Tomoka Marsh Aquatic Preserve

SEACAR Water Quality Analysis

Last compiled on 27 January, 2025

Contents

Indicators

Nutrients

Total Nitrogen - Discrete

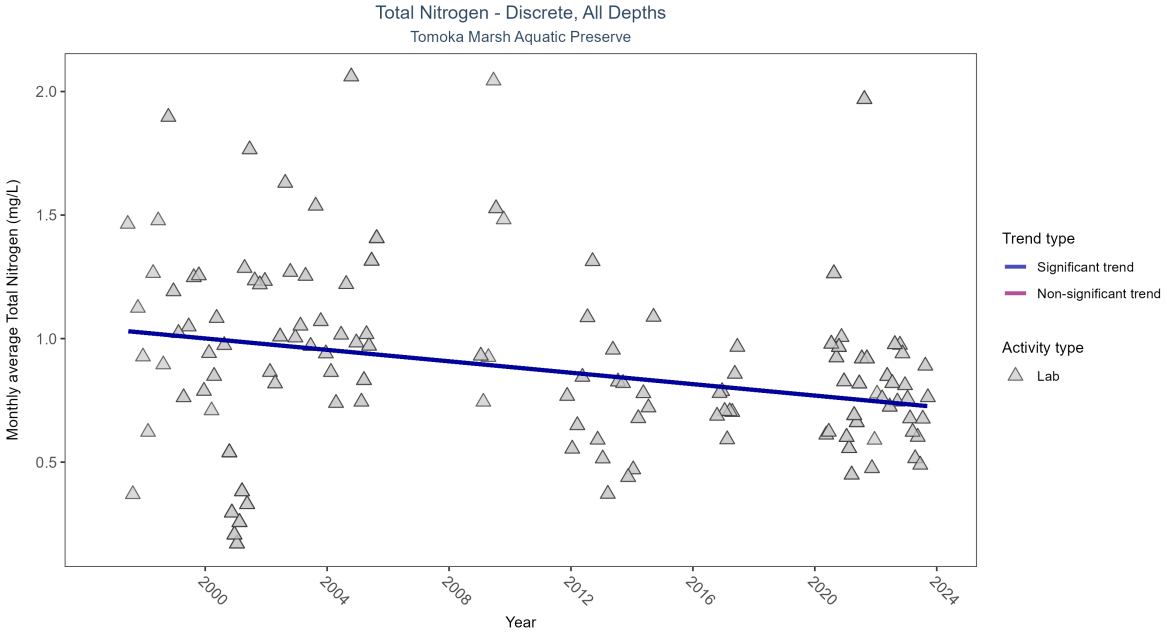

Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly decreasing trend	382	20	1997 - 2023	0.7927	-0.221	1.03521	-0.01156	0.0009

Total Phosphorus - Discrete

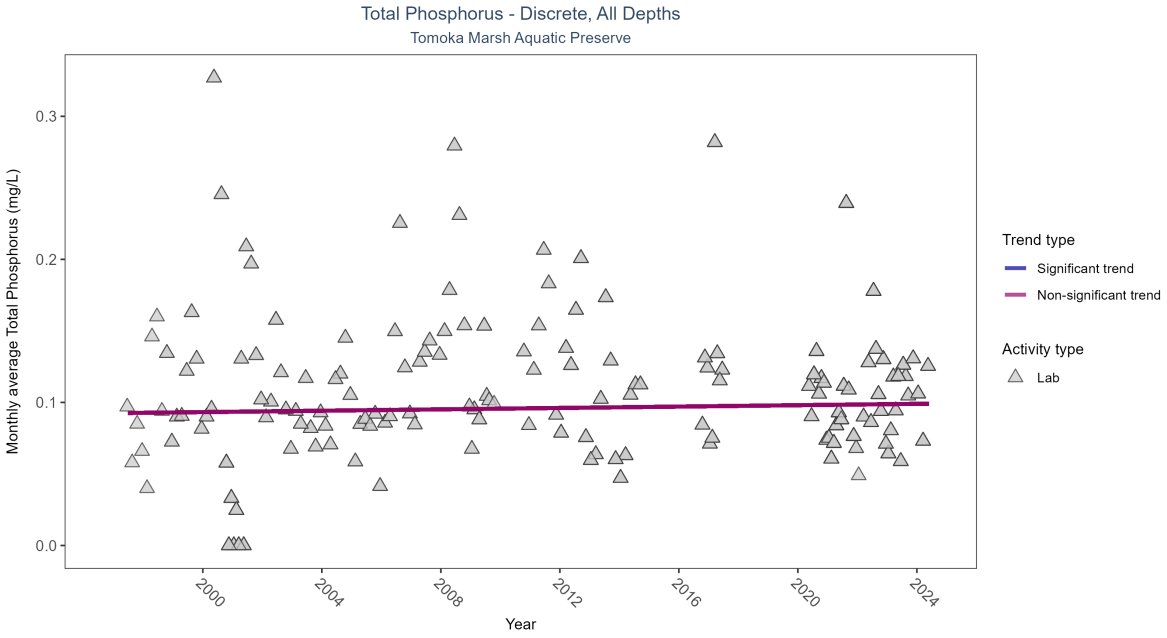

Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	No significant trend	661	25	1997 - 2024	0.097	0.0454	0.09252	0.00024	0.5822

