

Jensen Beach to Jupiter Inlet Aquatic Preserve
SEACAR Discrete Water Quality Analysis

Last compiled on 14 August, 2024

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Indicators

Nutrients

Total Nitrogen - Discrete

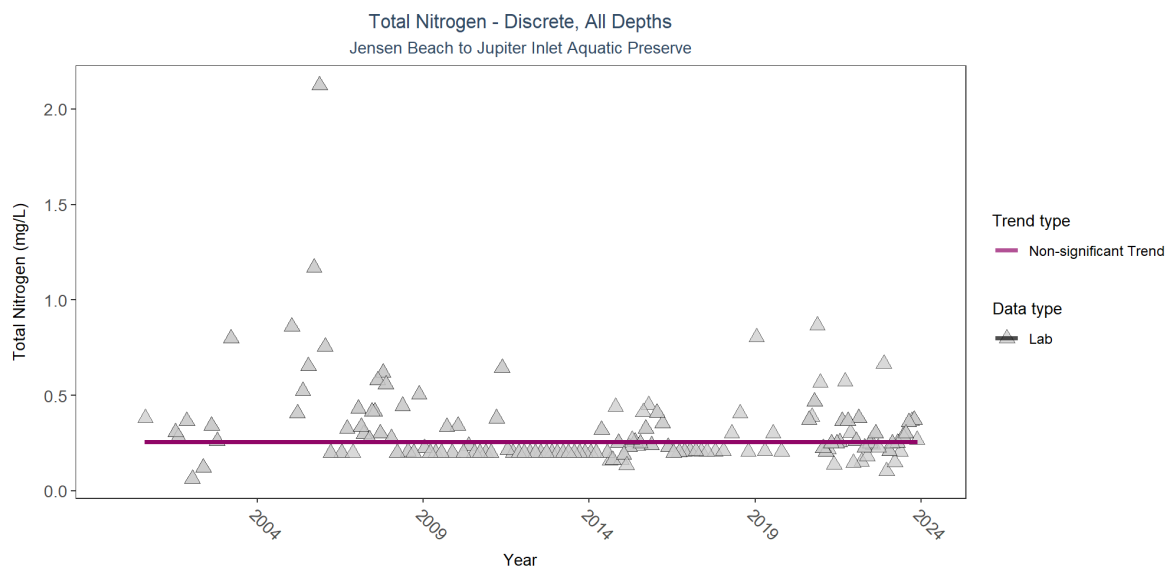


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	486	23	2000 - 2023	0.258	-0.0802	0.25677	0	0.2531

Total Phosphorus - Discrete

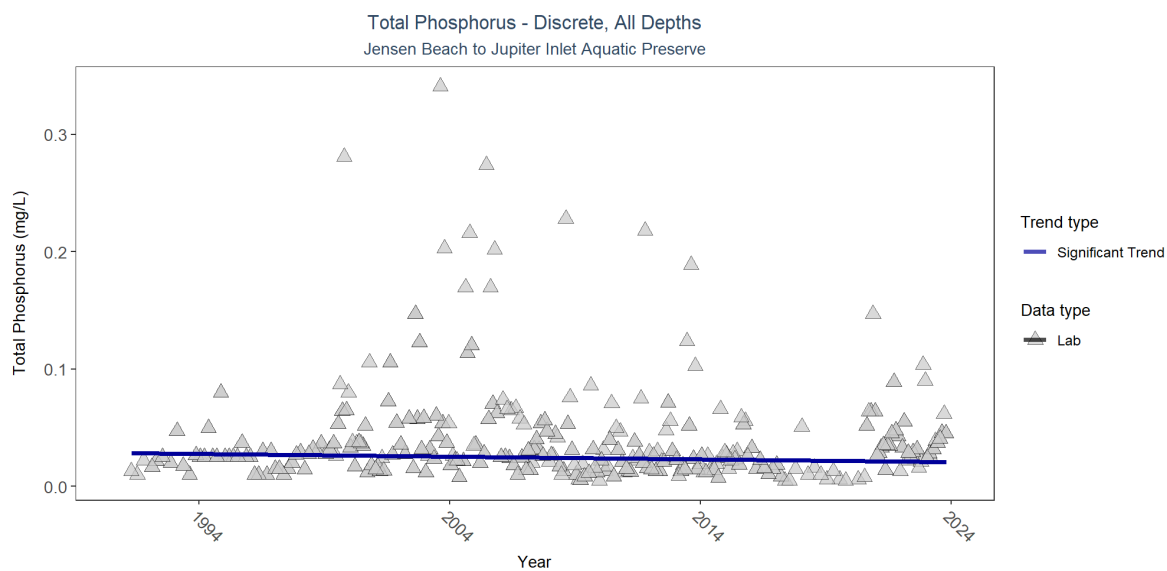


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	900	33	1991 - 2023	0.03	-0.1051	0.02867	-0.00023	0.0219

