Mosquito Lagoon Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 15 August, 2024

Contents

Indicators

Nutrients

Total Nitrogen - Discrete

Total Nitrogen - Discrete, All Depths
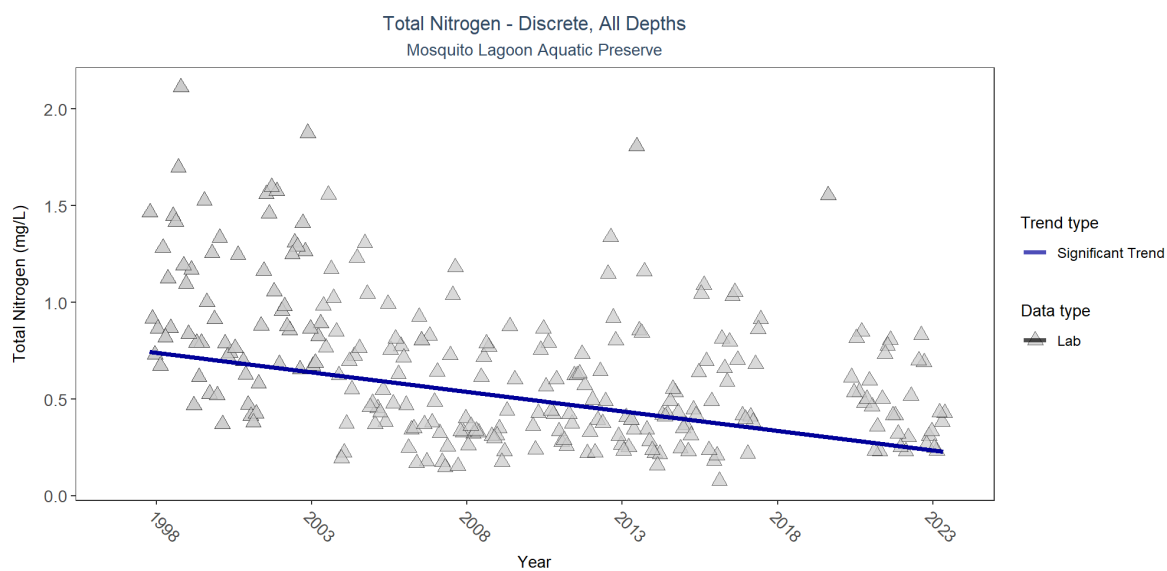Mosquito Lagoon Aquatic Preserve

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	370	26	1997 - 2023	0.7115	-0.3781	0.75976	-0.0202	0.0000

Total Phosphorus - Discrete

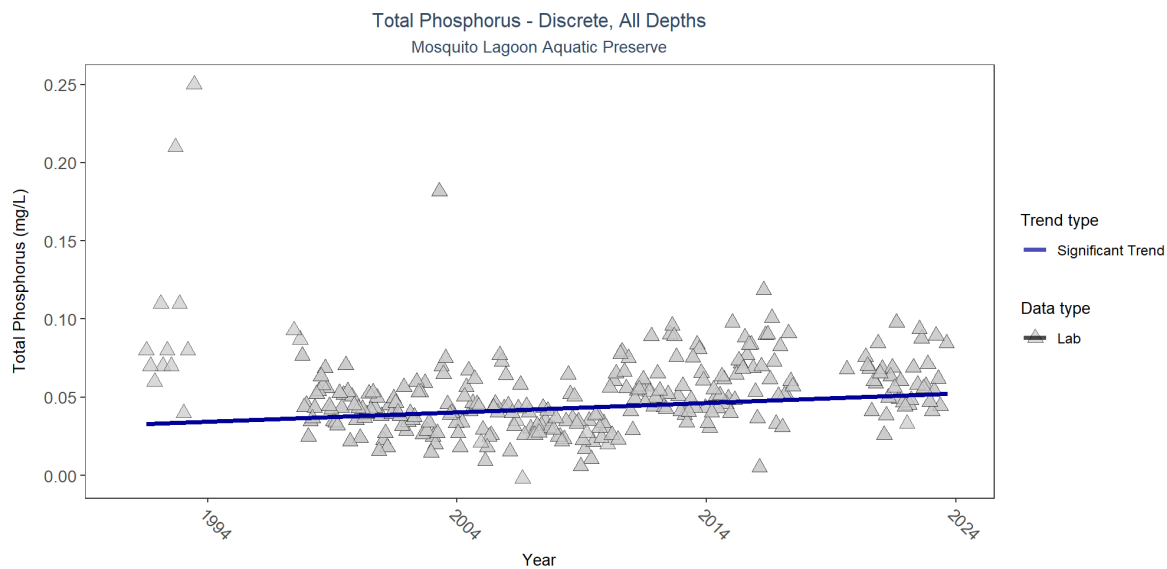Total Phosphorus - Discrete, All Depths
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Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	829	29	1991 - 2023	0.04114	0.1733	0.03265	0.00059	0.0000

