

# Terra Ceia Aquatic Preserve

## SEACAR Water Quality Analysis

Last compiled on 09 January, 2025

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# Indicators

## Nutrients

### Total Nitrogen - Discrete

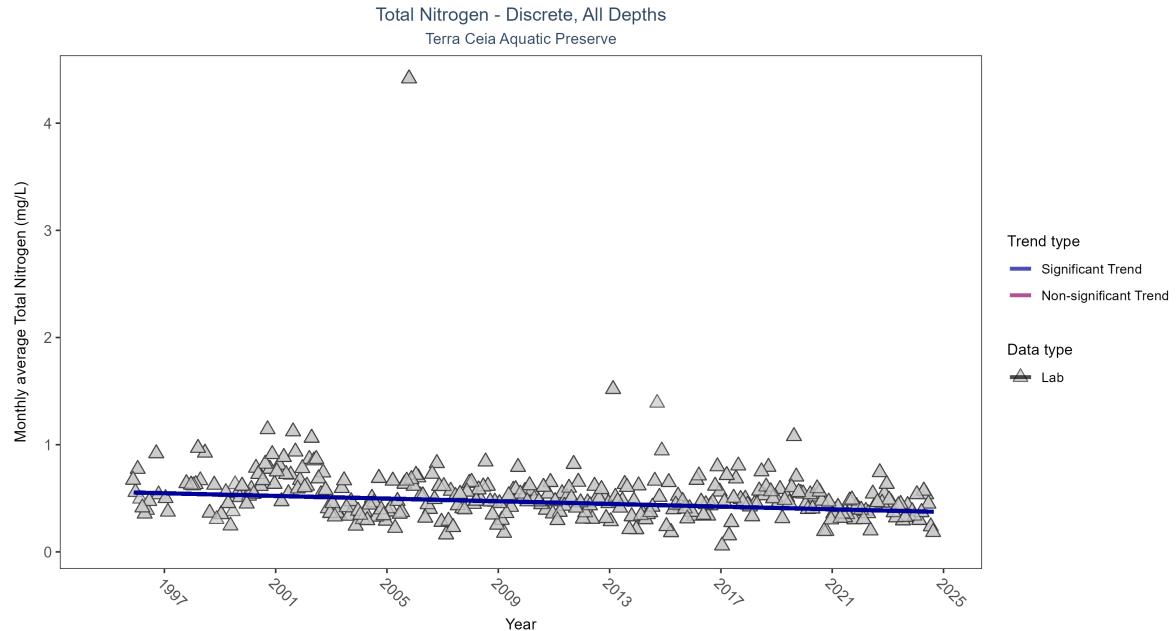


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	2328	30	1995 - 2024	0.382	-0.2126	0.55957	-0.00624	0.0000

## Total Phosphorus - Discrete

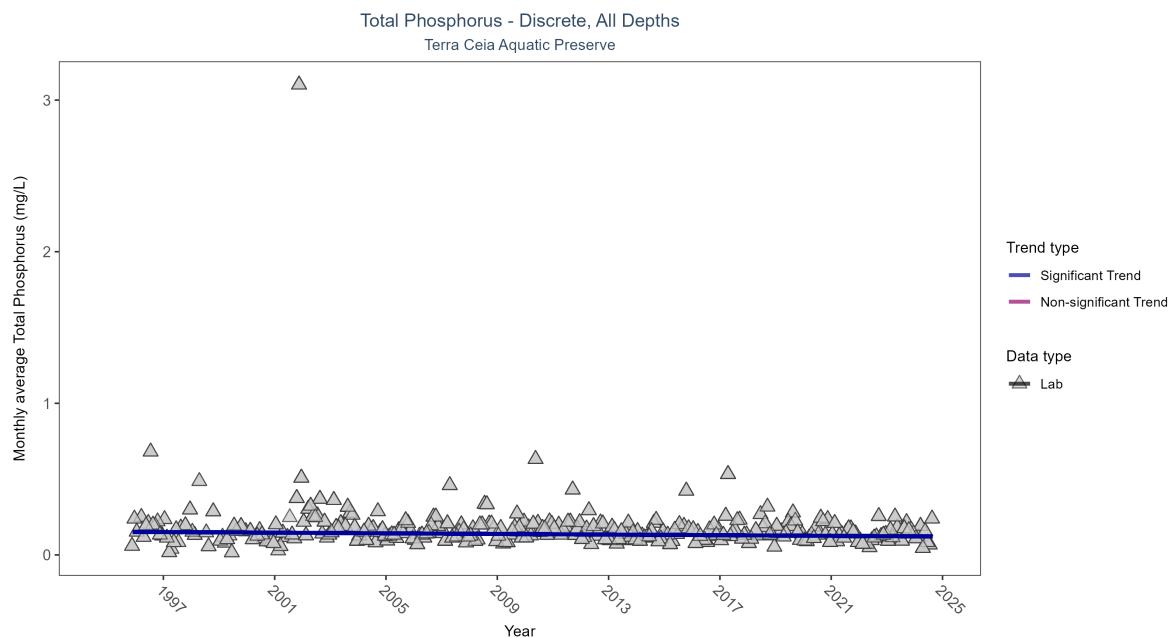


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	3118	30	1995 - 2024	0.11	-0.1012	0.15299	-0.00105	0.0077

