

Fort Clinch State Park Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 14 August, 2024

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Indicators

Nutrients

Total Nitrogen - Discrete

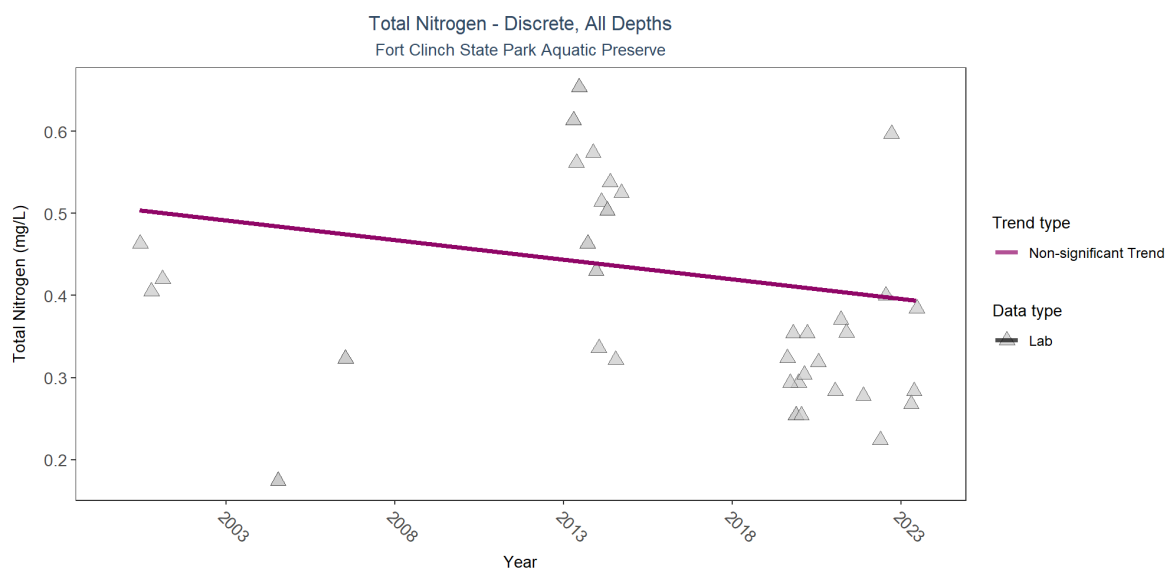


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|----------------------|--------|---------|------------------|--------|---------|---------------|-----------|--------|
| Lab | No significant trend | 52 | 11 | 2000 - 2023 | 0.3545 | -0.2762 | 0.50547 | -0.00477 | 0.2581 |

