

# Yellow River Marsh Aquatic Preserve

## SEACAR Discrete Water Quality Analysis

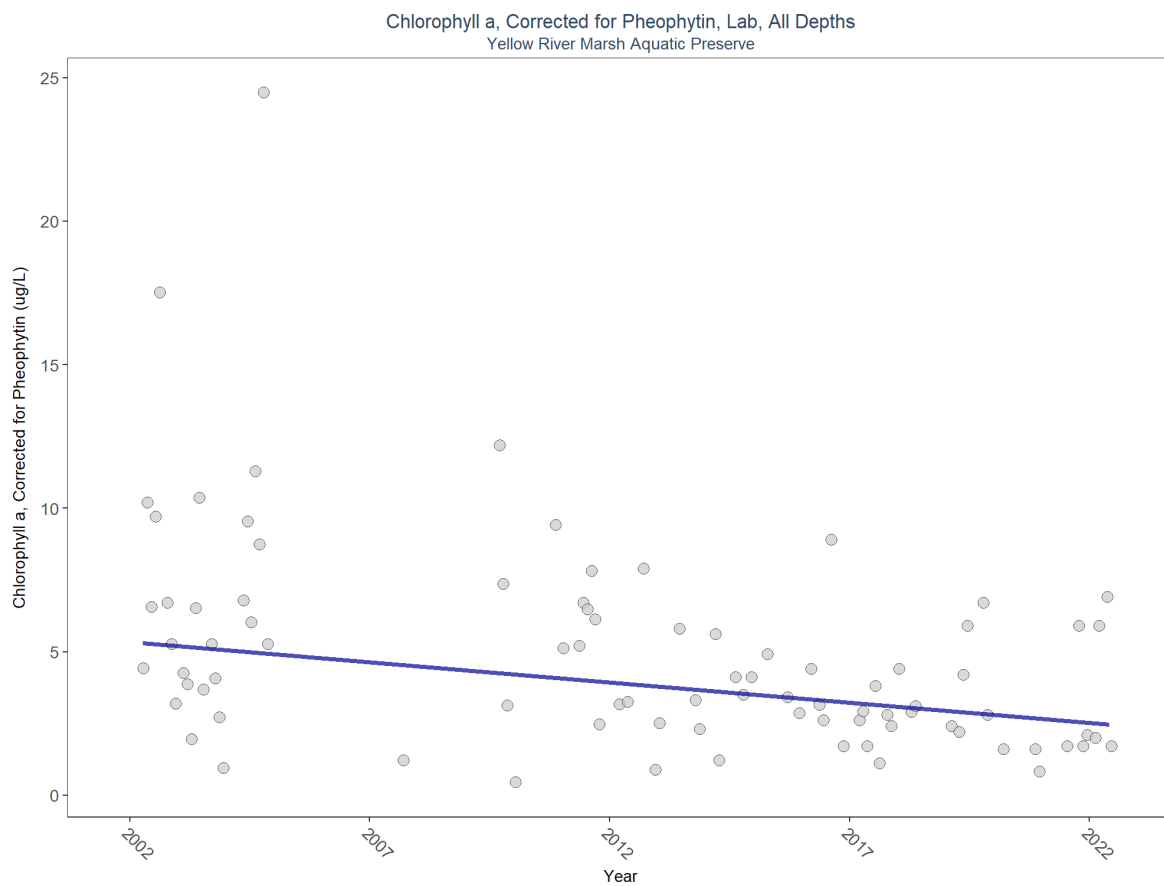
Last compiled on 26 June, 2024

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# Parameters

## Chlorophyll a, Corrected for Pheophytin

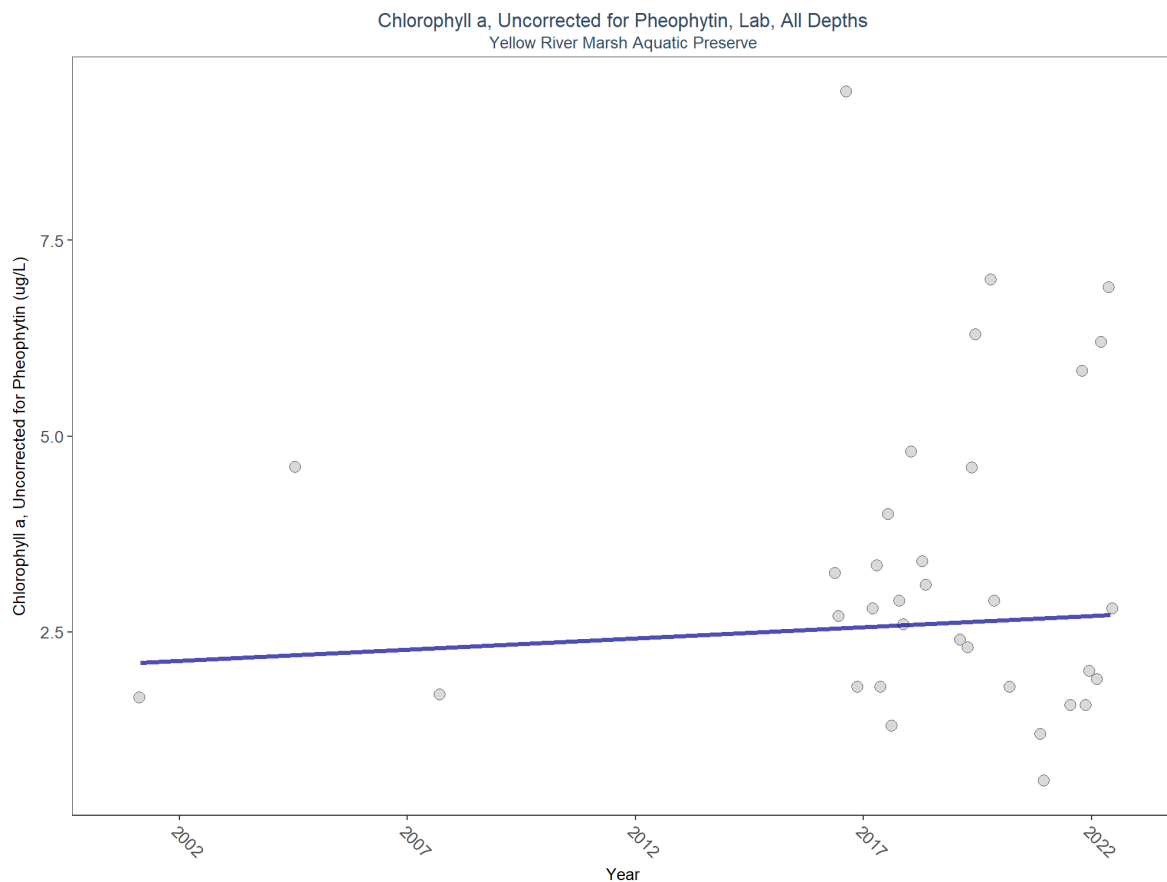


| RelativeDepth | N_Data | N_Years | Median | Independent | tau     | p      | SennSlope  | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|------------|---------------|------------|-------------|-------|
| All           | 123    | 18      | 4.15   | TRUE        | -0.3293 | 0.0003 | -0.1414086 | 5.343056      | 9.0518     | 0.6171      | -1    |

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

SennIntercept is intercept value at beginning of  
record for monitoring location

