Indian River-Vero Beach to Ft. Pierce Aquatic Preserve SEACAR Discrete Water Quality Analysis

Last compiled on 14 August, 2024

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Indicators

Nutrients

Total Nitrogen - Discrete

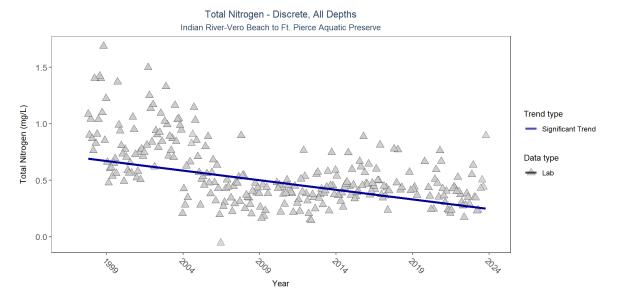


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	1009	27	1997 - 2023	0.531	-0.408	0.7059	-0.01706	0.0000

Total Phosphorus - Discrete

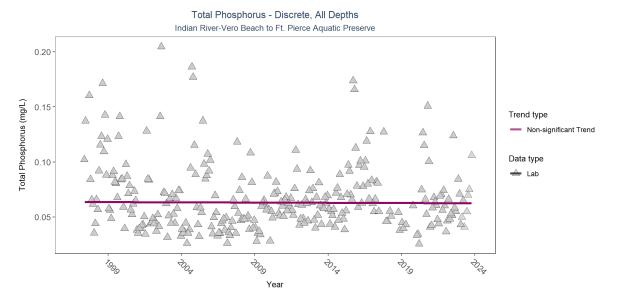


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Lab	No significant trend	2077	27	1997 - 2023	0.0595	-0.0104	0.06359	-0.00004	0.8393

Water Quality

Dissolved Oxygen - Discrete

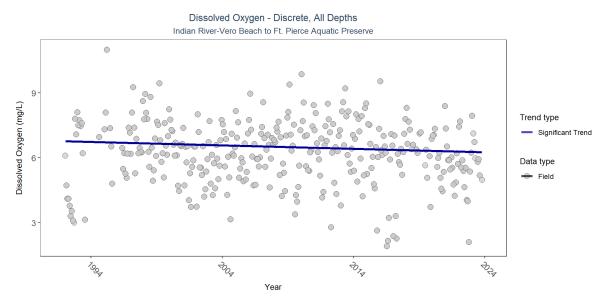


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	7660	32	1992 - 2023	6.22	-0.0901	6.768	-0.01613	0.0206

Dissolved Oxygen Saturation - Discrete

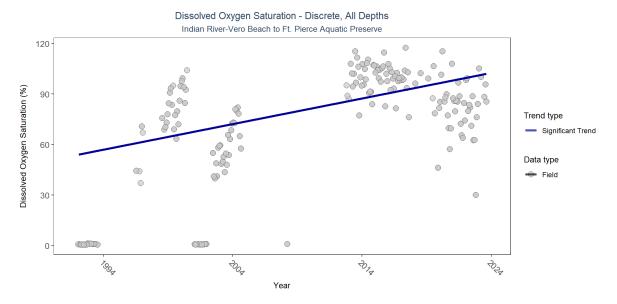


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	797	24	1992 - 2023	83	0.3691	53.95132	1.52206	0.0000

Salinity - Discrete

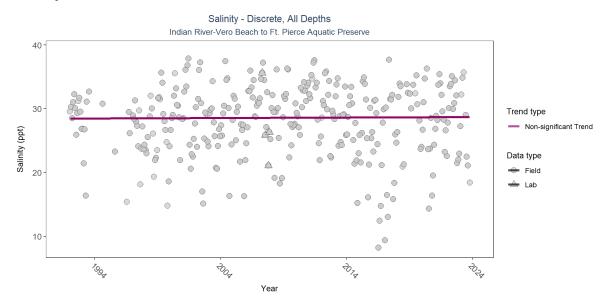


Table 5: Seasonal Kendall-Tau Results for - Salinity

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	${\bf SennSlope}$	p
All	No significant trend	8369	32	1992 - 2023	29.01	0.0061	28.45982	0.008	0.8376

Water Temperature - Discrete

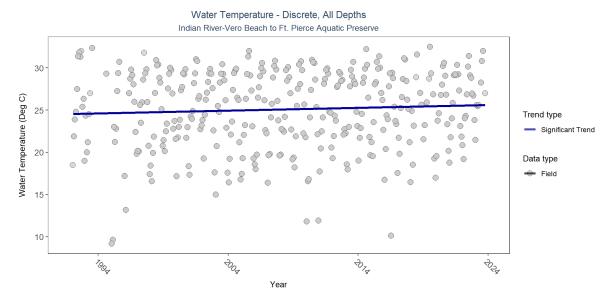


Table 6: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	8401	32	1992 - 2023	25.4	0.14	24.55978	0.03295	0.0002

pH - Discrete

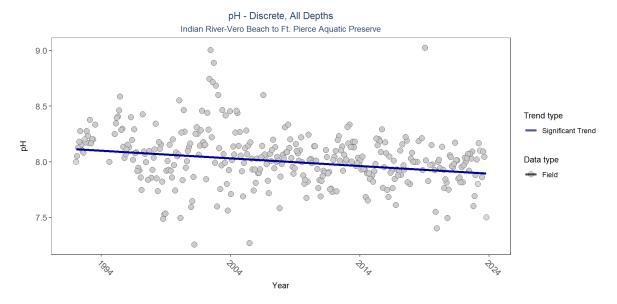


Table 7: Seasonal Kendall-Tau Results for - pH $\,$

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	5704	32	1992 - 2023	8.02	-0.2133	8.1136	-0.00686	0.0000