Water Quality

Dissolved Oxygen - Discrete

Dissolved Oxygen - Discrete, All Depths
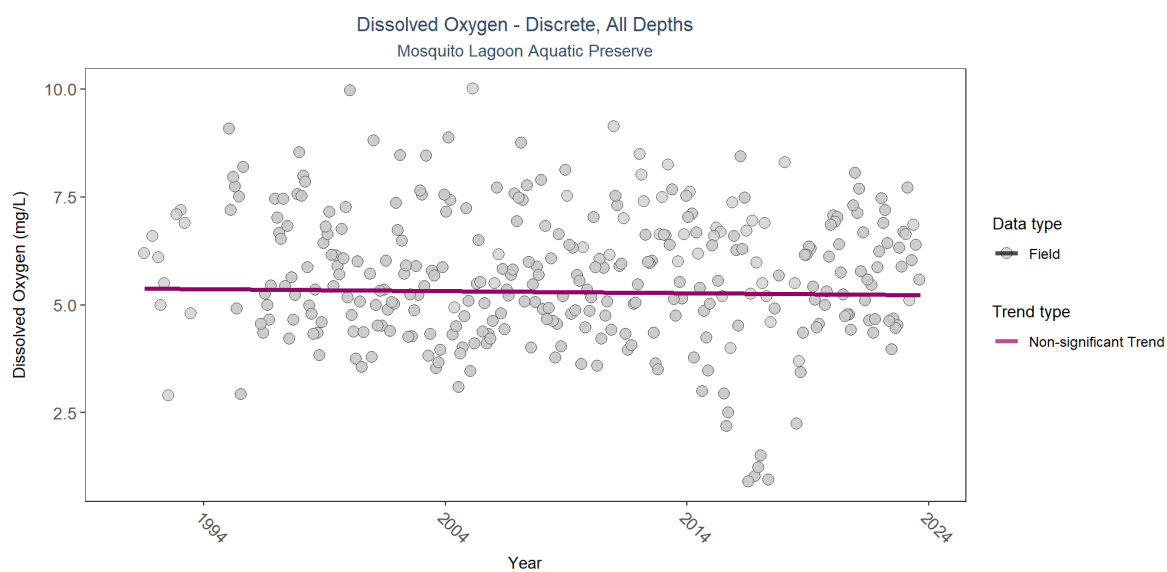Mosquito Lagoon Aquatic Preserve

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	4713	32	1991 - 2023	5.4	-0.0255	5.37895	-0.00469	0.5305

