Coupon Bight Aquatic Preserve SEACAR Water Quality Analysis

Last compiled on 27 January, 2025

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Indicators

Nutrients

Total Nitrogen - Discrete

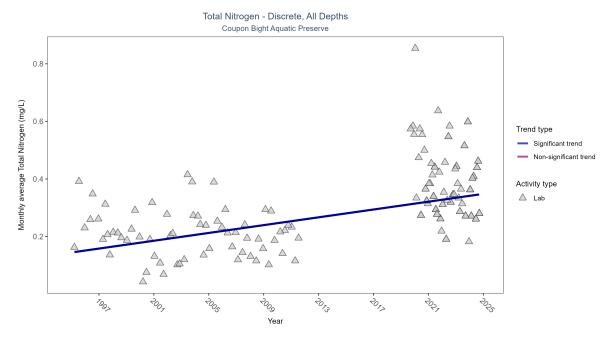


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly increasing trend	161	23	1995 - 2024	0.285	0.3474	0.14455	0.00679	0.0000

Total Phosphorus - Discrete

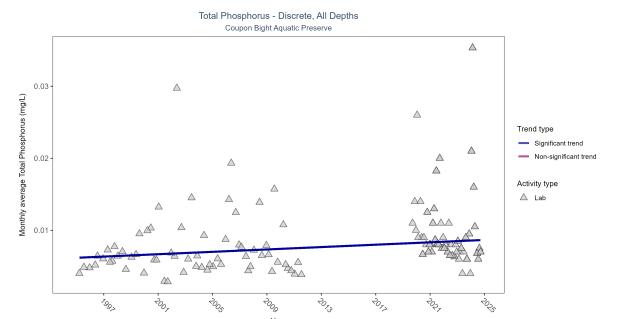


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

Year

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly increasing trend	178	23	1995 - 2024	0.00715	0.2168	0.00619	0.00008	0.0044

Water Quality

Dissolved Oxygen - Discrete

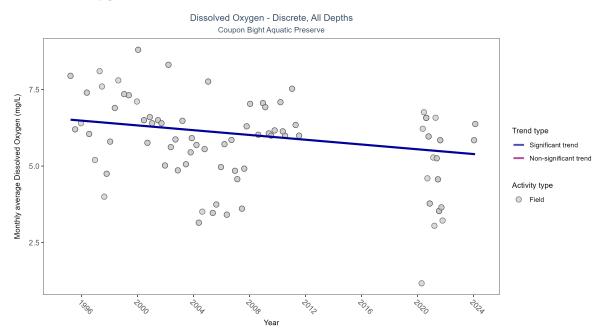


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Significantly decreasing trend	159	20	1995 - 2024	5.99052	-0.2504	6.52392	-0.03898	0.0220

Dissolved Oxygen - Continuous

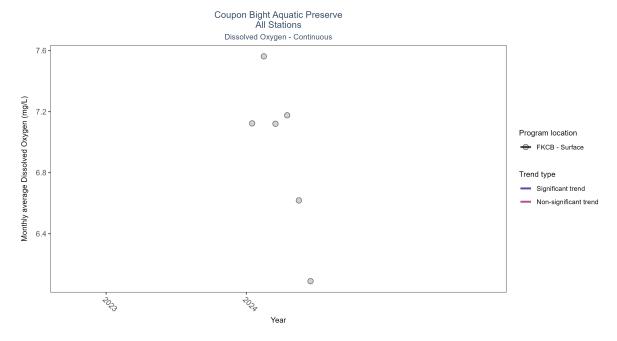


Table 4: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
FKCB	Insufficient data to calculate trend	14196	1	2024 - 2024	6.9	-	-	-	-

