Lignumvitae Key Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 15 August, 2024

Contents

Indicators

Nutrients

Total Nitrogen - Discrete

Total Nitrogen - Discrete, All Depths
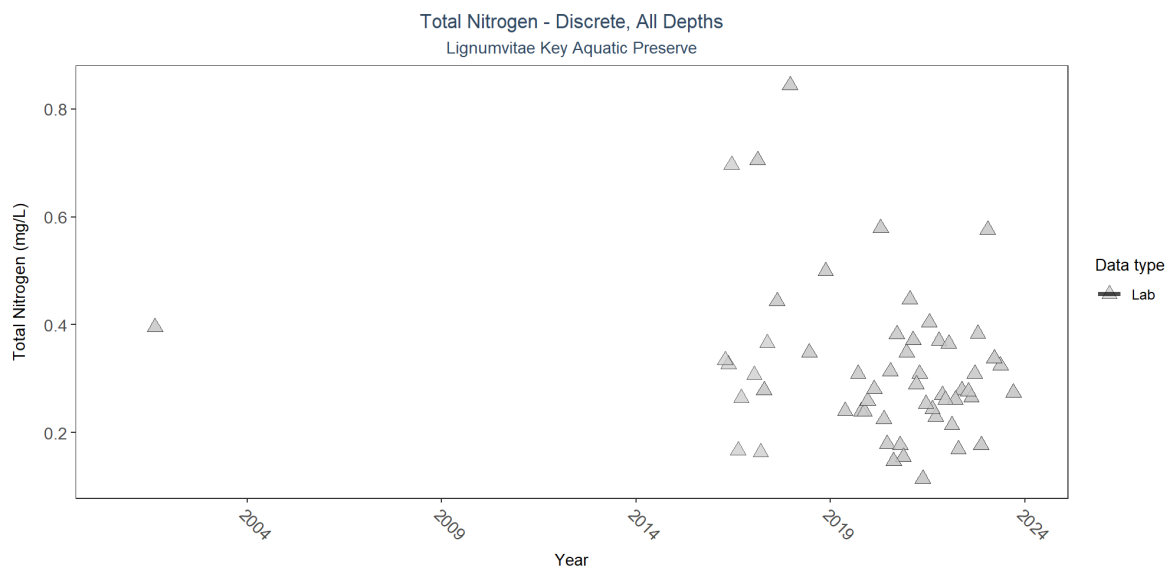Lignumvitae Key Aquatic Preserve

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	Insufficient data to calculate trend	178	9	2001 - 2023	0.263	-	-	-	NA

Total Phosphorus - Discrete

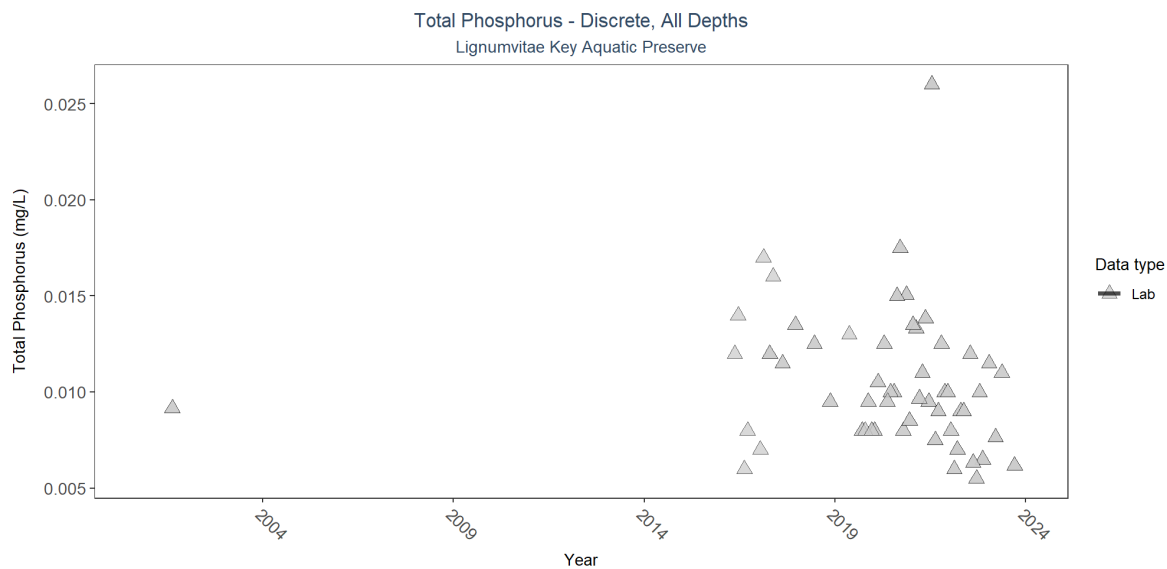Total Phosphorus - Discrete, All Depths
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Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	194	9	2001 - 2023	0.011	-	-	-	NA