Water Quality

Dissolved Oxygen - Discrete

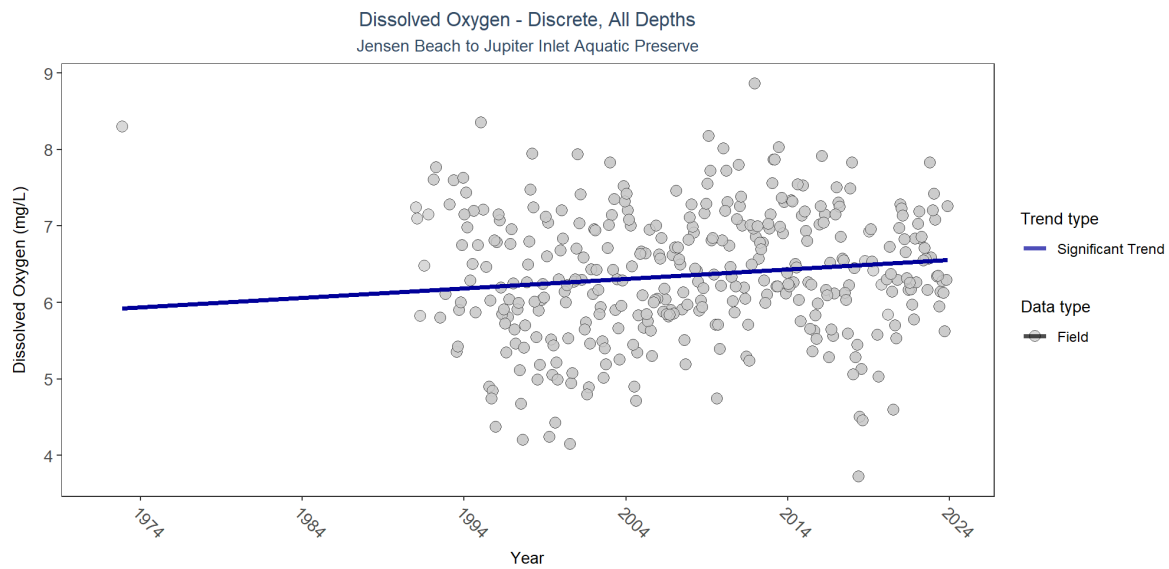


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	9613	34	1972 - 2023	6.4	0.1331	5.91049	0.01237	0.0005

Dissolved Oxygen Saturation - Discrete

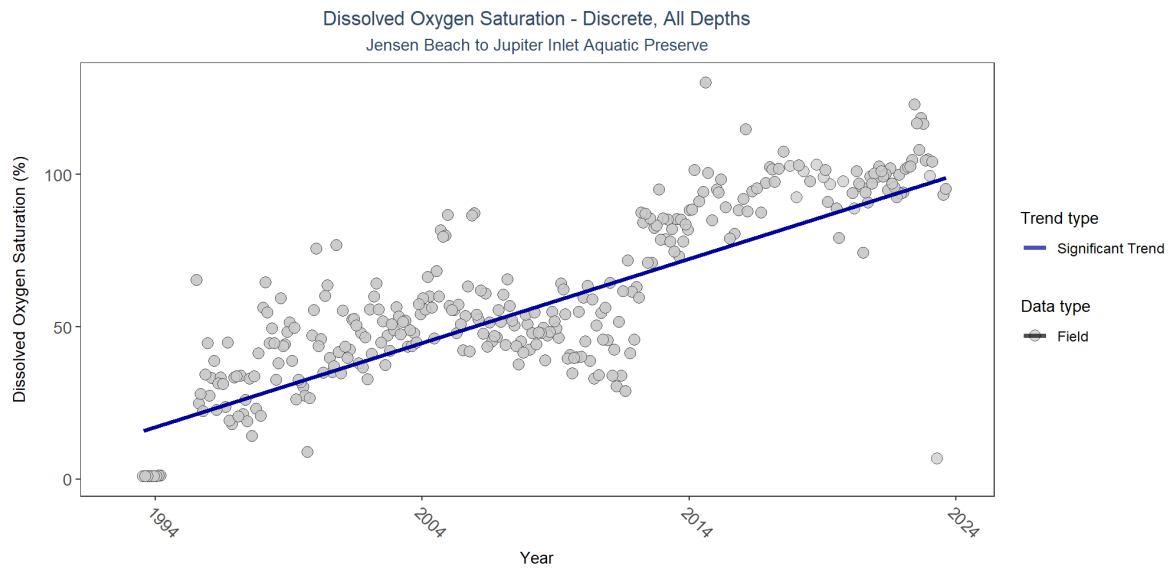


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	3923	31	1993 - 2023	75.516	0.6437	14.22444	2.76295	0.0000

