

Fort Clinch State Park Aquatic Preserve

SEACAR Water Quality Analysis

Last compiled on 27 January, 2025

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Indicators

Nutrients

Total Nitrogen - Discrete

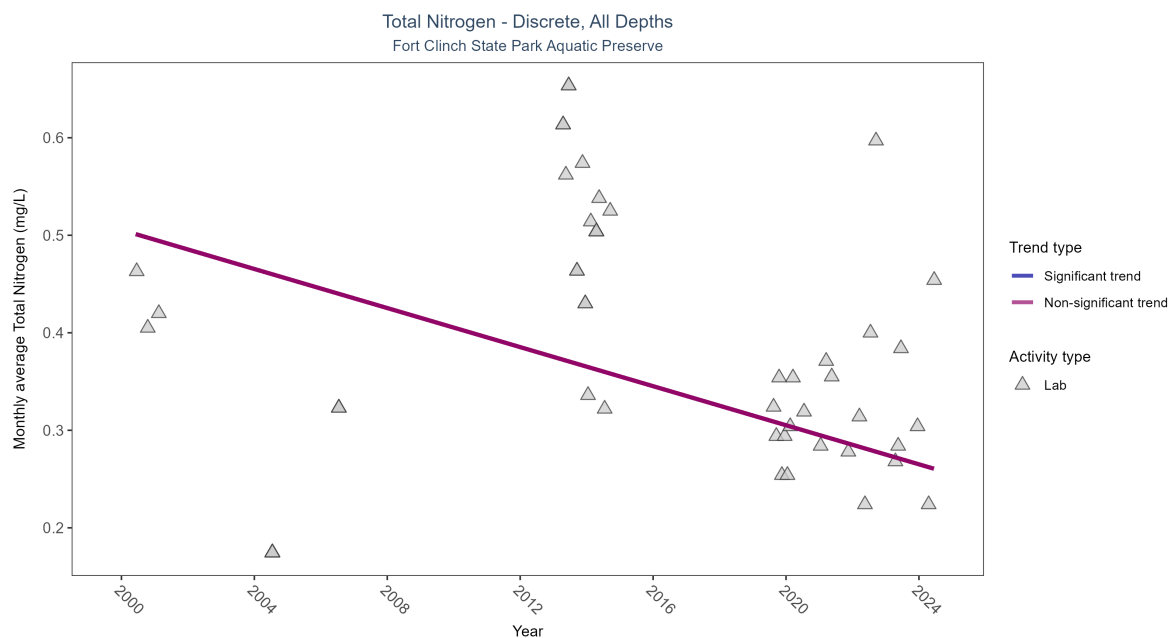


Table 1: Seasonal Kendall-Tau Results for - Total Nitrogen

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|----------------------|--------------|-----------------|------------------|---------------------|---------|---------------|-----------|--------|
| Lab | No significant trend | 55 | 12 | 2000 - 2024 | 0.354 | -0.3333 | 0.50547 | -0.01001 | 0.0908 |