Dissolved Oxygen Saturation - Discrete

Dissolved Oxygen Saturation - Discrete, All Depths
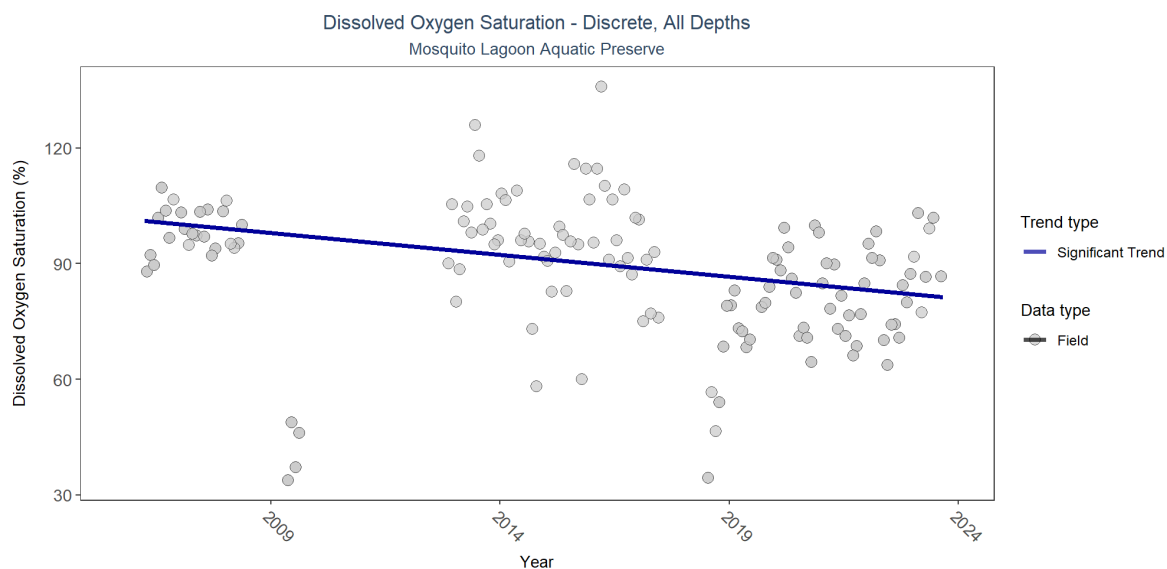
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Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	423	16	2006 - 2023	87.1	-0.2846	101.4434	-1.13448	0.0000

Salinity - Discrete

Salinity - Discrete, All Depths
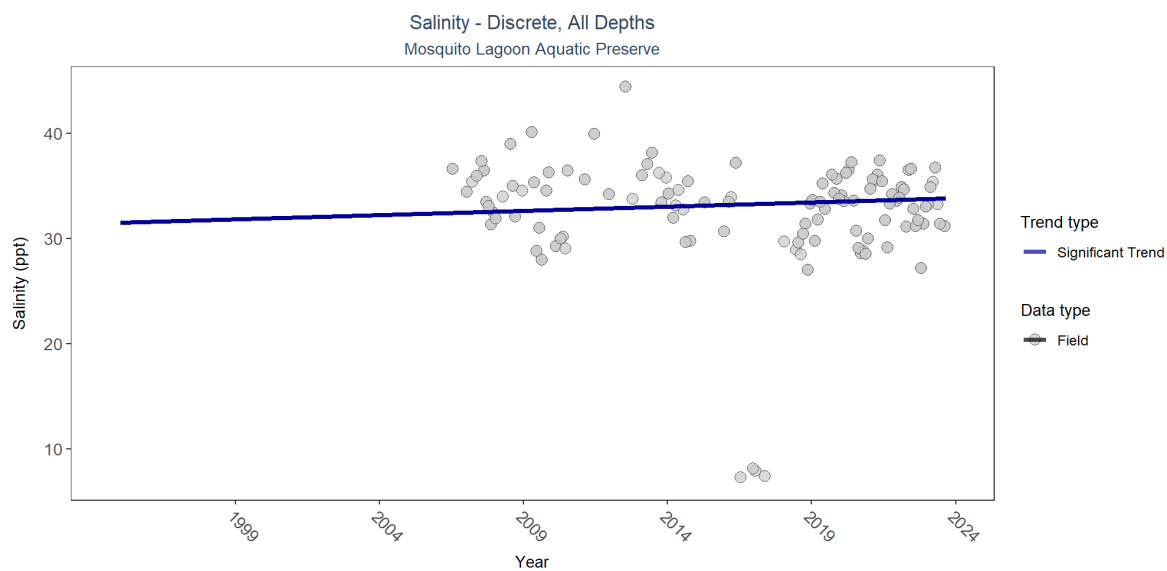Mosquito Lagoon Aquatic Preserve

