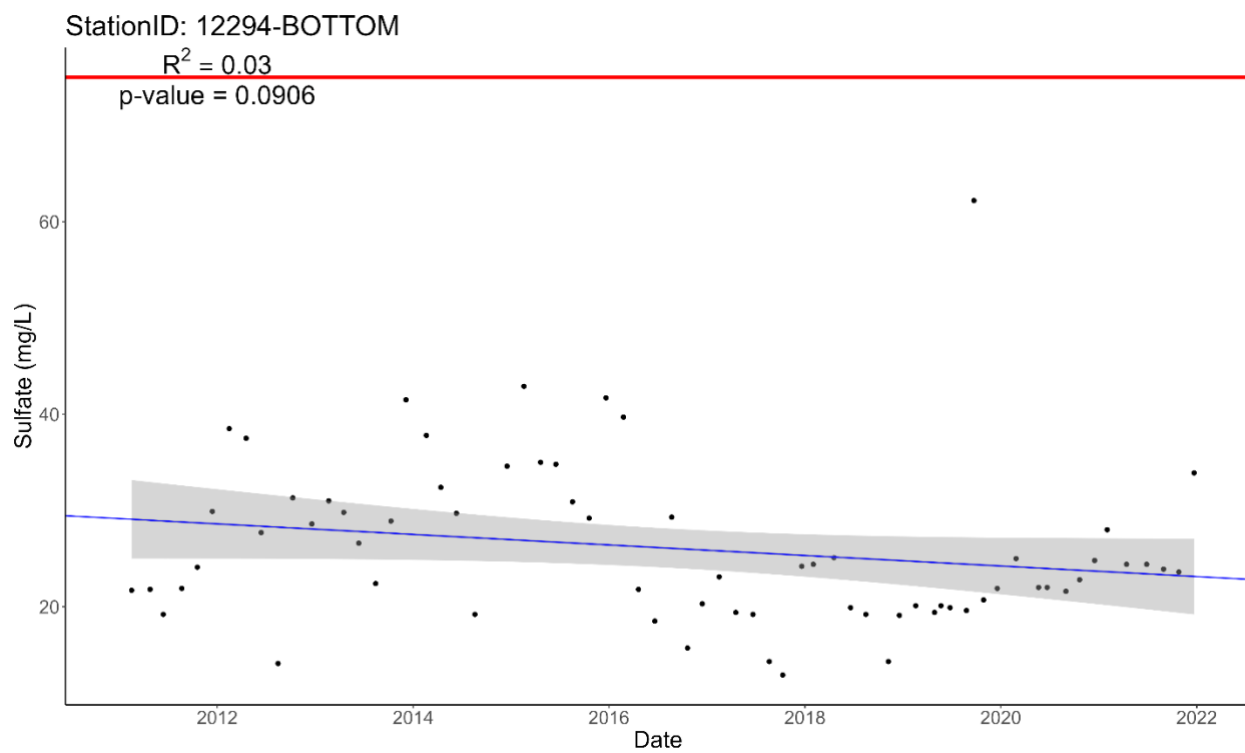
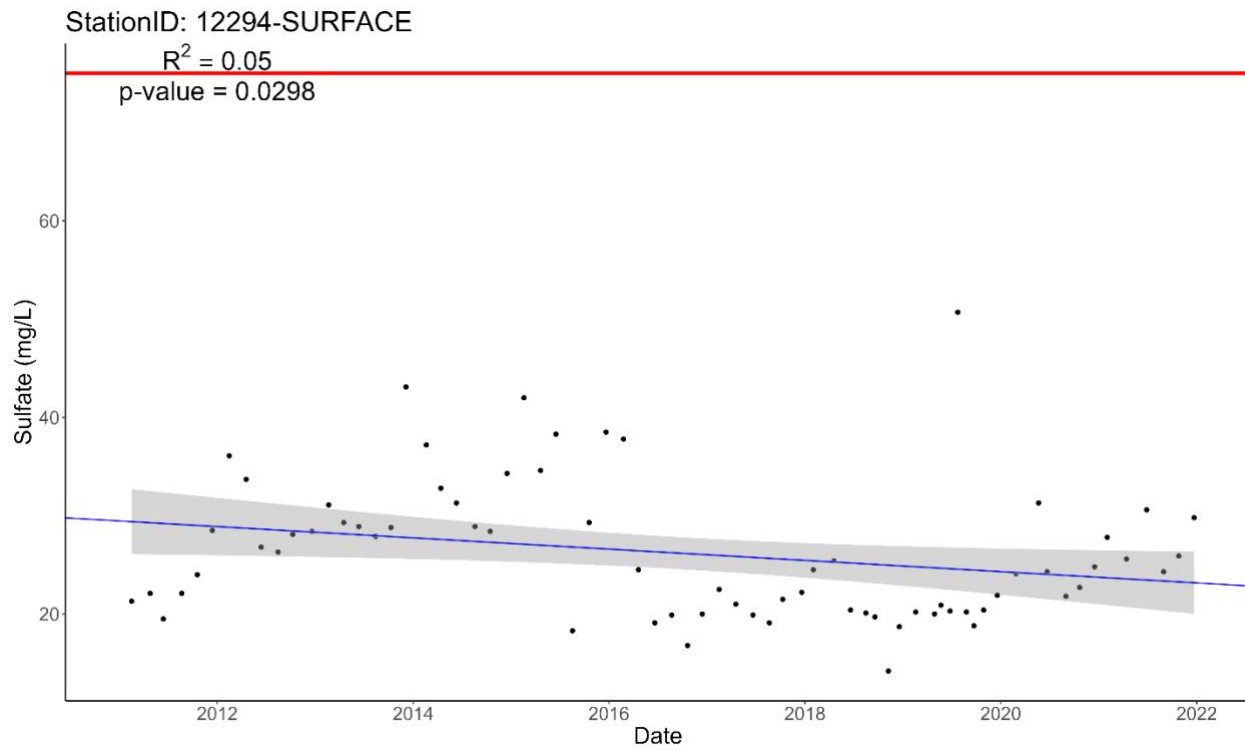


