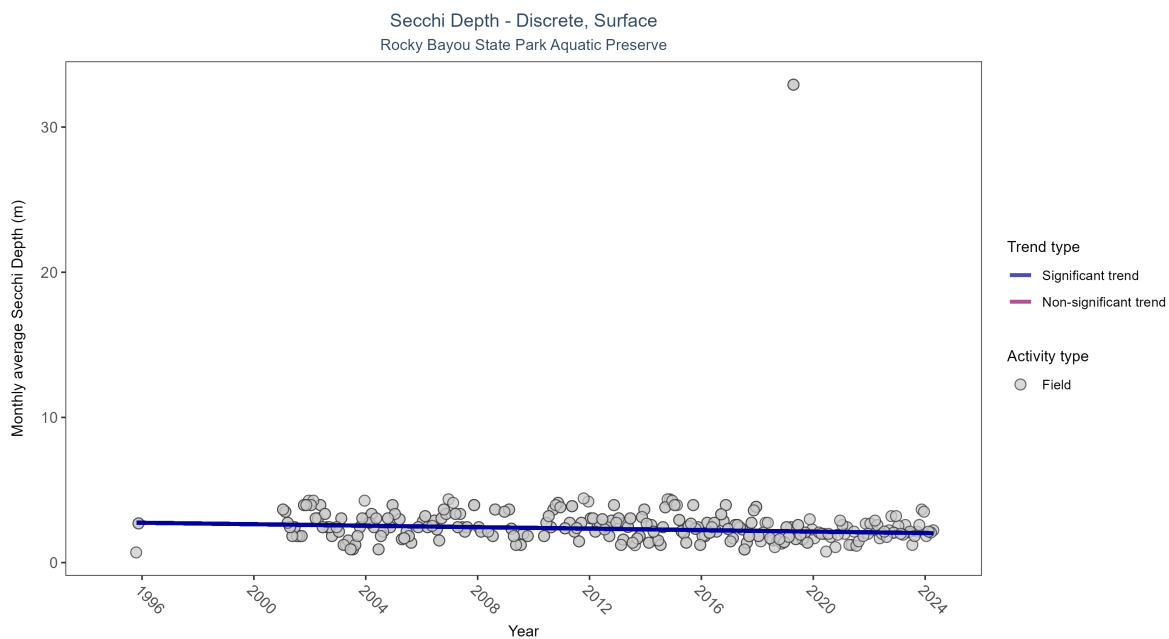


Table 12: Seasonal Kendall-Tau Results for - Secchi Depth

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Significantly decreasing trend	458	25	1995 - 2024	2.4384	-0.1678	2.77026	-0.0254	0.0003

Colored Dissolved Organic Matter - Discrete

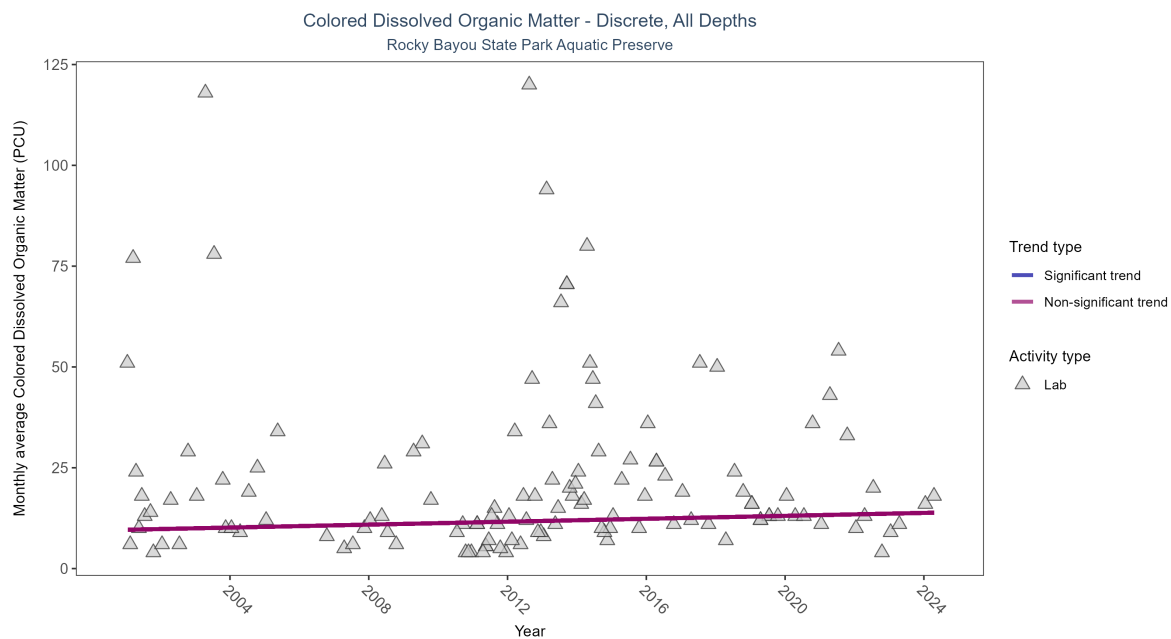


Table 13: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	No significant trend	128	24	2001 - 2024	13.5	0.0916	9.62163	0.18182	0.3155