## Chlorophyll a, Uncorrected for Pheophytin

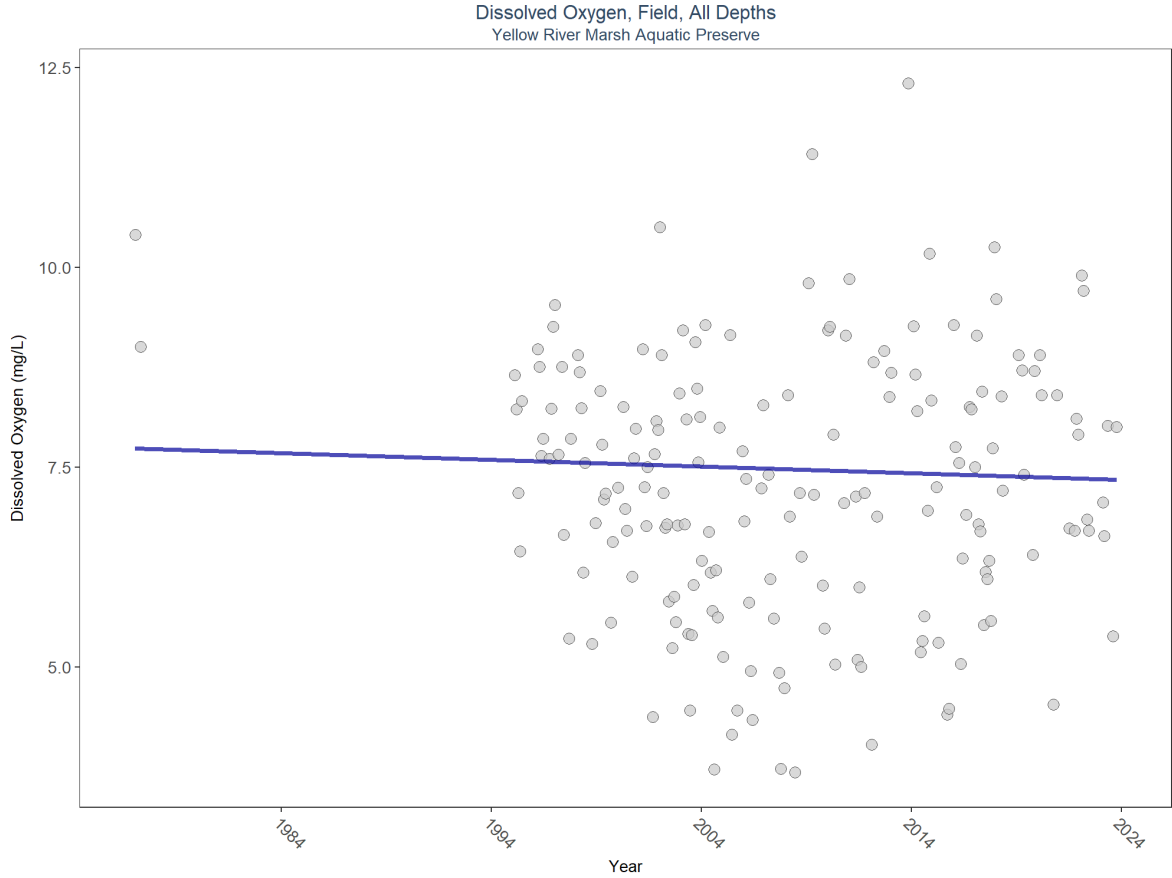


| RelativeDepth | N_Data | N_Years | Median | Independent | tau    | p      | SennSlope | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|-----------|---------------|------------|-------------|-------|
| All           | 48     | 10      | 2.7    | TRUE        | 0.0625 | 0.6920 | 0.0287037 | 2.1           | 8.1222     | 0.5219      | 0     |

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

SennIntercept is intercept value at beginning of  
record for monitoring location