## Water Quality

### Dissolved Oxygen - Discrete

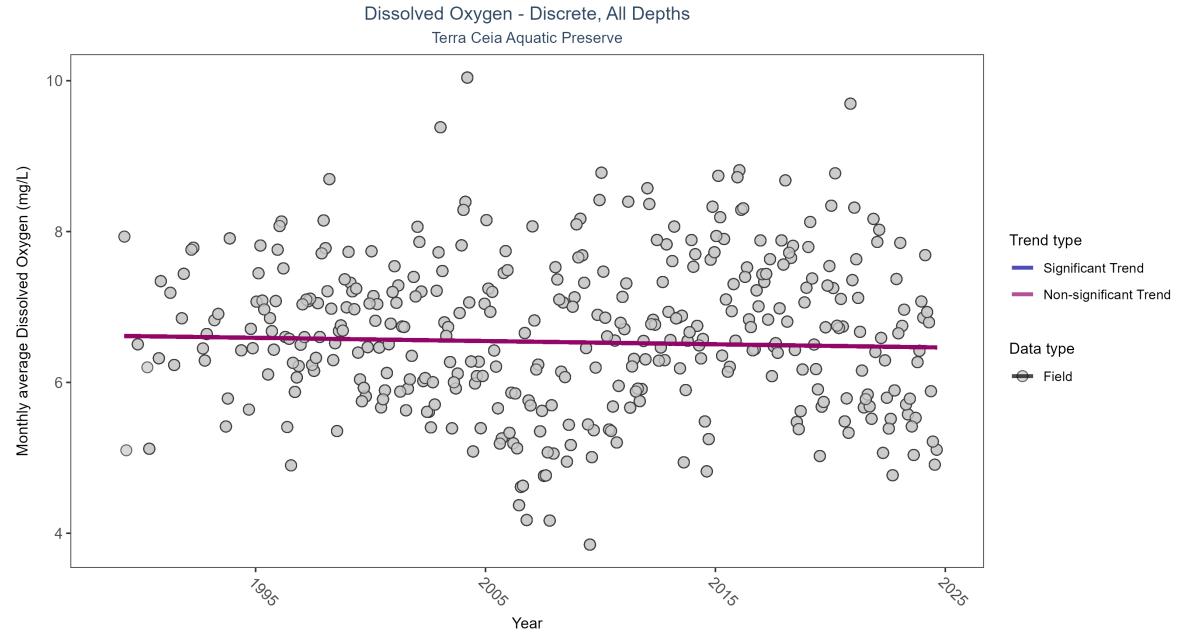


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	24537	36	1989 - 2024	6.53	-0.0359	6.61695	-0.00429	0.3256

## Dissolved Oxygen - Continuous

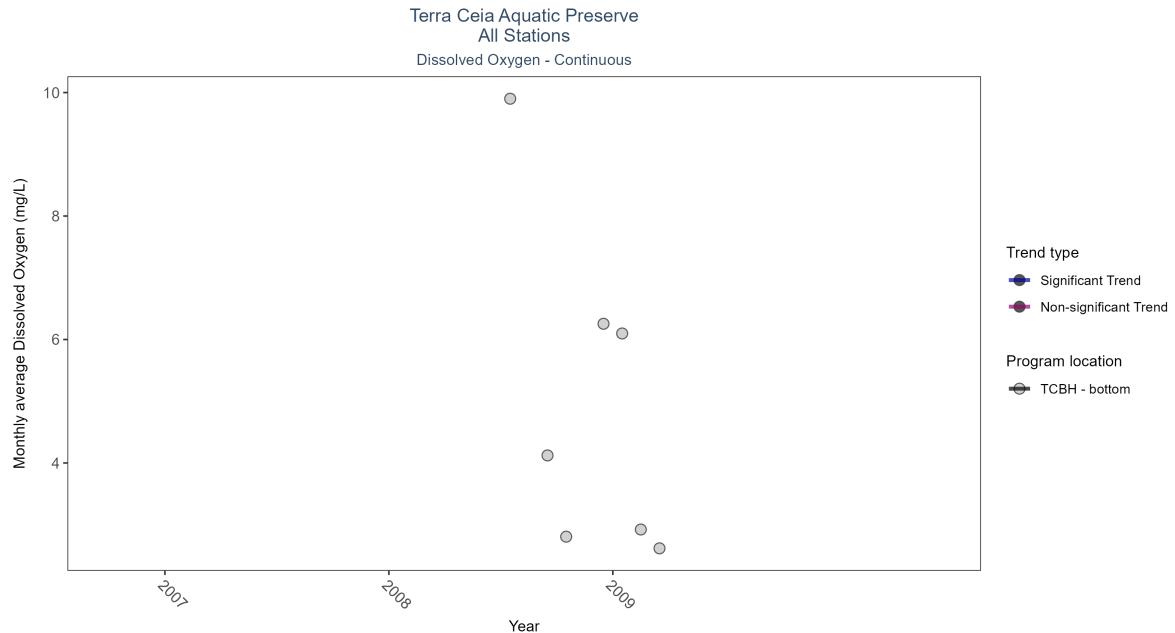


Table 4: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
TCBH	Insufficient data to calculate trend	8153	2	2008 - 2009	4.2	-	-	-	-

## Dissolved Oxygen Saturation - Discrete

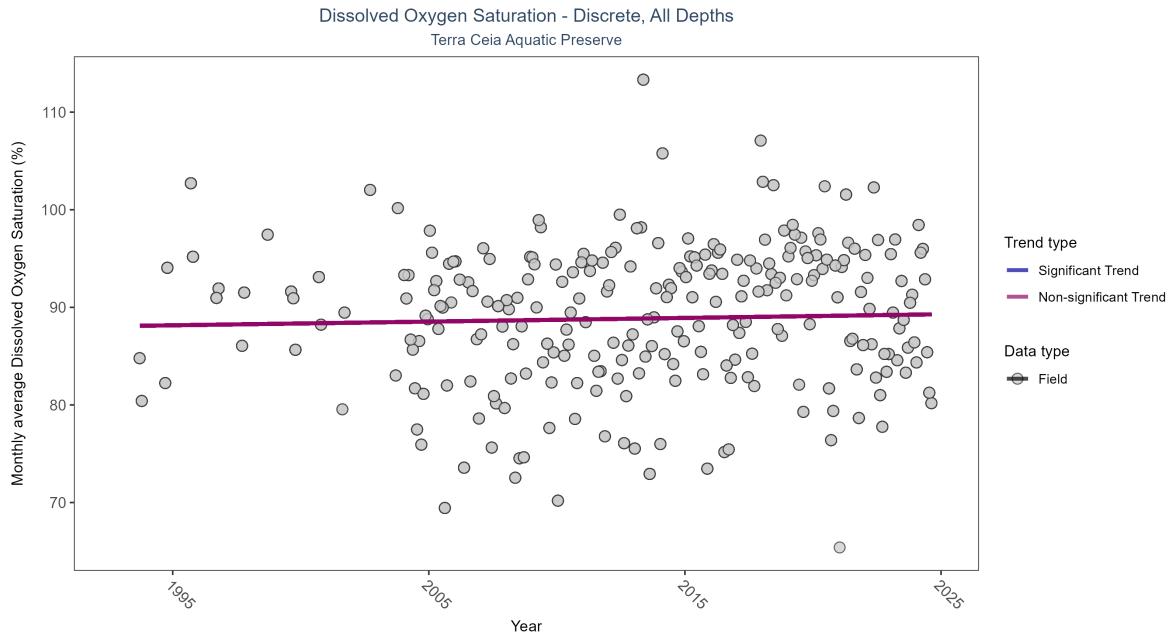


Table 5: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	4982	32	1993 - 2024	90	0.0477	88.08222	0.0378	0.5743