Water Quality

Dissolved Oxygen - Discrete

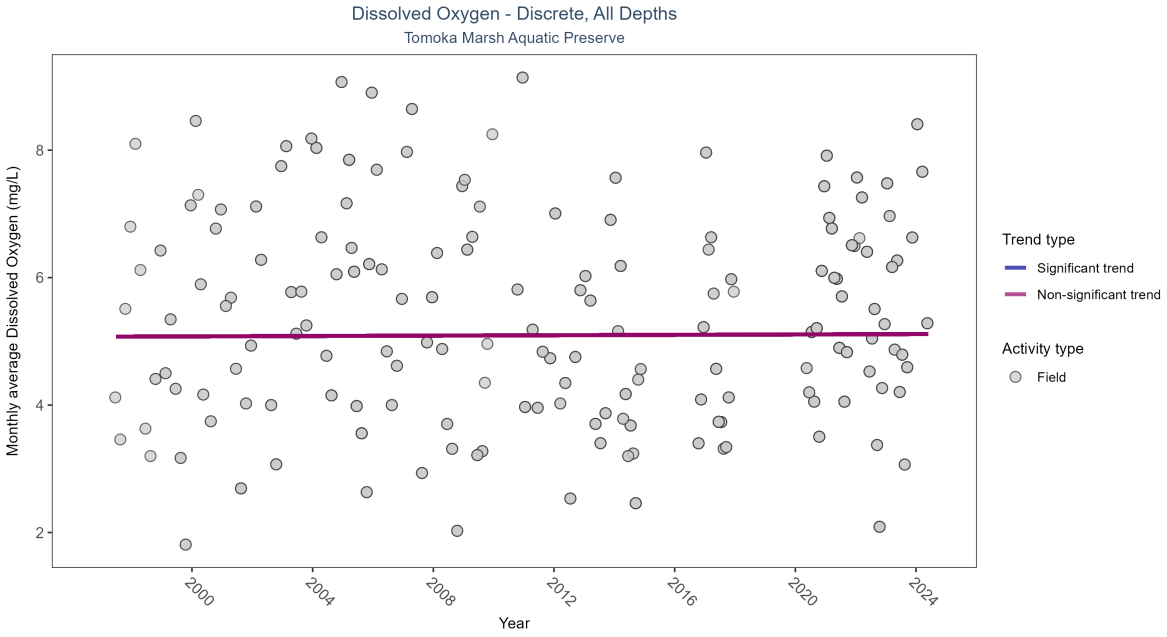

Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	No significant trend	676	25	1997 - 2024	5.43	0.0475	5.07345	0.0015	0.8888

Dissolved Oxygen - Continuous

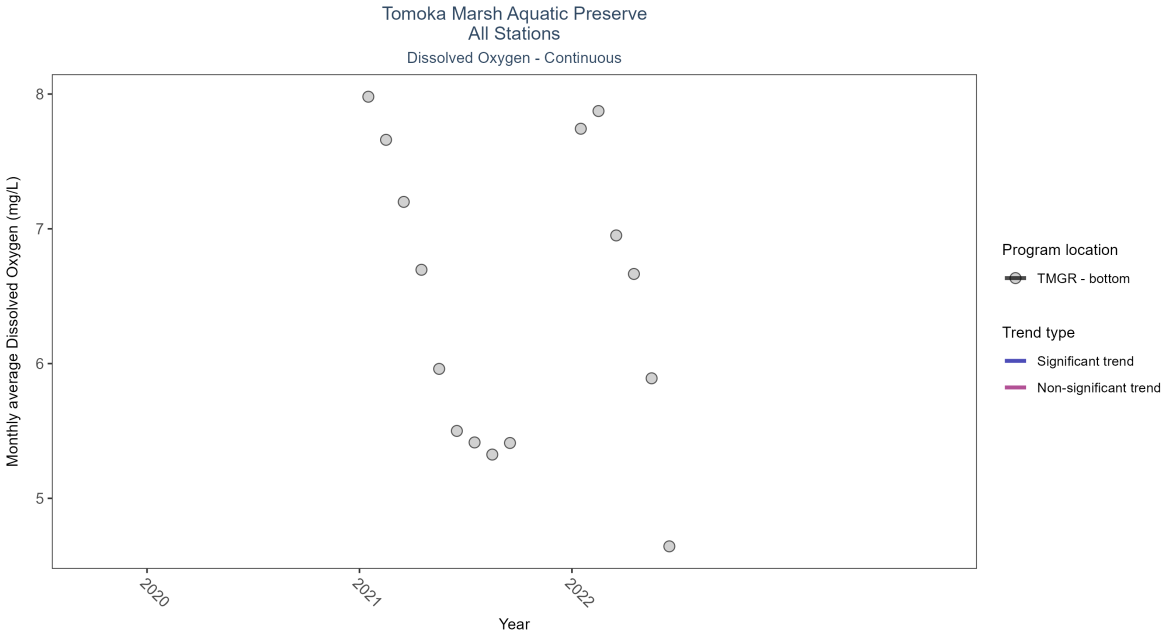

Table 4: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

Program Location	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
TMGR	Insufficient data to calculate trend	40492	2	2021 - 2022	6.5	-	-	-	NA

Dissolved Oxygen Saturation - Discrete

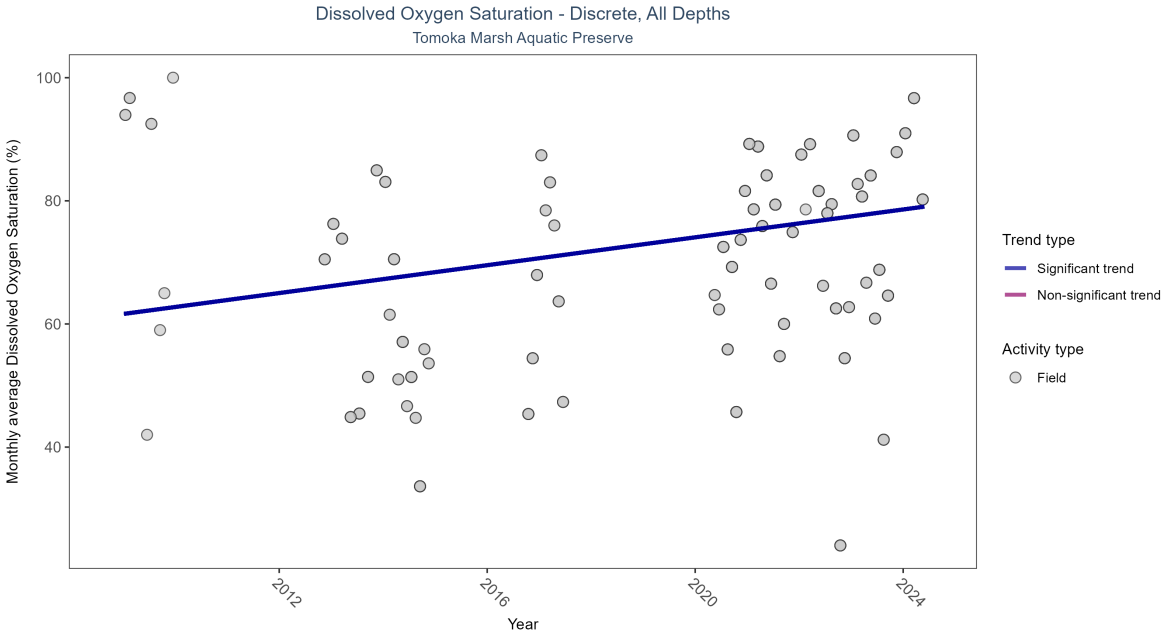

Table 5: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

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	366	11	2009 - 2024	71.4	0.2288	61.62389	1.13148	0.0026