Water Quality

Dissolved Oxygen - Discrete

Dissolved Oxygen - Discrete, All Depths
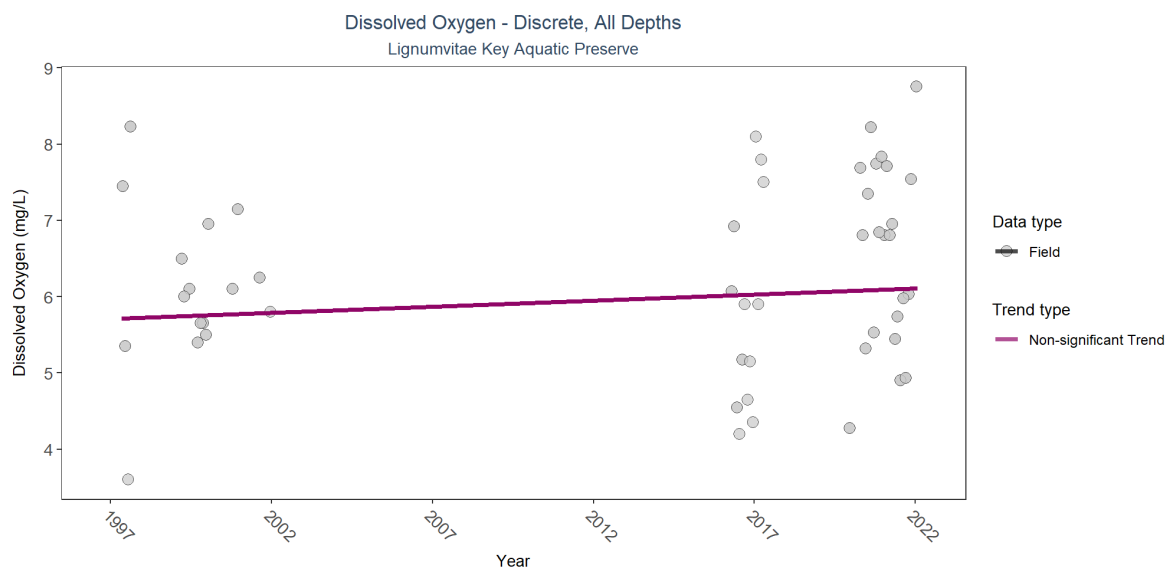Lignumvitae Key Aquatic Preserve

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	215	10	1997 - 2022	6.79	0.1163	5.70592	0.01625	0.6158