Appendix X12

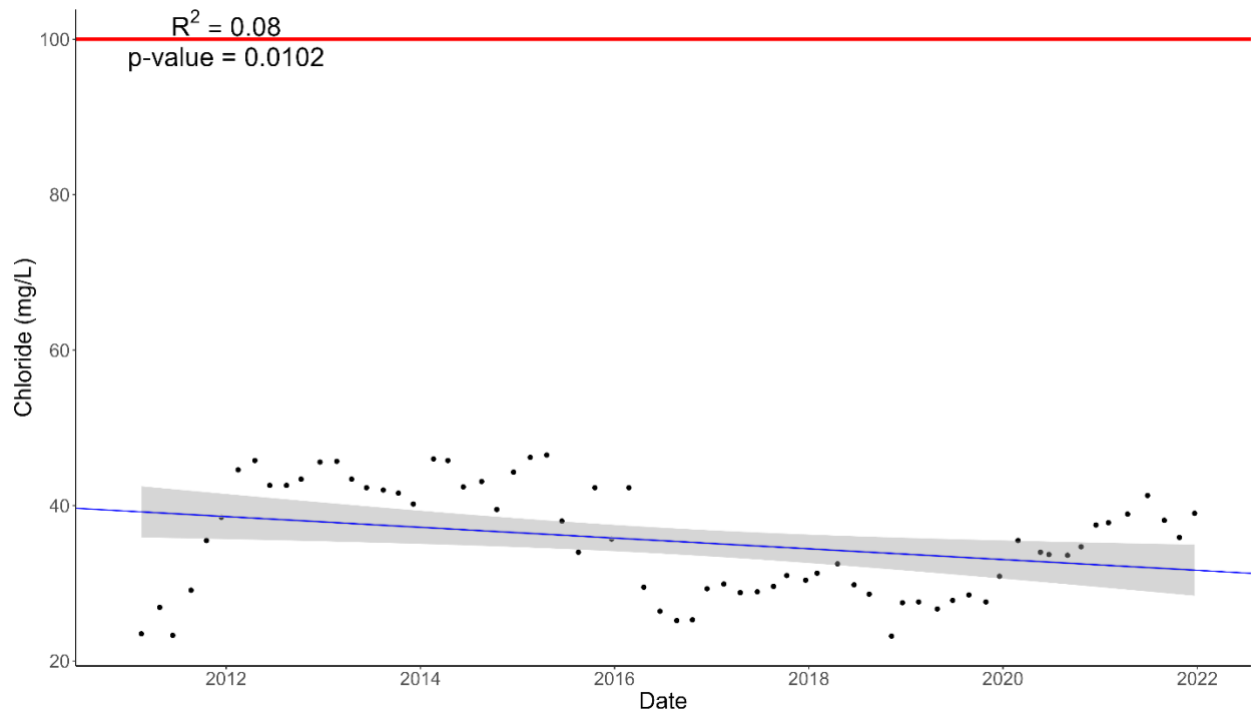
Significant temporal trend graphs for all stations in the Austin basin by segment.