Dissolved Oxygen

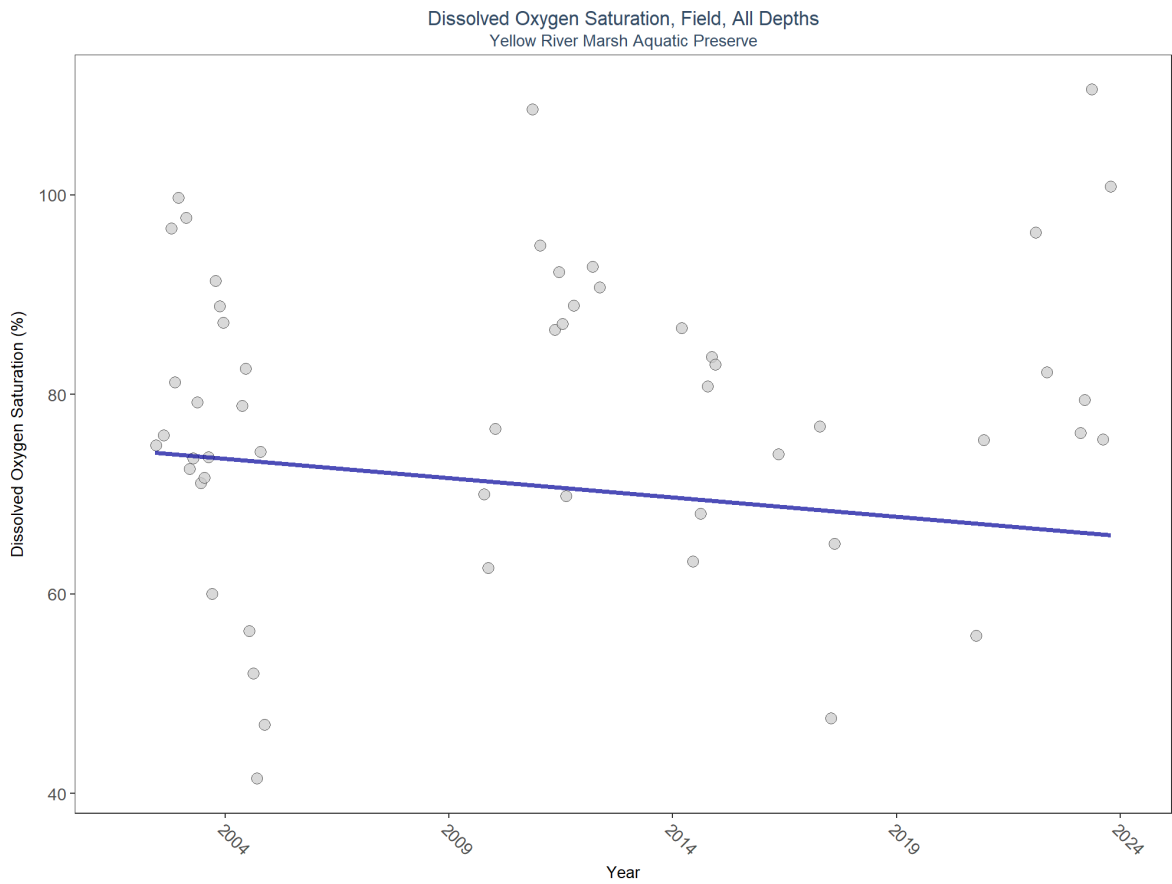


| RelativeDepth | N_Data | N_Years | Median | Independent | tau     | p      | SennSlope    | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|--------------|---------------|------------|-------------|-------|
| All           | 892    | 30      | 7.4    | TRUE        | -0.0035 | 0.5074 | -0.008333333 | 7.736143      | 14.4044    | 0.2114      | 0     |

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