Total Phosphorus - Discrete

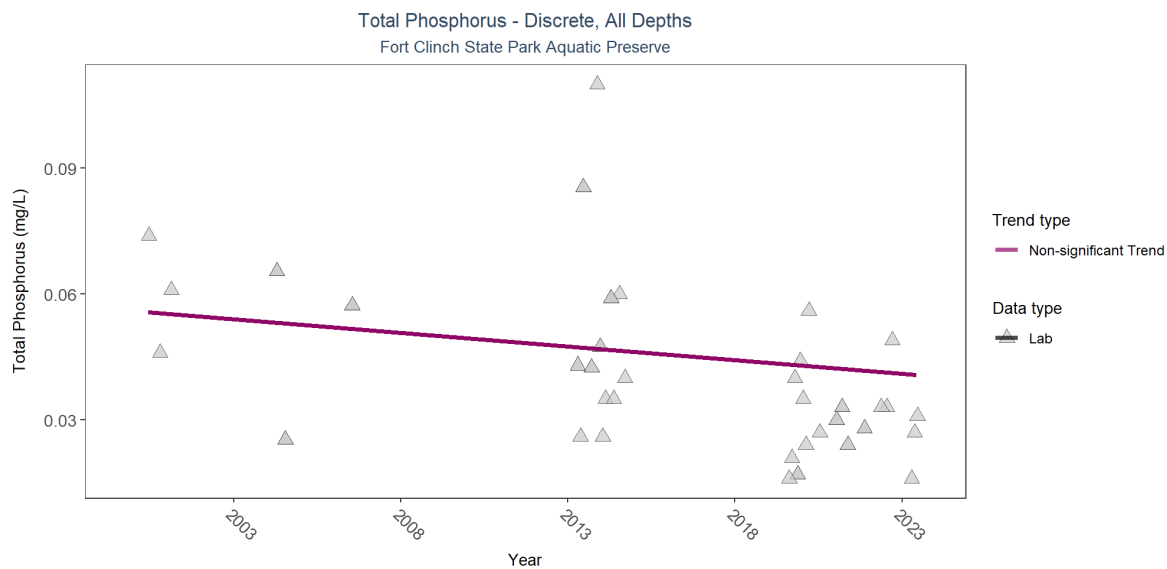


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|----------------------|--------|---------|------------------|--------|---------|---------------|-----------|--------|
| Lab | No significant trend | 55 | 11 | 2000 - 2023 | 0.035 | -0.3241 | 0.05592 | -0.00065 | 0.3332 |

Water Quality

Dissolved Oxygen - Discrete

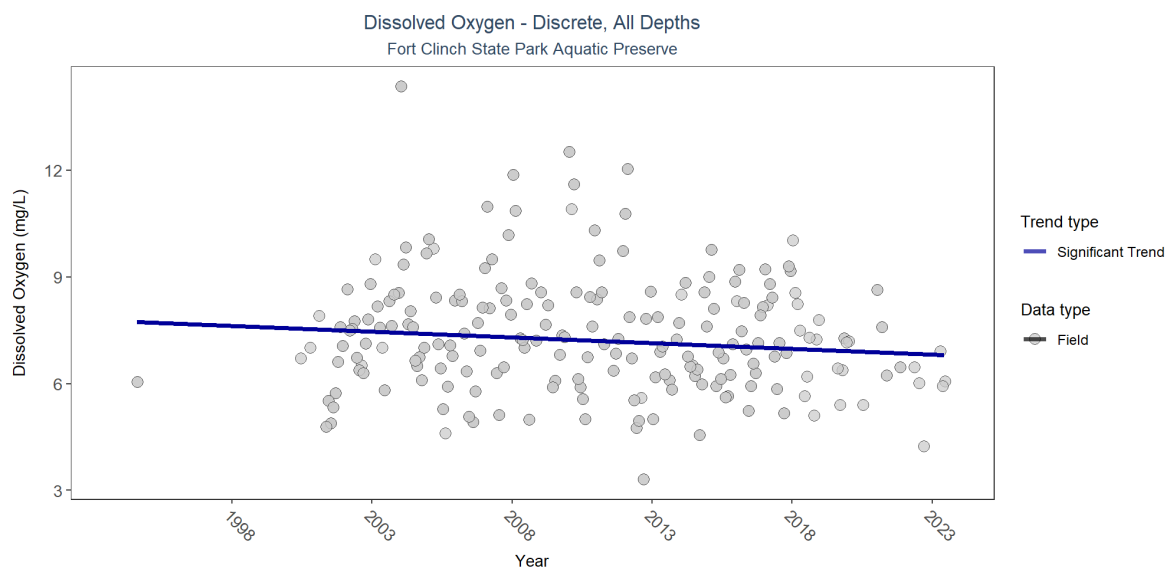


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------|--------|---------|------------------|--------|---------|---------------|-----------|--------|
| Field | Significantly decreasing trend | 1376 | 25 | 1994 - 2023 | 7.2 | -0.1386 | 7.75035 | -0.03228 | 0.0057 |

