

Banana River Aquatic Preserve

SEACAR Discrete Water Quality Analysis

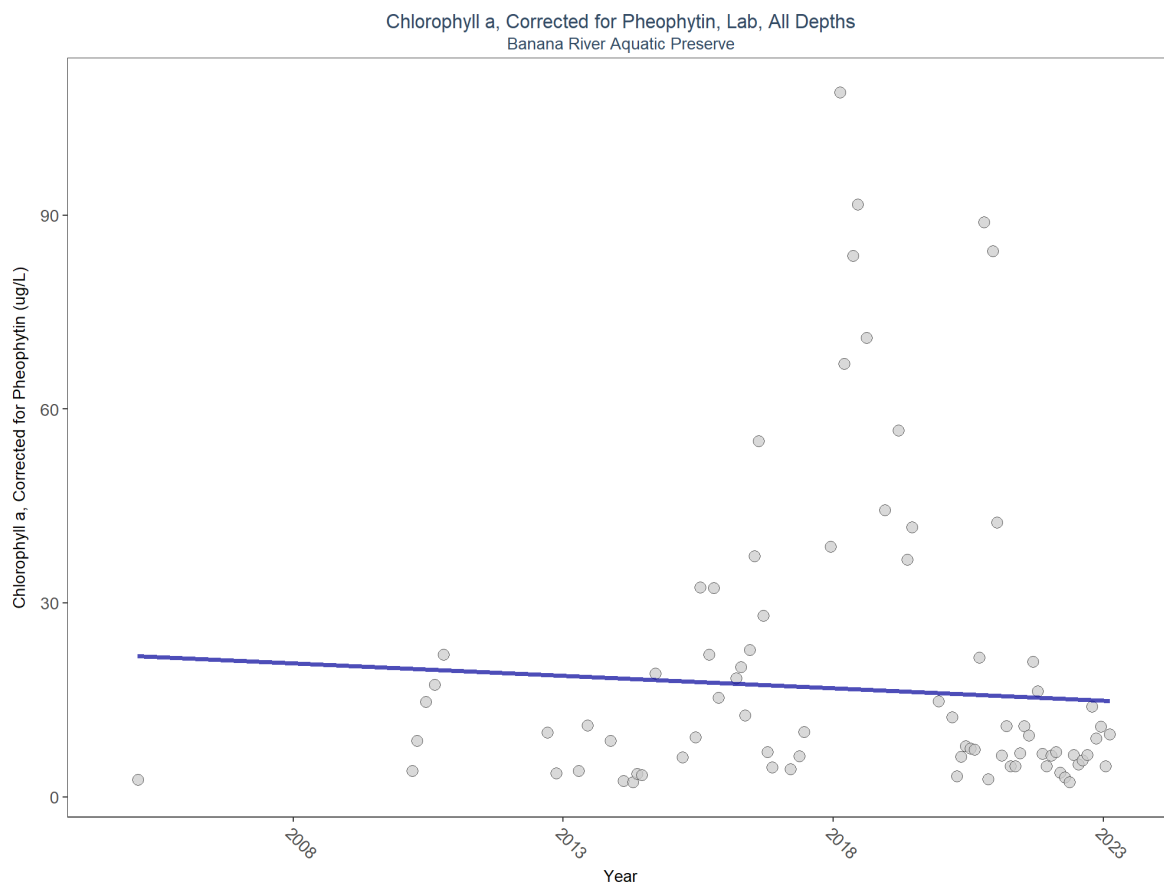
Last compiled on 26 June, 2024

Contents

| | |
|---|----------|
| Parameters | 2 |
| Chlorophyll a, Corrected for Pheophytin | 2 |
| Chlorophyll a, Uncorrected for Pheophytin | 3 |
| Dissolved Oxygen | 4 |
| Dissolved Oxygen Saturation | 5 |
| pH | 6 |
| Salinity | 7 |
| Secchi Depth | 8 |
| Total Nitrogen | 9 |
| Total Phosphorus | 10 |
| Total Suspended Solids | 11 |
| Turbidity | 12 |
| Water Temperature | 13 |