Dissolved Oxygen Saturation - Discrete

Dissolved Oxygen Saturation - Discrete, All Depths
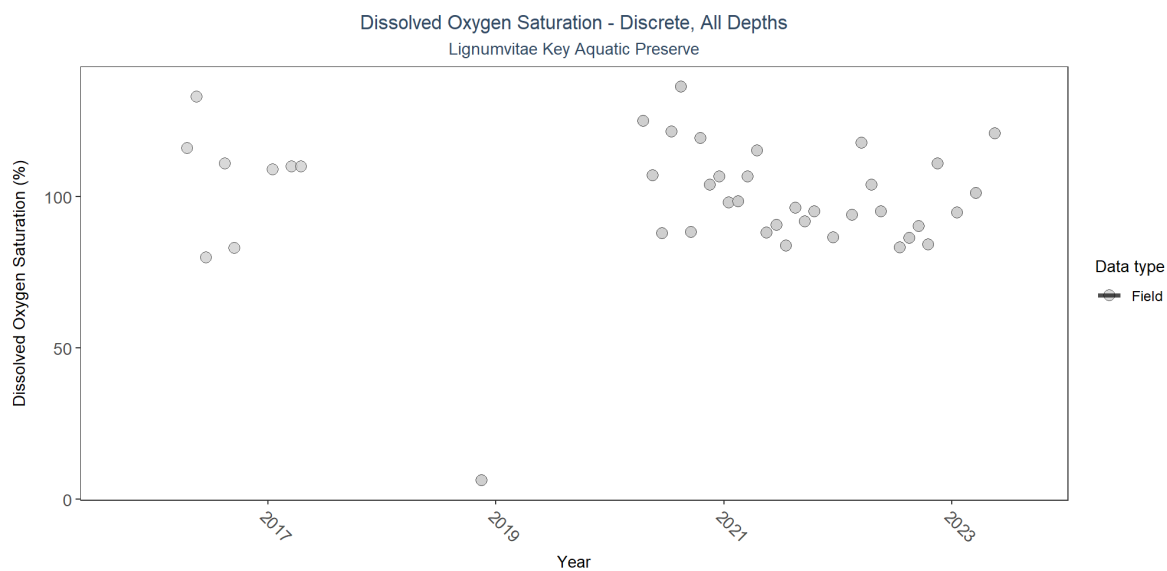Lignumvitae Key Aquatic Preserve

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	Insufficient data to calculate trend	196	7	2016 - 2023	100.2	-	-	-	NA

Salinity - Discrete

Salinity - Discrete, All Depths
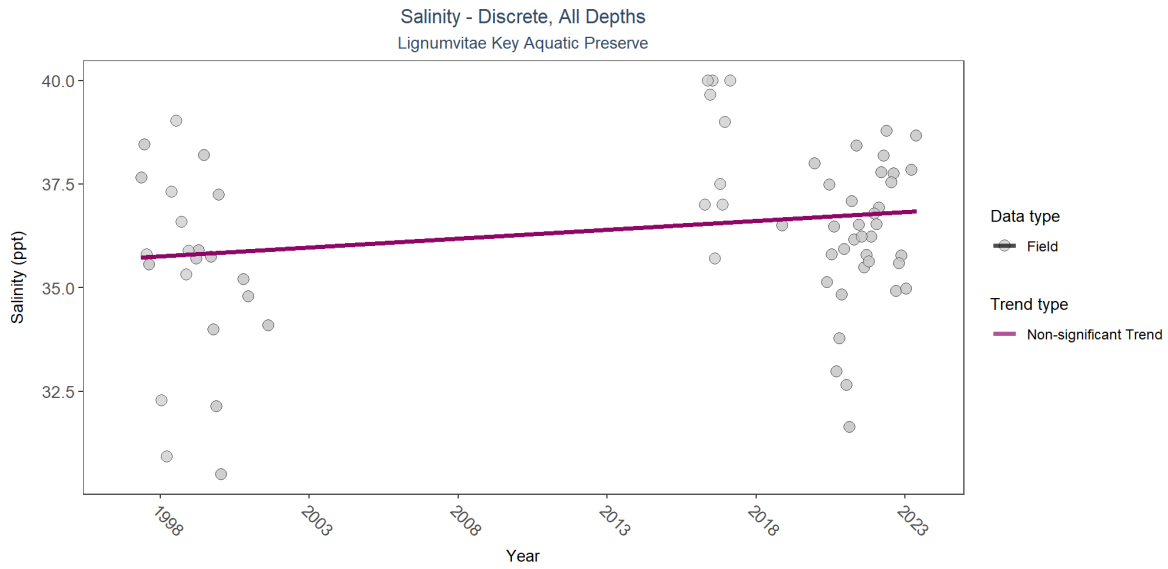Lignumvitae Key Aquatic Preserve

