# Cape Haze Aquatic Preserve

# SEACAR Discrete Water Quality Analysis

# Last compiled on 14 August, 2024

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# Indicators

# Nutrients

#### Total Nitrogen - Discrete

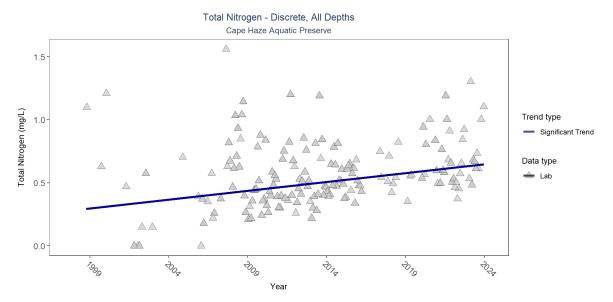


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	р
Lab	Significantly increasing trend	385	25	1998 - 2023	0.511	0.2799	0.28335	0.014	0.0000

### Total Phosphorus - Discrete

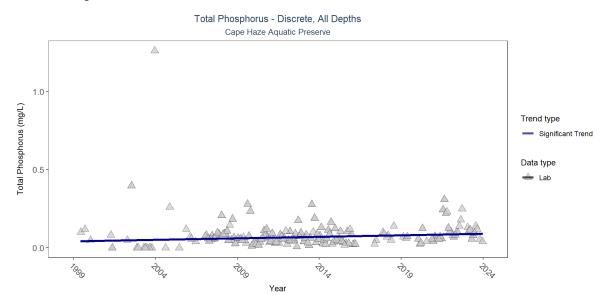


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	р
Lab	Significantly increasing trend	427	25	1999 - 2023	0.057	0.1991	0.042	0.0019	0.0003

# Water Quality

### Dissolved Oxygen - Discrete

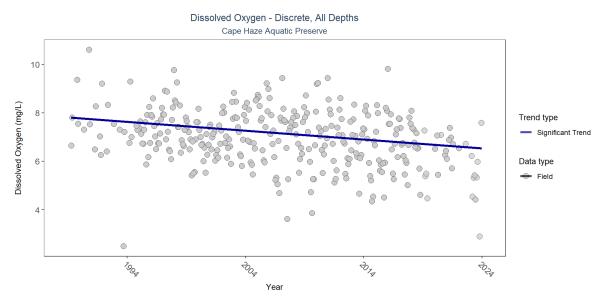


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	8283	35	1989 - 2023	6.9	-0.2423	7.80633	-0.0363	0.0000

### Dissolved Oxygen - Continuous

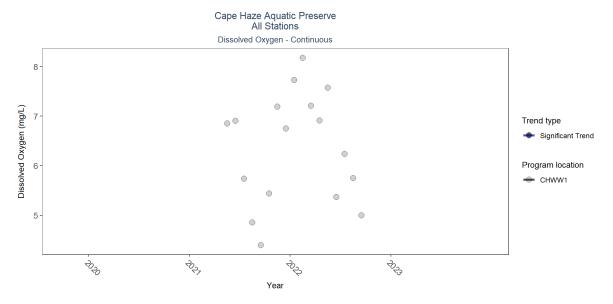


Table 4: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
CHWW1	Insufficient data to calculate trend	45222	2	2021 - 2022	6.7	-	-	-	-

#### Dissolved Oxygen Saturation - Discrete

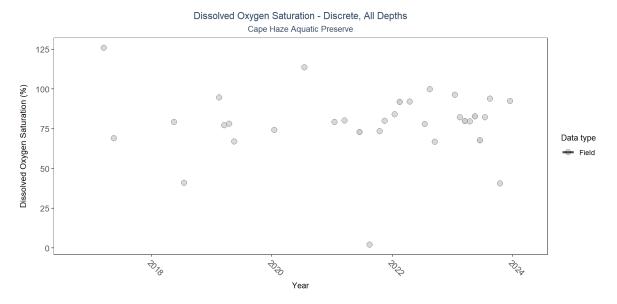


Table 5: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	р
Field	Insufficient data to calculate trend	37	7	2017 - 2023	80	-	_	-	NA