Salinity - Discrete

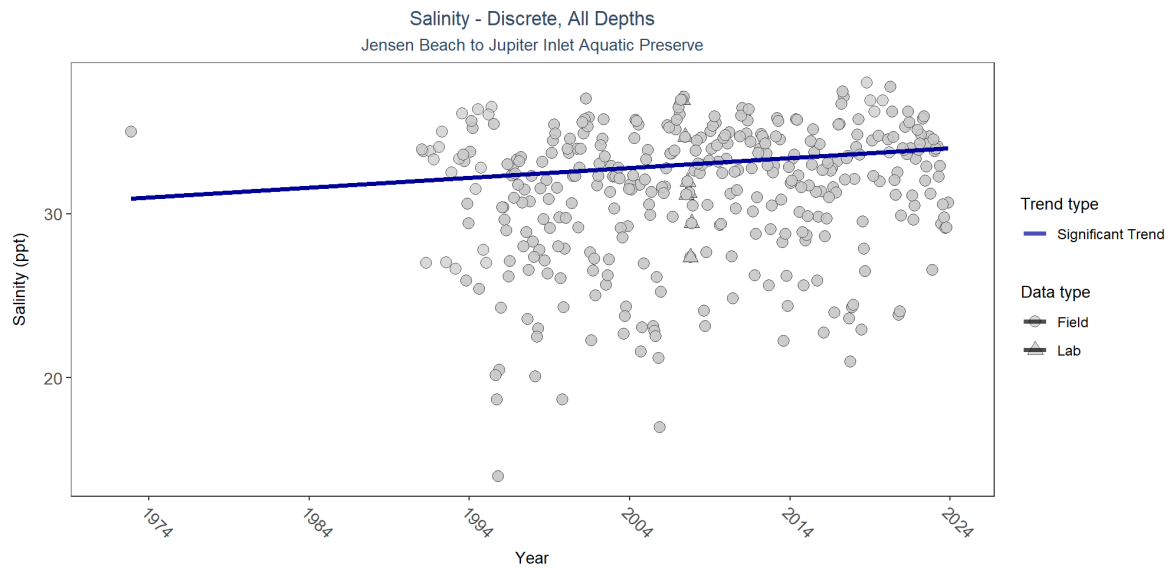


Table 5: Seasonal Kendall-Tau Results for - Salinity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
All	Significantly increasing trend	9503	34	1972 - 2023	32.6	0.1277	30.87727	0.05962	0.0007