Dissolved Oxygen Saturation - Continuous

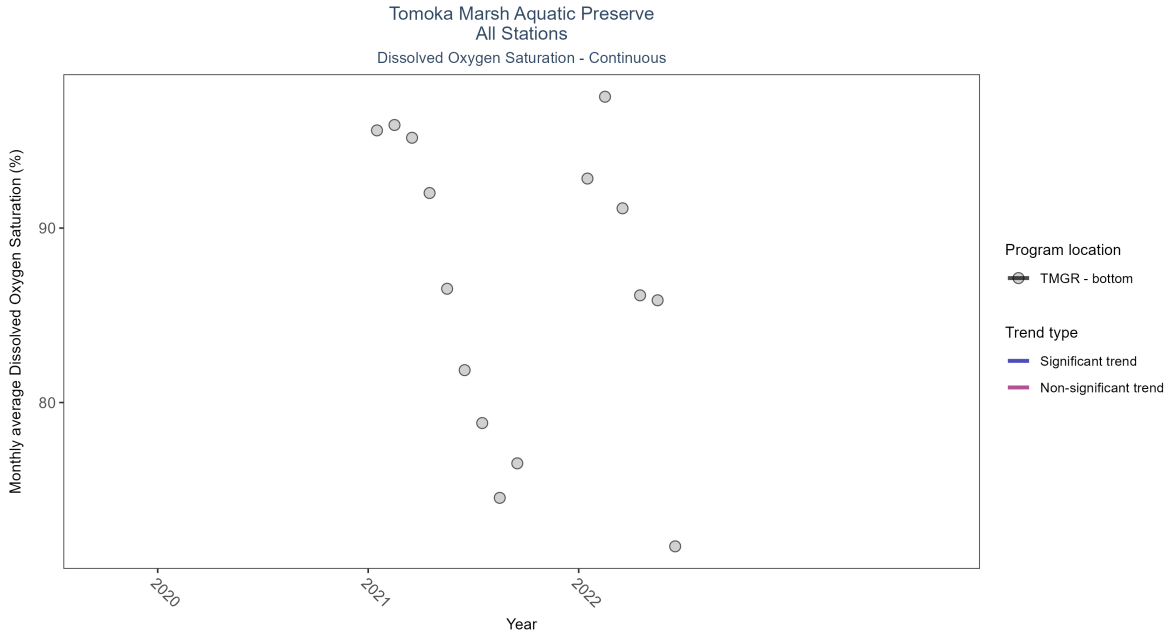

Table 6: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen Saturation

Program Location	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
TMGR	Insufficient data to calculate trend	40492	2	2021 - 2022	88.4	-	-	-	NA

Salinity - Discrete

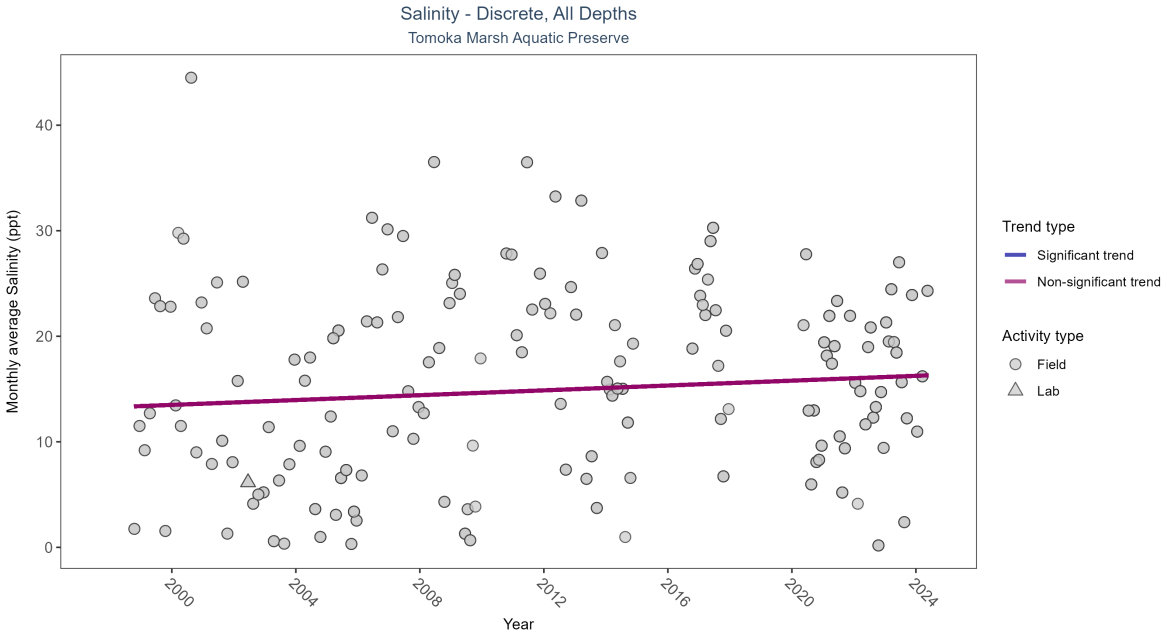

Table 7: Seasonal Kendall-Tau Results for - Salinity

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	654	24	1998 - 2024	16.155	0.0461	13.267	0.11478	0.3339