Parameters

Chlorophyll a, Corrected for Pheophytin



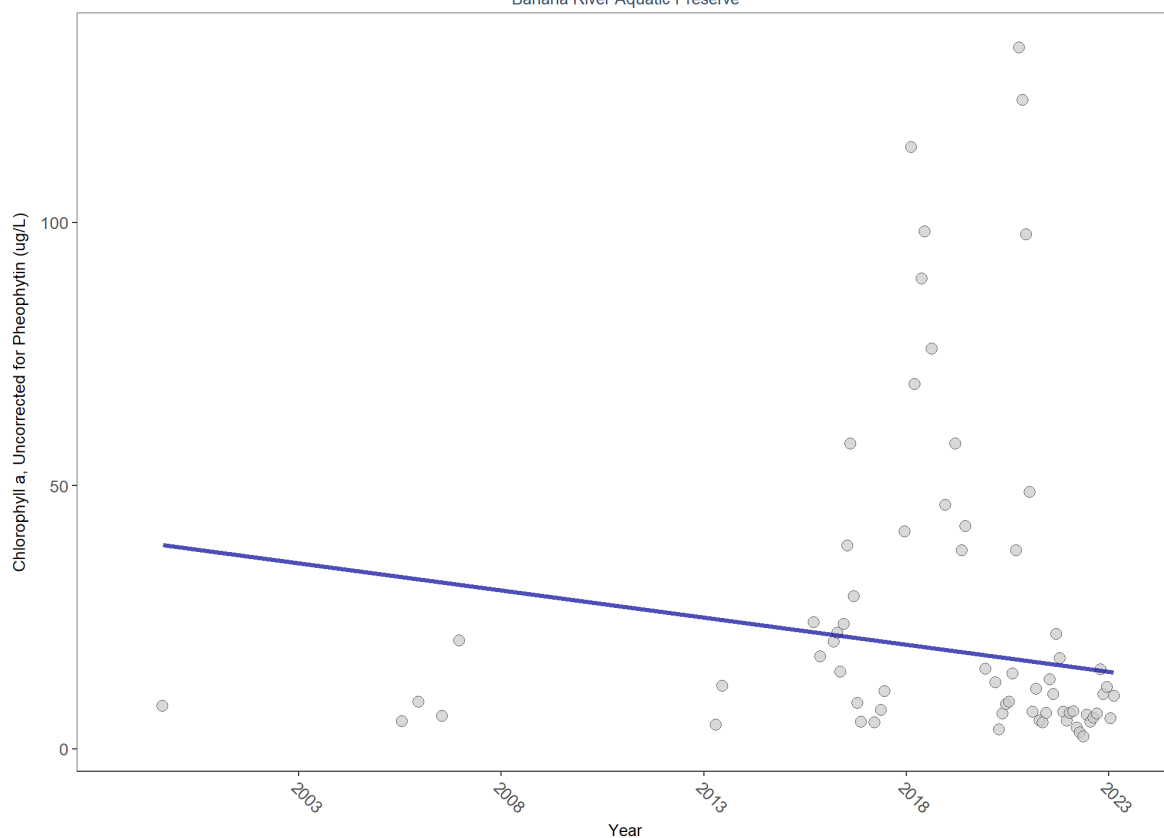
| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|-----------|---------------|------------|-------------|-------|
| All | 418 | 14 | 7.1 | TRUE | -0.1813 | 0.1174 | -0.388668 | 21.84385 | 7.8815 | 0.7239 | 0 |

$p < 0.00005$ appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Chlorophyll a, Uncorrected for Pheophytin

Chlorophyll a, Uncorrected for Pheophytin, Lab, All Depths
Banana River Aquatic Preserve

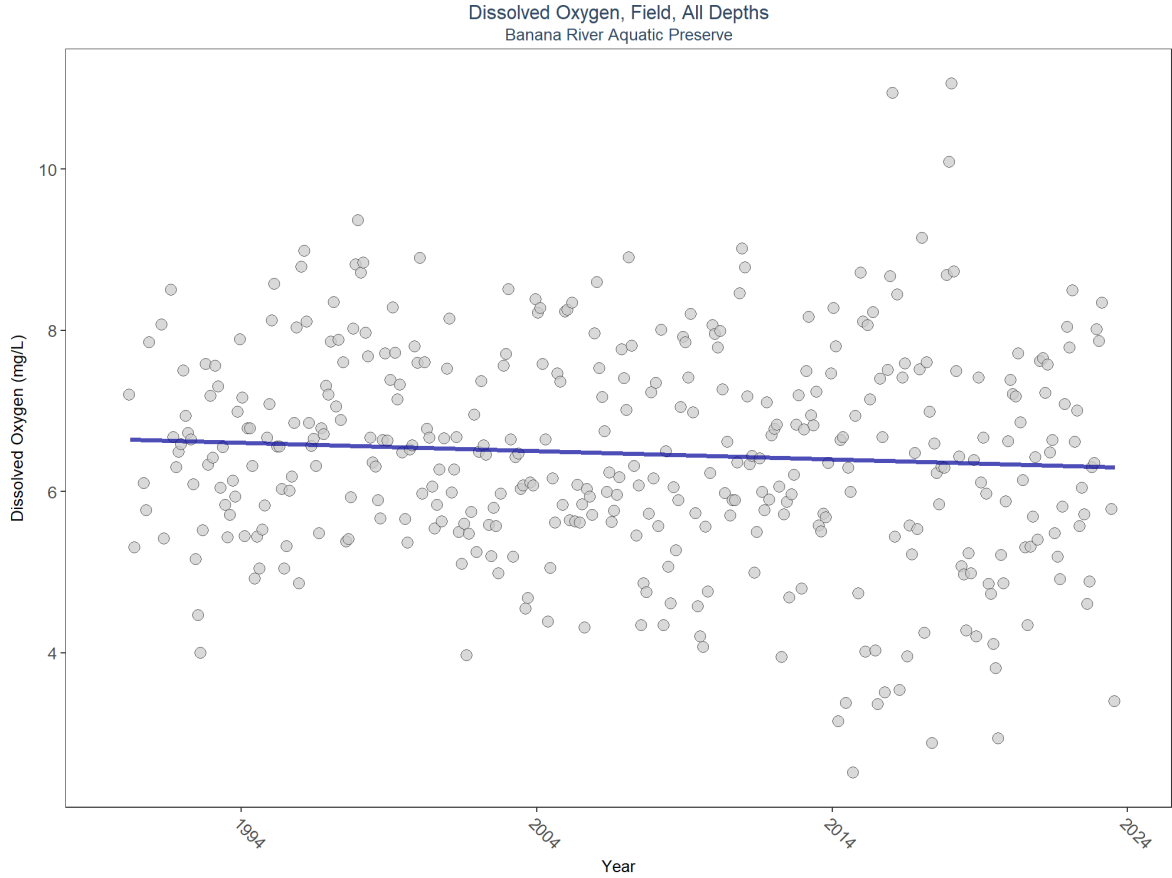


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|-----------|---------------|------------|-------------|-------|
| All | 324 | 13 | 8.7 | TRUE | -0.2931 | 0.0073 | -1.031935 | 39.40114 | 6.7022 | 0.8227 | -2 |