Total Phosphorus - Discrete

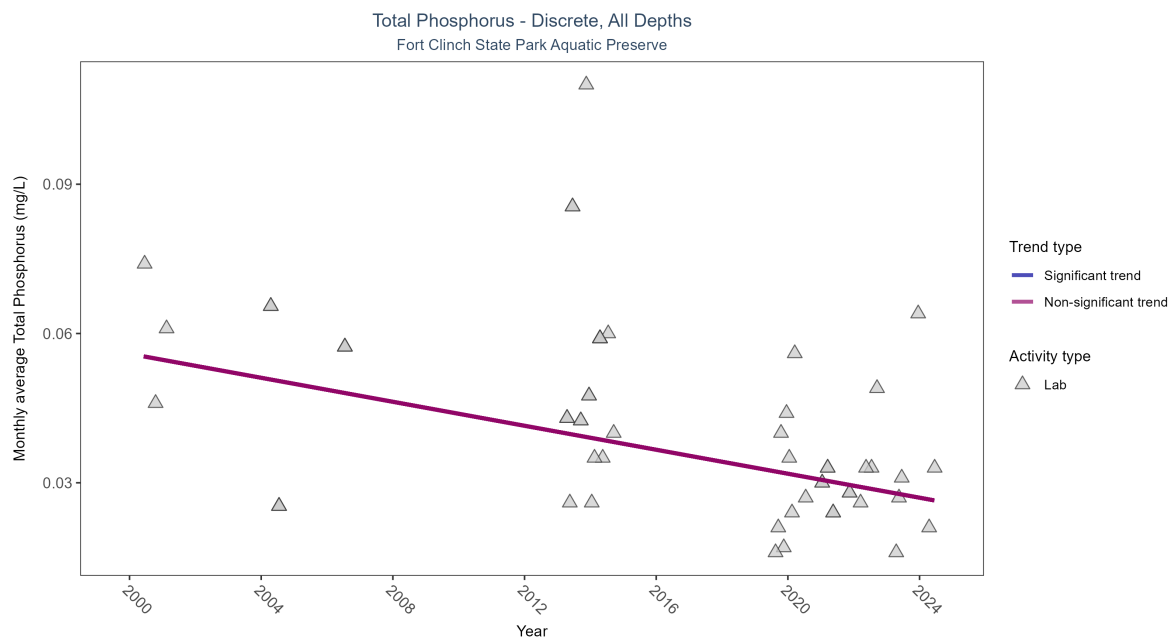


Table 2: Seasonal Kendall-Tau Results for - Total Phosphorus

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|----------------------|--------------|-----------------|------------------|---------------------|---------|---------------|-----------|--------|
| Lab | No significant trend | 58 | 12 | 2000 - 2024 | 0.034 | -0.2583 | 0.05592 | -0.0012 | 0.2374 |

Water Quality

Dissolved Oxygen - Discrete

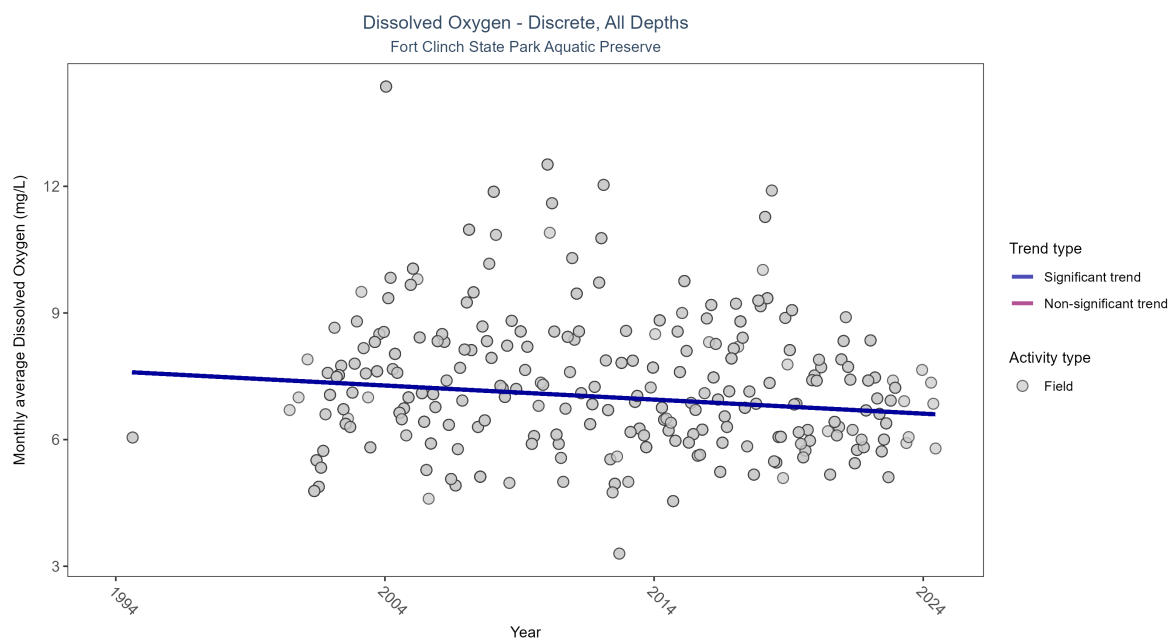


Table 3: Seasonal Kendall-Tau Results for - Dissolved Oxygen

| 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 | 1641 | 26 | 1994 - 2024 | 7.1 | -0.1847 | 7.61469 | -0.03332 | 0.0000 |