Table 5: Seasonal Kendall-Tau Results for - Salinity

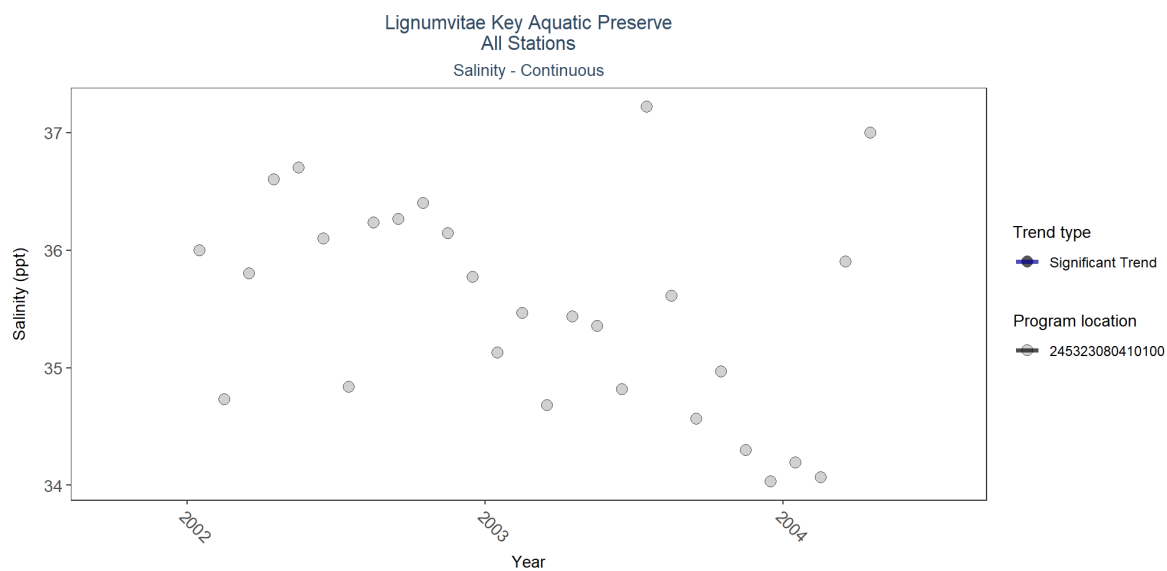| ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
All	No significant trend	244	13	1997 - 2023	36.23	0.1891	35.72409	0.04251	0.0777

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
245323080410100	Insufficient data to calculate trend	746	3	2002 - 2004	35	-	-	-	-

Water Temperature - Discrete

Water Temperature - Discrete, All Depths
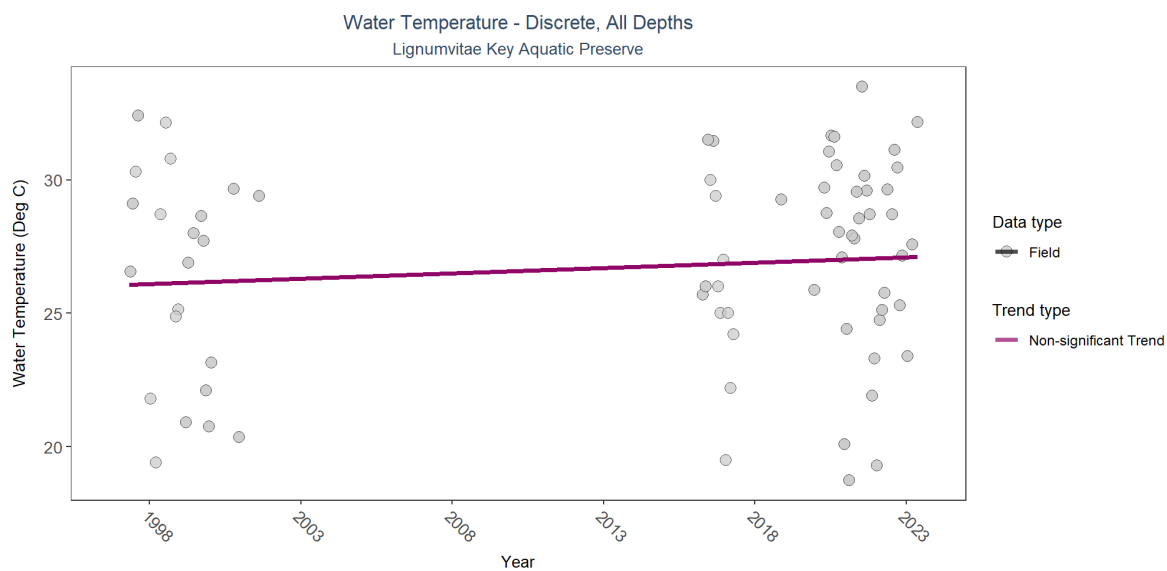Lignumvitae Key Aquatic Preserve