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	5137	29	1995 - 2023	32.4	0.139	31.49931	0.08006	0.0004

Water Temperature - Discrete

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

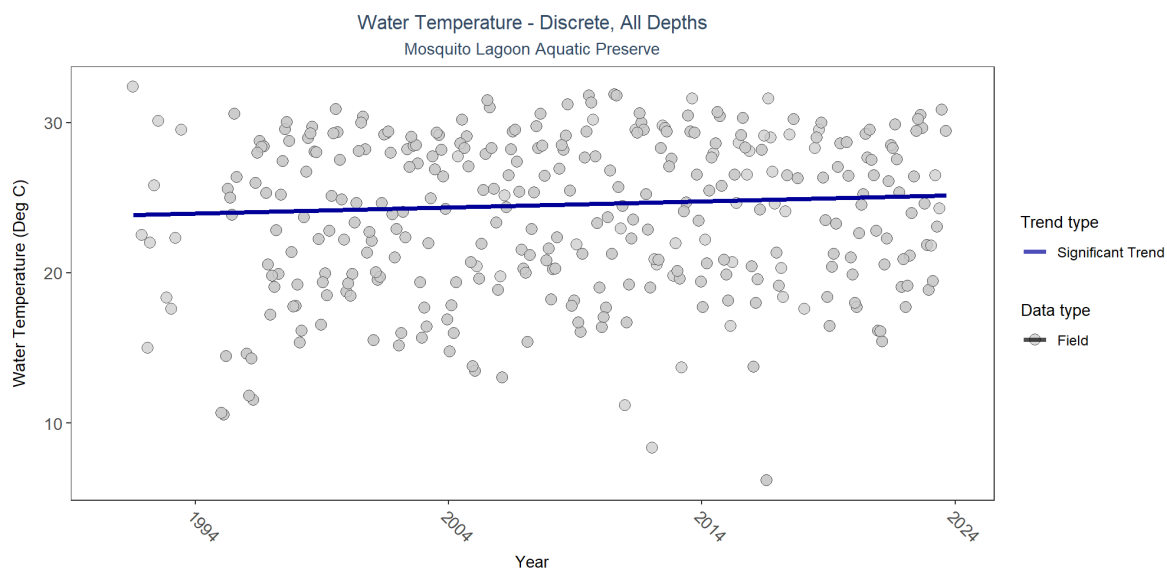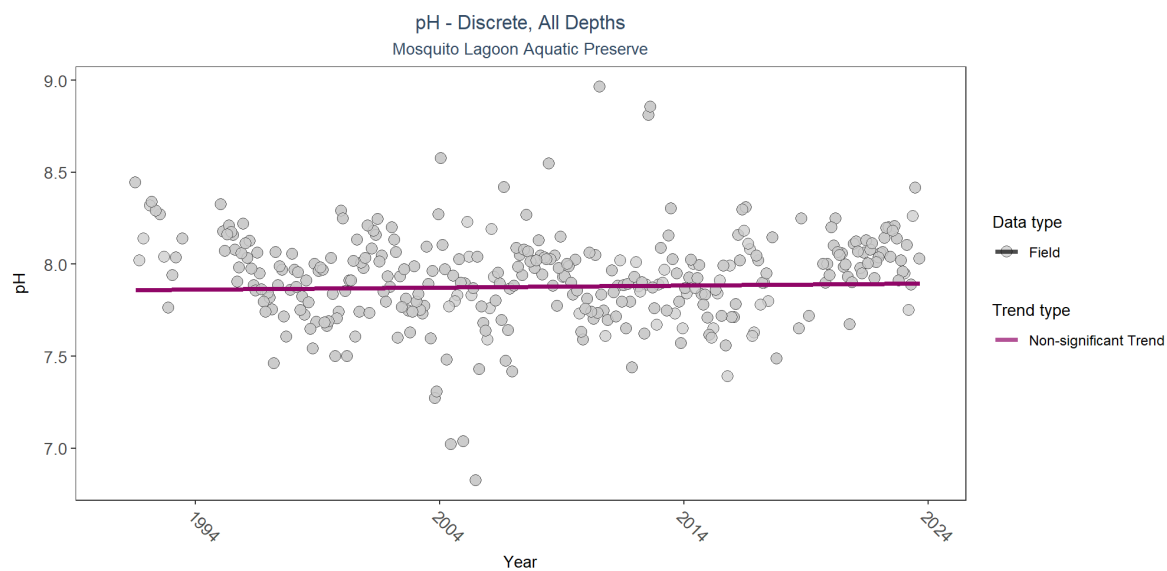| ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	5254	32	1991 - 2023	25	0.1379	23.82724	0.04064	0.0003