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of
record for monitoring location

Dissolved Oxygen

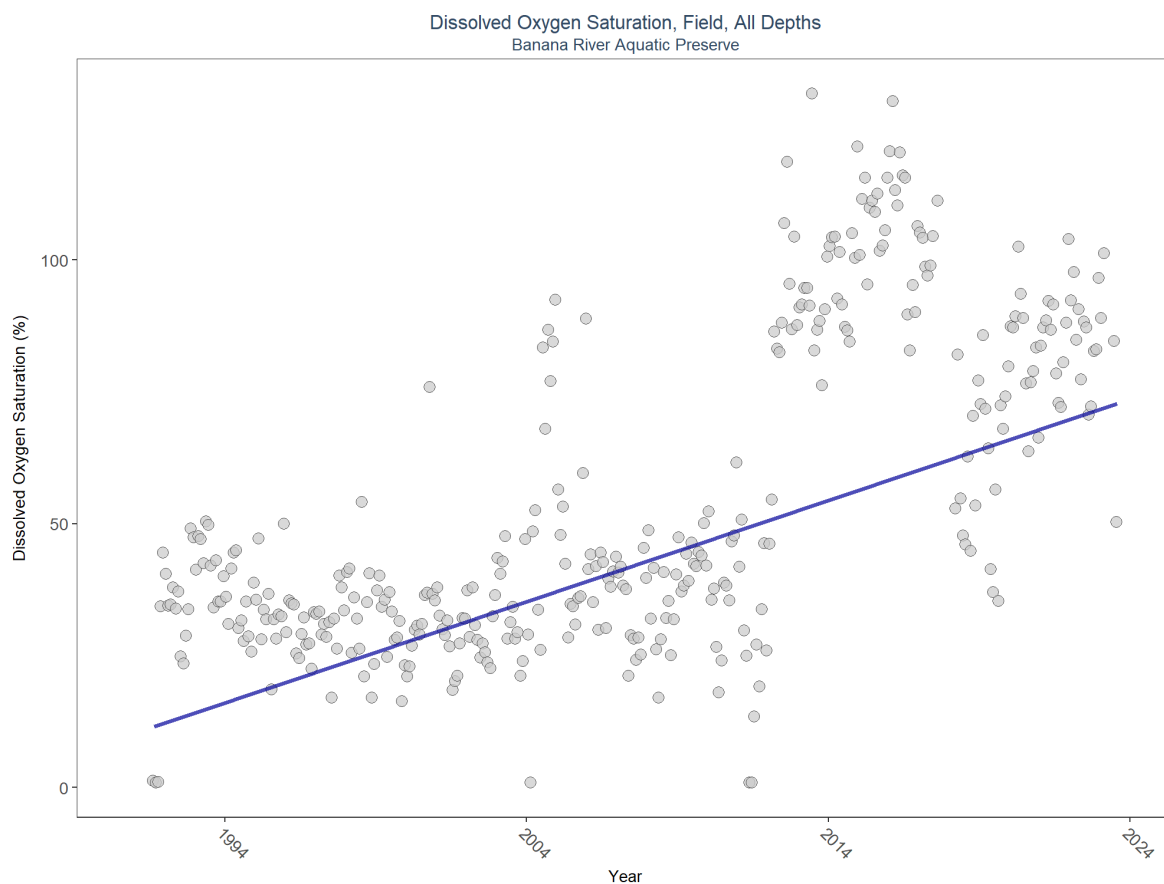


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|-------------|---------------|------------|-------------|-------|
| All | 29112 | 34 | 6.42 | TRUE | -0.0719 | 0.0412 | -0.01015565 | 6.643613 | 11.0872 | 0.436 | -1 |