## Dissolved Oxygen Saturation - Continuous

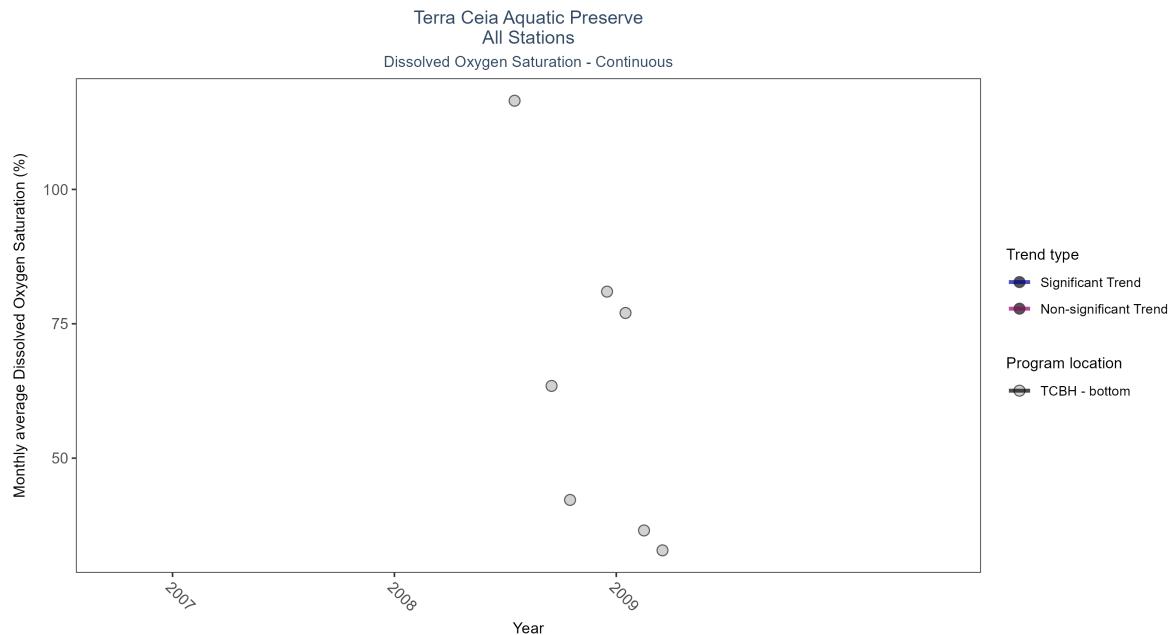


Table 6: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen Saturation

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
TCBH	Insufficient data to calculate trend	8153	2	2008 - 2009	59.5	-	-	-	-

## Salinity - Discrete

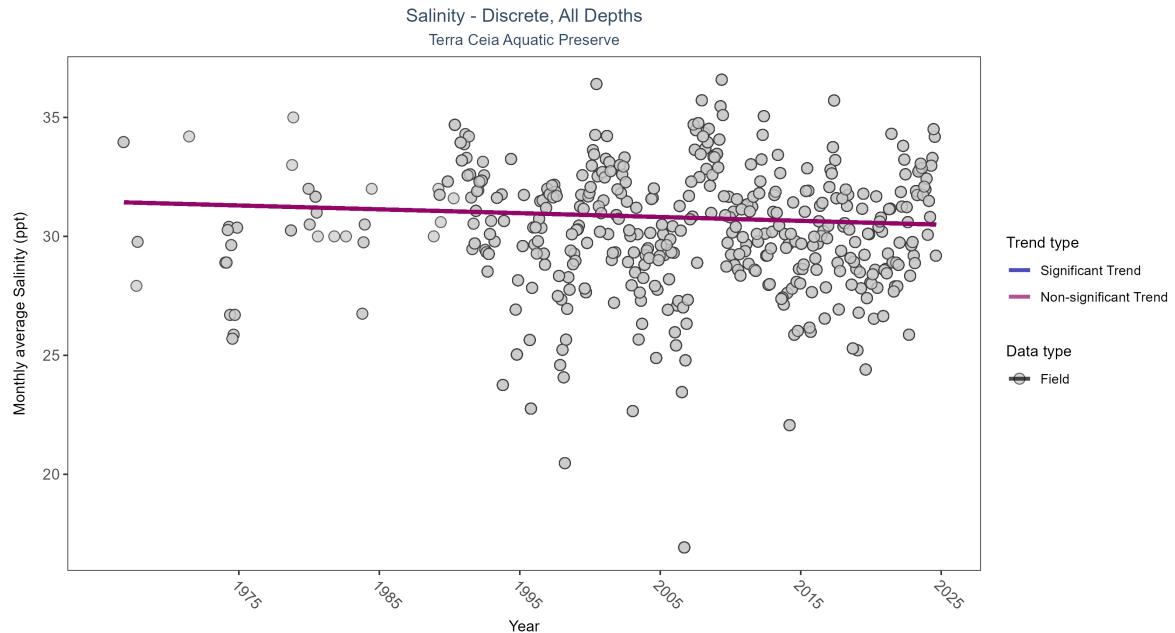


Table 7: Seasonal Kendall-Tau Results for - Salinity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
All	No significant trend	24759	48	1966 - 2024	30.6	-0.0609	31.44423	-0.01614	0.0724