Dissolved Oxygen Saturation - Discrete

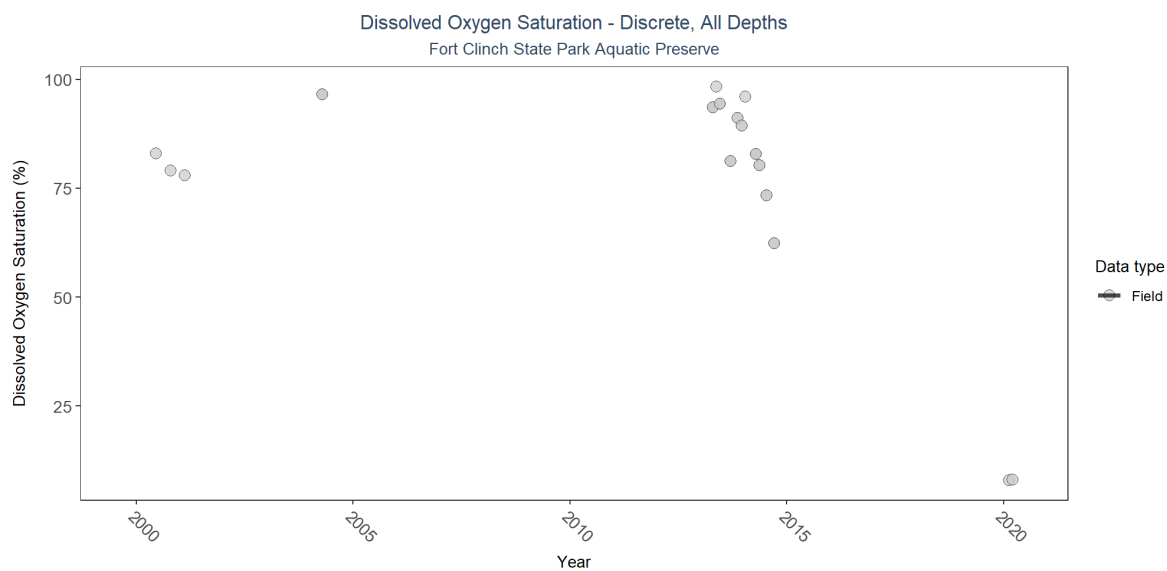


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------------|--------|---------|------------------|--------|-----|---------------|-----------|----|
| Field | Insufficient data to calculate trend | 50 | 6 | 2000 - 2020 | 83.75 | - | - | - | NA |

Salinity - Discrete

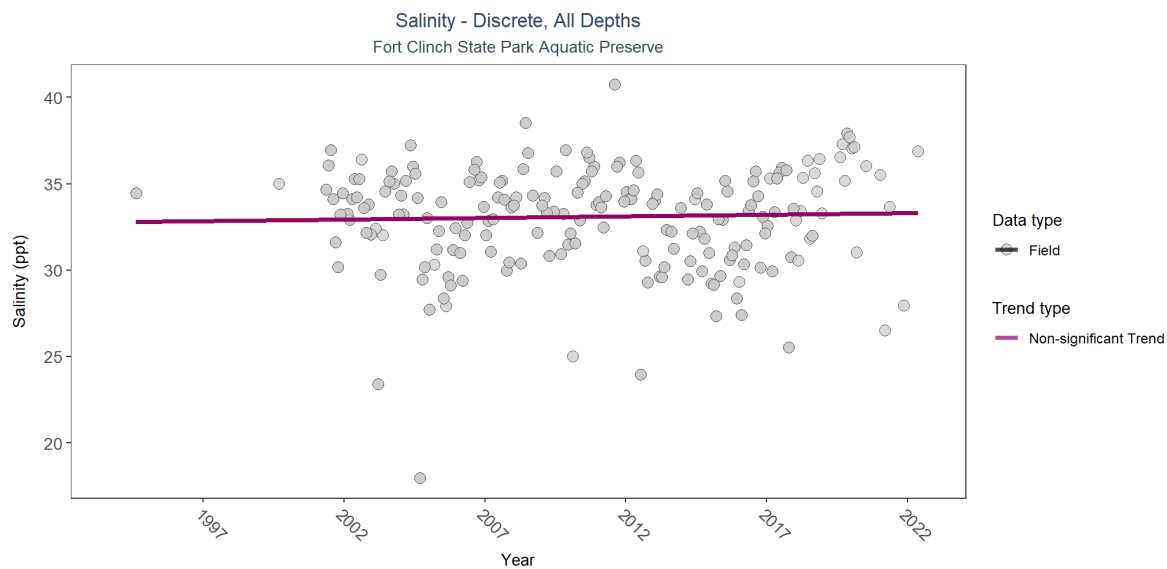


Table 5: Seasonal Kendall-Tau Results for - Salinity

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|----------------------|--------|---------|------------------|--------|--------|---------------|-----------|--------|
| All | No significant trend | 1381 | 25 | 1994 - 2022 | 33.6 | 0.0283 | 32.79999 | 0.01778 | 0.5845 |