Dissolved Oxygen Saturation - Discrete

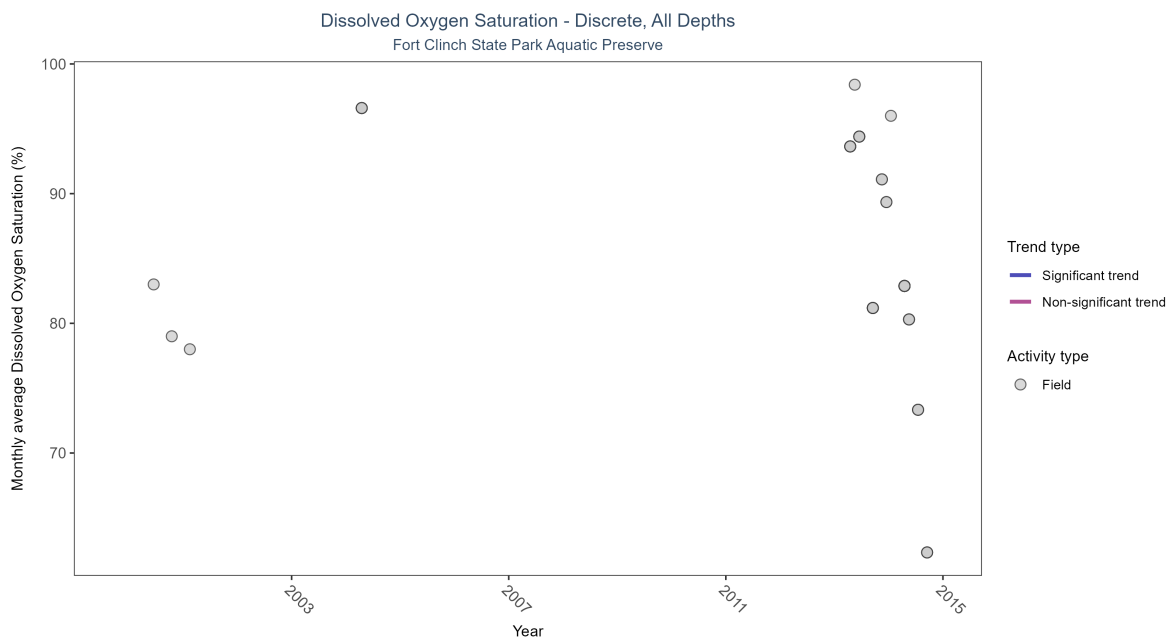


Table 4: Seasonal Kendall-Tau Results for - Dissolved Oxygen Saturation

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|--------------------------------------|--------------|-----------------|------------------|---------------------|-----|---------------|-----------|----|
| Field | Insufficient data to calculate trend | 48 | 5 | 2000 - 2014 | 85.45 | - | - | - | NA |