Water Clarity

Turbidity - Discrete

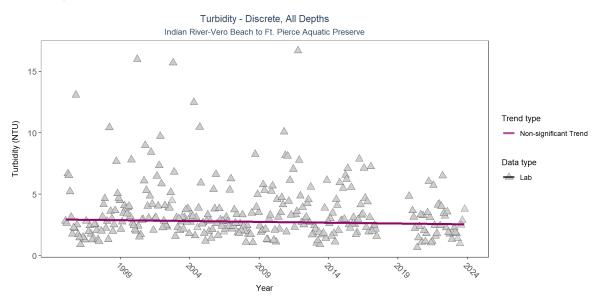


Table 8: Seasonal Kendall-Tau Results for - Turbidity

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Lab	No significant trend	3923	28	1995 - 2023	2.6	-0.0456	2.944	-0.01291	0.2773

Total Suspended Solids - Discrete

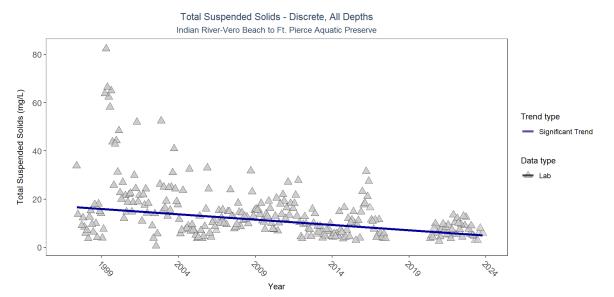


Table 9: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	858	25	1997 - 2023	12	-0.3121	16.84777	-0.44167	0.0000

Chlorophyll a, Uncorrected for Pheophytin - Discrete

Chlorophyll a, Uncorrected for Pheophytin - Discrete, All Depths Indian River-Vero Beach to Ft. Pierce Aquatic Preserve

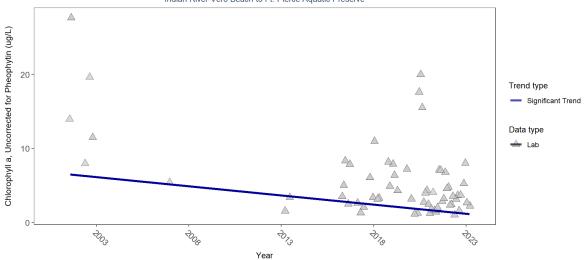


Table 10: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	162	12	2001 - 2023	3.77983	-0.2849	6.63012	-0.24788	0.0115

Chlorophyll a, Corrected for Pheophytin - Discrete

Chlorophyll a, Corrected for Pheophytin - Discrete, All Depths Indian River-Vero Beach to Ft. Pierce Aquatic Preserve

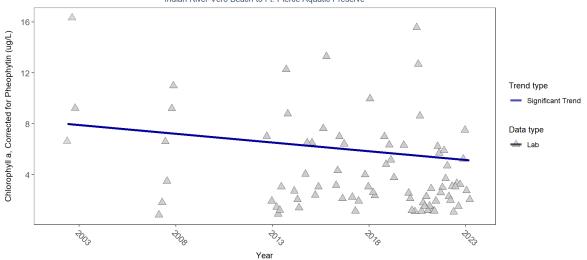


Table 11: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	250	14	2002 - 2023	2.85	-0.1997	8.03519	-0.13761	0.0195

Secchi Depth - Discrete

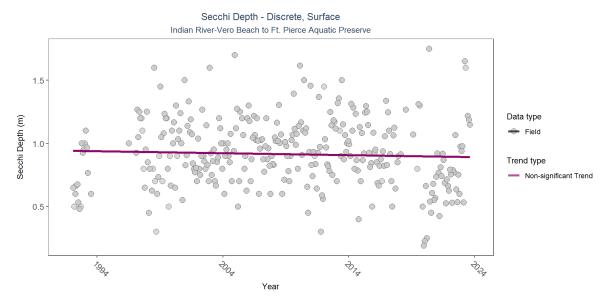


Table 12: Seasonal Kendall-Tau Results for - Secchi Depth

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Field	No significant trend	1889	30	1992 - 2023	0.9	-0.0446	0.94218	-0.00156	0.3154

Colored Dissolved Organic Matter - Discrete

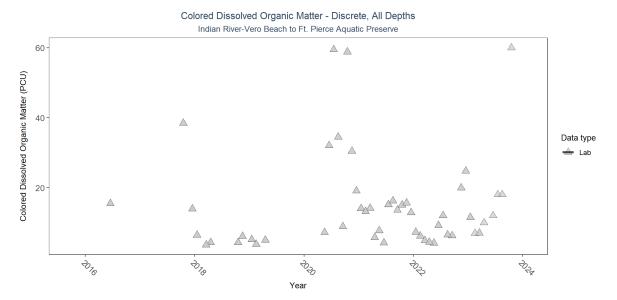


Table 13: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	130	8	2016 - 2023	8.87332	-	-	-	NA