Salinity - Continuous

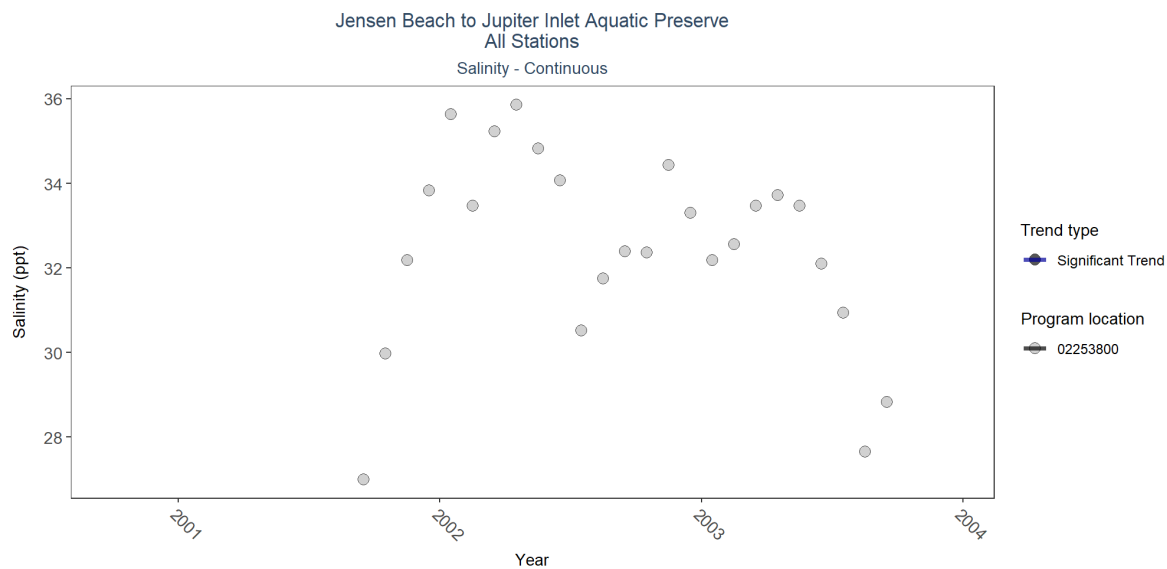


Table 6: Seasonal Kendall-Tau Results for All Stations - Salinity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02253800	Insufficient data to calculate trend	1213	3	2001 - 2003	33	-	-	-	-

Water Temperature - Discrete

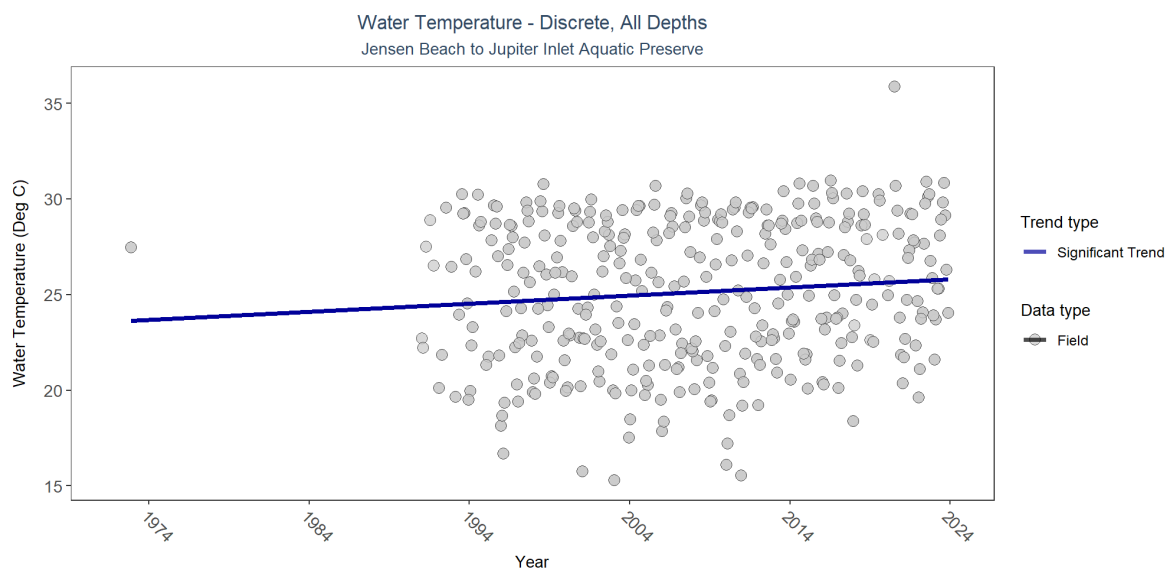


Table 7: Seasonal Kendall-Tau Results for - Water Temperature

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	9441	34	1972 - 2023	25.5	0.2331	23.59701	0.04212	0.0000