1403 – Lake Austin

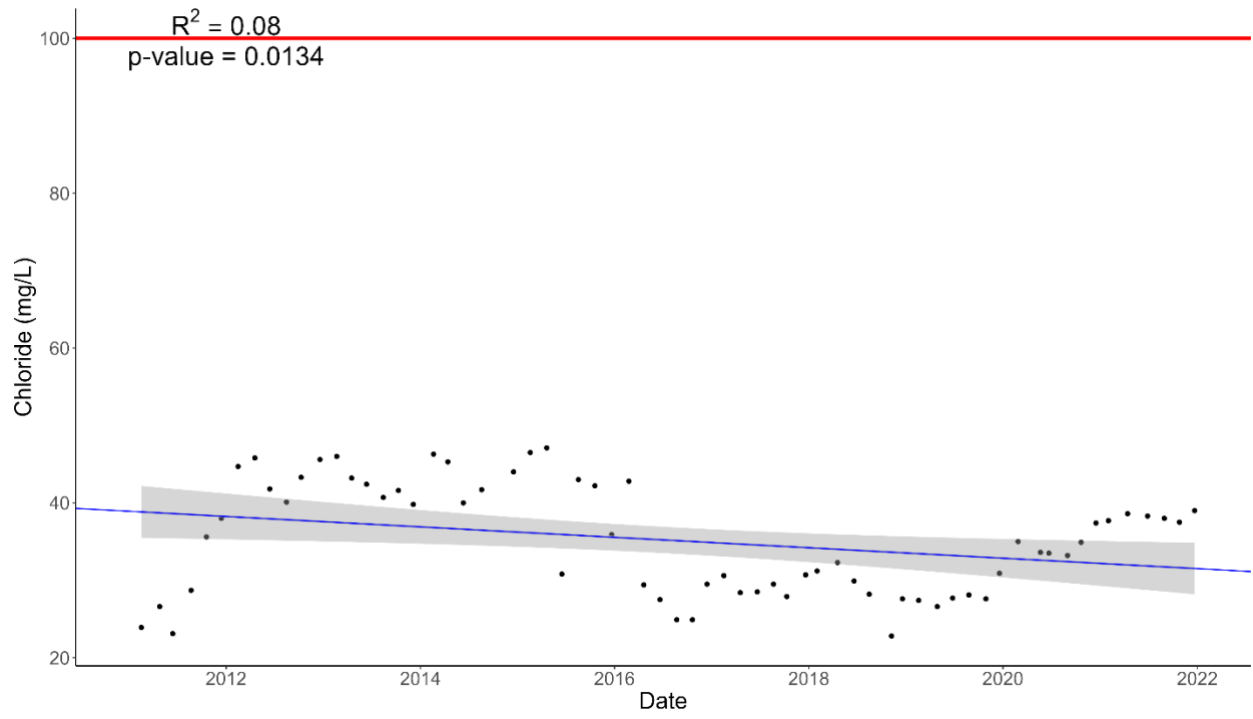
Assessment Unit: 1403_01