p < 0.00005 appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

Dissolved Oxygen Saturation

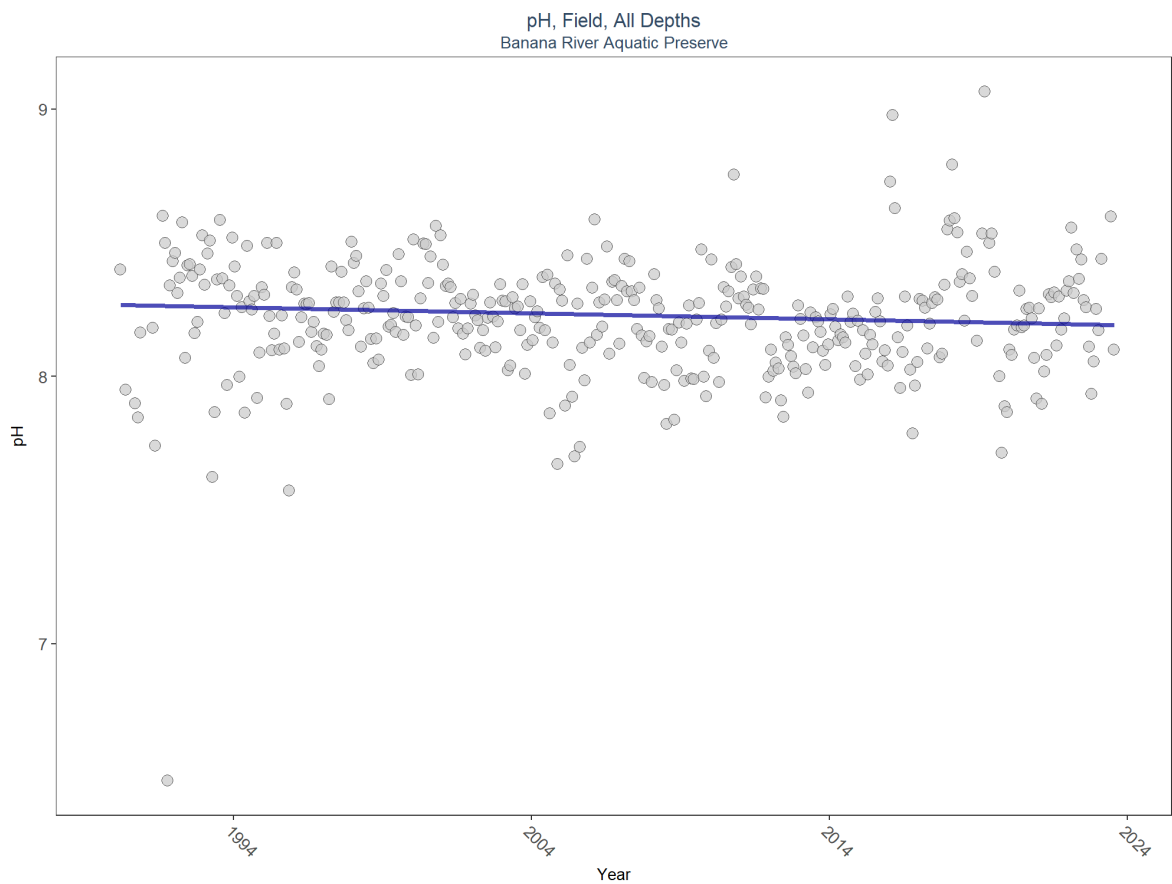


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|-----------|---------------|------------|-------------|-------|
| All | 7294 | 33 | 56.475 | TRUE | 0.4448 | 0.0000 | 1.916731 | 10.34417 | 5.7512 | 0.8894 | 1 |

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

pH

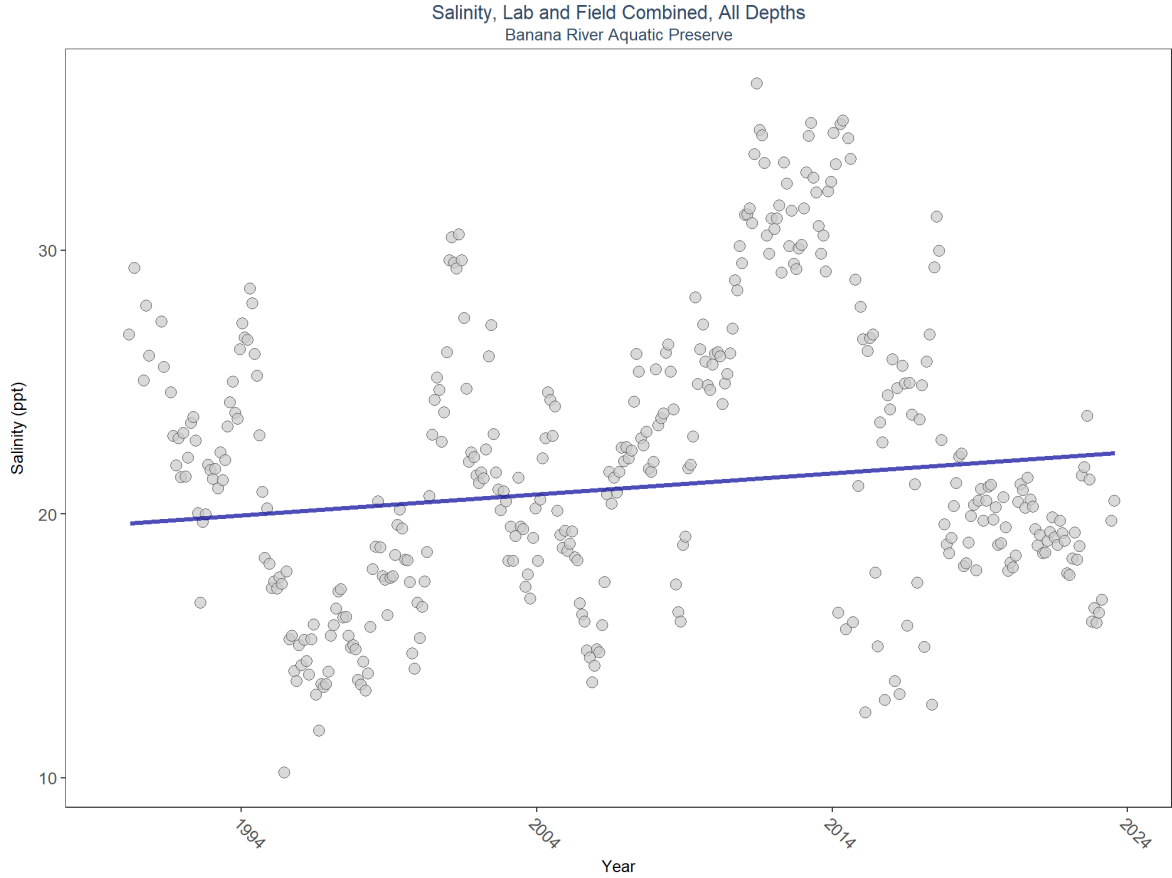


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|--------------|---------------|------------|-------------|-------|
| All | 22007 | 34 | 8.2 | TRUE | -0.0771 | 0.0374 | -0.002246377 | 8.26725 | 19.5447 | 0.052 | -1 |