#### Dissolved Oxygen Saturation - Continuous

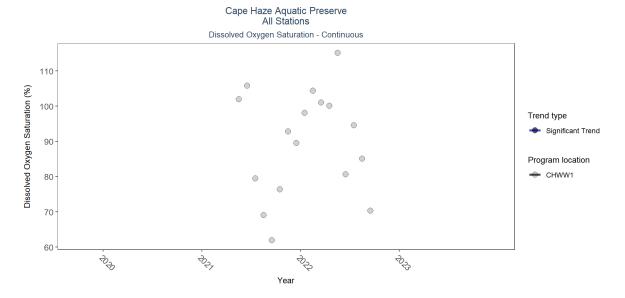


Table 6: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen Saturation

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	р
CHWW1	Insufficient data to calculate trend	45179	2	2021 - 2022	93.5	-	-	-	-

## Salinity - Discrete

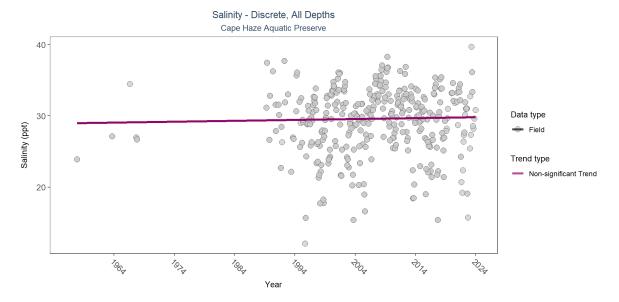


Table 7: Seasonal Kendall-Tau Results for - Salinity

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
All	No significant trend	8585	39	1957 - 2023	30.1	0.0206	28.953	0.01299	0.5788

### Salinity - Continuous

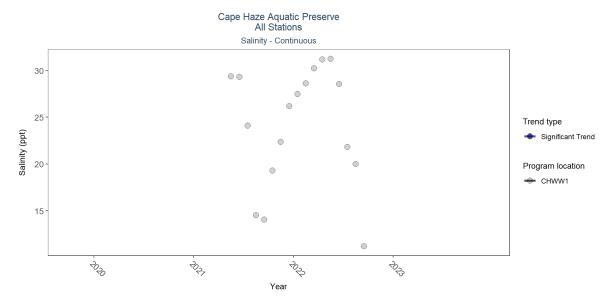


Table 8: Seasonal Kendall-Tau Results for All Stations - Salinity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
CHWW1	Insufficient data to calculate trend	41531	2	2021 - 2022	26.5	-	-	-	-

#### Water Temperature - Discrete

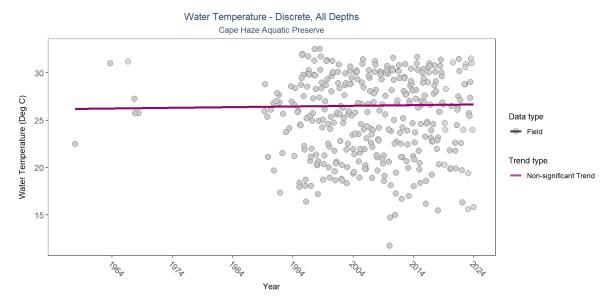


Table 9: Seasonal Kendall-Tau Results for - Water Temperature

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	${\bf SennSlope}$	p
Field	No significant trend	8602	40	1957 - 2023	26.84	0.0331	26.20257	0.00699	0.3454