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

# Dissolved Oxygen Saturation

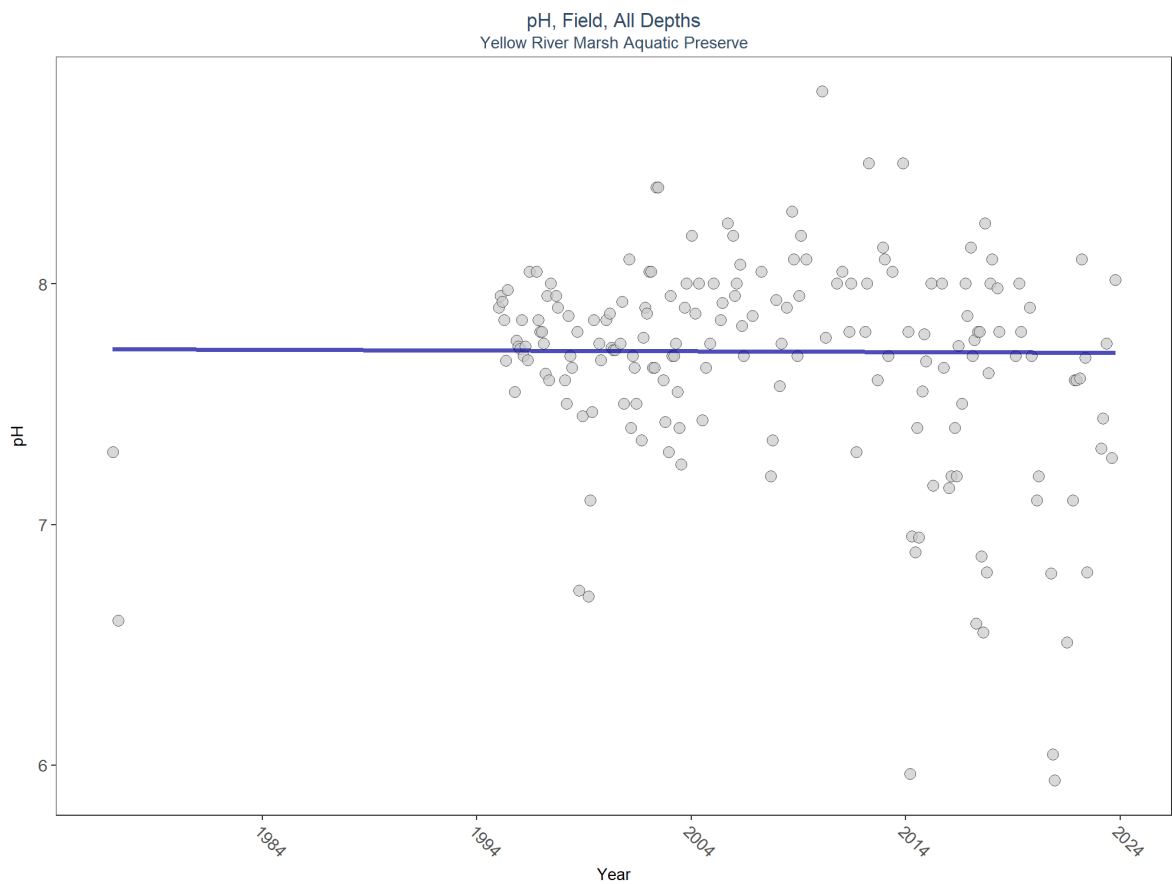


| RelativeDepth | N_Data | N_Years | Median | Independent | tau     | p      | SennSlope  | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|------------|---------------|------------|-------------|-------|
| All           | 114    | 13      | 78.12  | TRUE        | -0.1145 | 0.5112 | -0.3872727 | 74.31369      | 11.7743    | 0.3808      | 0     |