pH - Discrete

Table 7: Seasonal Kendall-Tau Results for - pH

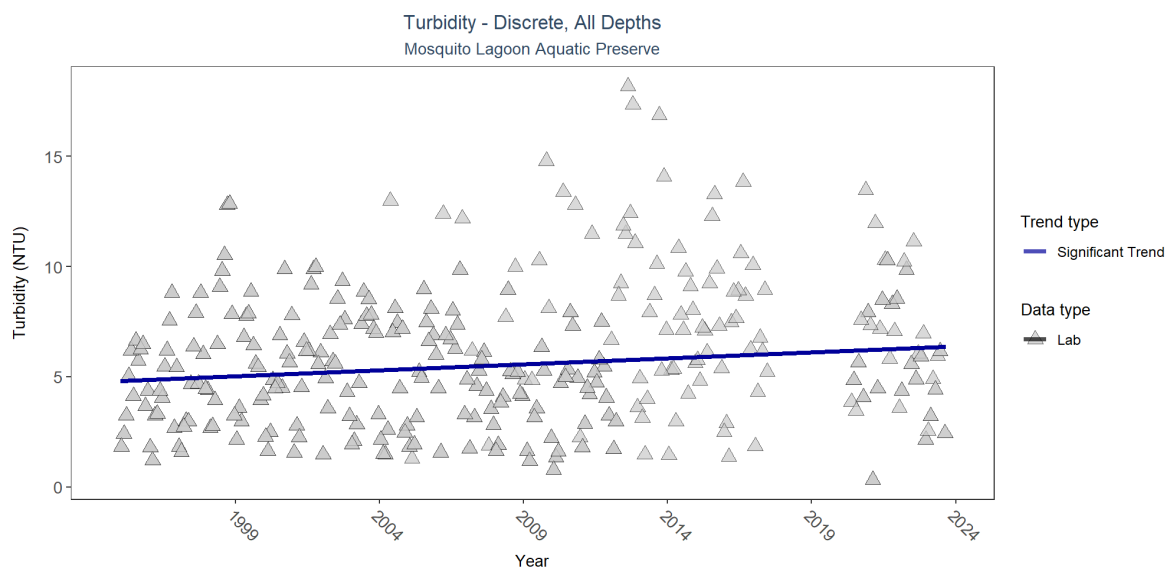| ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	3633	32	1991 - 2023	7.9	0.035	7.86026	0.0011	0.3786