## Salinity - Continuous

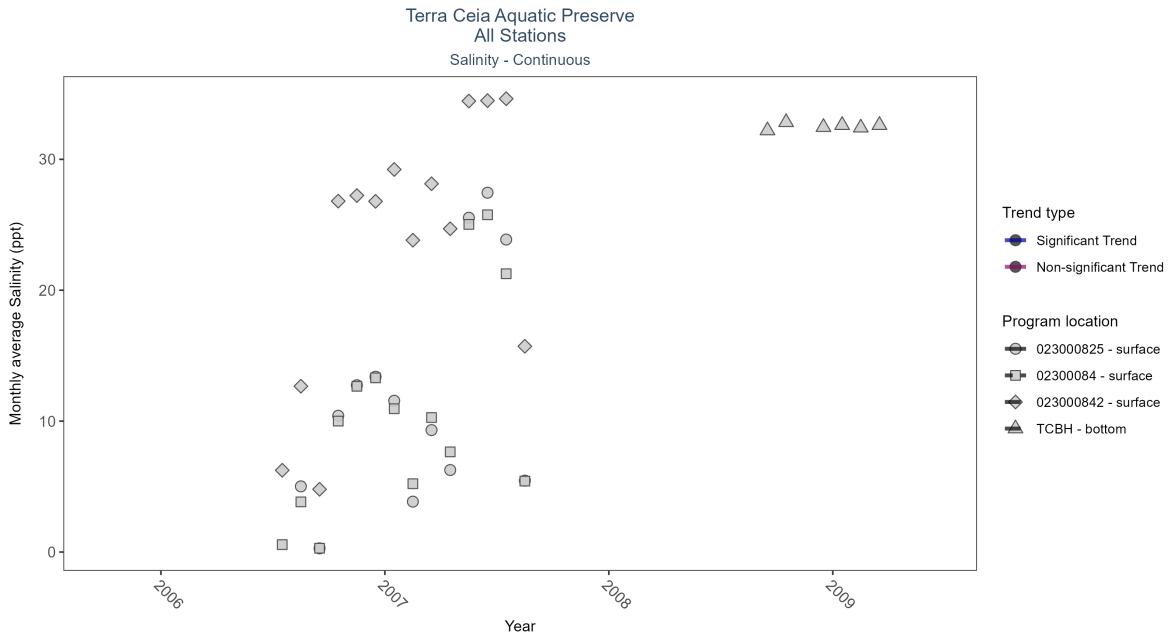


Table 8: Seasonal Kendall-Tau Results for All Stations - Salinity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
023000825	Insufficient data to calculate trend	645	2	2006 - 2007	12.0	-	-	-	-
02300084	Insufficient data to calculate trend	696	2	2006 - 2007	11.0	-	-	-	-
023000842	Insufficient data to calculate trend	578	2	2006 - 2007	28.0	-	-	-	-
TCBH	Insufficient data to calculate trend	8304	2	2008 - 2009	32.6	-	-	-	-

## Water Temperature - Discrete

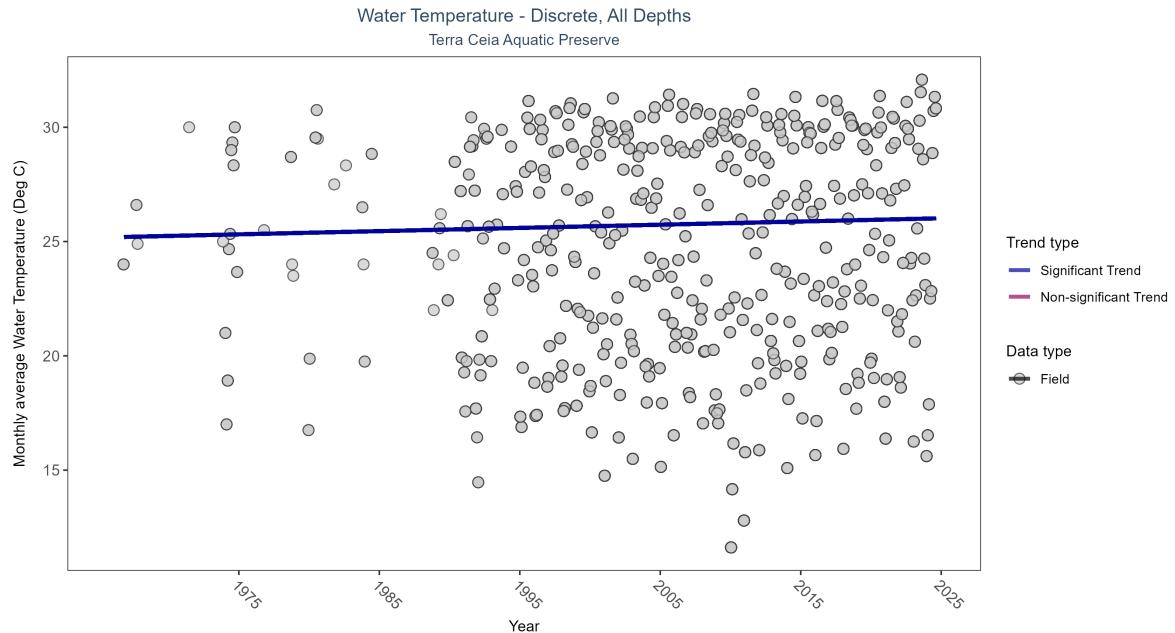


Table 9: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	25690	50	1966 - 2024	26.7	0.0896	25.18823	0.01406	0.0104