Water Temperature - Discrete

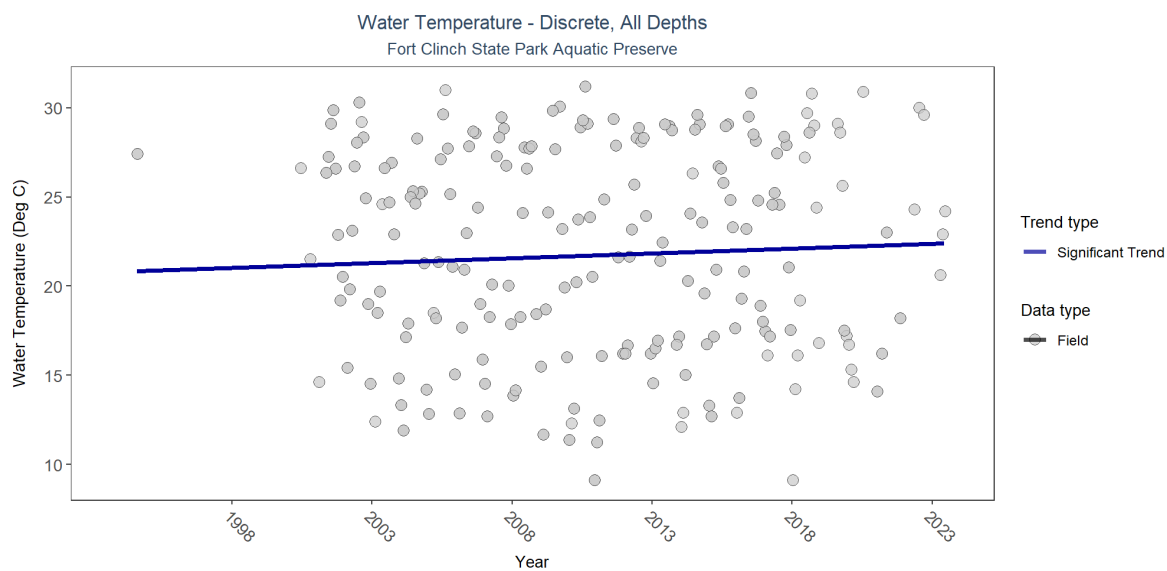


Table 6: Seasonal Kendall-Tau Results for - Water Temperature

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------|--------|---------|------------------|--------|--------|---------------|-----------|--------|
| Field | Significantly increasing trend | 1399 | 25 | 1994 - 2023 | 23.4 | 0.1212 | 20.81143 | 0.05412 | 0.0117 |

pH - Discrete

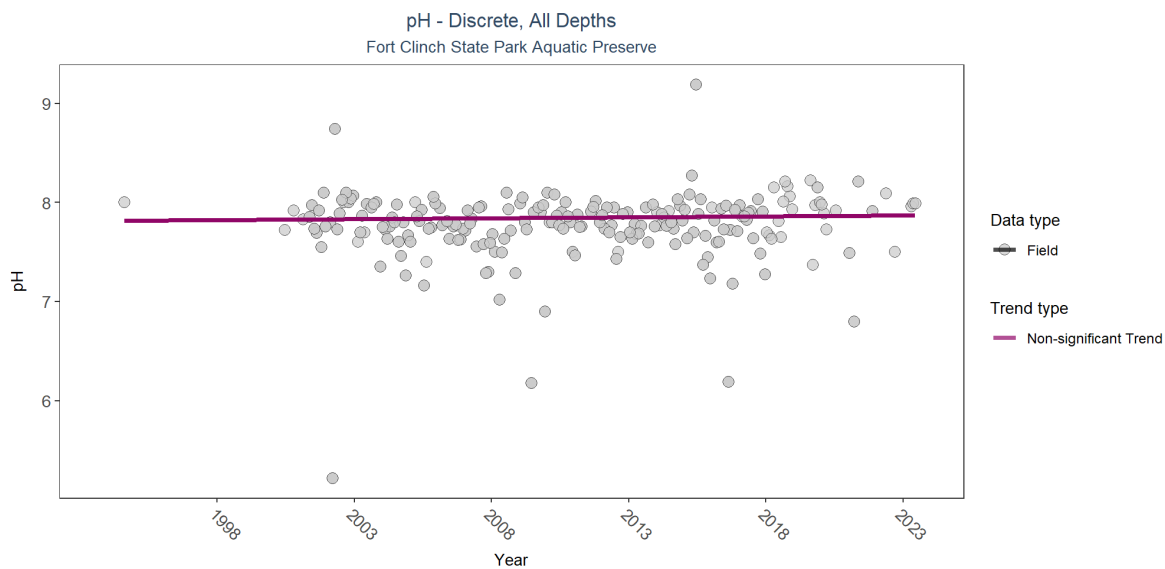


Table 7: Seasonal Kendall-Tau Results for - pH

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|----------------------|--------|---------|------------------|--------|--------|---------------|-----------|--------|
| Field | No significant trend | 1380 | 25 | 1994 - 2023 | 7.8 | 0.0367 | 7.81813 | 0.00179 | 0.5029 |