Dissolved Oxygen Saturation - Discrete

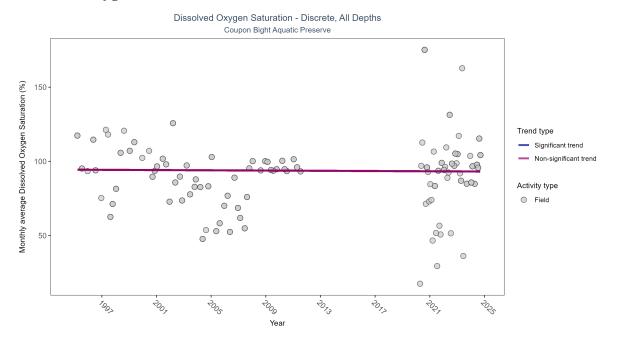


Table 5: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	No significant trend	190	22	1995 - 2024	93.64996	-0.0039	94.38476	-0.04099	0.8600

Dissolved Oxygen Saturation - Continuous

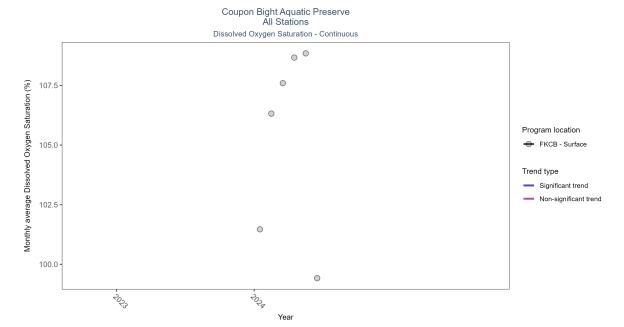


Table 6: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen Saturation

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
FKCB	Insufficient data to calculate trend	14197	1	2024 - 2024	103.6	-	-	-	-

Salinity - Discrete

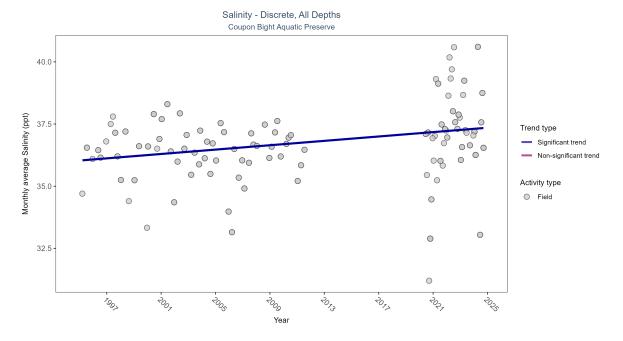


Table 7: Seasonal Kendall-Tau Results for - Salinity

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
All	Significantly increasing trend	200	22	1995 - 2024	36.7	0.3305	36.03288	0.04398	0.0000

Salinity - Continuous

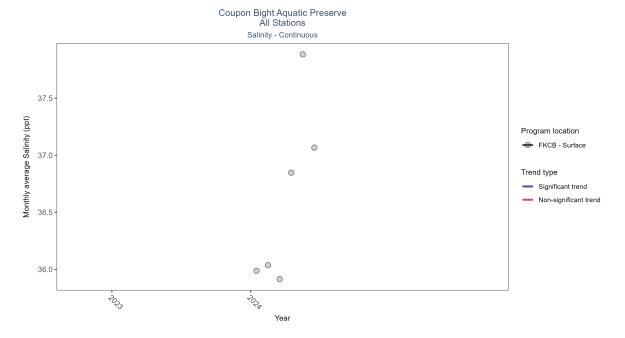


Table 8: Seasonal Kendall-Tau Results for All Stations - Salinity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
FKCB	Insufficient data to calculate trend	14192	1	2024 - 2024	36.4	-	-	-	-

Water Temperature - Discrete

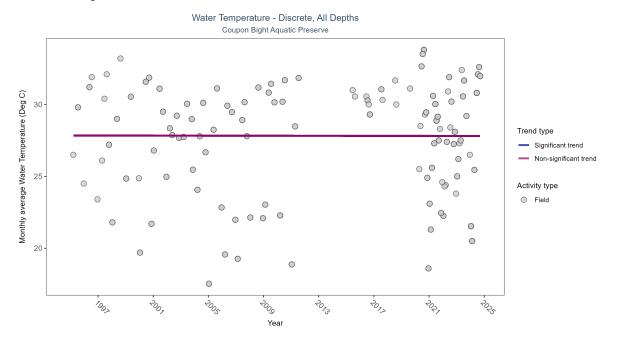


Table 9: Seasonal Kendall-Tau Results for - Water Temperature

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	Р
Field	No significant trend	240	27	1995 - 2024	28.49565	-0.0058	27.84285	-0.00126	0.8520