Salinity - Continuous

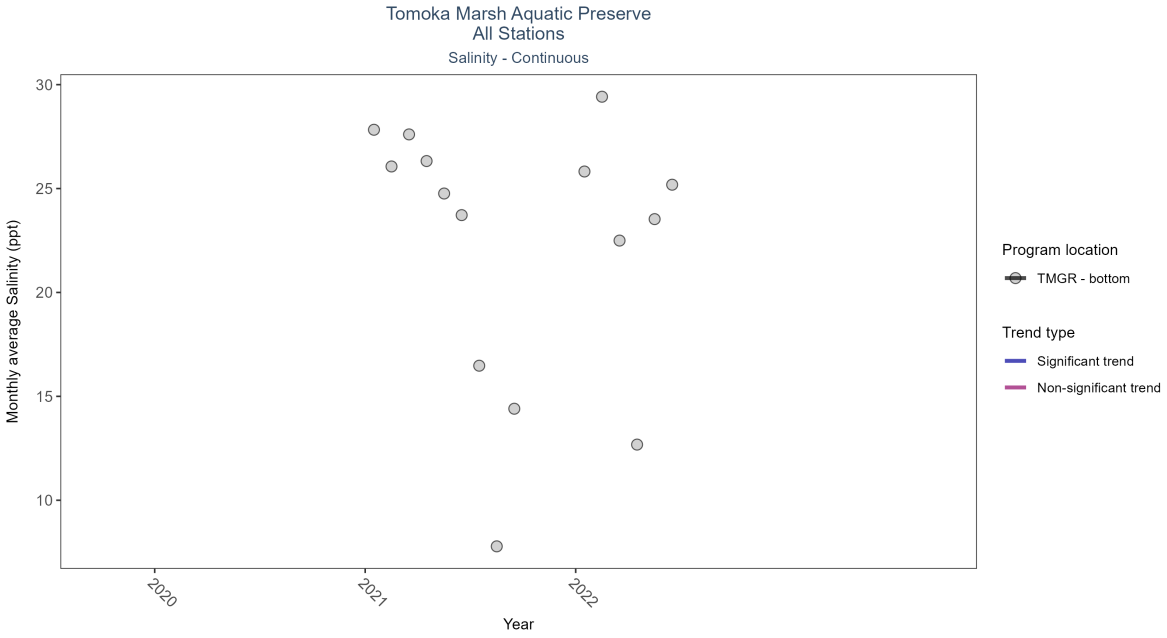

Table 8: Seasonal Kendall-Tau Results for All Stations - Salinity

Program Location	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
TMGR	Insufficient data to calculate trend	41374	2	2021 - 2022	23.3	-	-	-	NA

Water Temperature - Discrete

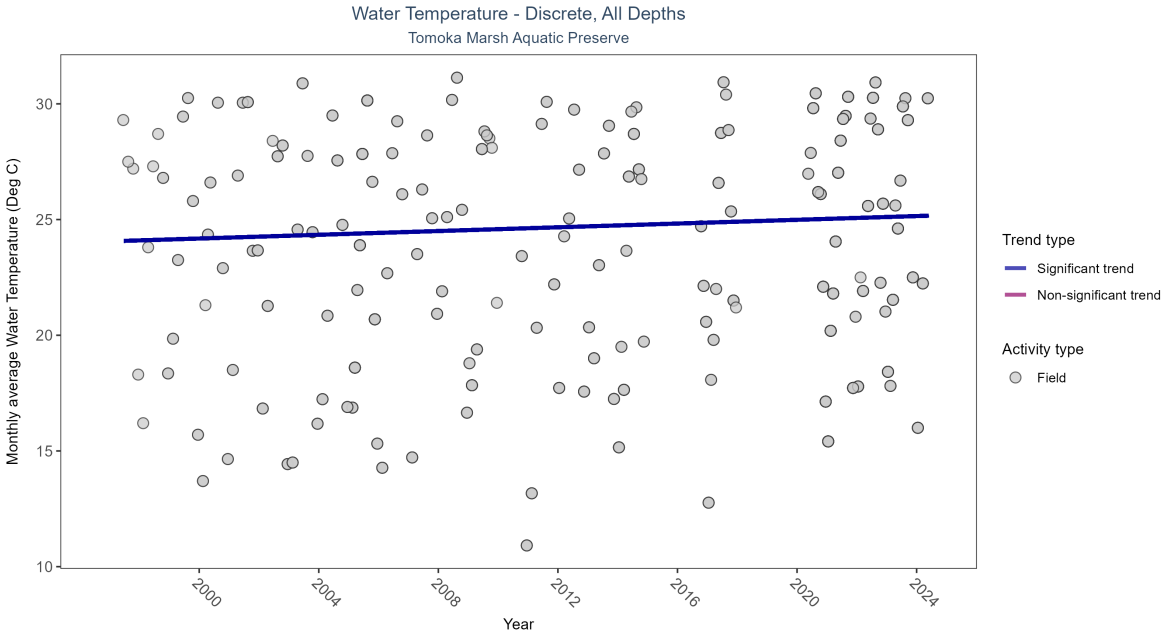

Table 9: Seasonal Kendall-Tau Results for - Water Temperature

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	692	25	1997 - 2024	24.97	0.1577	24.05857	0.04043	0.0195