Water Clarity

Turbidity - Discrete

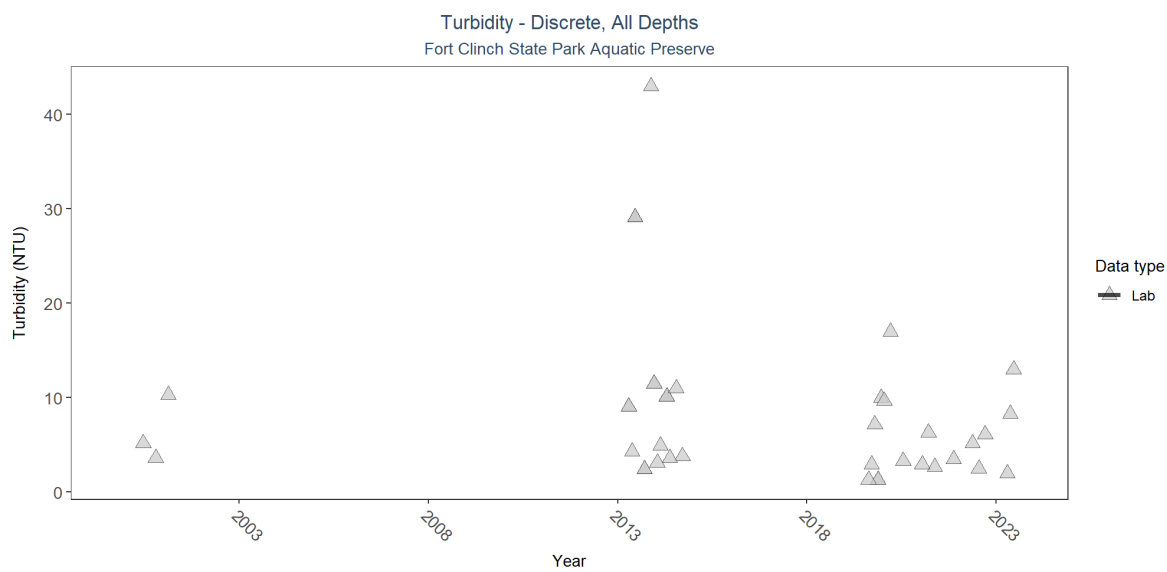


Table 8: Seasonal Kendall-Tau Results for - Turbidity

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------------|--------|---------|------------------|--------|-----|---------------|-----------|----|
| Lab | Insufficient data to calculate trend | 44 | 9 | 2000 - 2023 | 5.2 | - | - | - | NA |