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

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

pH

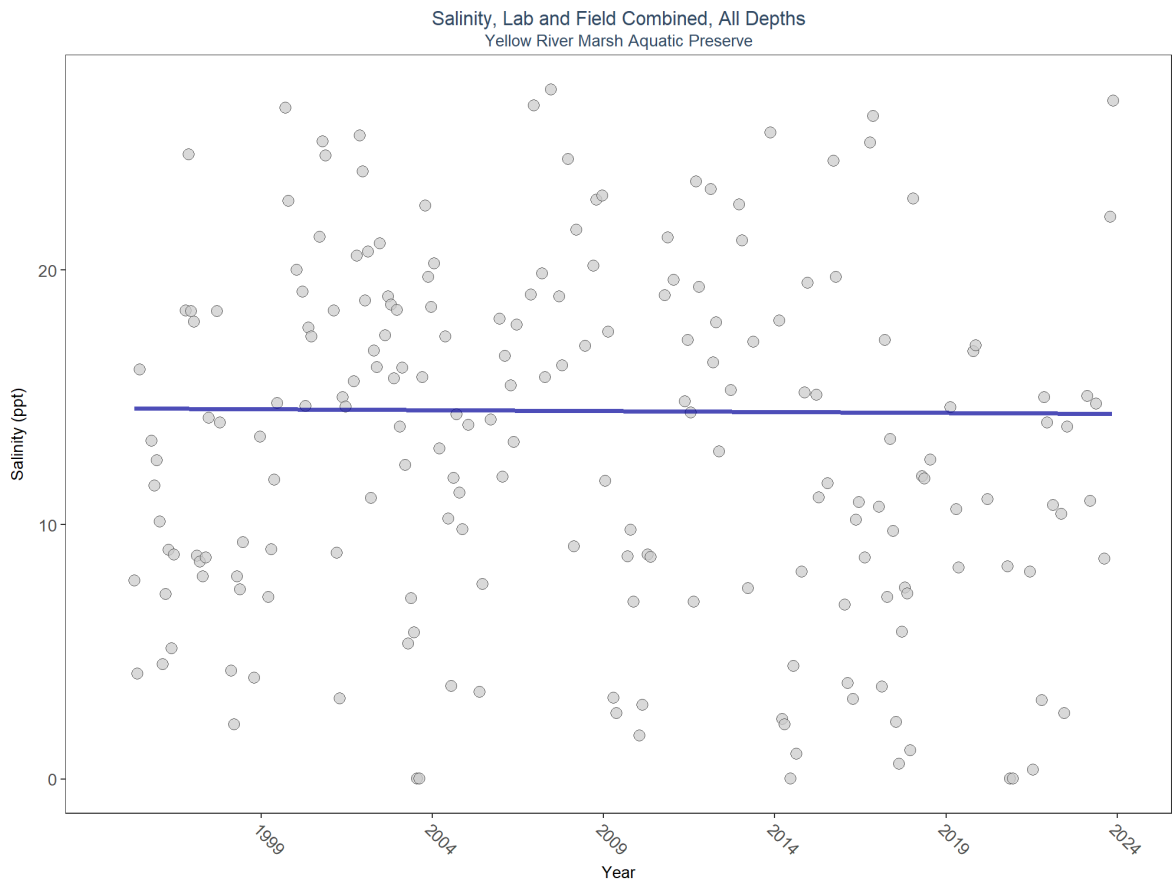


| RelativeDepth | N_Data | N_Years | Median | Independent | tau    | p      | SennSlope     | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|---------------|---------------|------------|-------------|-------|
| All           | 567    | 30      | 7.7    | TRUE        | -0.037 | 0.7221 | -0.0002777778 | 7.728002      | 18.3625    | 0.0735      | 0     |