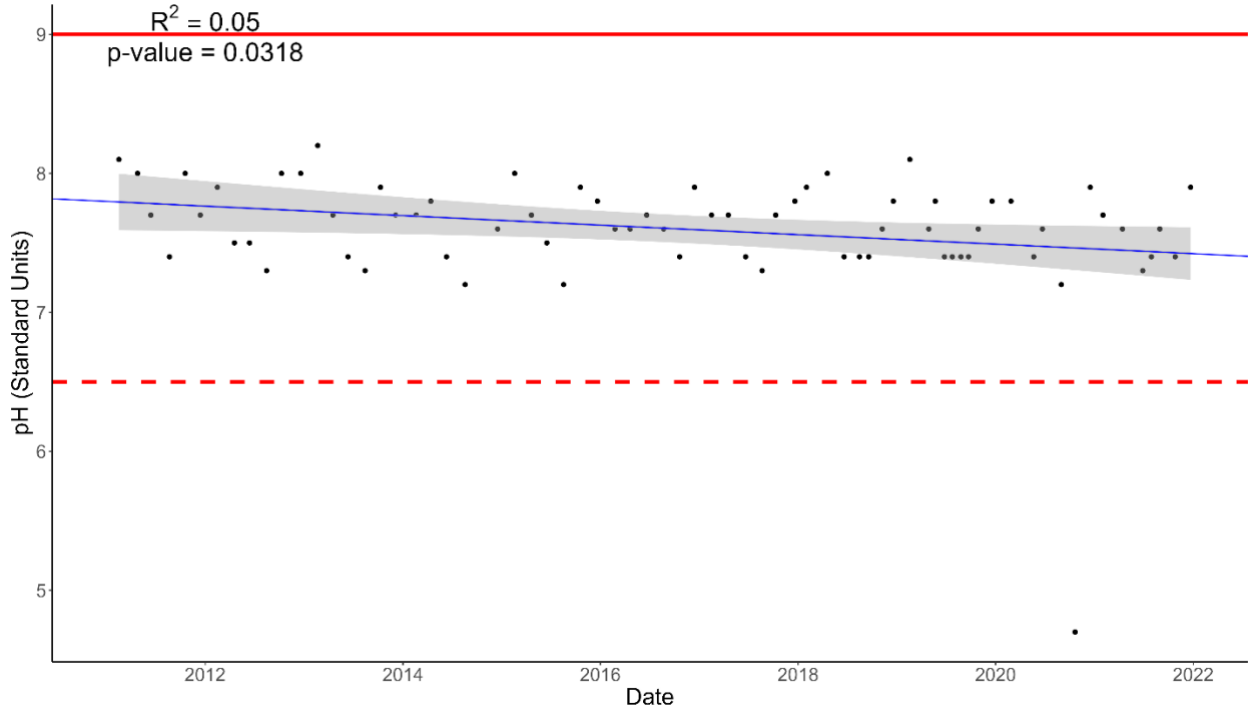
StationID: 12294-SURFACE



StationID: 12294-BOTTOM

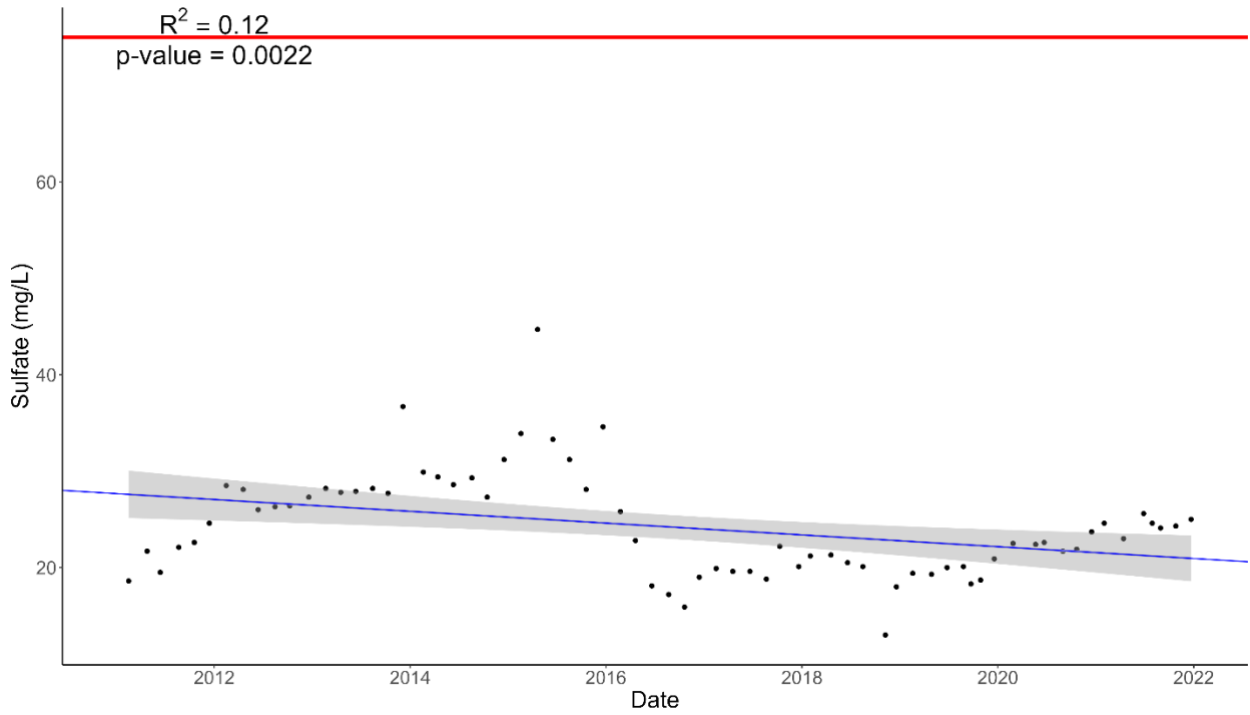