Water Temperature - Continuous

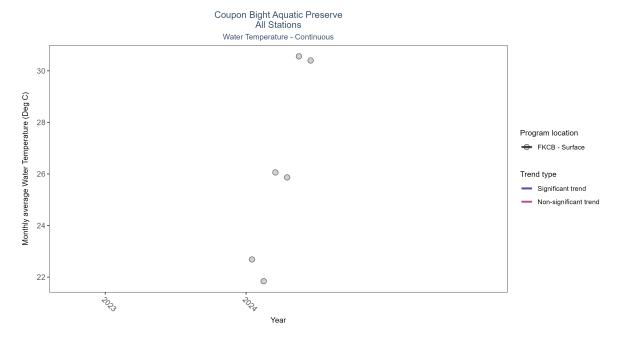


Table 10: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
FKCB	Insufficient data to calculate trend	14197	1	2024 - 2024	26.2	-	-	-	-

pH - Discrete

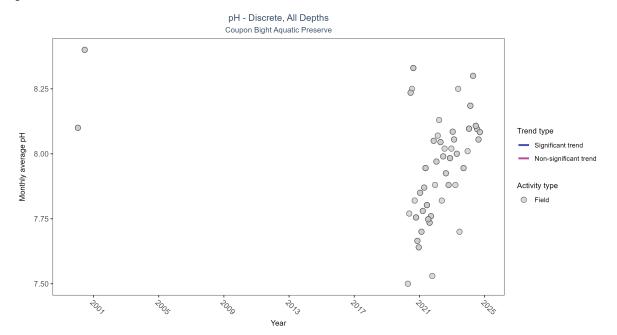


Table 11: Seasonal Kendall-Tau Results for - pH $\,$

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Insufficient data to calculate trend	105	6	2000 - 2024	8	-	-	-	NA

pH - Continuous

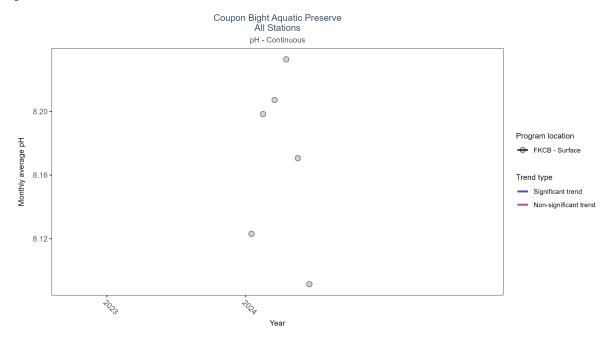


Table 12: Seasonal Kendall-Tau Results for All Stations - $\rm pH$

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
FKCB	Insufficient data to calculate trend	14197	1	2024 - 2024	8.2	-	-	-	-

Water Clarity

Turbidity - Discrete

Turbidity - Discrete, All Depths Coupon Bight Aquatic Preserve

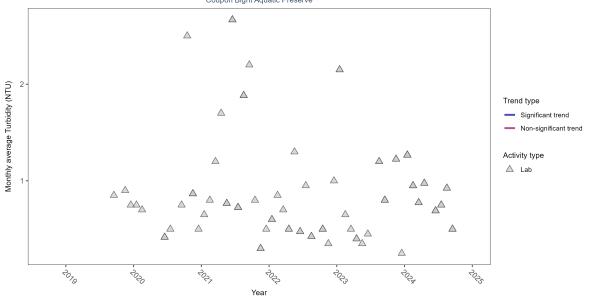


Table 13: Seasonal Kendall-Tau Results for - Turbidity

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Insufficient data to calculate trend	95	6	2019 - 2024	0.7	-	-	-	NA