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

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

Salinity

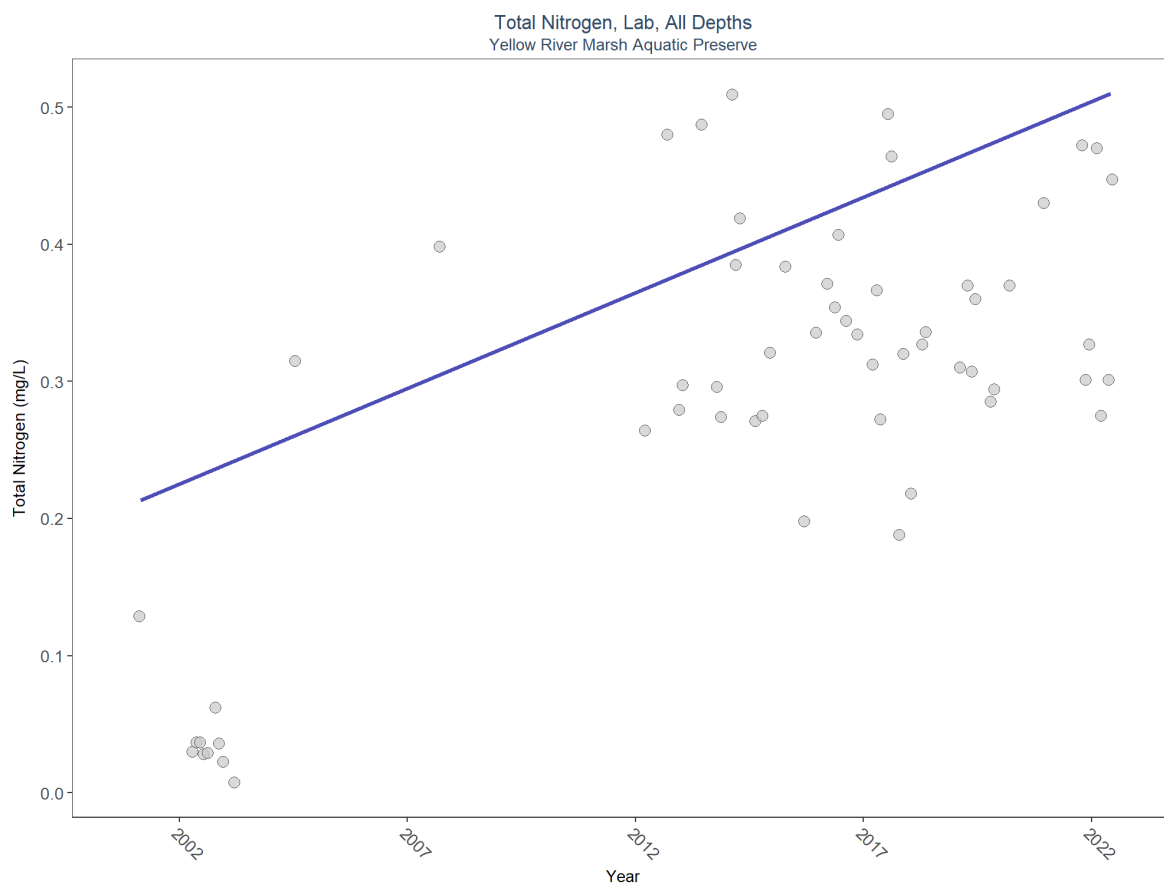


| RelativeDepth | N_Data | N_Years | Median | Independent | tau     | p      | SennSlope    | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|--------------|---------------|------------|-------------|-------|
| All           | 1069   | 29      | 12.2   | TRUE        | -0.0102 | 0.9029 | -0.007142857 | 14.56652      | 6.598      | 0.8306      | 0     |

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

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

## Total Nitrogen



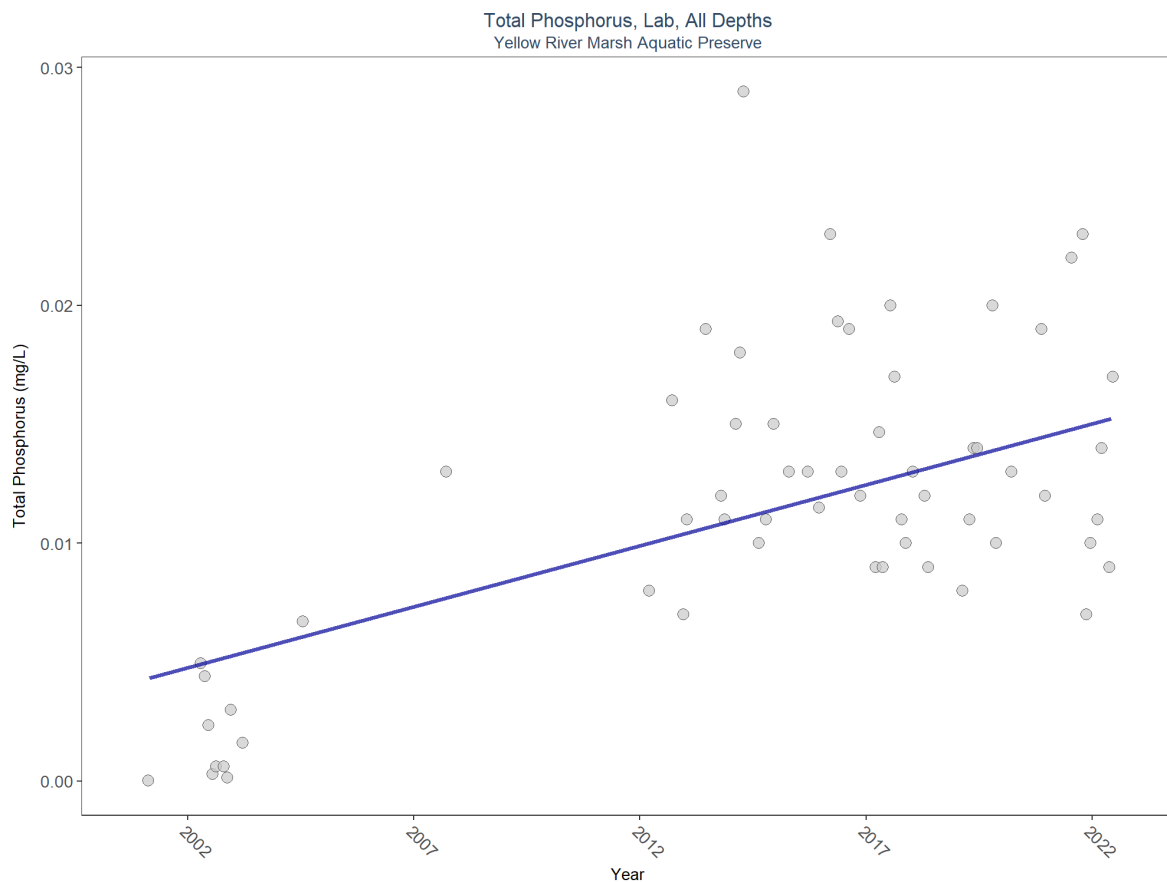
| RelativeDepth | N_Data | N_Years | Median | Independent | tau    | p      | SennSlope  | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|------------|---------------|------------|-------------|-------|
| All           | 89     | 16      | 0.297  | TRUE        | 0.2851 | 0.0172 | 0.01395263 | 0.2113338     | 10.3741    | 0.4971      | 1     |