p < 0.00005 appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Salinity

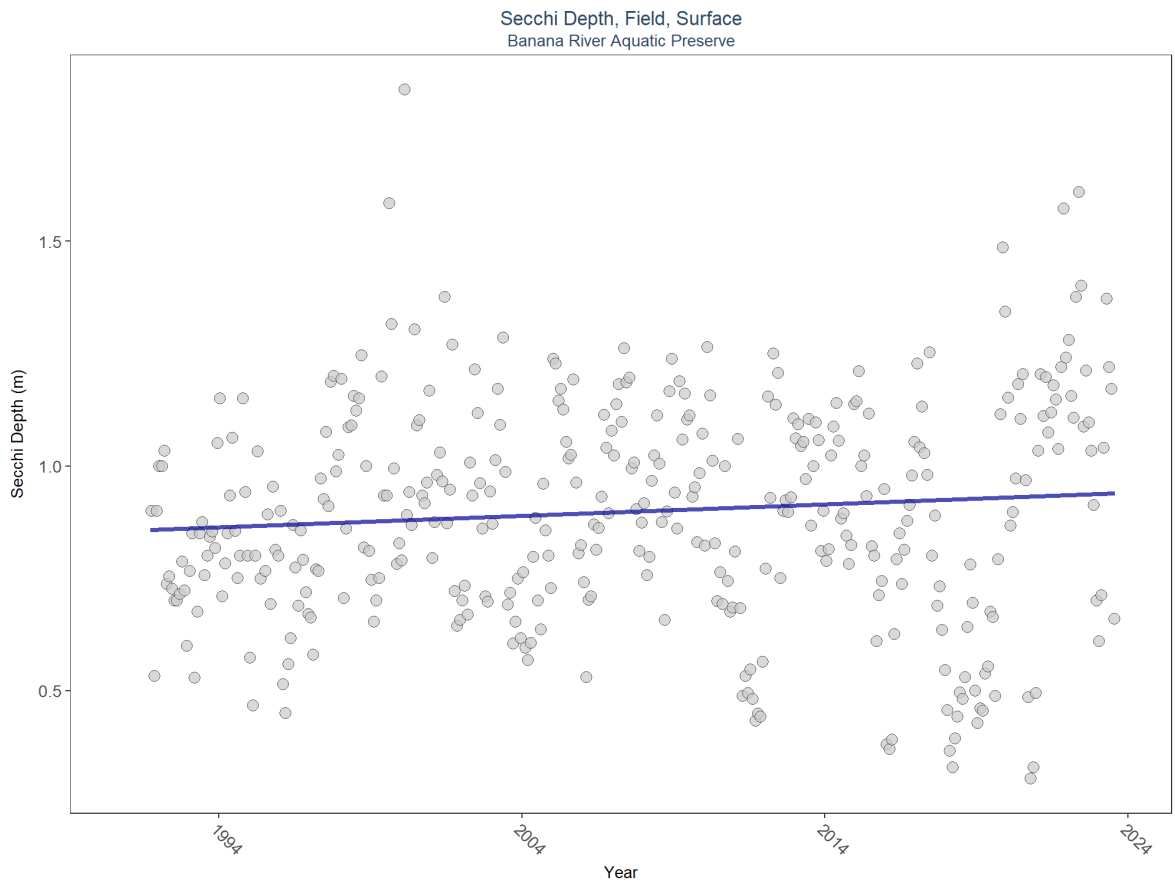


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|------------|---------------|------------|-------------|-------|
| All | 30601 | 34 | 19.8 | TRUE | 0.0905 | 0.0117 | 0.08017598 | 19.61702 | 2.3053 | 0.9971 | 1 |

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of
record for monitoring location