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

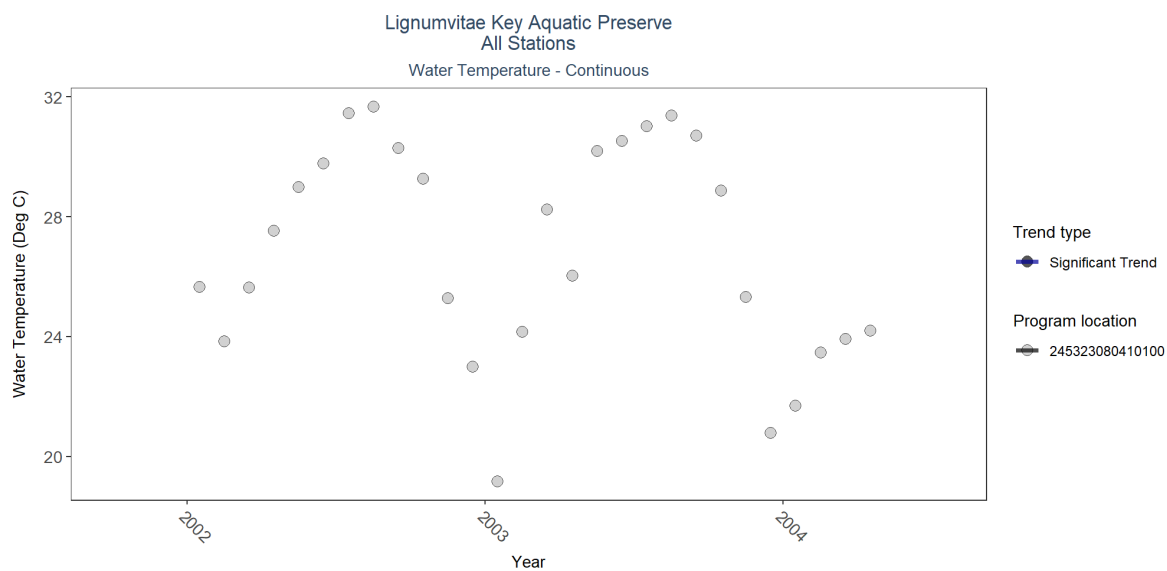| ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	No significant trend	275	13	1997 - 2023	27.9	0.1146	26.04792	0.04	0.2006

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
245323080410100	Insufficient data to calculate trend	791	3	2002 - 2004	27.9	-	-	-	-

pH - Discrete

pH - Discrete, All Depths
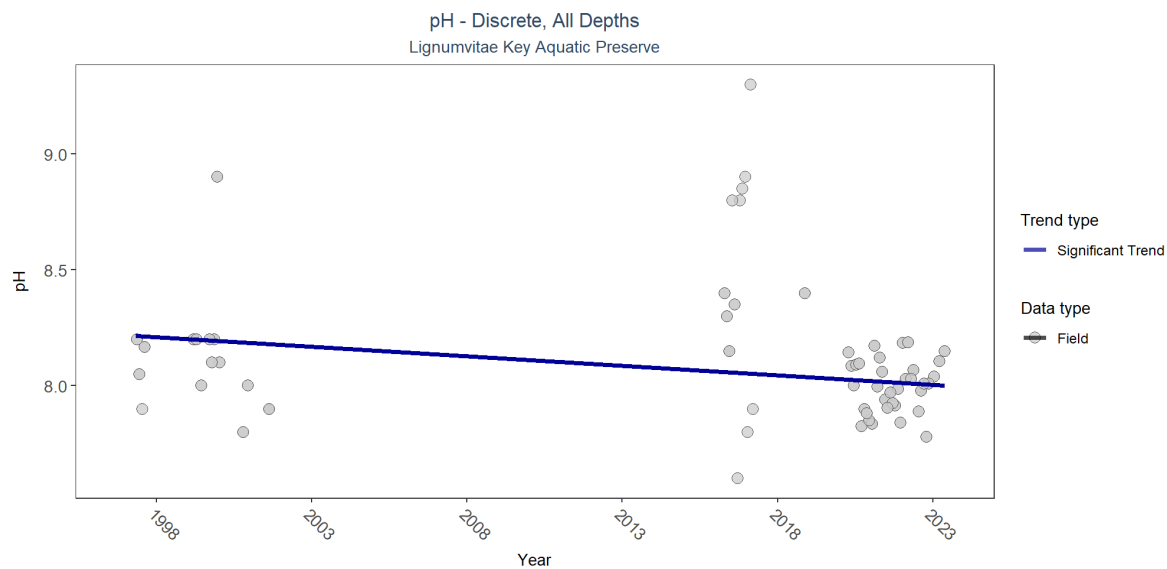Lignumvitae Key Aquatic Preserve