Water Temperature - Continuous

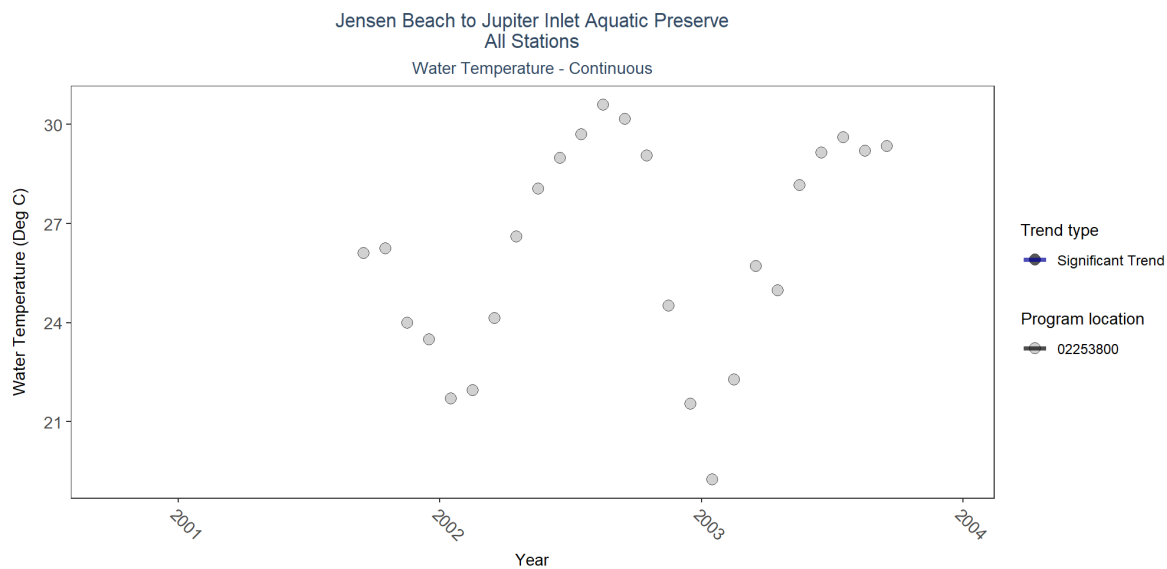


Table 8: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
02253800	Insufficient data to calculate trend	1186	3	2001 - 2003	27.1	-	-	-	-

pH - Discrete

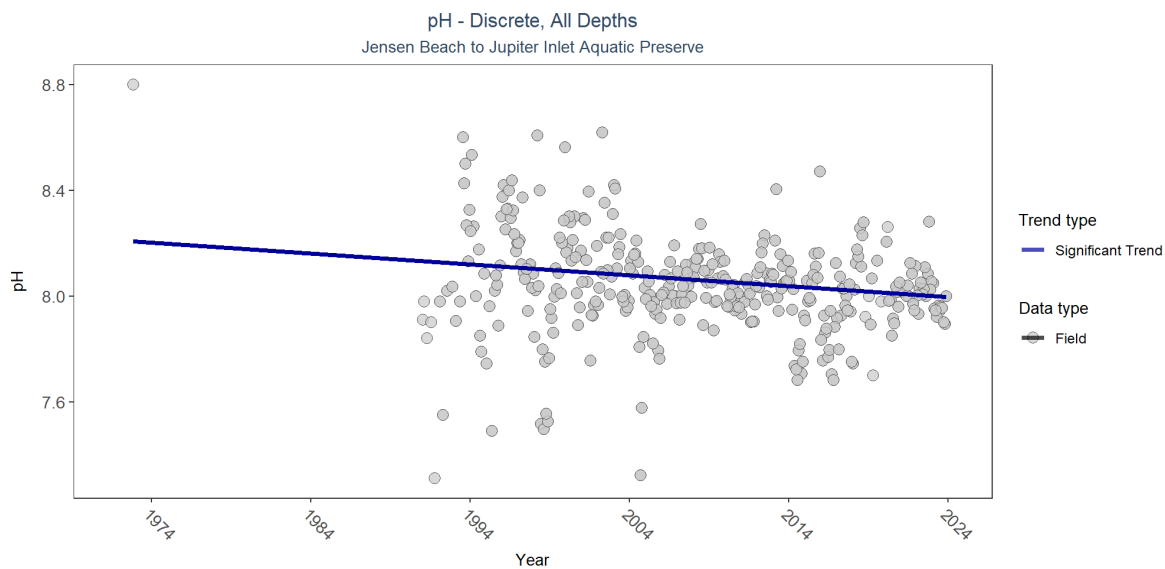


Table 9: Seasonal Kendall-Tau Results for - pH

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	8638	34	1972 - 2023	8.02	-0.167	8.21106	-0.00415	0.0000