Water Temperature - Continuous

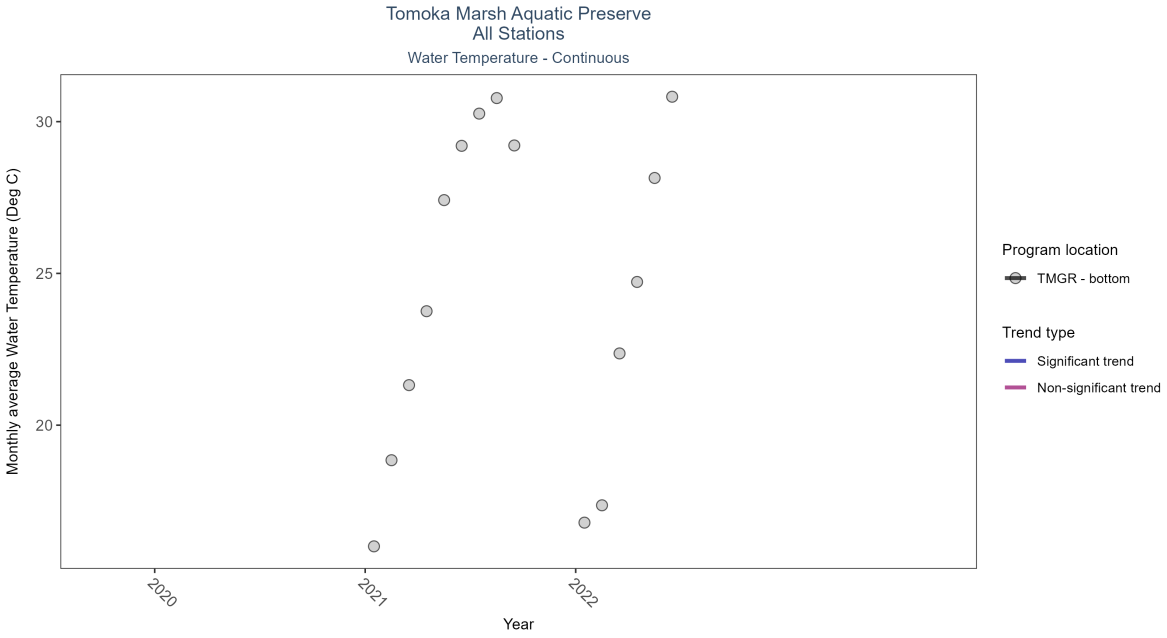

Table 10: Seasonal Kendall-Tau Results for All Stations - Water Temperature

Program Location	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
TMGR	Insufficient data to calculate trend	41374	2	2021 - 2022	25.5	-	-	-	NA

pH - Discrete

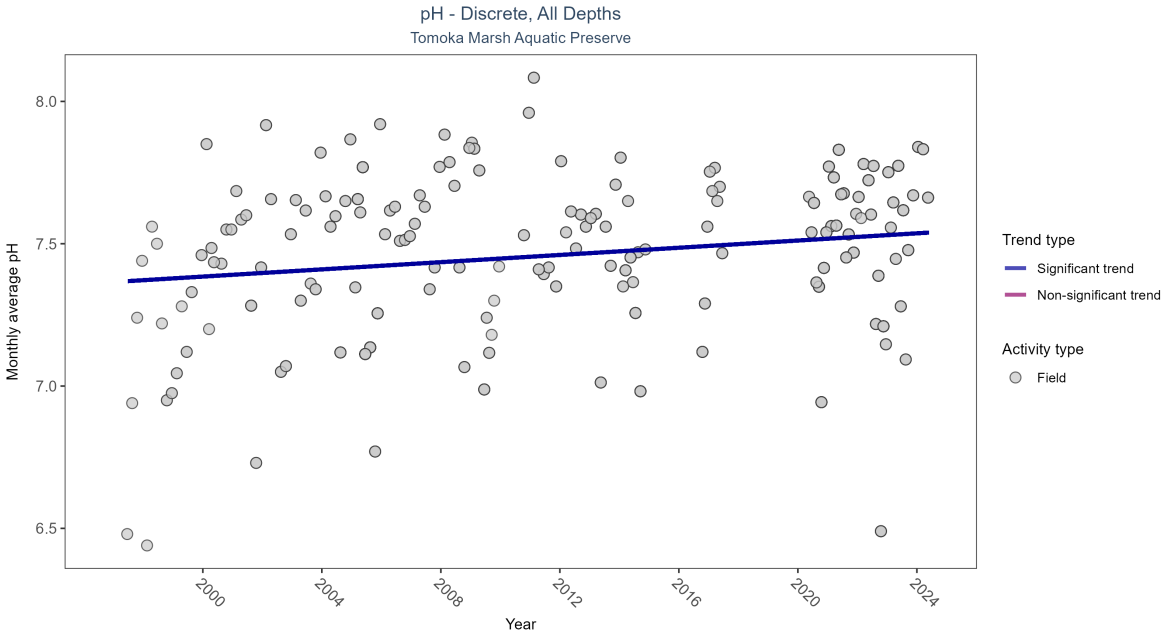

Table 11: Seasonal Kendall-Tau Results for - pH

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Significantly increasing trend	665	25	1997 - 2024	7.54	0.1709	7.36556	0.00633	0.0109

pH - Continuous

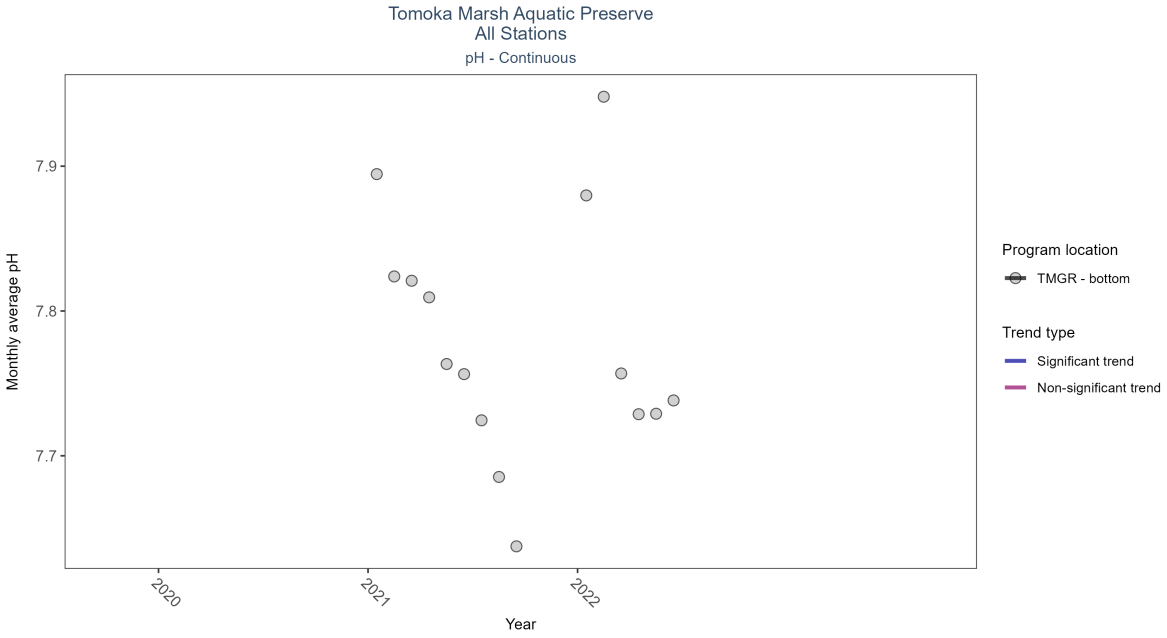

Table 12: Seasonal Kendall-Tau Results for All Stations - pH

Program Location	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
TMGR	Insufficient data to calculate trend	41374	2	2021 - 2022	7.8	-	-	-	NA