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	265	11	1997 - 2023	8.07	-0.3258	8.2186	-0.00819	0.0086

Water Clarity

Turbidity - Discrete

Turbidity - Discrete, All Depths
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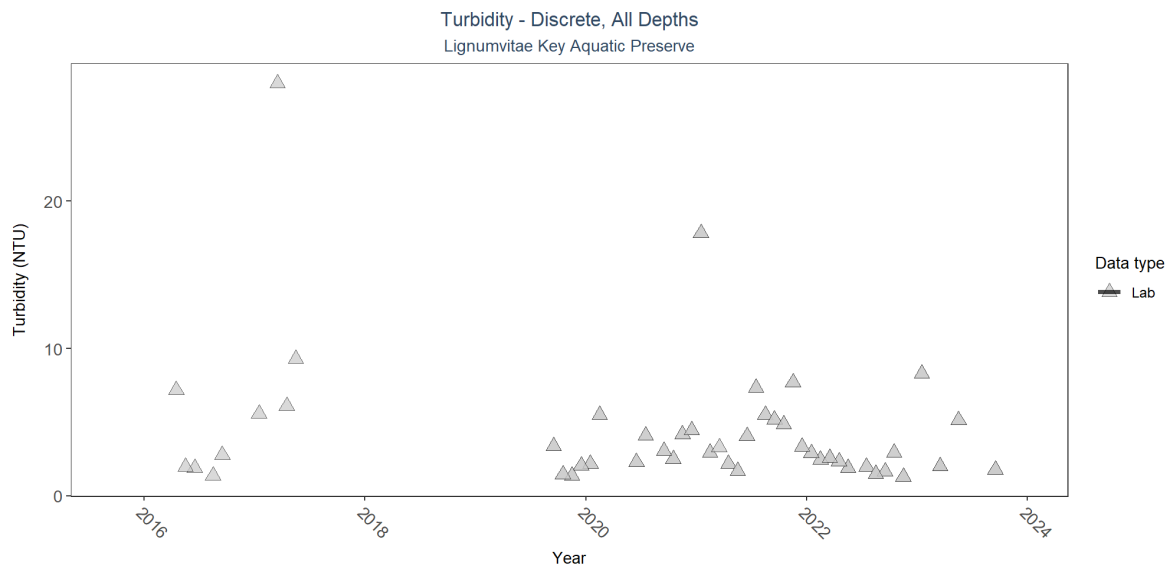Table 10: Seasonal Kendall-Tau Results for - Turbidity

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	100	7	2016 - 2023	2.3	-	-	-	NA