Total Suspended Solids - Discrete

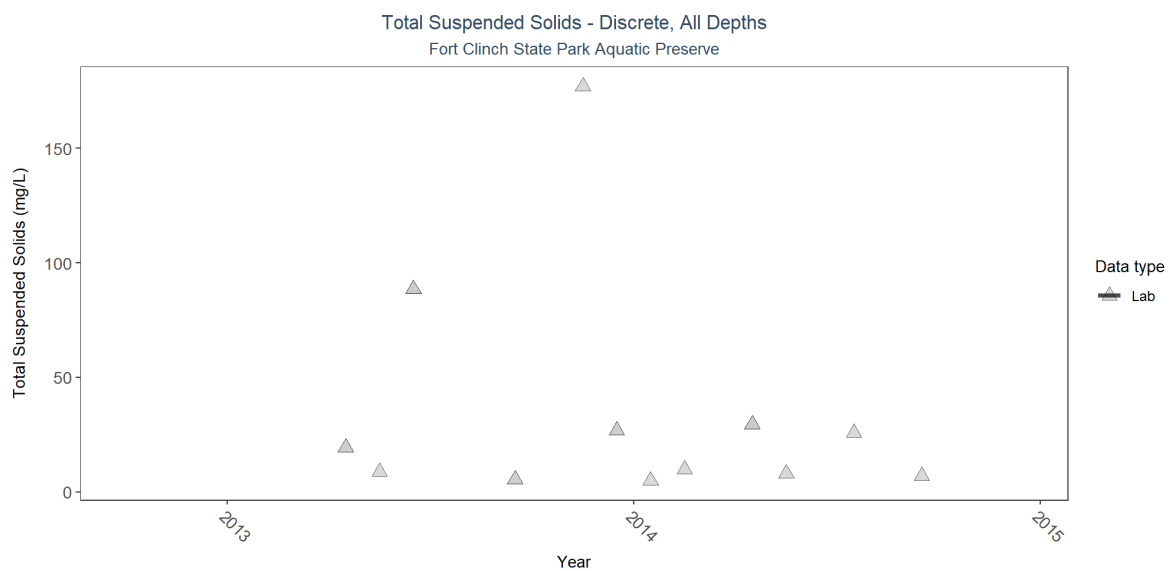


Table 9: Seasonal Kendall-Tau Results for - Total Suspended Solids

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------------|--------|---------|------------------|--------|-----|---------------|-----------|----|
| Lab | Insufficient data to calculate trend | 22 | 2 | 2013 - 2014 | 17.5 | - | - | - | NA |

Chlorophyll a, Uncorrected for Pheophytin - Discrete

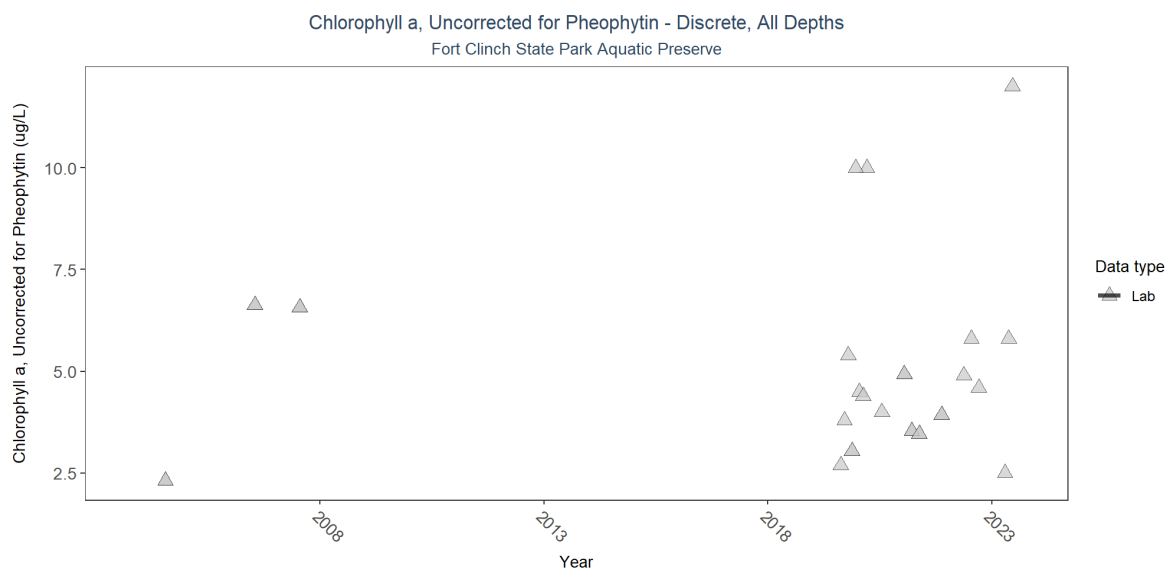


Table 10: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------------|--------|---------|------------------|---------|-----|---------------|-----------|----|
| Lab | Insufficient data to calculate trend | 52 | 8 | 2004 - 2023 | 4.95419 | - | - | - | NA |