Salinity - Discrete

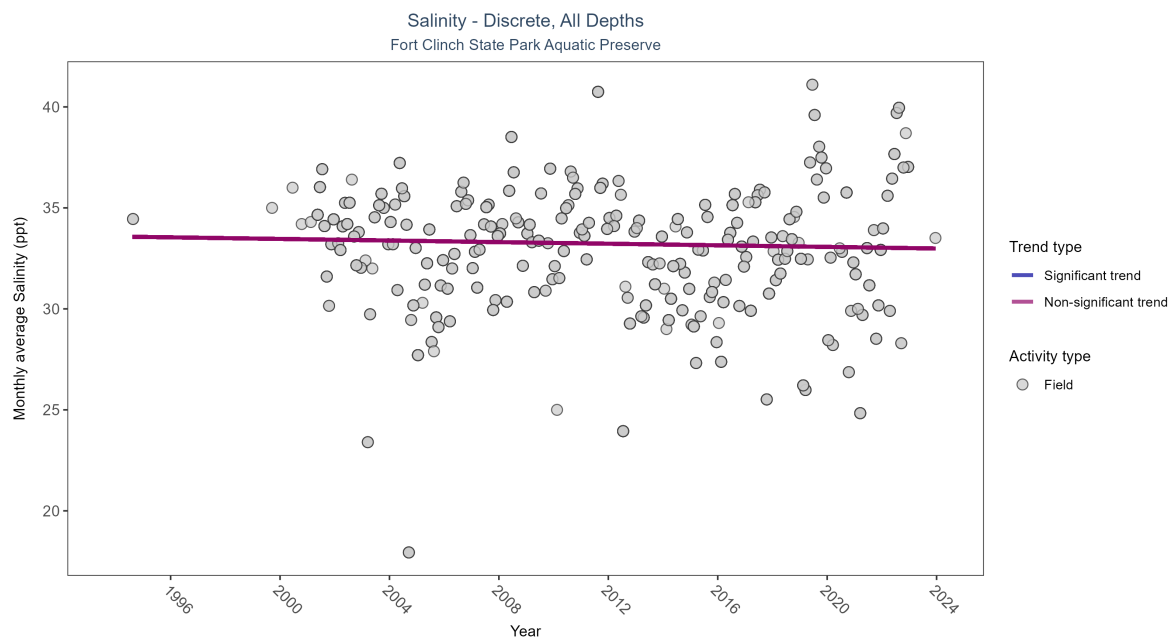


Table 5: Seasonal Kendall-Tau Results for - Salinity

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|----------------------|--------------|-----------------|------------------|---------------------|---------|---------------|-----------|--------|
| All | No significant trend | 1638 | 26 | 1994 - 2023 | 33.5 | -0.0384 | 33.58155 | -0.01974 | 0.3912 |

Water Temperature - Discrete

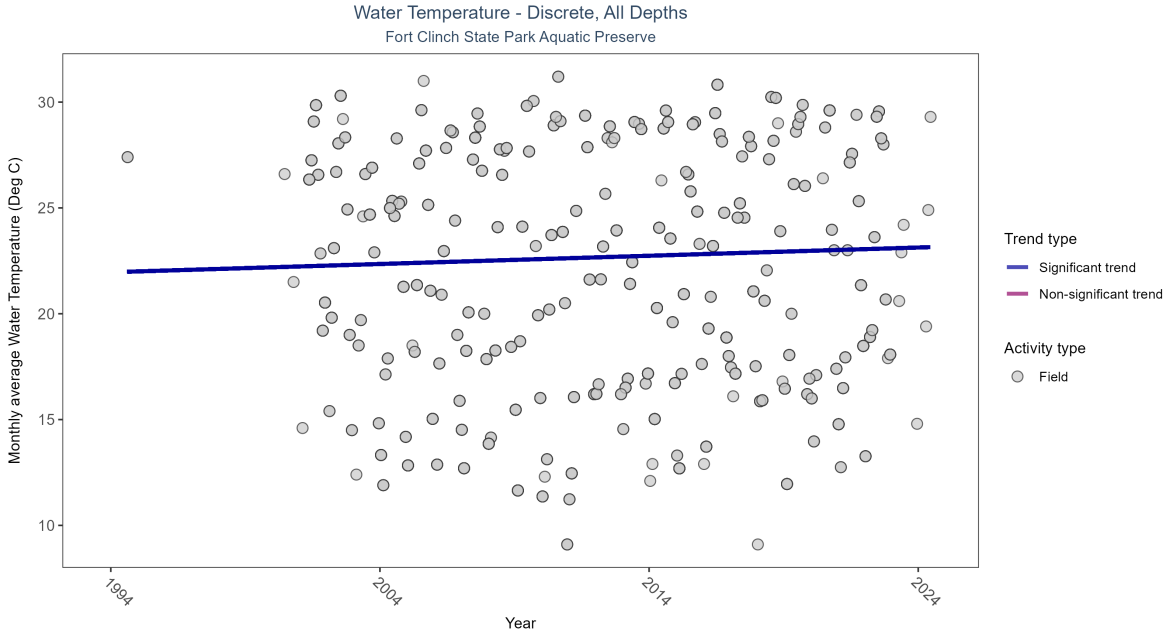


Table 6: Seasonal Kendall-Tau Results for - Water Temperature

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|--------------------------------|--------------|-----------------|------------------|---------------------|-------|---------------|-----------|--------|
| Field | Significantly increasing trend | 1662 | 26 | 1994 - 2024 | 23.2 | 0.089 | 21.96099 | 0.03893 | 0.0395 |