Water Clarity

Turbidity - Discrete

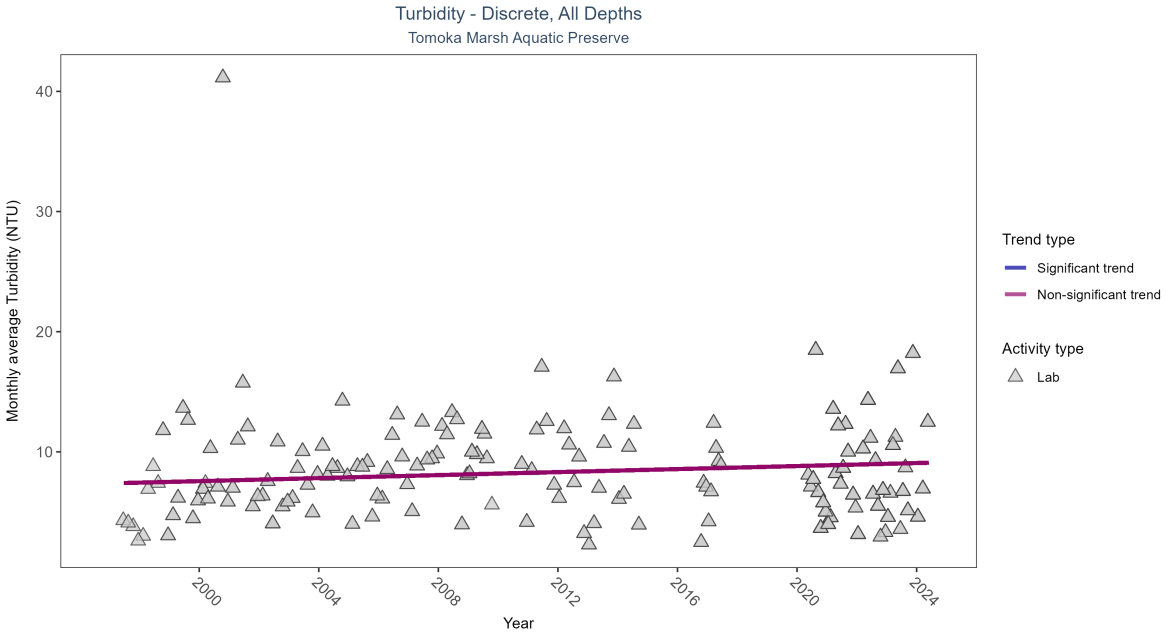

Table 13: Seasonal Kendall-Tau Results for - Turbidity

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	No significant trend	458	25	1997 - 2024	7.22899	0.0712	7.37283	0.06272	0.1479

Turbidity - Continuous

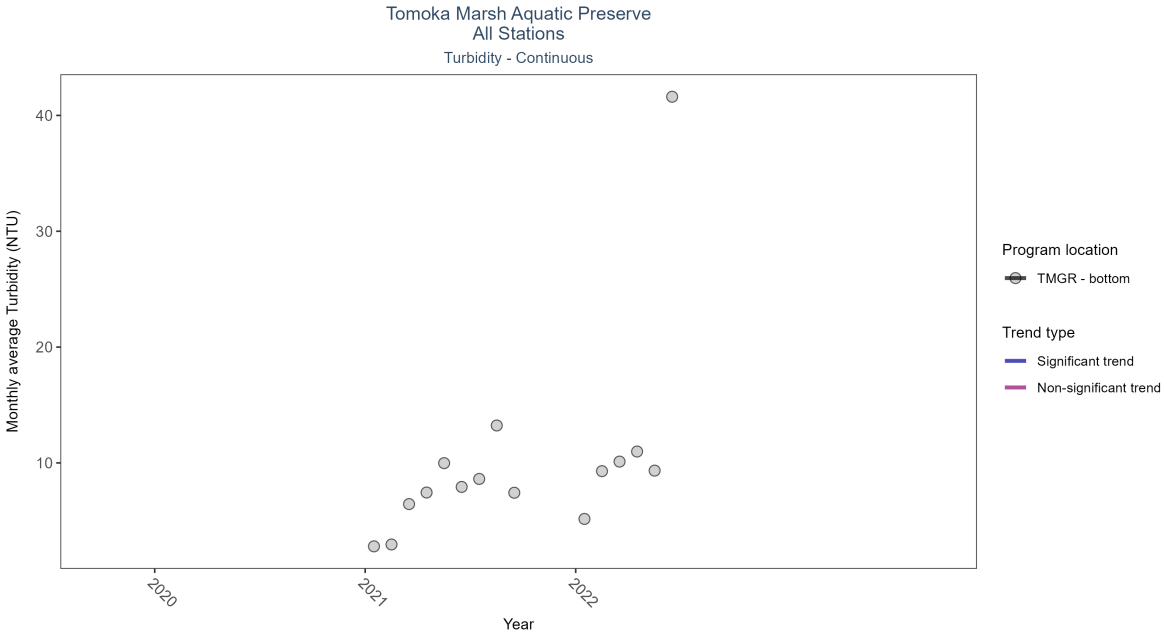

Table 14: Seasonal Kendall-Tau Results for All Stations - Turbidity

Program Location	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
TMGR	Insufficient data to calculate trend	41169	2	2021 - 2022	7	-	-	-	NA