Total Suspended Solids - Discrete

Total Suspended Solids - Discrete, All Depths
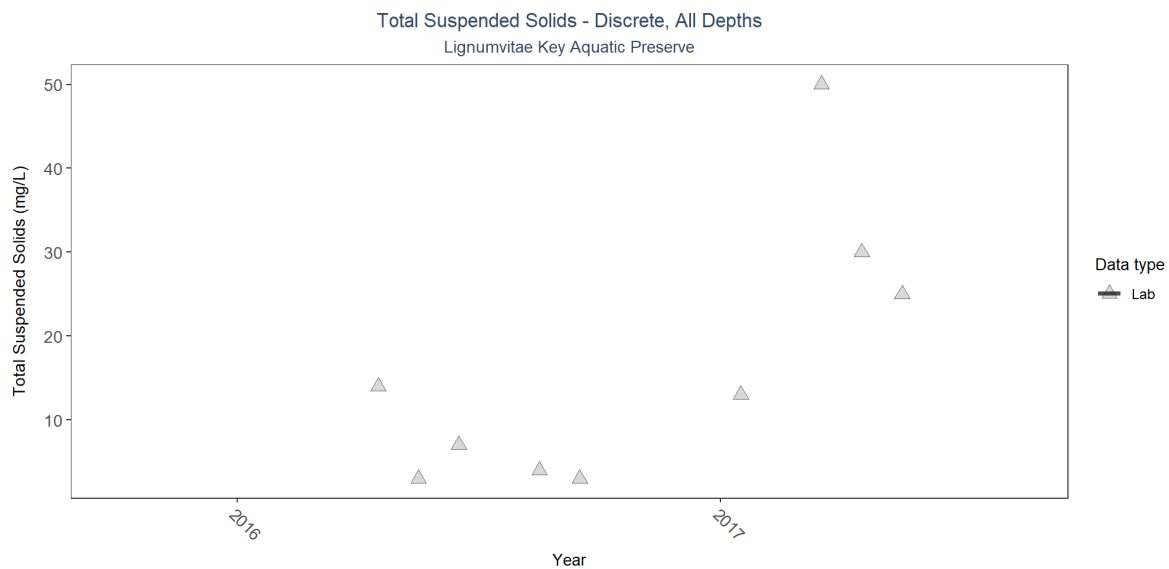
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Table 11: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	9	2	2016 - 2017	13	-	-	-	NA

Chlorophyll a, Uncorrected for Pheophytin - Discrete

Chlorophyll a, Uncorrected for Pheophytin - Discrete, All Depths
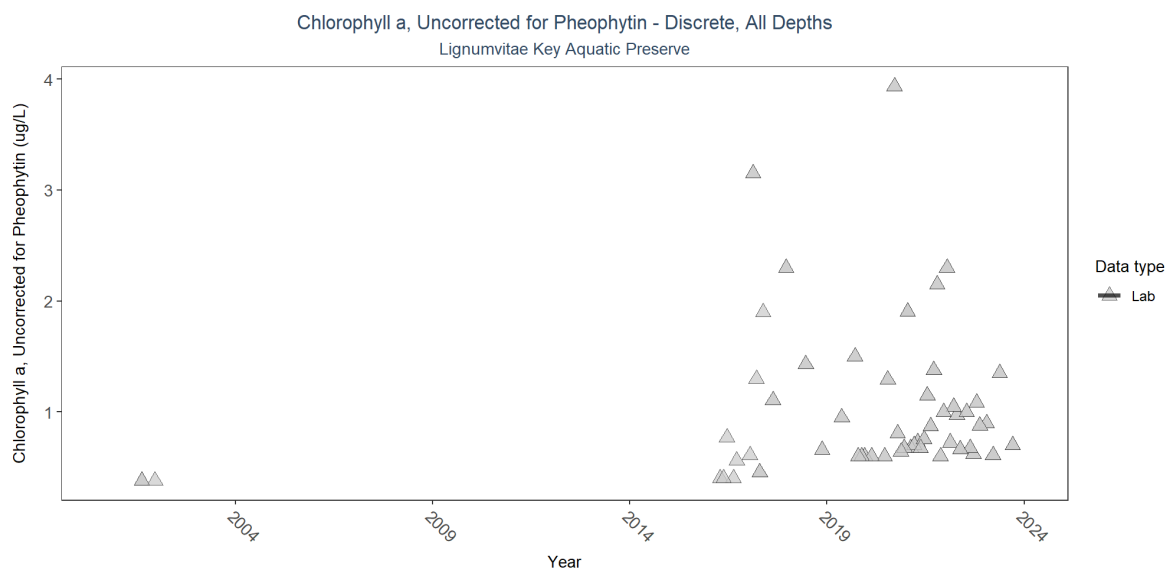Lignumvitae Key Aquatic Preserve

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	Insufficient data to calculate trend	157	9	2001 - 2023	0.7	-	-	-	NA

