# Fort Clinch State Park Aquatic Preserve

# SEACAR Water Quality Analysis

## Last compiled on 09 January, 2025

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# Indicators

## Nutrients

#### Total Nitrogen - Discrete

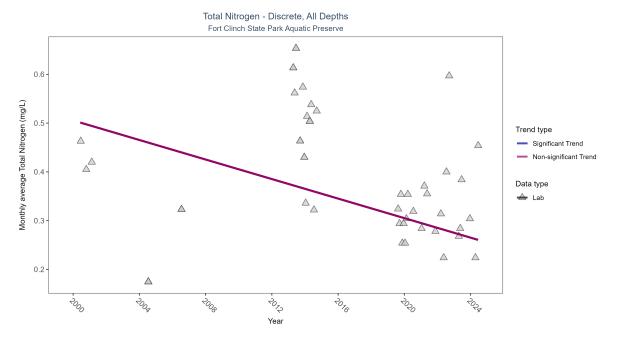


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	55	12	2000 - 2024	0.354	-0.3333	0.50547	-0.01001	0.0908

#### Total Phosphorus - Discrete

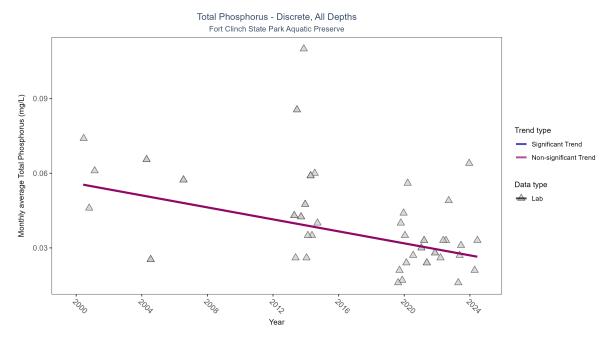


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf SennIntercept}$	SennSlope	p
Lab	No significant trend	58	12	2000 - 2024	0.034	-0.2583	0.05592	-0.0012	0.2374

# Water Quality

#### Dissolved Oxygen - Discrete

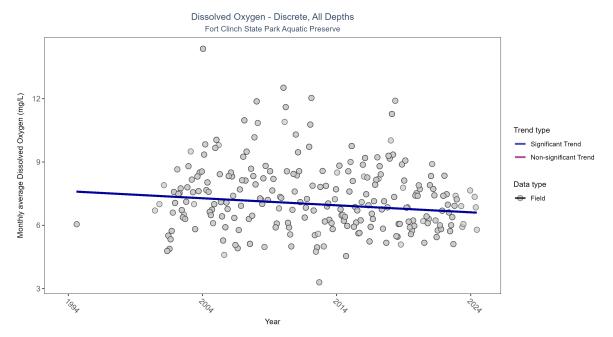


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf SennIntercept}$	${\bf SennSlope}$	p
Field	Significantly decreasing trend	1641	26	1994 - 2024	7.1	-0.1847	7.61469	-0.03332	0.0000

#### Dissolved Oxygen Saturation - Discrete

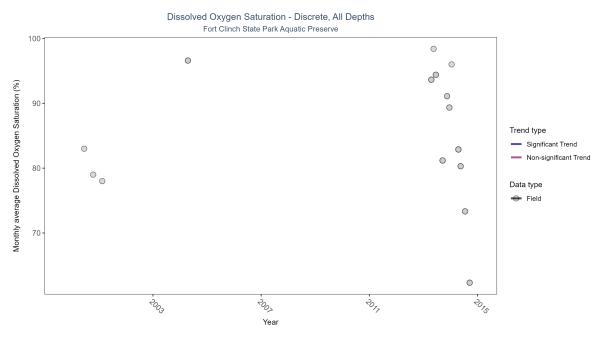


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Field	Insufficient data to calculate trend	48	5	2000 - 2014	85.45	-	-	-	NA

#### Salinity - Discrete

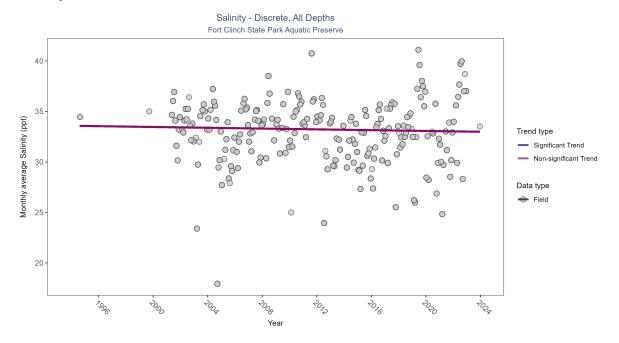


Table 5: Seasonal Kendall-Tau Results for - Salinity

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
All	No significant trend	1638	26	1994 - 2023	33.5	-0.0384	33.58155	-0.01974	0.3912

#### Water Temperature - Discrete

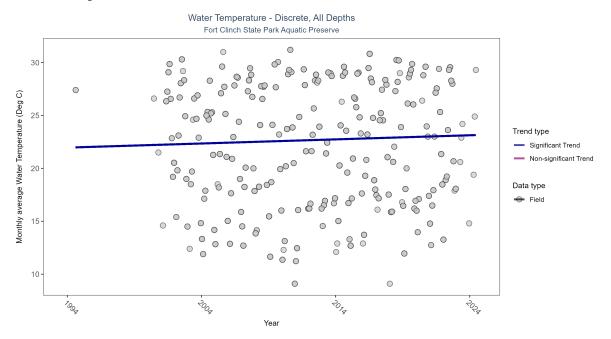


Table 6: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Field	Significantly increasing trend	1662	26	1994 - 2024	23.2	0.089	21.96099	0.03893	0.0395