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

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



## Total Phosphorus

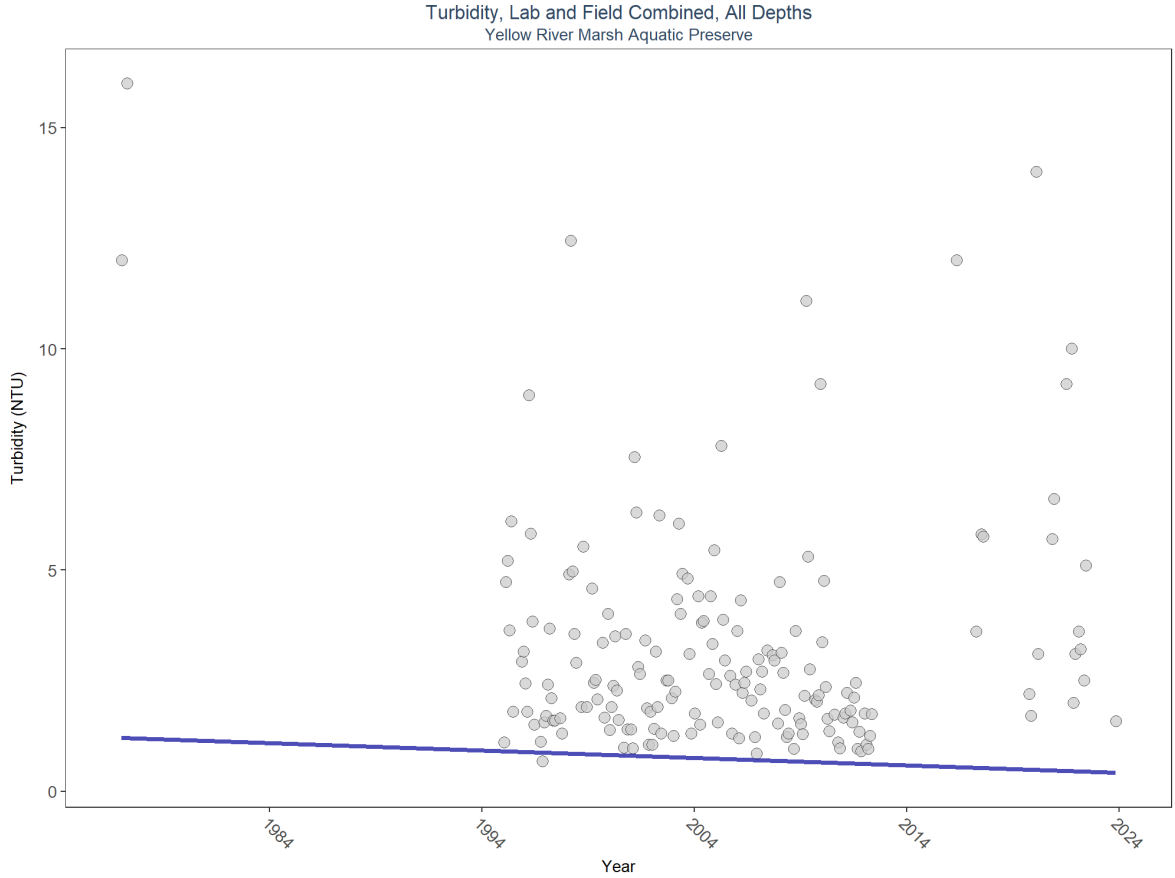


| RelativeDepth | N_Data | N_Years | Median | Independent | tau    | p      | SennSlope    | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|--------|--------|--------------|---------------|------------|-------------|-------|
| All           | 82     | 16      | 0.011  | TRUE        | 0.3544 | 0.0085 | 0.0005117778 | 0.00426348    | 6.3437     | 0.8495      | 1     |