Chlorophyll a, Corrected for Pheophytin - Discrete

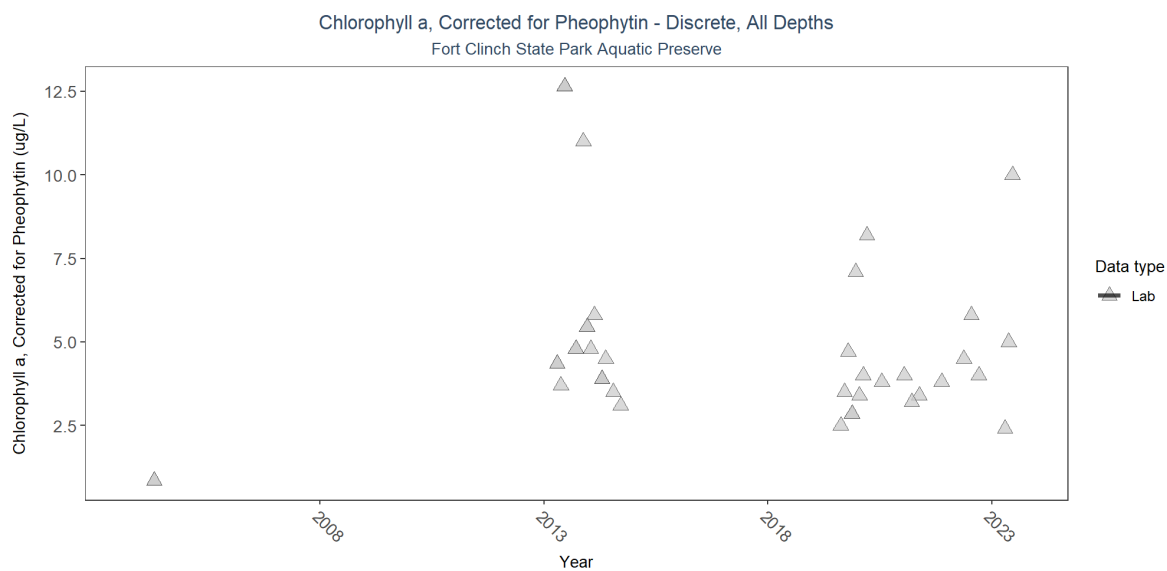


Table 11: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|--------------------------------------|--------|---------|------------------|--------|-----|---------------|-----------|----|
| Lab | Insufficient data to calculate trend | 44 | 8 | 2004 - 2023 | 4.1 | - | - | - | NA |

Secchi Depth - Discrete

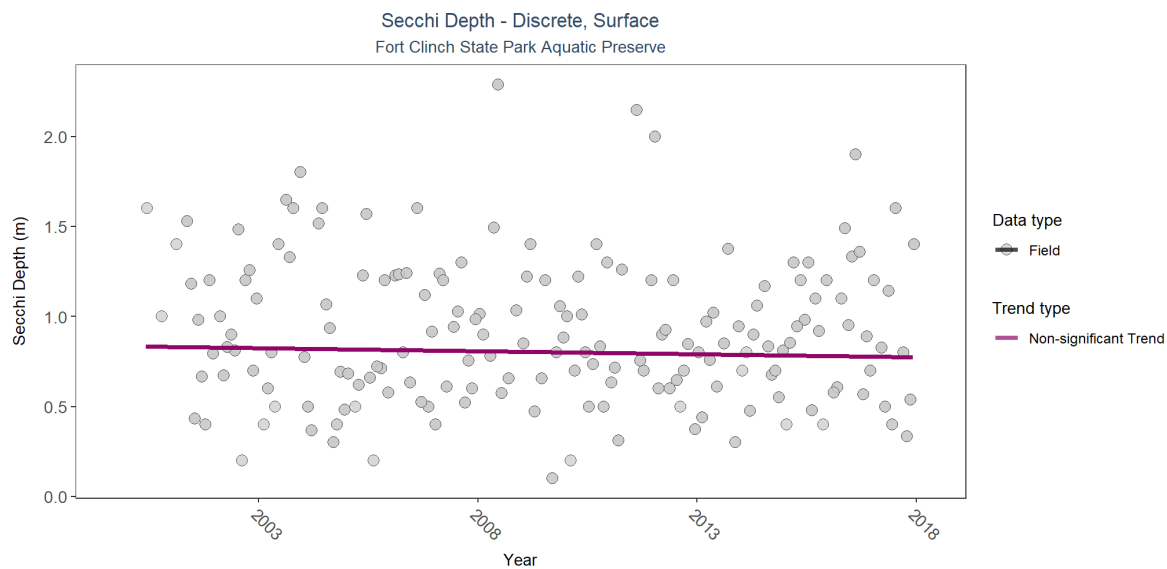


Table 12: Seasonal Kendall-Tau Results for - Secchi Depth

| ActivityType | Statistical Trend | N-Data | N-Years | Period of Record | Median | tau | SennIntercept | SennSlope | p |
|--------------|----------------------|--------|---------|------------------|--------|---------|---------------|-----------|--------|
| Field | No significant trend | 1245 | 18 | 2000 - 2017 | 0.9 | -0.0269 | 0.83609 | -0.00348 | 0.6021 |