Water Clarity

Turbidity - Discrete

Table 8: Seasonal Kendall-Tau Results for - Turbidity

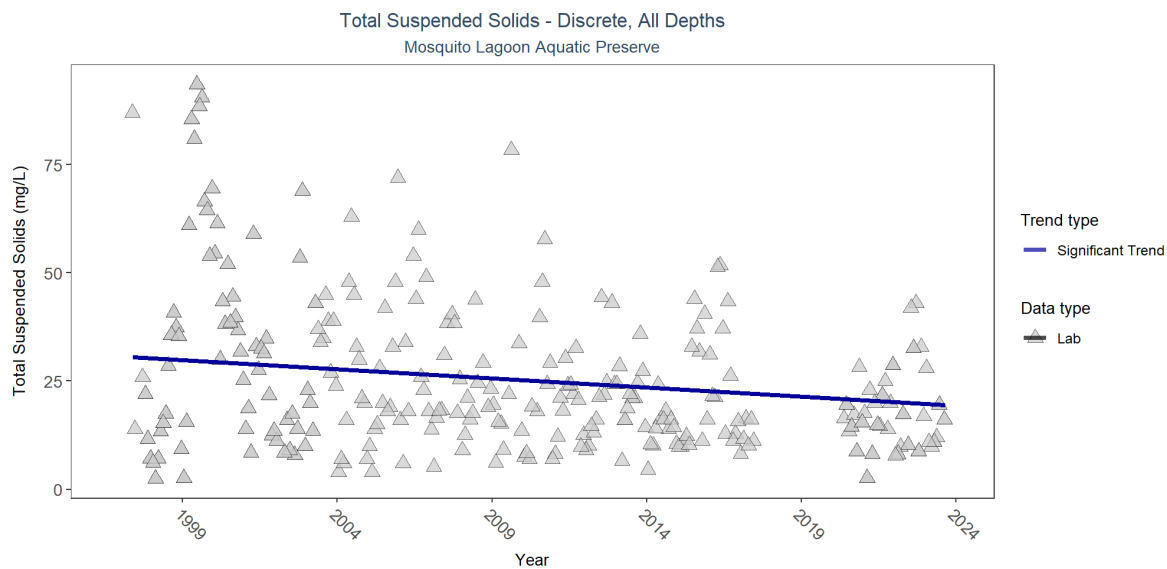| ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	3467	27	1995 - 2023	4.6	0.1413	4.81991	0.05365	0.0005

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	403	25	1997 - 2023	20	-0.1858	30.72054	-0.42083	0.0000

Chlorophyll a, Uncorrected for Pheophytin - Discrete

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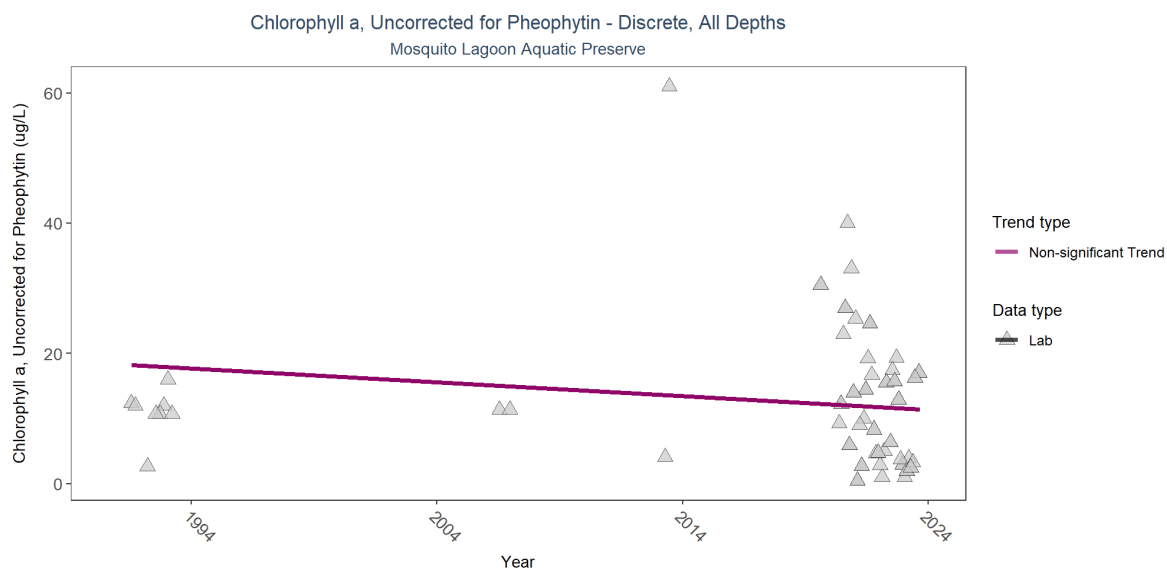
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Table 10: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	No significant trend	106	10	1991 - 2023	10.7	-0.1242	18.32114	-0.21059	0.3537