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

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

Turbidity

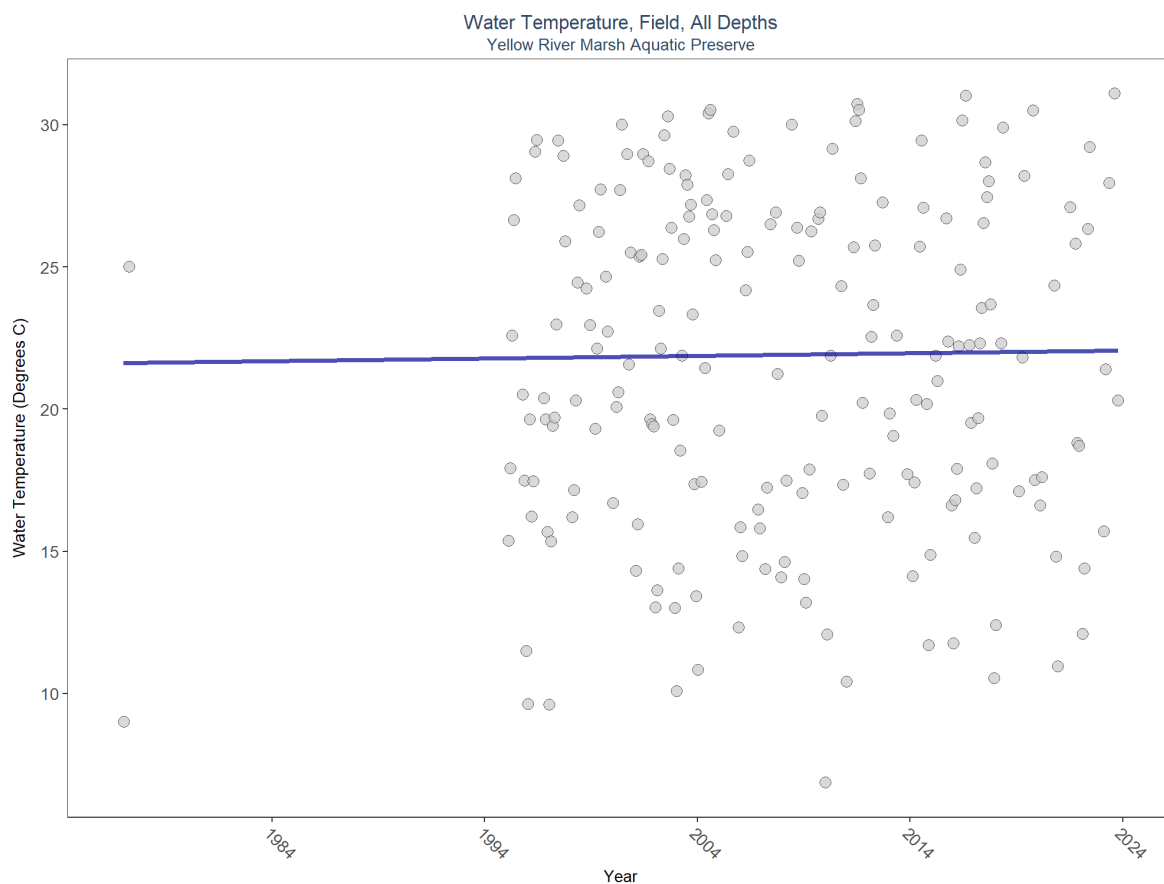


| RelativeDepth | N_Data | N_Years | Median | Independent | tau     | p      | SennSlope   | SennIntercept | ChiSquared | pChiSquared | Trend |
|---------------|--------|---------|--------|-------------|---------|--------|-------------|---------------|------------|-------------|-------|
| All           | 576    | 26      | 2.4    | TRUE        | -0.0061 | 0.3630 | -0.01690476 | 1.207279      | 23.1814    | 0.0167      | 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           | 1063   | 30      | 22     | TRUE        | 0.0175 | 0.6385 | 0.009069549 | 21.62783      | 9.016      | 0.6204      | 0     |

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

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