#### pH - Discrete



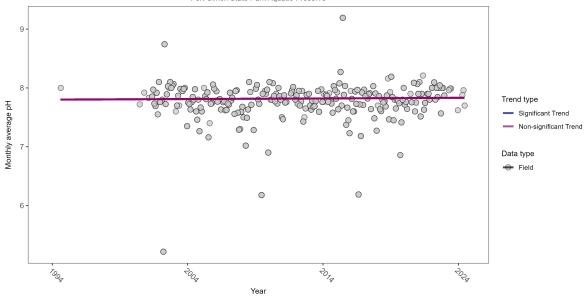


Table 7: Seasonal Kendall-Tau Results for - pH  $\,$ 

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf SennIntercept}$	${\bf SennSlope}$	p
Field	No significant trend	1631	26	1994 - 2024	7.8	0.0303	7.80065	0.00102	0.5561

# Water Clarity

#### Turbidity - Discrete

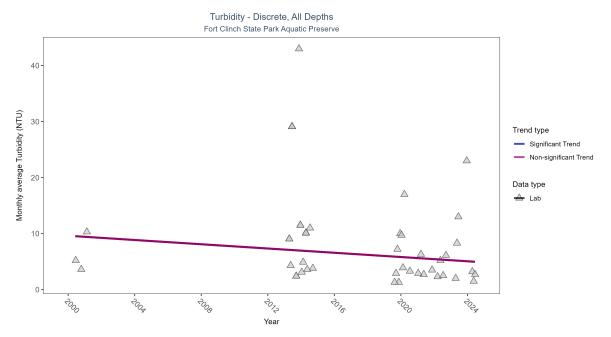


Table 8: Seasonal Kendall-Tau Results for - Turbidity

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Lab	No significant trend	49	10	2000 - 2024	5	-0.2211	9.61579	-0.19	0.3061

#### Total Suspended Solids - Discrete

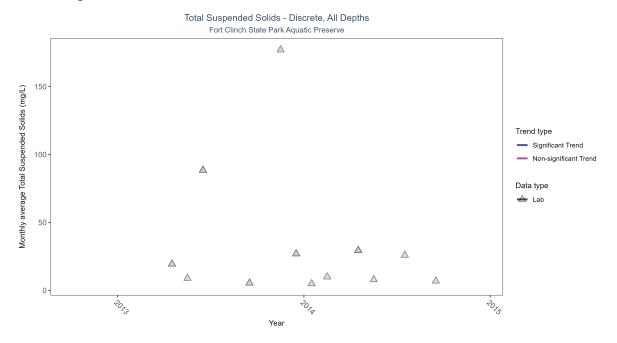


Table 9: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	22	2	2013 - 2014	17.5	-	-	-	NA

#### Chlorophyll a, Uncorrected for Pheophytin - Discrete

Chlorophyll a, Uncorrected for Pheophytin - Discrete, All Depths Fort Clinch State Park Aquatic Preserve  $\triangle$ Monthly average Chlorophyll a, Uncorrected for Pheophytin (ug/L) 12.5  $\triangle$ 10.0 -Trend type Significant Trend Non-significant Trend 7.5 Data type  $\triangle$   $\triangle$  $\triangle$   $\triangle$ 5.0 Δ  $\triangle$ 2.5 700g 7000 40/2 1-202× 2076 2020

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

Year

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	56	9	2004 - 2024	4.95419	-	-	-	NA

#### Chlorophyll a, Corrected for Pheophytin - Discrete

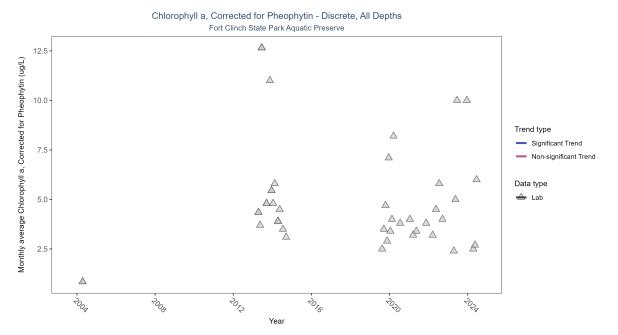


Table 11: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	48	9	2004 - 2024	4.1	-	-	-	NA

#### Secchi Depth - Discrete

7003

7007

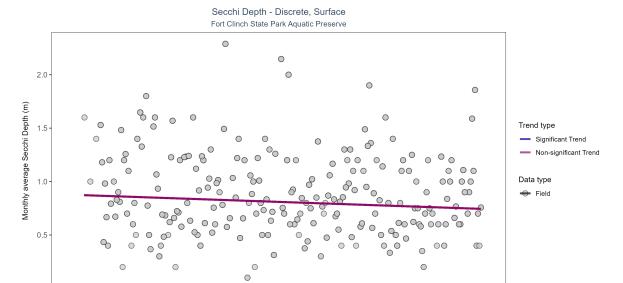


Table 12: Seasonal Kendall-Tau Results for - Secchi Depth

Year

2015

707g

7023

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	${\bf SennSlope}$	p
Field	No significant trend	1511	23	2000 - 2022	0.9	-0.0647	0.875	-0.00568	0.1556