Total Suspended Solids - Discrete

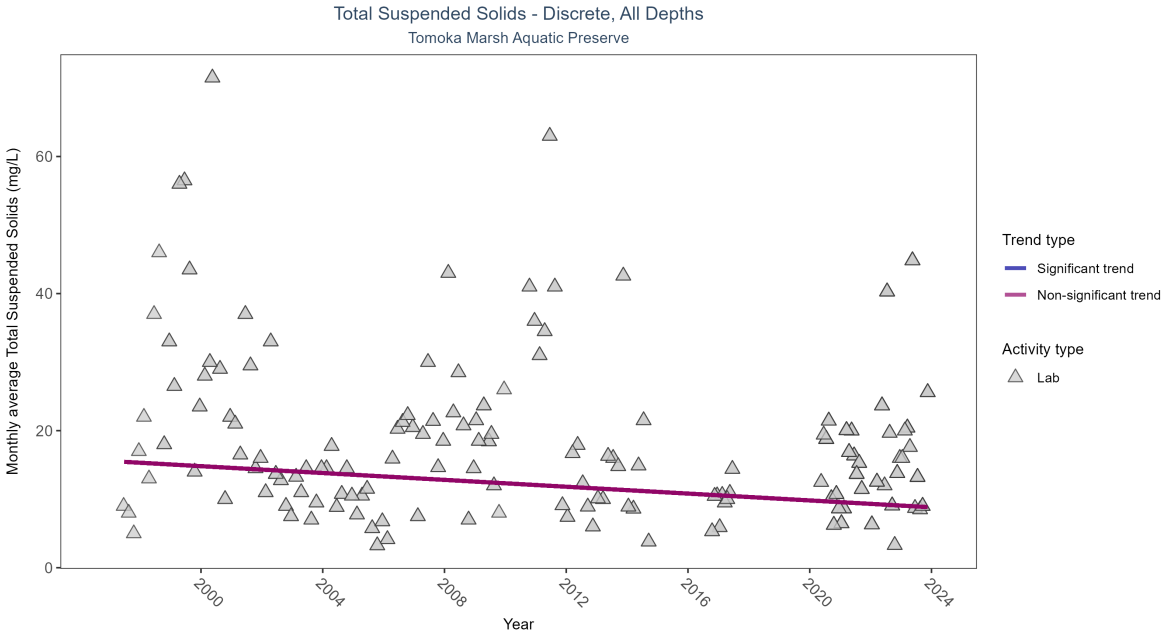

Table 15: Seasonal Kendall-Tau Results for - Total Suspended Solids

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	No significant trend	411	24	1997 - 2023	14.2	-0.0792	15.56634	-0.24999	0.0683

Chlorophyll a, Uncorrected for Pheophytin - Discrete

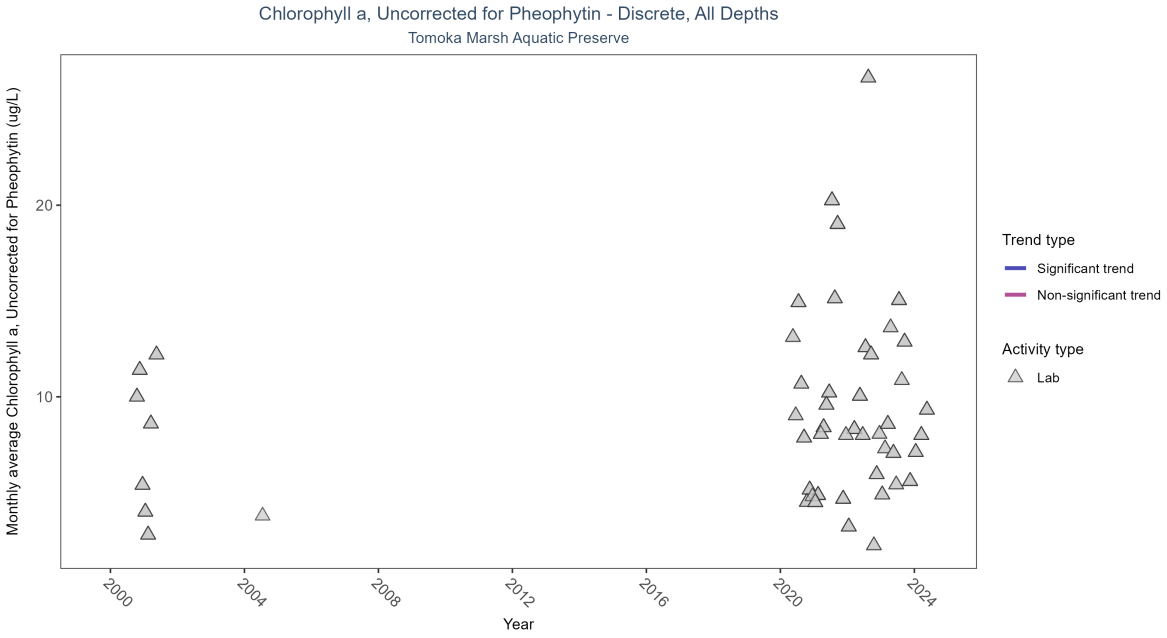

Table 16: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Insufficient data to calculate trend	300	8	2000 - 2024	8.09702	-	-	-	NA