## Water Temperature - Continuous

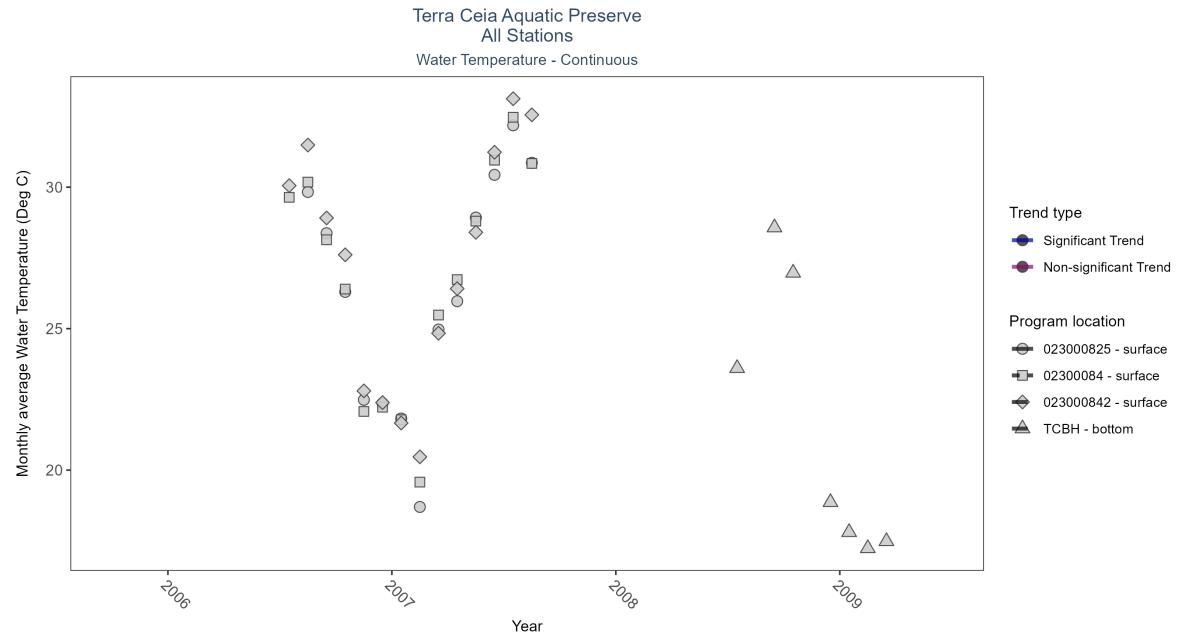


Table 10: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
023000842	Insufficient data to calculate trend	571	2	2006 - 2007	27.7	-	-	-	-
023000825	Insufficient data to calculate trend	659	2	2006 - 2007	26.6	-	-	-	-
02300084	Insufficient data to calculate trend	717	2	2006 - 2007	27.5	-	-	-	-
TCBH	Insufficient data to calculate trend	8305	2	2008 - 2009	20.0	-	-	-	-

## pH - Discrete

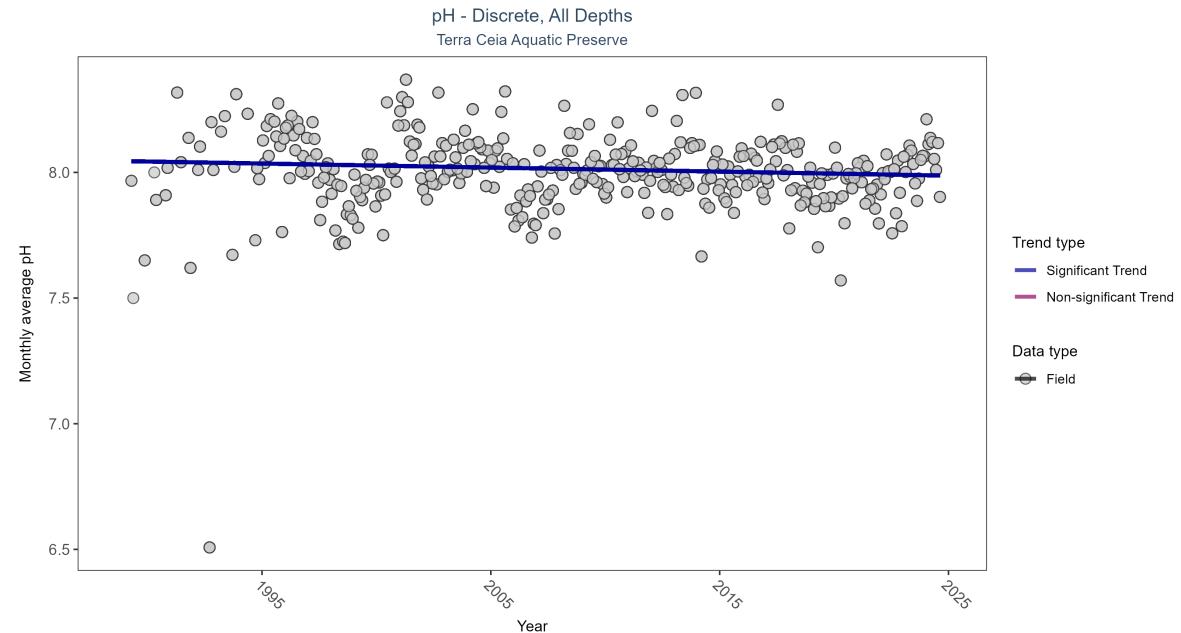


Table 11: Seasonal Kendall-Tau Results for - pH

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	22760	36	1989 - 2024	8	-0.0867	8.04497	-0.00161	0.0191

## pH - Continuous

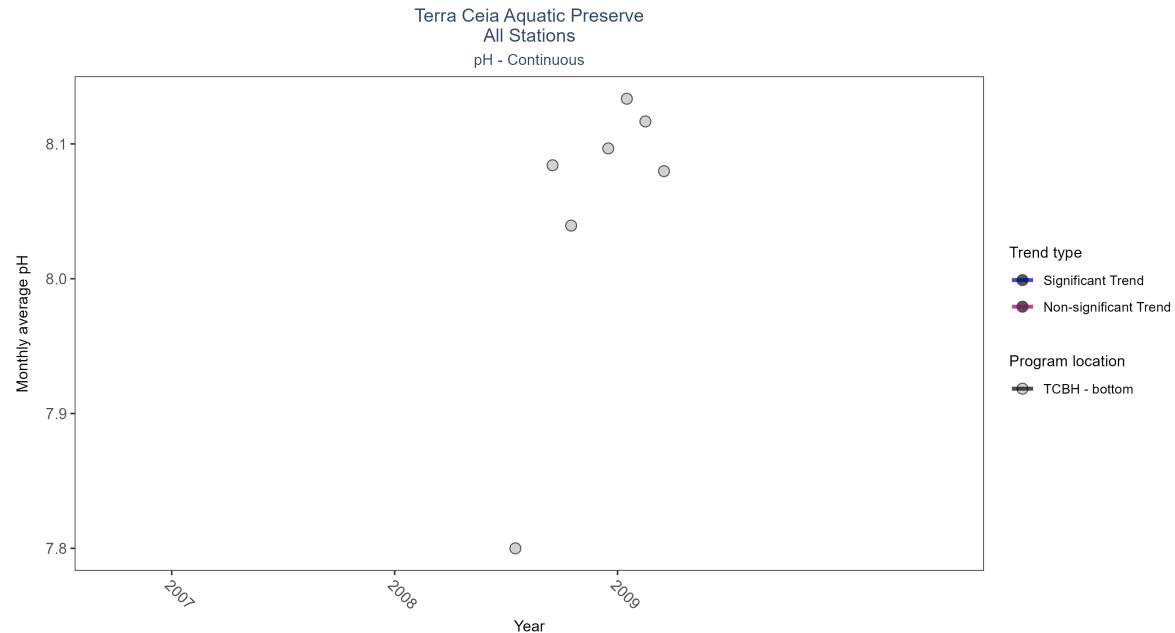


Table 12: Seasonal Kendall-Tau Results for All Stations - pH

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
TCBH	Insufficient data to calculate trend	8306	2	2008 - 2009	8.1	-	-	-	-