Water Clarity

Turbidity - Discrete

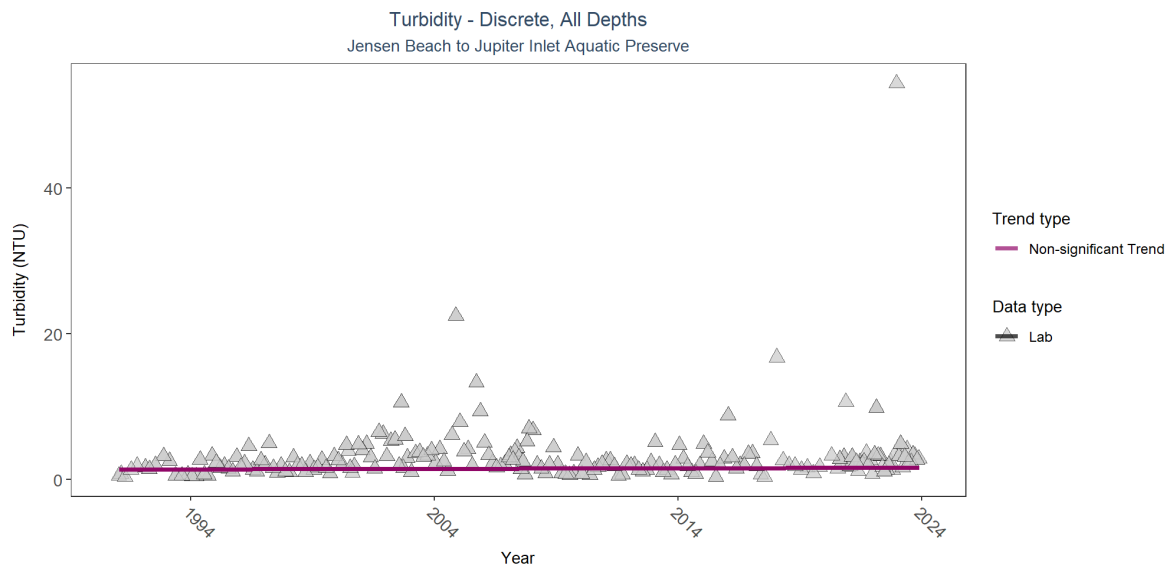


Table 10: Seasonal Kendall-Tau Results for - Turbidity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	632	33	1991 - 2023	2.31	0.056	1.40311	0.00757	0.4469

Total Suspended Solids - Discrete

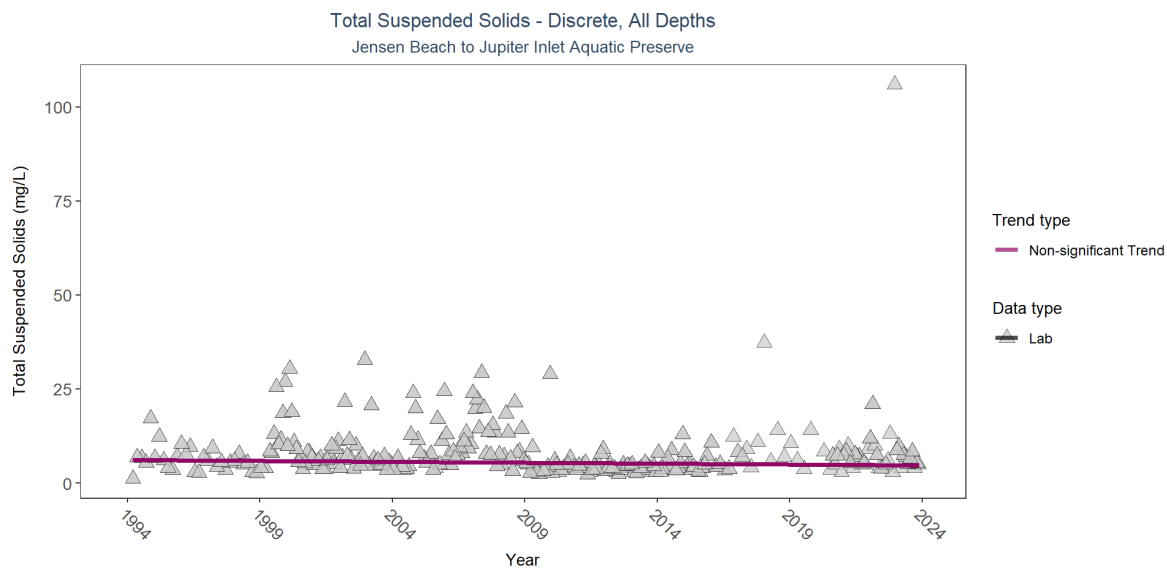


Table 11: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	968	30	1994 - 2023	6	-0.0852	6.07857	-0.04482	0.0643