pH - Discrete

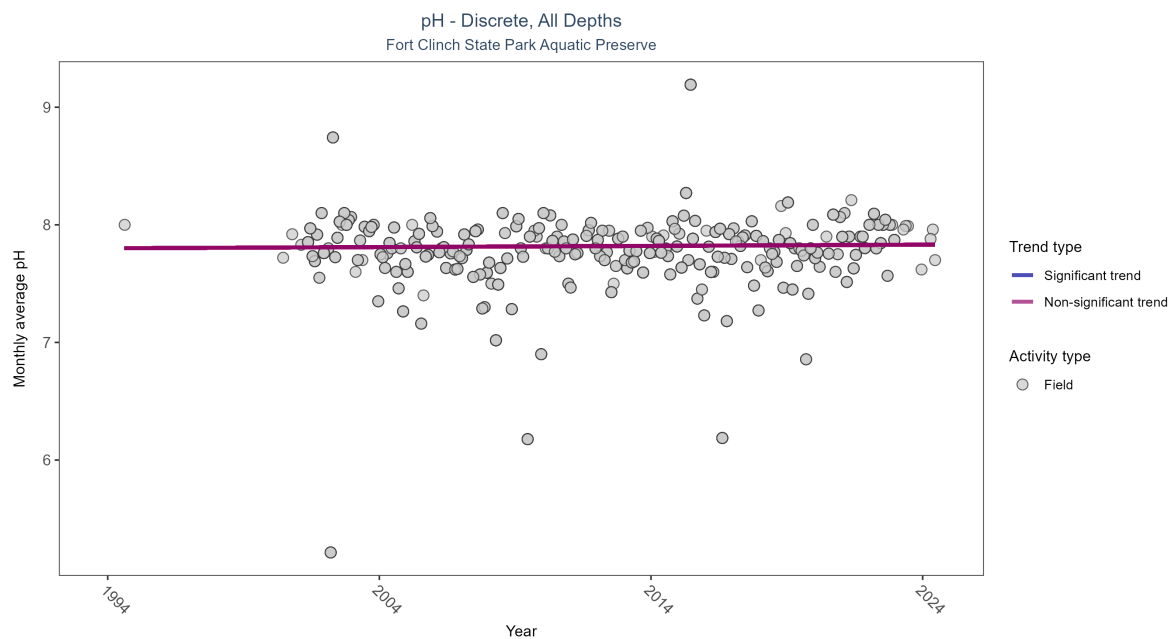


Table 7: Seasonal Kendall-Tau Results for - pH

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|----------------------|--------------|-----------------|------------------|---------------------|--------|---------------|-----------|--------|
| Field | No significant trend | 1631 | 26 | 1994 - 2024 | 7.8 | 0.0303 | 7.80065 | 0.00102 | 0.5561 |