Secchi Depth

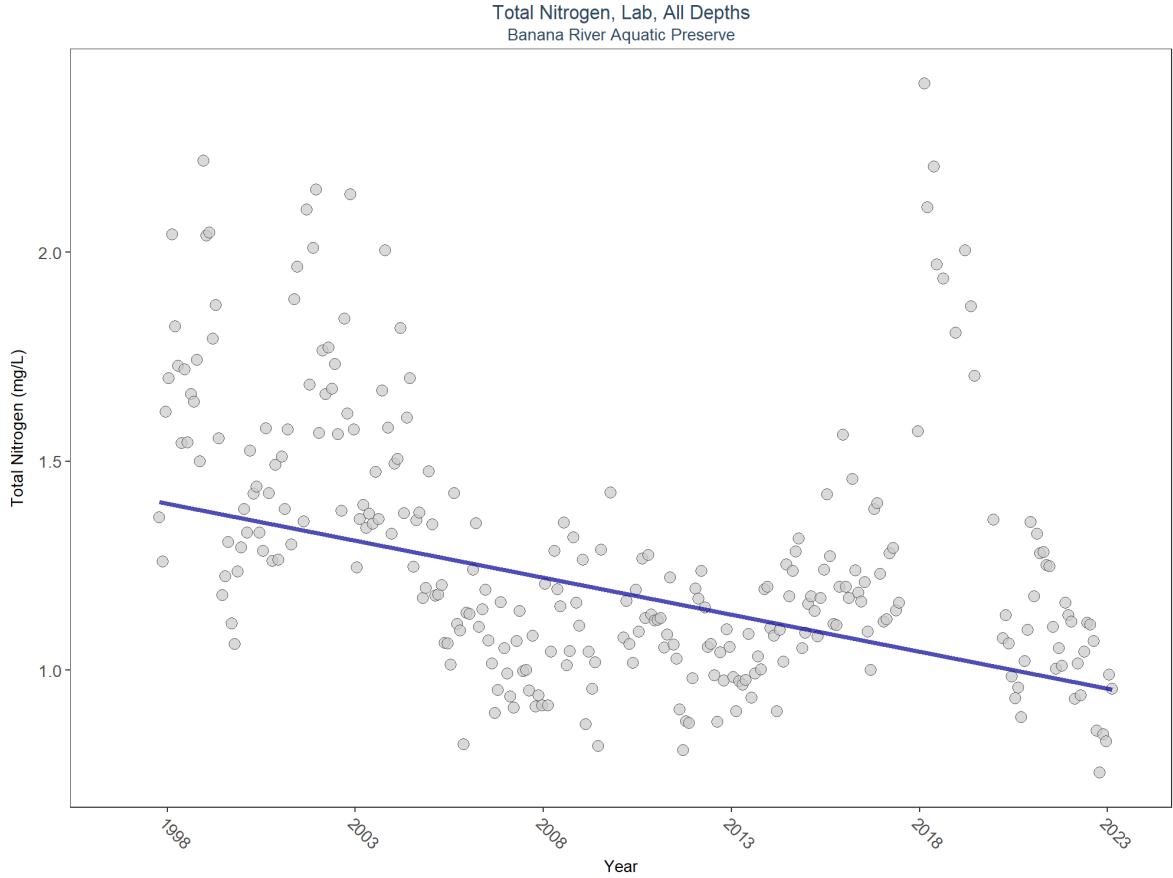


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|-------------|---------------|------------|-------------|-------|
| Surface | 7892 | 33 | 0.8 | TRUE | 0.0647 | 0.0712 | 0.002539465 | 0.8560427 | 7.042 | 0.7957 | 0 |

p < 0.00005 appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Total Nitrogen

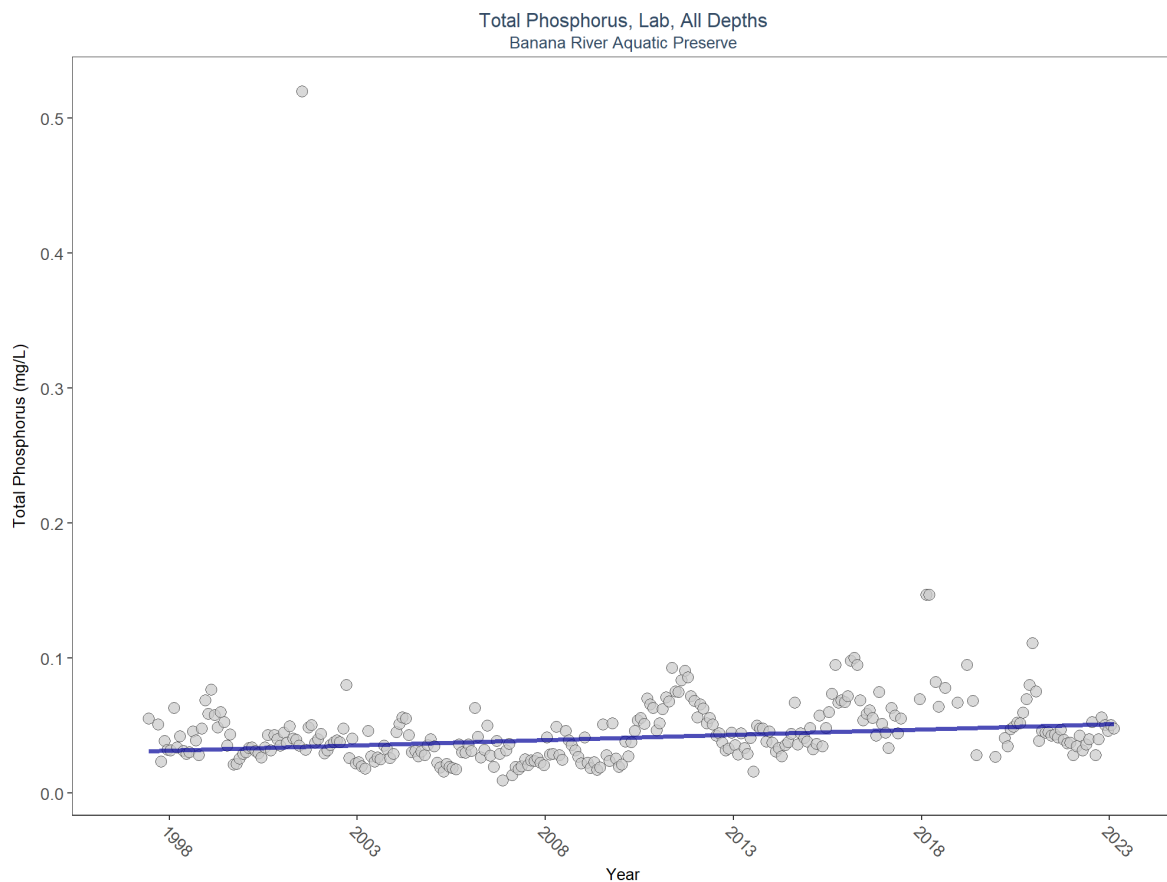


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|-------------|---------------|------------|-------------|-------|
| All | 2150 | 27 | 1.24 | TRUE | -0.3448 | 0.0000 | -0.01771167 | 1.415622 | 7.2332 | 0.7799 | -1 |

p < 0.00005 appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Total Phosphorus