Chlorophyll a, Corrected for Pheophytin - Discrete

Chlorophyll a, Corrected for Pheophytin - Discrete, All Depths
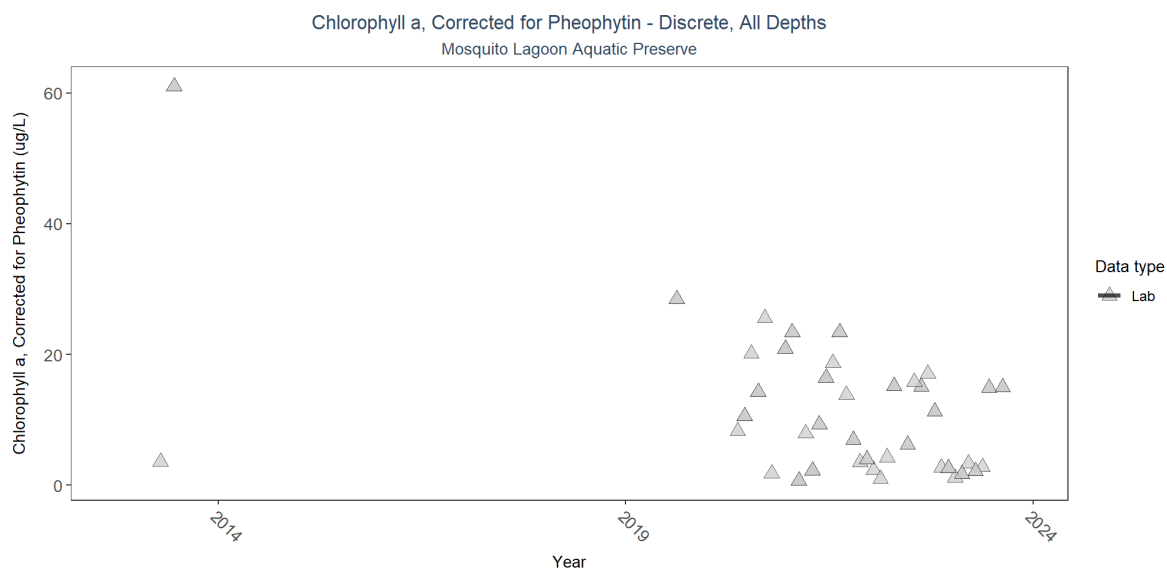Mosquito Lagoon Aquatic Preserve

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	Insufficient data to calculate trend	80	6	2013 - 2023	9.345	-	-	-	NA