#### Water Temperature - Continuous

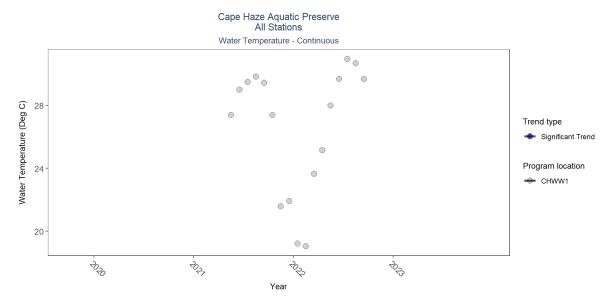


Table 10: Seasonal Kendall-Tau Results for All Stations - Water Temperature

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
CHWW1	Insufficient data to calculate trend	49072	2	2021 - 2022	28.3	-	-	-	-

## pH - Discrete

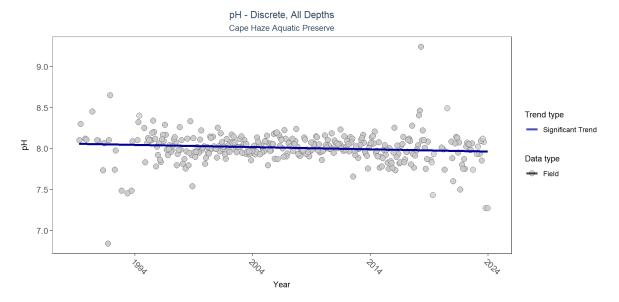


Table 11: Seasonal Kendall-Tau Results for -  $\rm pH$ 

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly decreasing trend	7871	35	1989 - 2023	8	-0.1253	8.05644	-0.00265	0.0011

### pH - Continuous

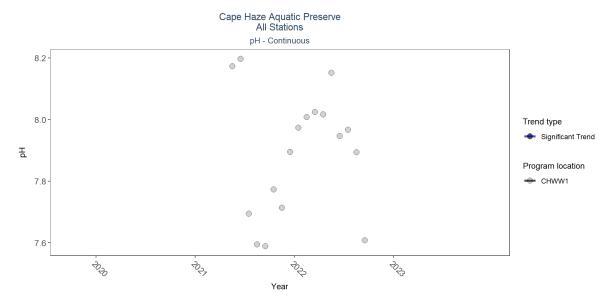


Table 12: Seasonal Kendall-Tau Results for All Stations - pH  $\,$ 

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
CHWW1	Insufficient data to calculate trend	48736	2	2021 - 2022	8	-	-	-	-

# Water Clarity

### Turbidity - Discrete

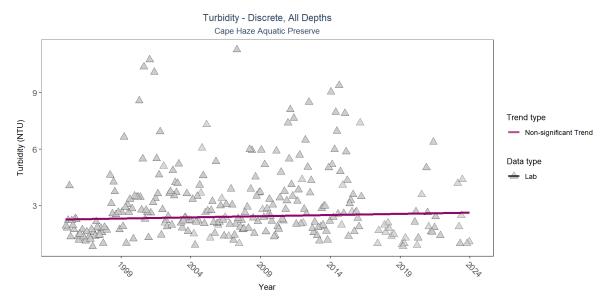


Table 13: Seasonal Kendall-Tau Results for - Turbidity

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Lab	No significant trend	1633	28	1995 - 2023	2.2	0.0481	2.27633	0.01265	0.3216

### Turbidity - Continuous

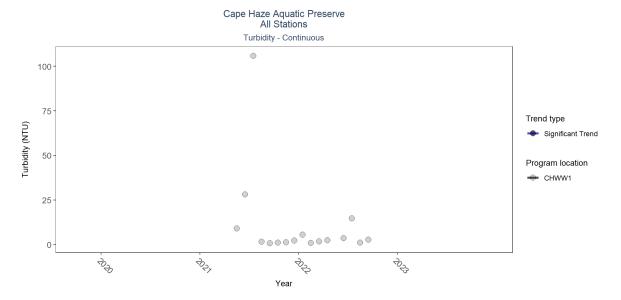


Table 14: Seasonal Kendall-Tau Results for All Stations - Turbidity

ProgramLocationID	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
CHWW1	Insufficient data to calculate trend	36806	2	2021 - 2022	1	-	-	-	-