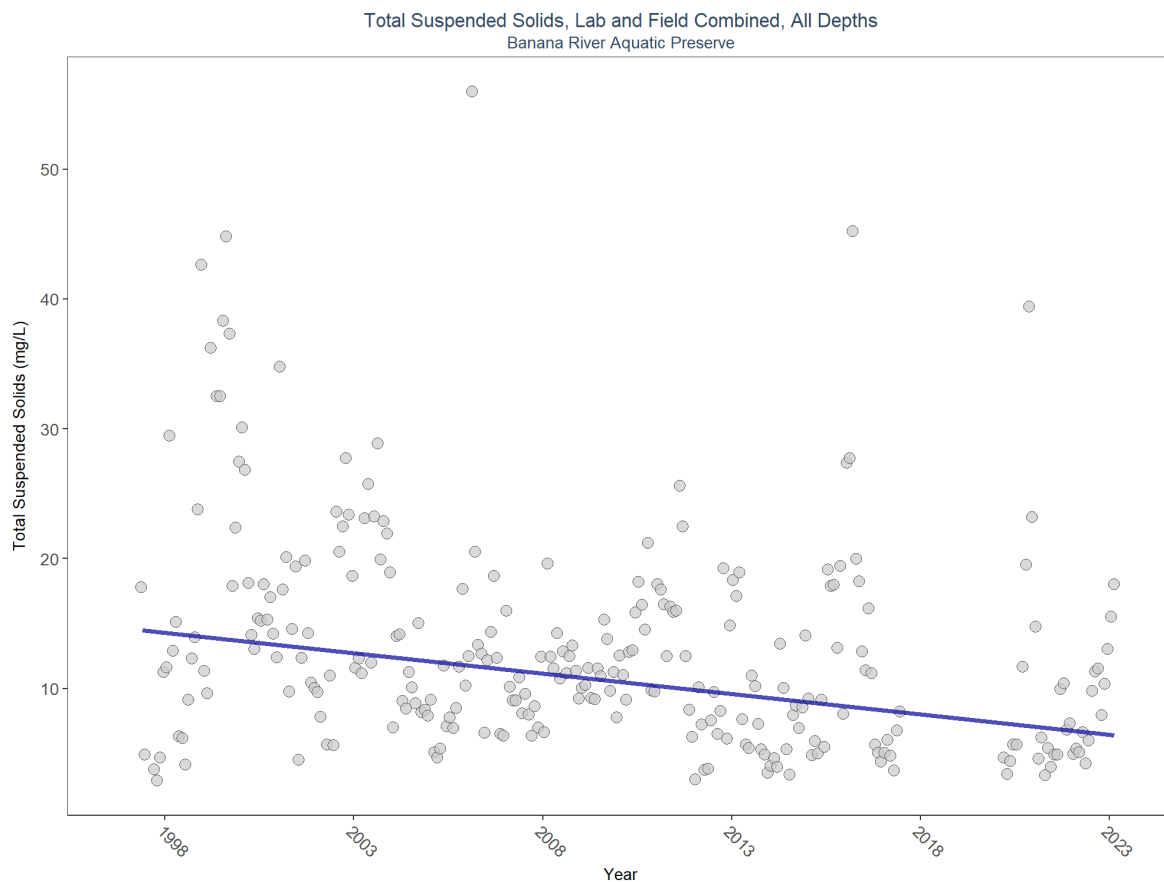


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|--------------|---------------|------------|-------------|-------|
| All | 4553 | 27 | 0.0354 | TRUE | 0.2394 | 0.0000 | 0.0007927083 | 0.0306678 | 4.3478 | 0.9586 | 1 |

$p < 0.00005$ appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Total Suspended Solids