Turbidity - Continuous

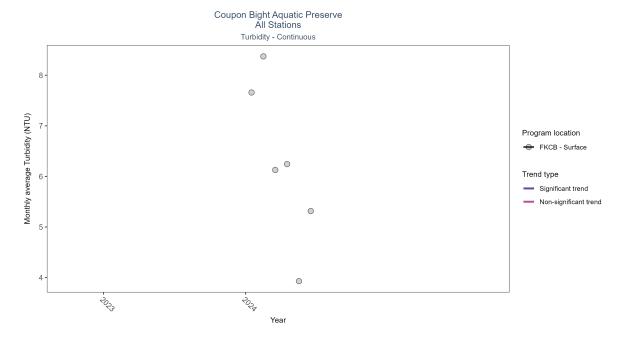


Table 14: Seasonal Kendall-Tau Results for All Stations - Turbidity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
FKCB	Insufficient data to calculate trend	14176	1	2024 - 2024	5	-	-	-	-

Chlorophyll a, Uncorrected for Pheophytin - Discrete

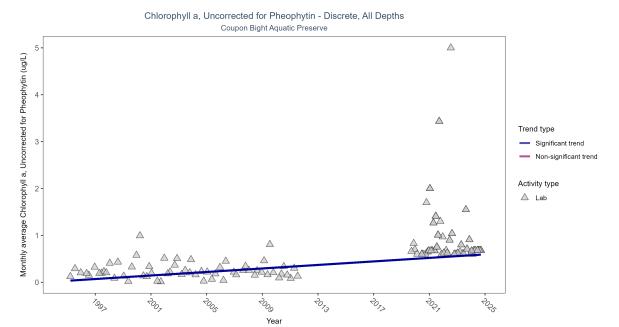


Table 15: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Significantly increasing trend	182	23	1995 - 2024	0.6	0.4324	0.0325	0.01877	0.0000

Chlorophyll a, Corrected for Pheophytin - Discrete

2027

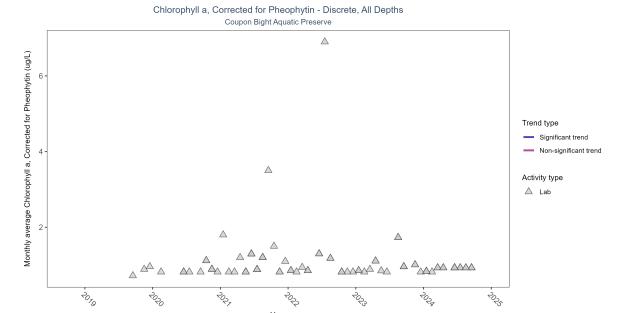


Table 16: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

Year

2023

202

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Lab	Insufficient data to calculate trend	90	6	2019 - 2024	0.89	-	-	-	NA

Secchi Depth - Discrete

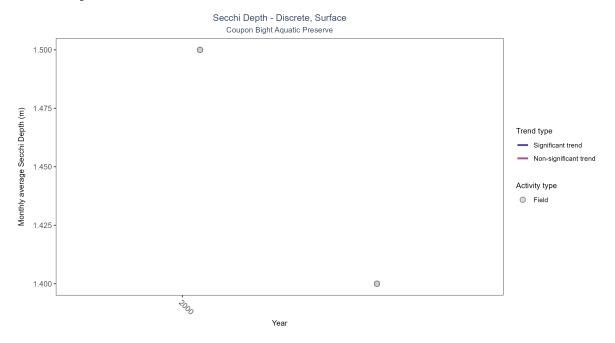


Table 17: Seasonal Kendall-Tau Results for - Secchi Depth

Activity Type	Statistical Trend	Sample Count	Years with Data	Period of Record	Median Result Value	Tau	Sen Intercept	Sen Slope	P
Field	Insufficient data to calculate trend	4	1	2000 - 2000	1.45	-	-	-	NA