Chlorophyll a, Uncorrected for Pheophytin - Discrete

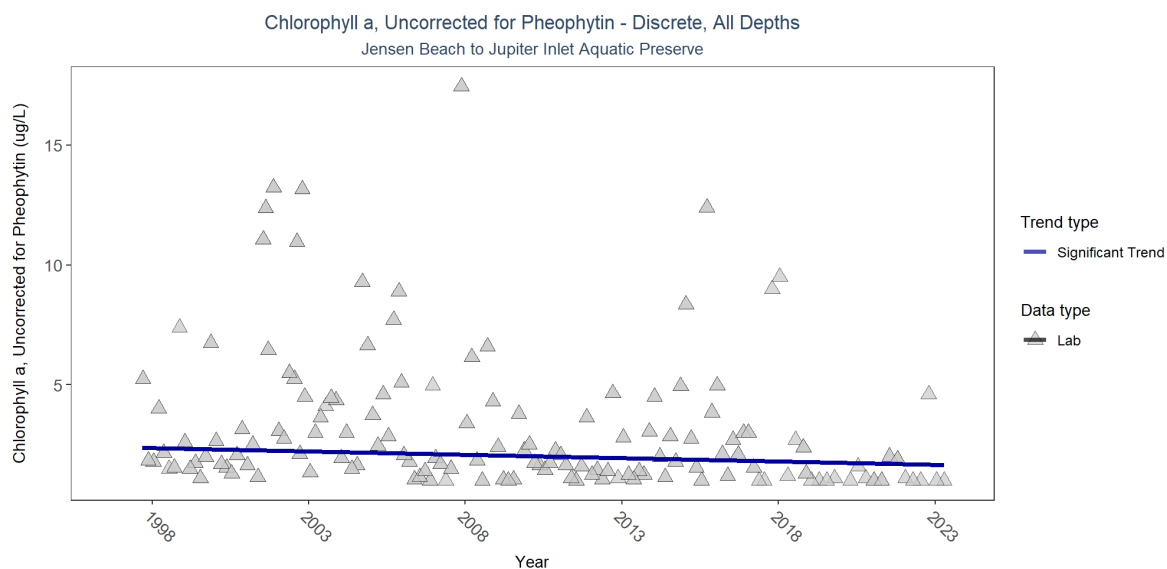


Table 12: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly decreasing trend	319	27	1997 - 2023	2.2	-0.2152	2.39	-0.02857	0.0042

Chlorophyll a, Corrected for Pheophytin - Discrete

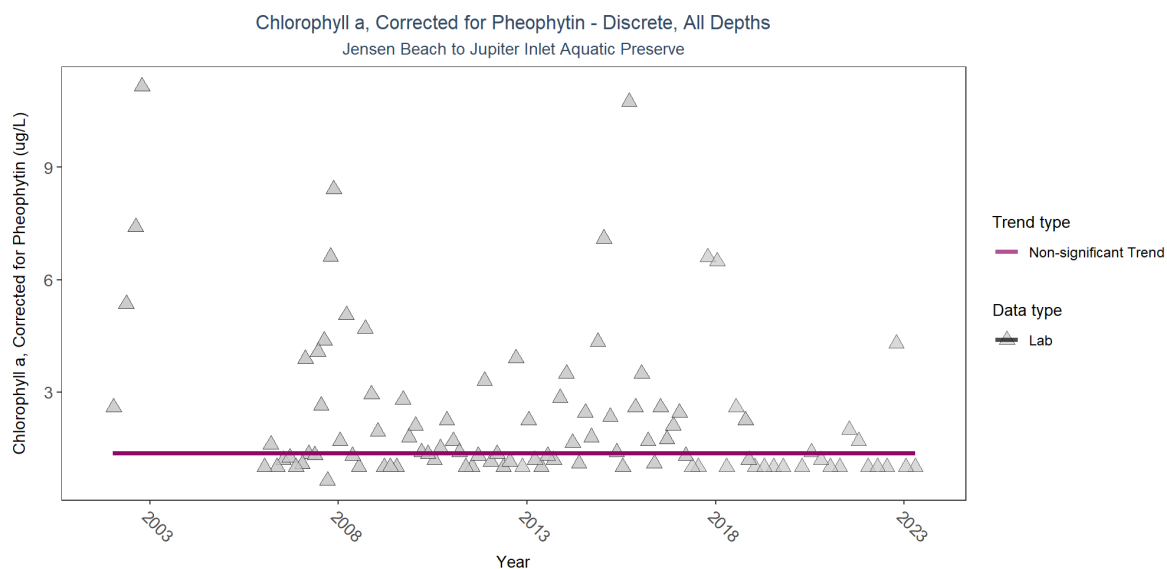


Table 13: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	237	19	2002 - 2023	1.6	-0.0638	1.37031	0	0.7117