## Water Clarity

### Turbidity - Discrete

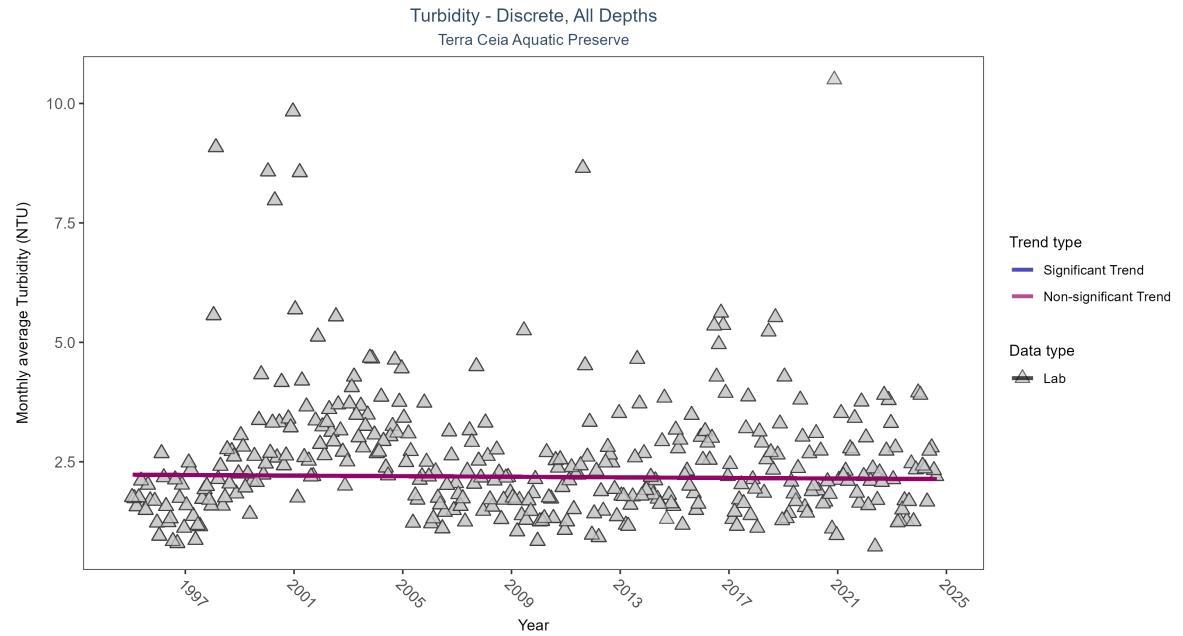


Table 13: Seasonal Kendall-Tau Results for - Turbidity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	8004	30	1995 - 2024	1.8	-0.0246	2.22956	-0.00306	0.5301

## Turbidity - Continuous

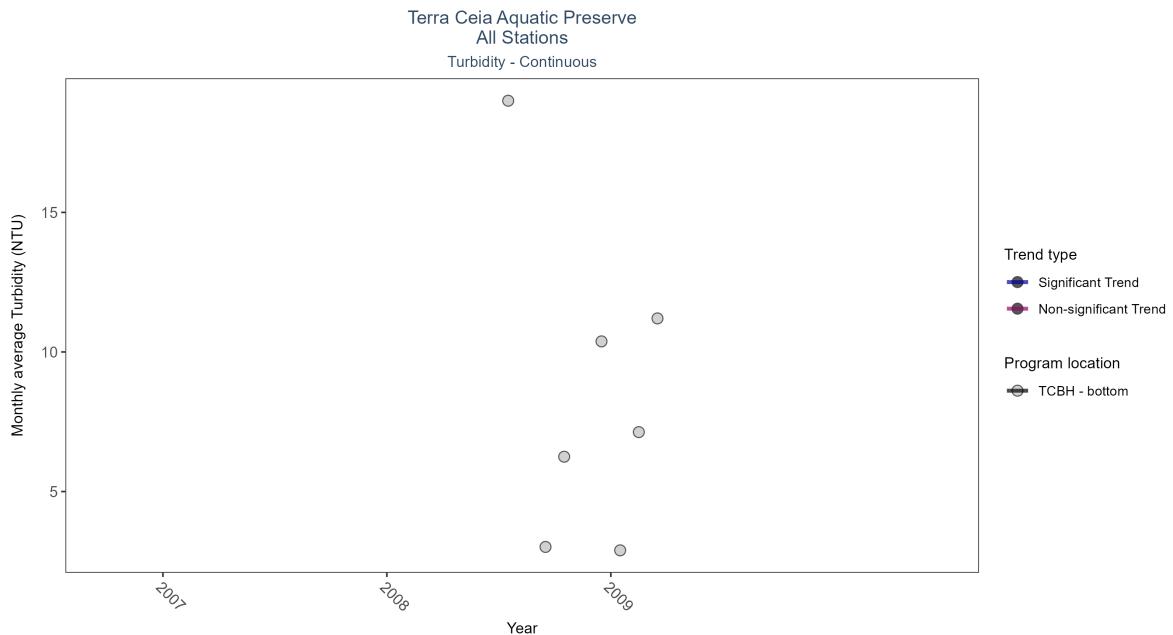


Table 14: Seasonal Kendall-Tau Results for All Stations - Turbidity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
TCBH	Insufficient data to calculate trend	8263	2	2008 - 2009	2	-	-	-	-