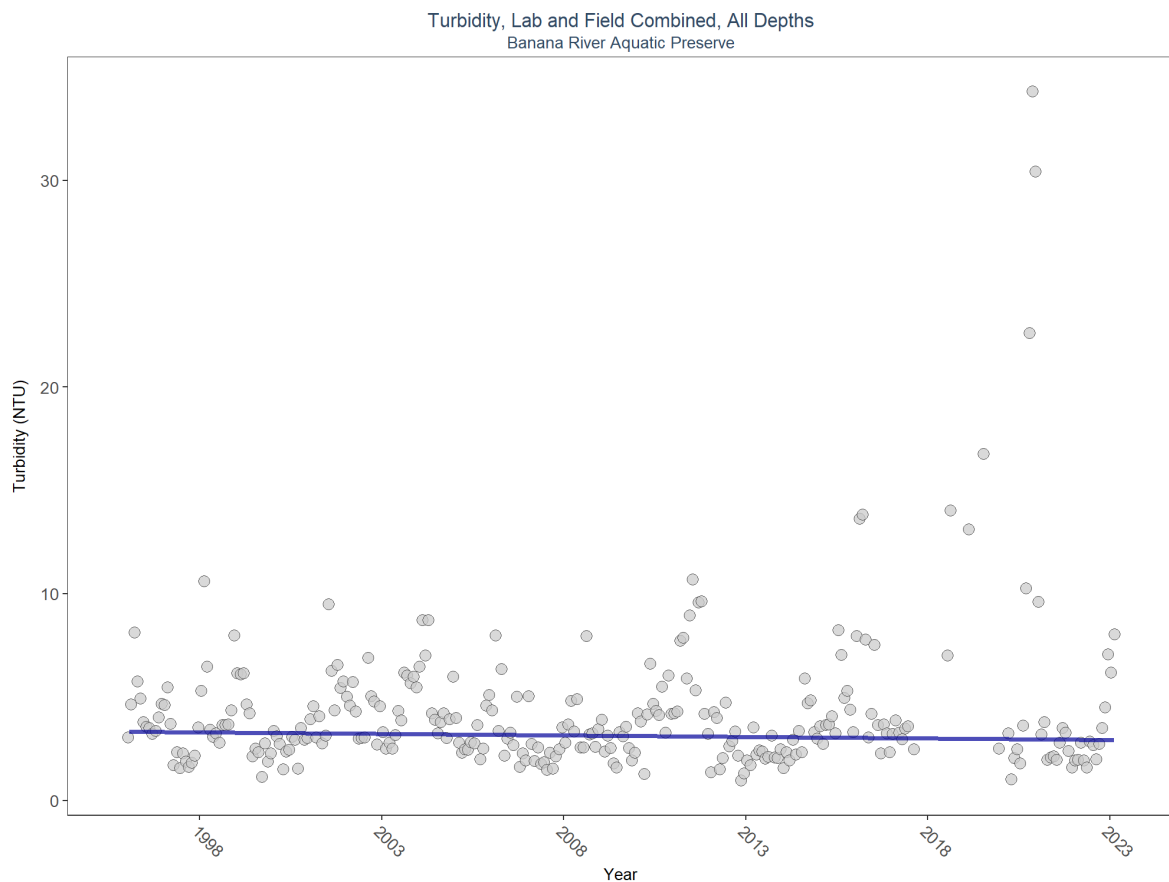


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|------------|---------------|------------|-------------|-------|
| All | 2390 | 25 | 10 | TRUE | -0.2456 | 0.0000 | -0.3147186 | 14.59654 | 4.1765 | 0.9645 | -1 |

$p < 0.00005$ appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Turbidity

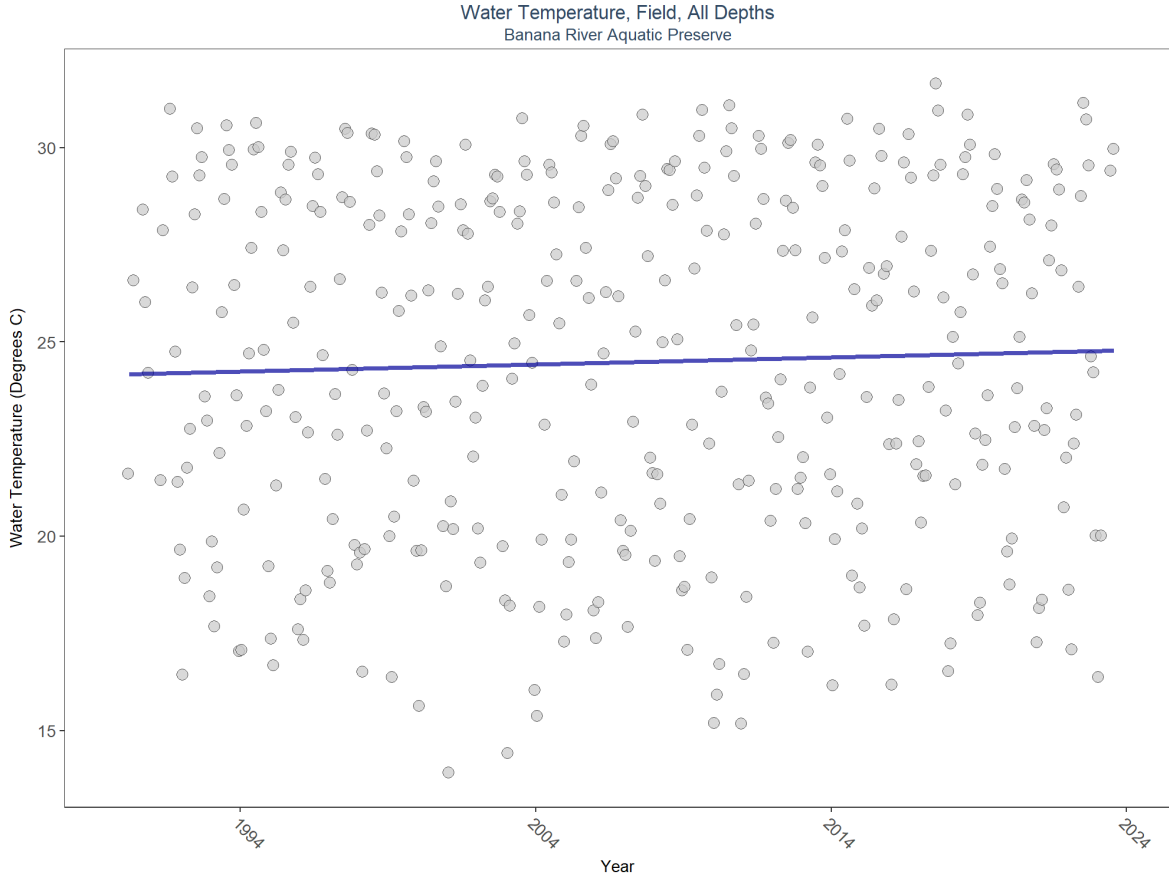


| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|-------------|---------------|------------|-------------|-------|
| All | 13917 | 28 | 3.2 | TRUE | -0.047 | 0.2413 | -0.01507469 | 3.336763 | 9.0095 | 0.621 | 0 |

$p < 0.00005$ appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

Water Temperature



| RelativeDepth | N_Data | N_Years | Median | Independent | tau | p | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|------------|---------------|------------|-------------|-------|
| All | 30599 | 34 | 25.5 | TRUE | 0.0902 | 0.0120 | 0.01831213 | 24.16082 | 9.1765 | 0.6056 | 1 |

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of
record for monitoring location