Secchi Depth - Discrete

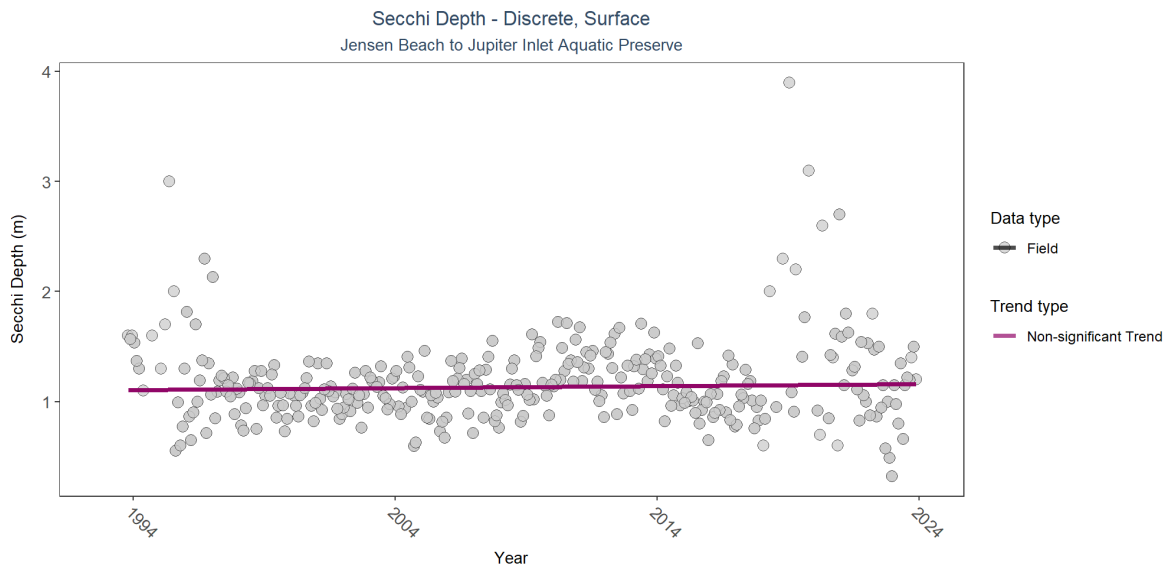


Table 14: Seasonal Kendall-Tau Results for - Secchi Depth

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	5231	31	1993 - 2023	1	0.0331	1.10184	0.00195	0.3691

Colored Dissolved Organic Matter - Discrete

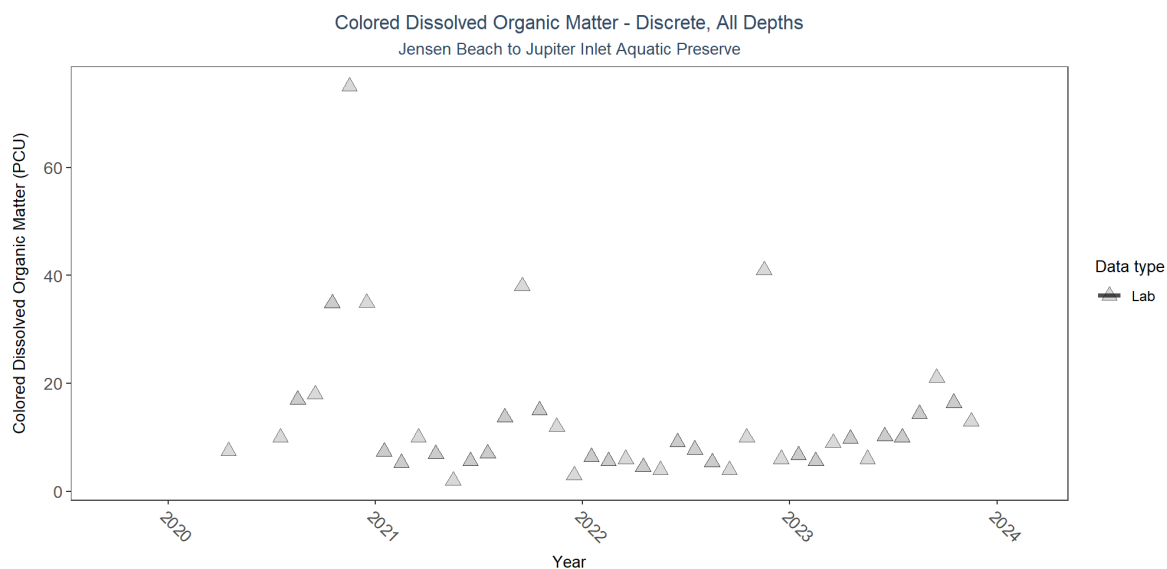


Table 15: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	237	4	2020 - 2023	7	-	-	-	NA