## Total Suspended Solids - Discrete

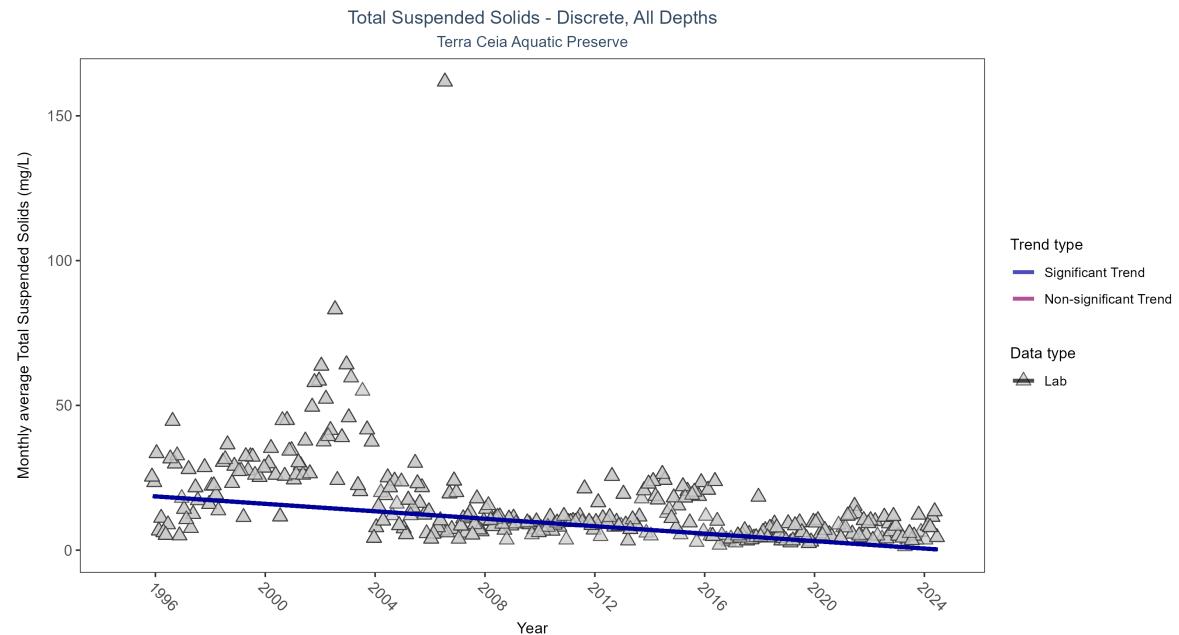


Table 15: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	1646	30	1995 - 2024	10.6	-0.4389	19.21194	-0.6433	0.0000

## Chlorophyll a, Uncorrected for Pheophytin - Discrete

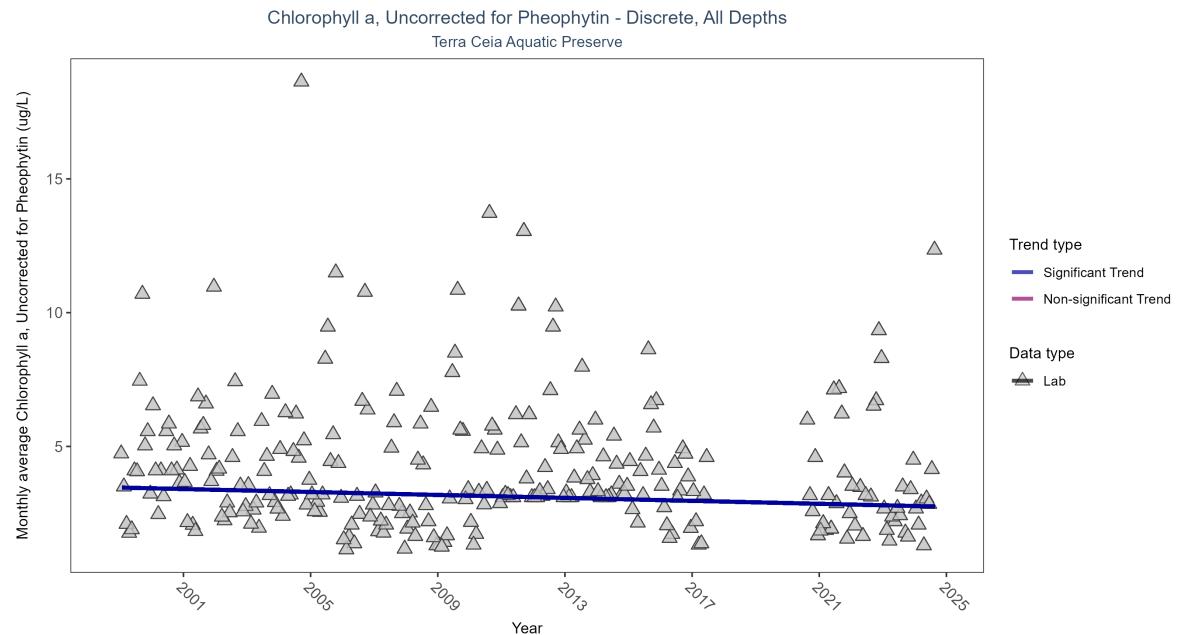


Table 16: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	1080	24	1999 - 2024	3.2	-0.0998	3.46277	-0.02757	0.0239