Water Clarity

Turbidity - Discrete

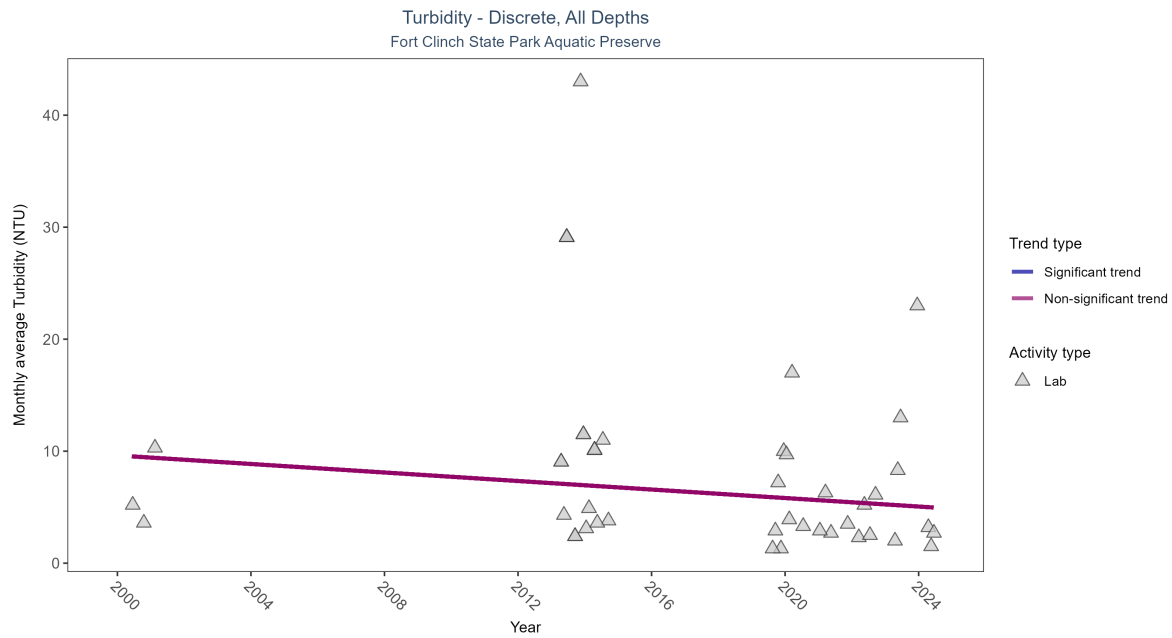


Table 8: Seasonal Kendall-Tau Results for - Turbidity

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|----------------------|--------------|-----------------|------------------|---------------------|---------|---------------|-----------|--------|
| Lab | No significant trend | 49 | 10 | 2000 - 2024 | 5 | -0.2211 | 9.61579 | -0.19 | 0.3061 |

Total Suspended Solids - Discrete

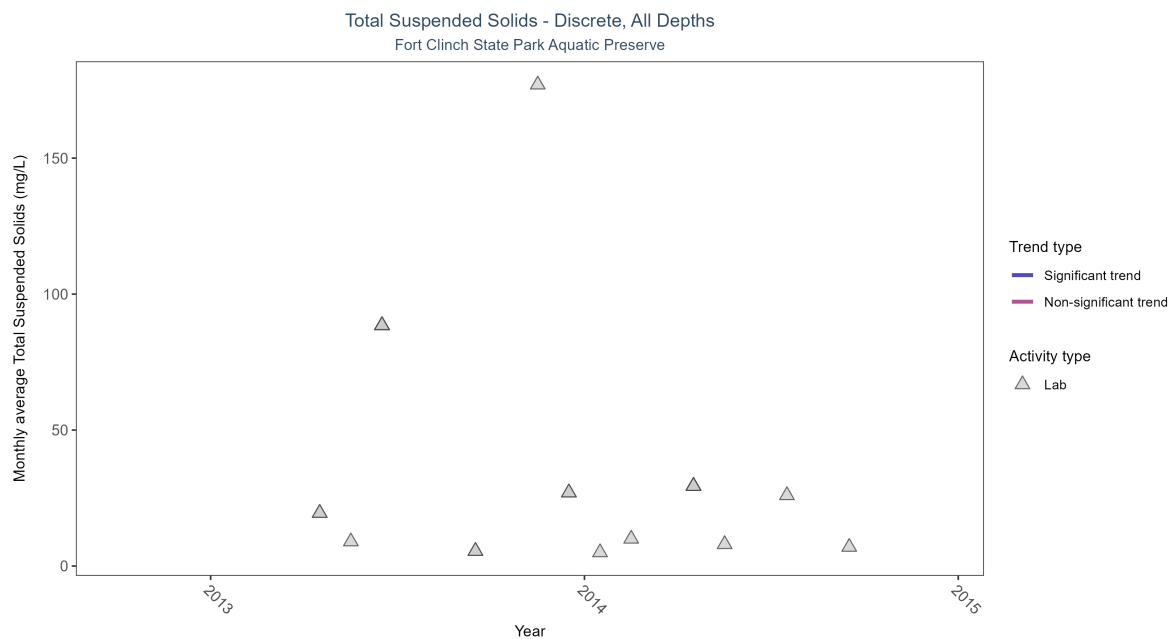


Table 9: Seasonal Kendall-Tau Results for - Total Suspended Solids

| 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 | 22 | 2 | 2013 - 2014 | 17.5 | - | - | - | NA |