Chlorophyll a, Corrected for Pheophytin - Discrete
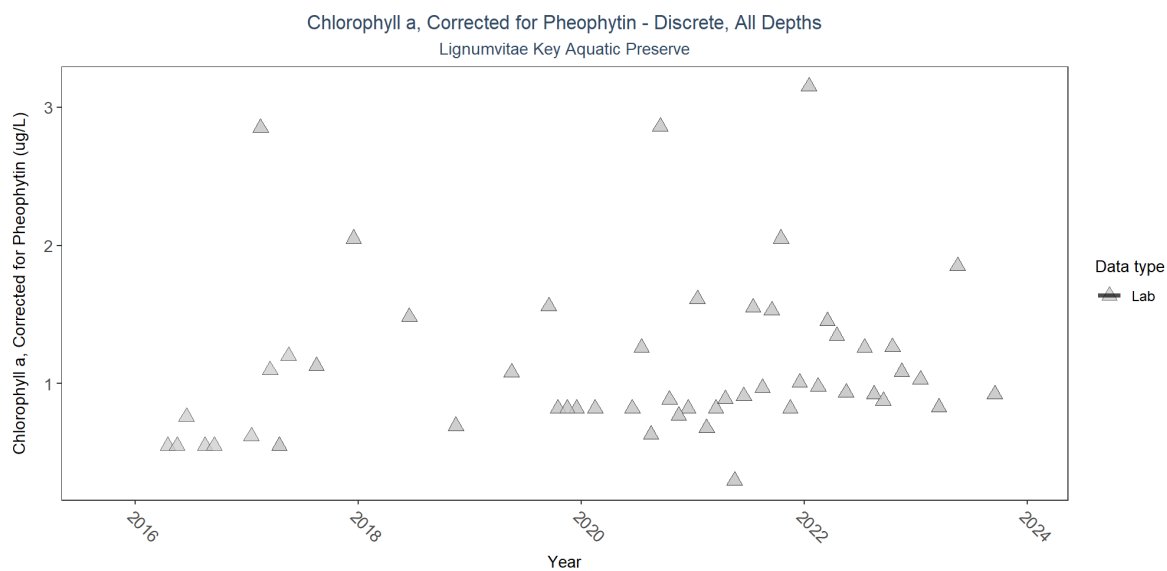

Table 13: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

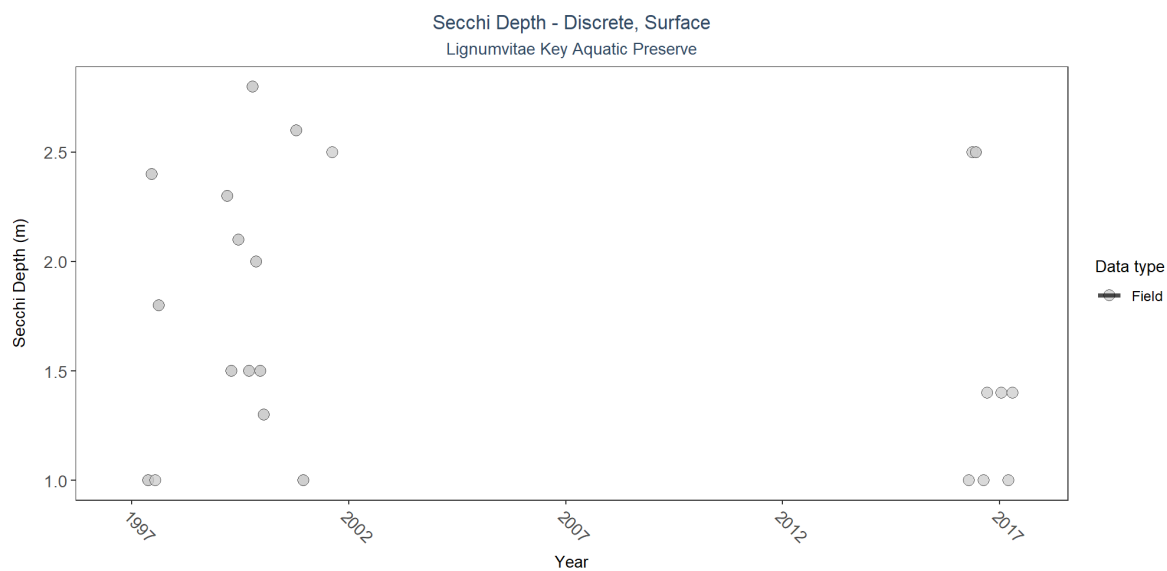| ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	173	8	2016 - 2023	0.82	-	-	-	NA

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	Insufficient data to calculate trend	38	6	1997 - 2017	1.5	-	-	-	NA