### Total Suspended Solids - Discrete

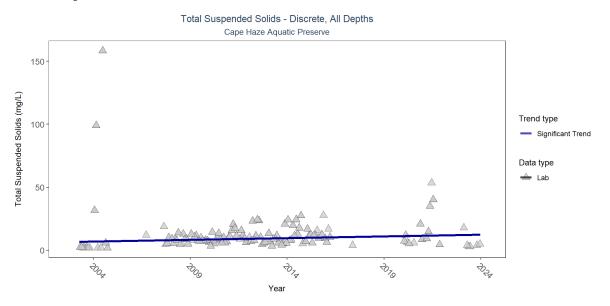


Table 15: Seasonal Kendall-Tau Results for - Total Suspended Solids

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	328	17	2003 - 2023	8.78	0.1487	6.6381	0.27196	0.0205

#### Chlorophyll a, Uncorrected for Pheophytin - Discrete

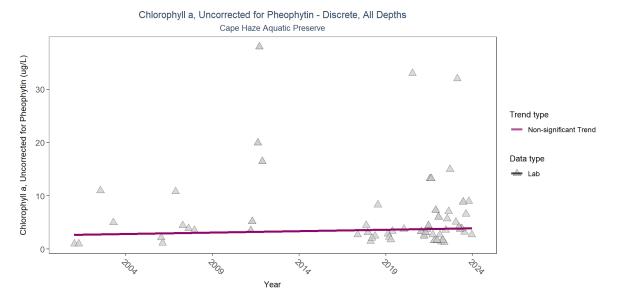


Table 16: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

${\bf Activity Type}$	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	${\bf Senn Intercept}$	SennSlope	p
Lab	No significant trend	101	13	2001 - 2023	3.9	0.0764	2.67958	0.05417	0.6038

#### Chlorophyll a, Corrected for Pheophytin - Discrete

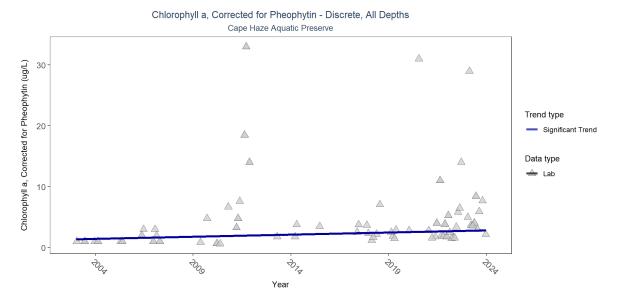


Table 17: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Significantly increasing trend	98	18	2003 - 2023	2.5	0.2071	1.36833	0.07051	0.0133

## Secchi Depth - Discrete

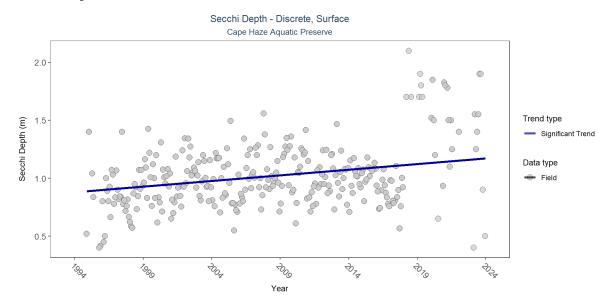


Table 18: Seasonal Kendall-Tau Results for - Secchi Depth

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Field	Significantly increasing trend	5727	30	1994 - 2023	0.9	0.1952	0.87799	0.00974	0.0000

#### Colored Dissolved Organic Matter - Discrete

7000

Colored Dissolved Organic Matter - Discrete, All Depths
Cape Haze Aquatic Preserve

Total Data type

Total Data type

Lab

Table 19: Seasonal Kendall-Tau Results for - Colored Dissolved Organic Matter

POZO

+ 202×

-07×

Year

ActivityType	Statistical Trend	N-Data	N-Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
Lab	Insufficient data to calculate trend	24	7	2006 - 2023	7.4	-	-	_	NA