Chlorophyll a, Uncorrected for Pheophytin - Discrete

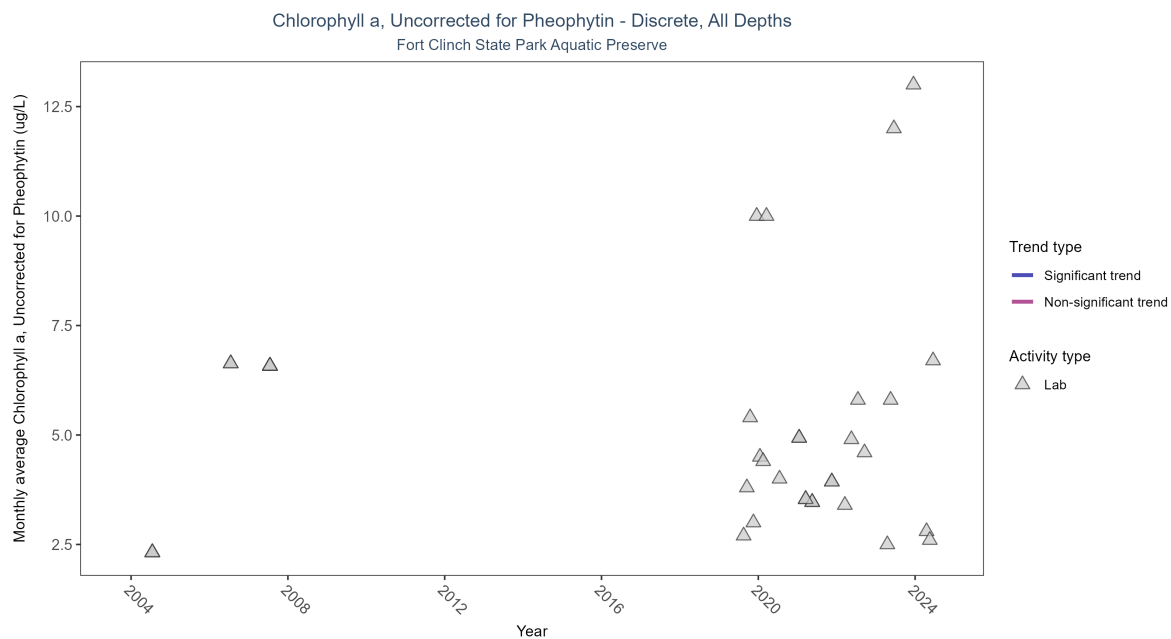


Table 10: Seasonal Kendall-Tau Results for - Chlorophyll a, Uncorrected for Pheophytin

| 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 | 56 | 9 | 2004 - 2024 | 4.95419 | - | - | - | NA |