## Chlorophyll a, Corrected for Pheophytin - Discrete

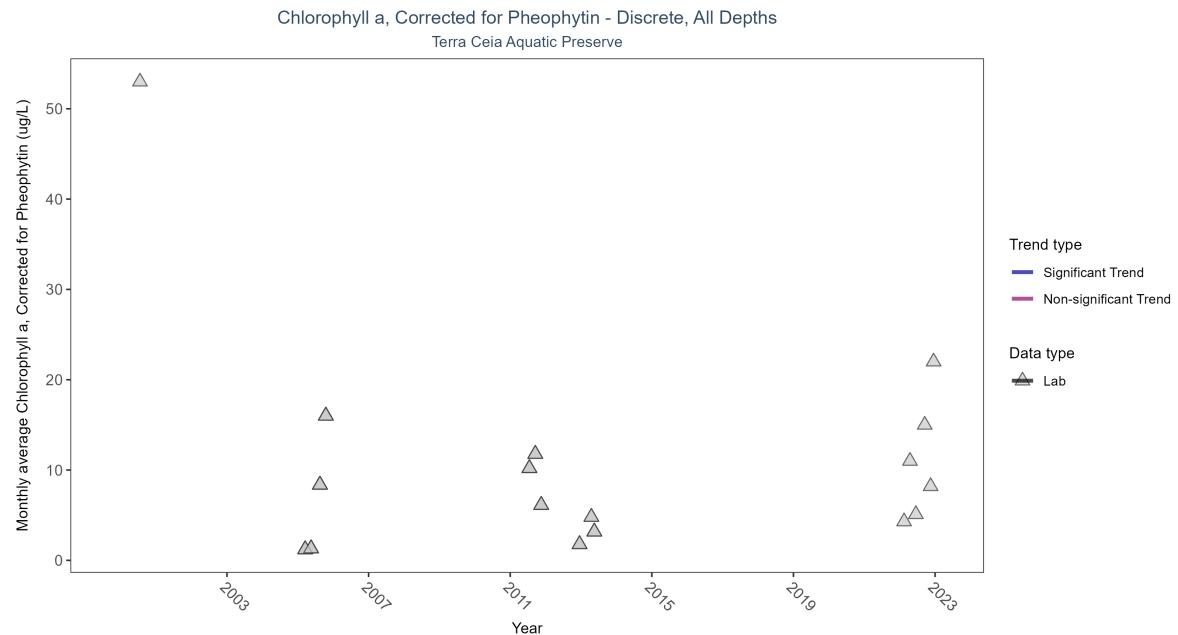


Table 17: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	54	6	2000 - 2022	5.1	-	-	-	NA

## Secchi Depth - Discrete

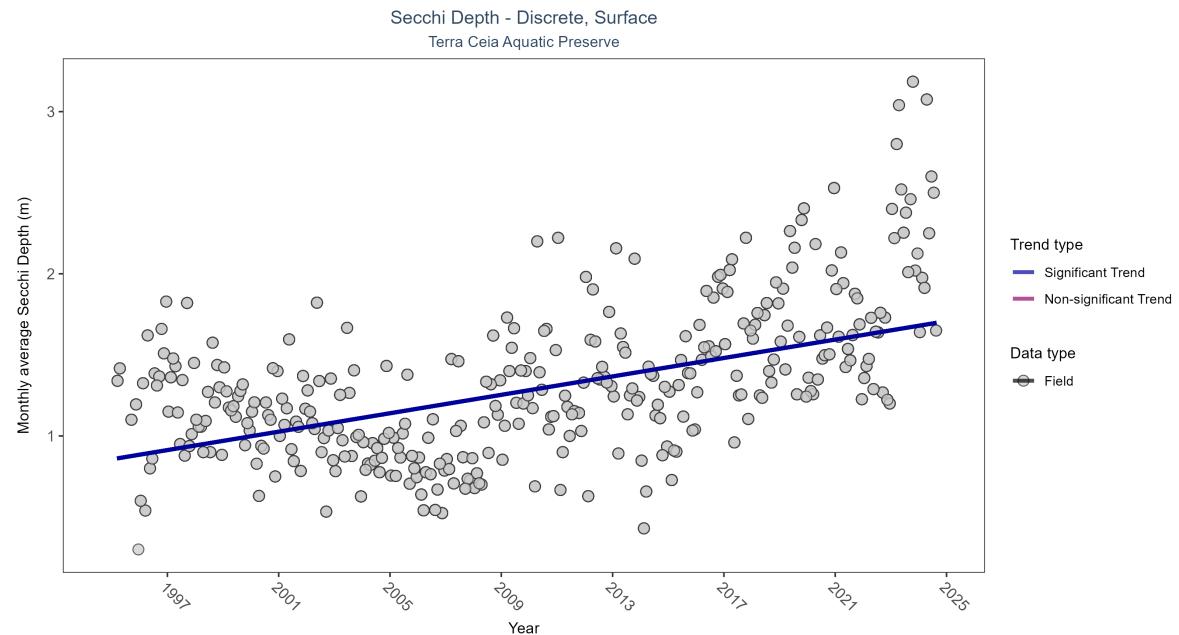


Table 18: Seasonal Kendall-Tau Results for - Secchi Depth

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	9833	30	1995 - 2024	1	0.3744	0.85592	0.0284	0.0000

## Colored Dissolved Organic Matter - Discrete

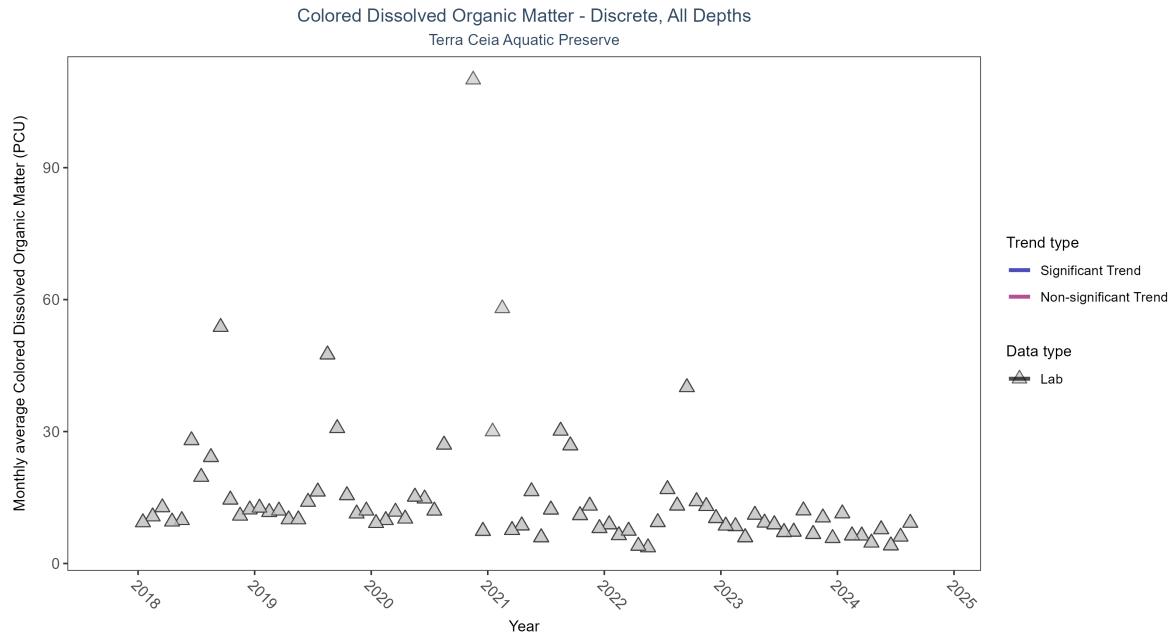


Table 19: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	546	7	2018 - 2024	5.3	-	-	-	NA