Secchi Depth - Discrete

Secchi Depth - Discrete, Surface
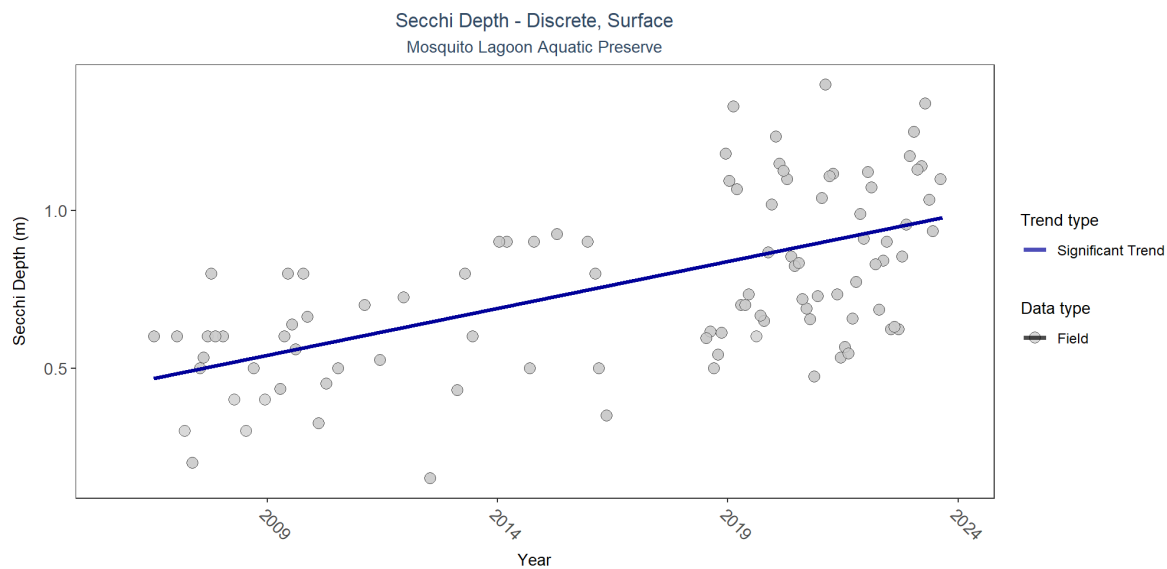Mosquito Lagoon Aquatic Preserve

Table 12: 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	596	17	2006 - 2023	0.8	0.4895	0.45222	0.02975	0.0000

Colored Dissolved Organic Matter - Discrete

Colored Dissolved Organic Matter - Discrete, All Depths

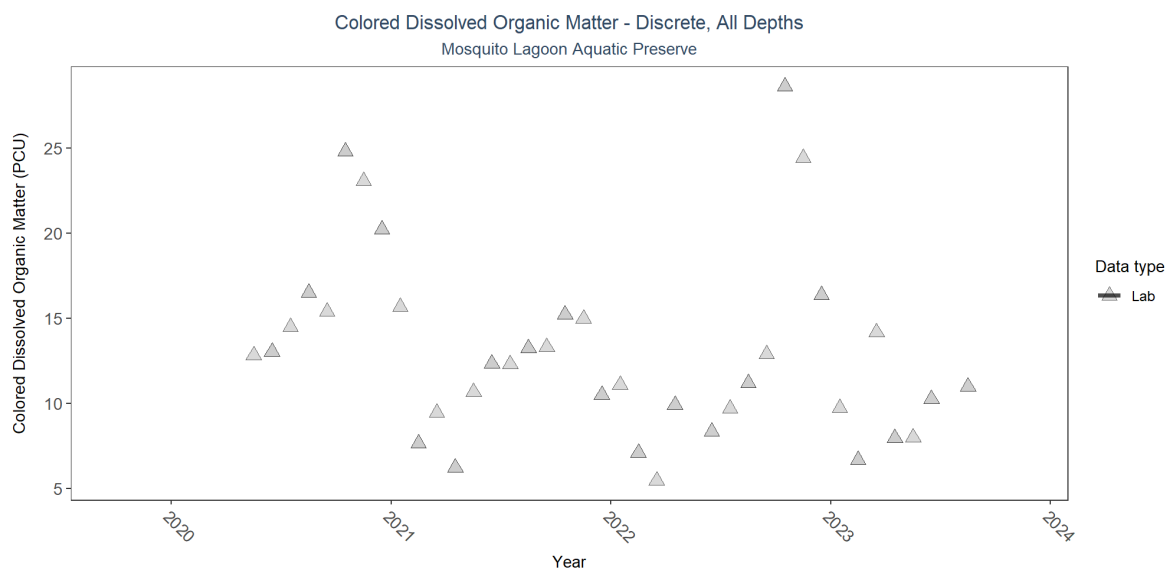Mosquito Lagoon Aquatic Preserve

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	75	4	2020 - 2023	11.60684	-	-	-	NA