Chlorophyll a, Corrected for Pheophytin - Discrete

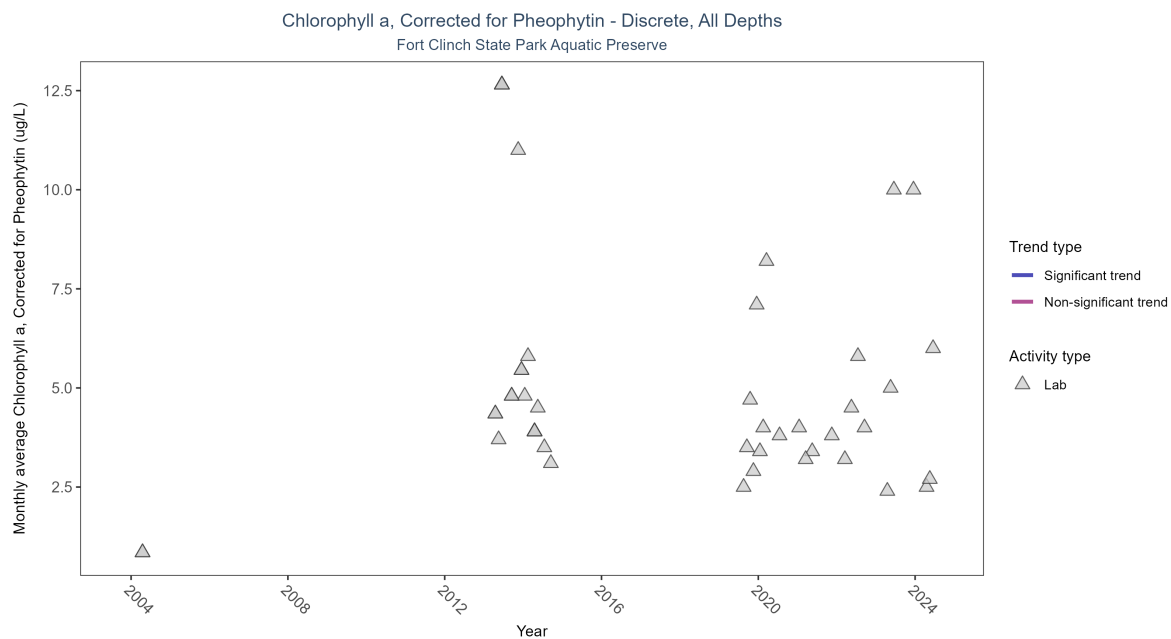


Table 11: Seasonal Kendall-Tau Results for - Chlorophyll a, Corrected for Pheophytin

| 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 | 48 | 9 | 2004 - 2024 | | 4.1 | - | - | NA |

Secchi Depth - Discrete

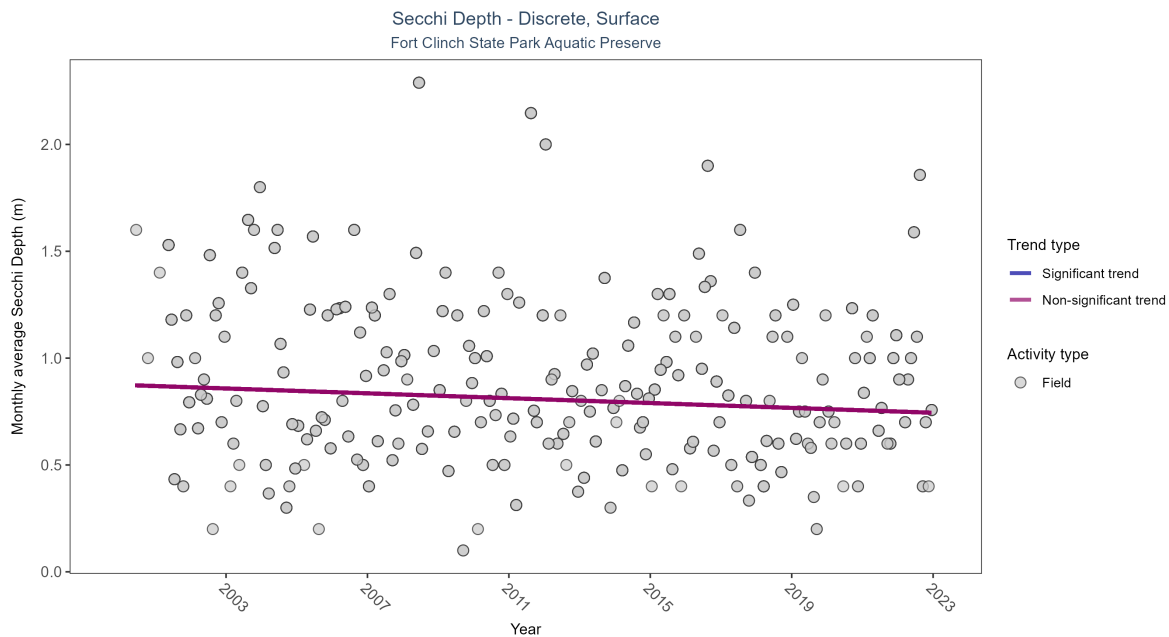


Table 12: Seasonal Kendall-Tau Results for - Secchi Depth

| Activity Type | Statistical Trend | Sample Count | Years with Data | Period of Record | Median Result Value | Tau | Sen Intercept | Sen Slope | P |
|---------------|----------------------|--------------|-----------------|------------------|---------------------|---------|---------------|-----------|--------|
| Field | No significant trend | 1511 | 23 | 2000 - 2022 | 0.9 | -0.0647 | 0.875 | -0.00568 | 0.1556 |