Chlorophyll a, Corrected for Pheophytin - Discrete

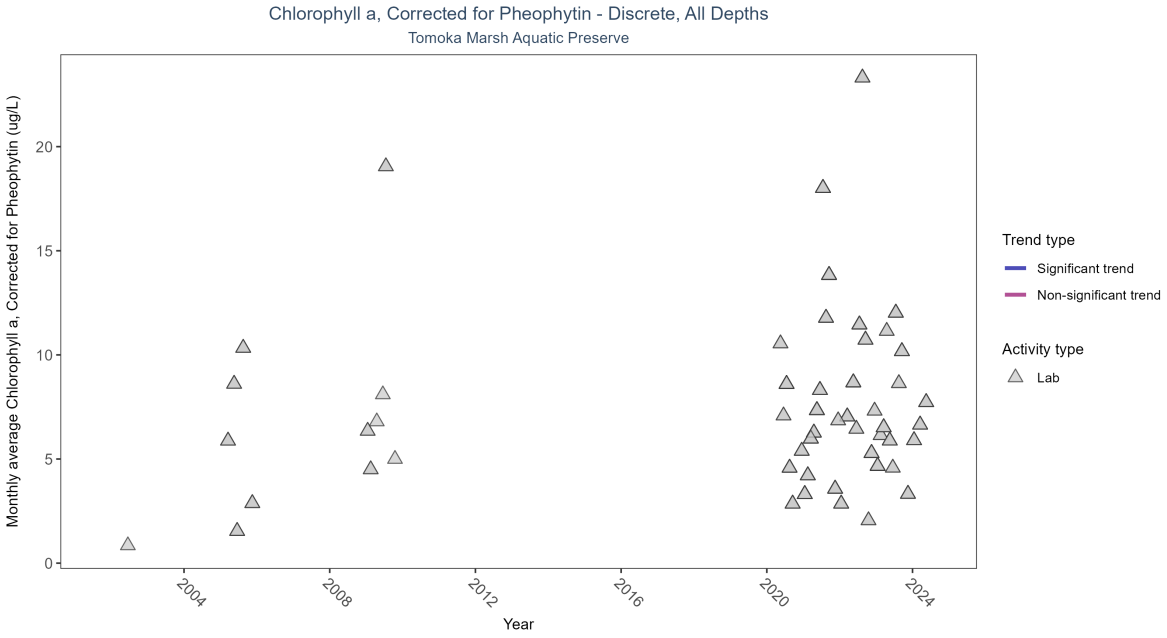

Table 17: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Insufficient data to calculate trend	252	8	2002 - 2024	6.31455	-	-	-	NA

Secchi Depth - Discrete

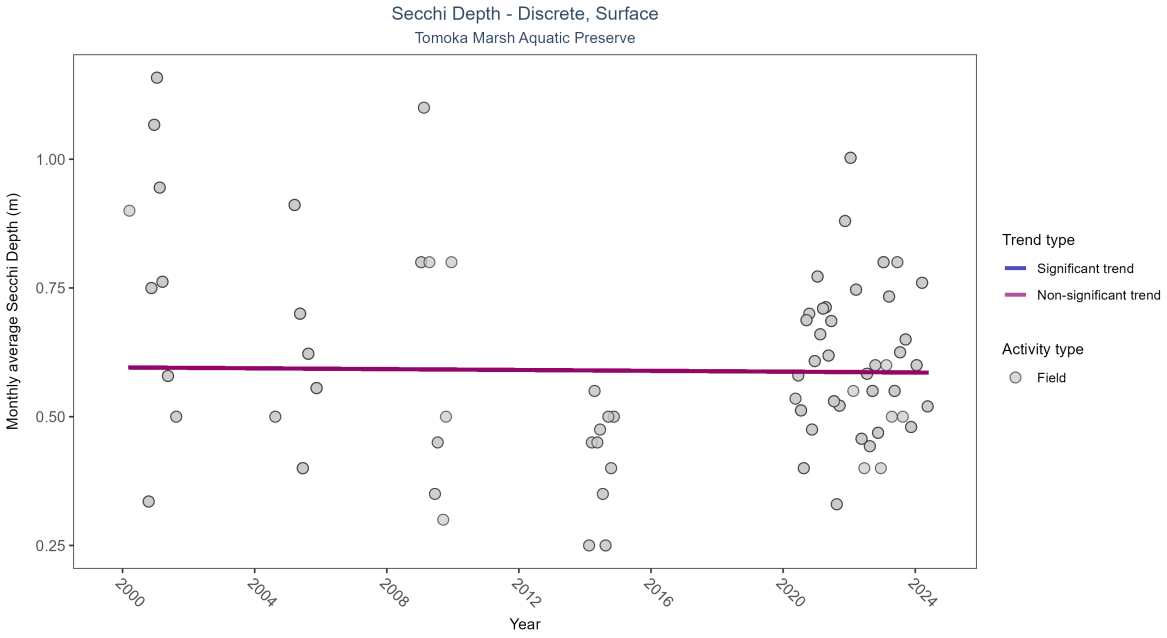

Table 18: Seasonal Kendall-Tau Results for - Secchi Depth

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	No significant trend	333	11	2000 - 2024	0.6	-0.0447	0.59562	-0.00041	0.7714

Colored Dissolved Organic Matter - Discrete

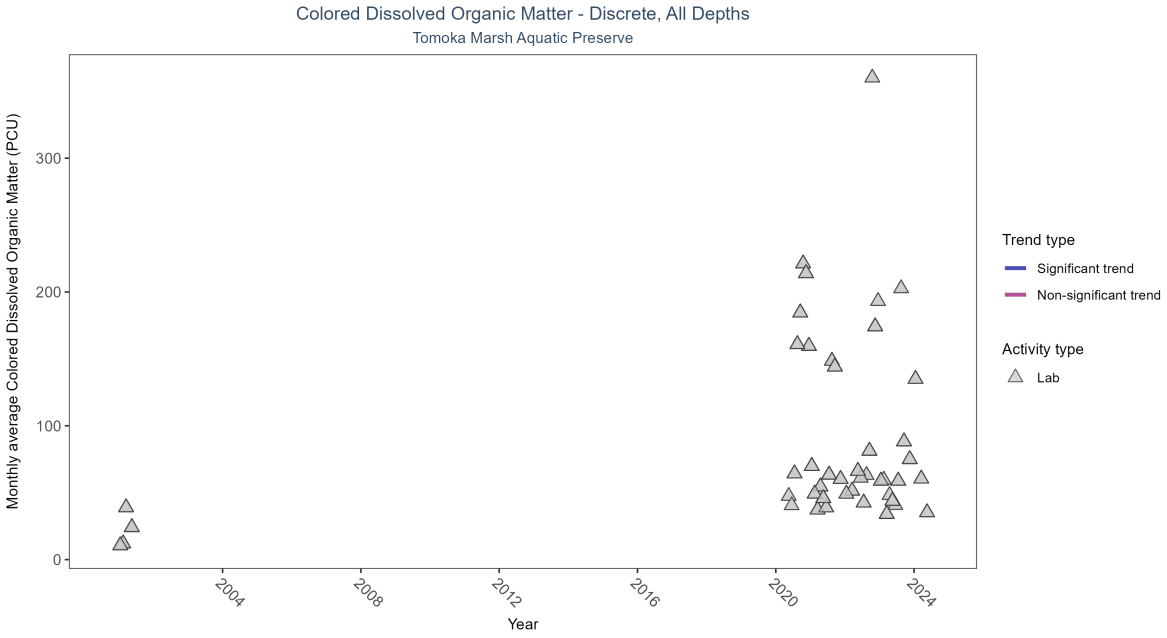

Table 19: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Insufficient data to calculate trend	238	6	2001 - 2024	54.5773	-	-	-	NA