StationID: 12294-BOTTOM

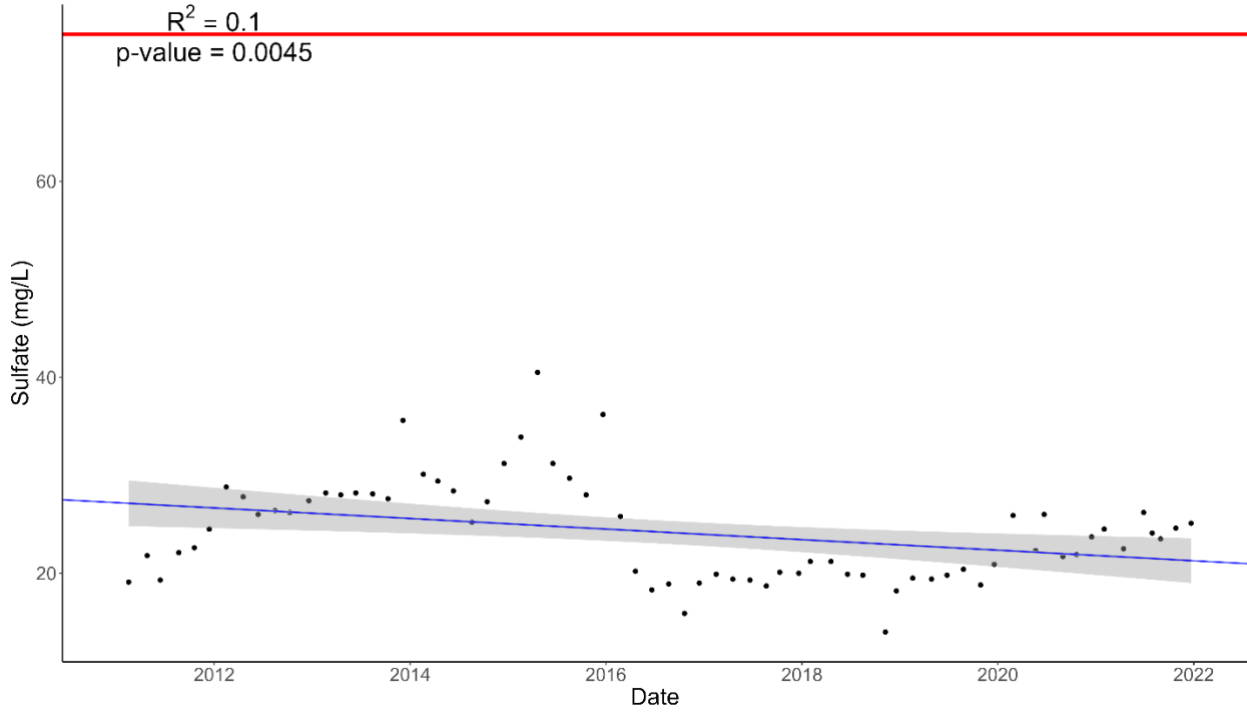


Assessment Unit: 1403_02

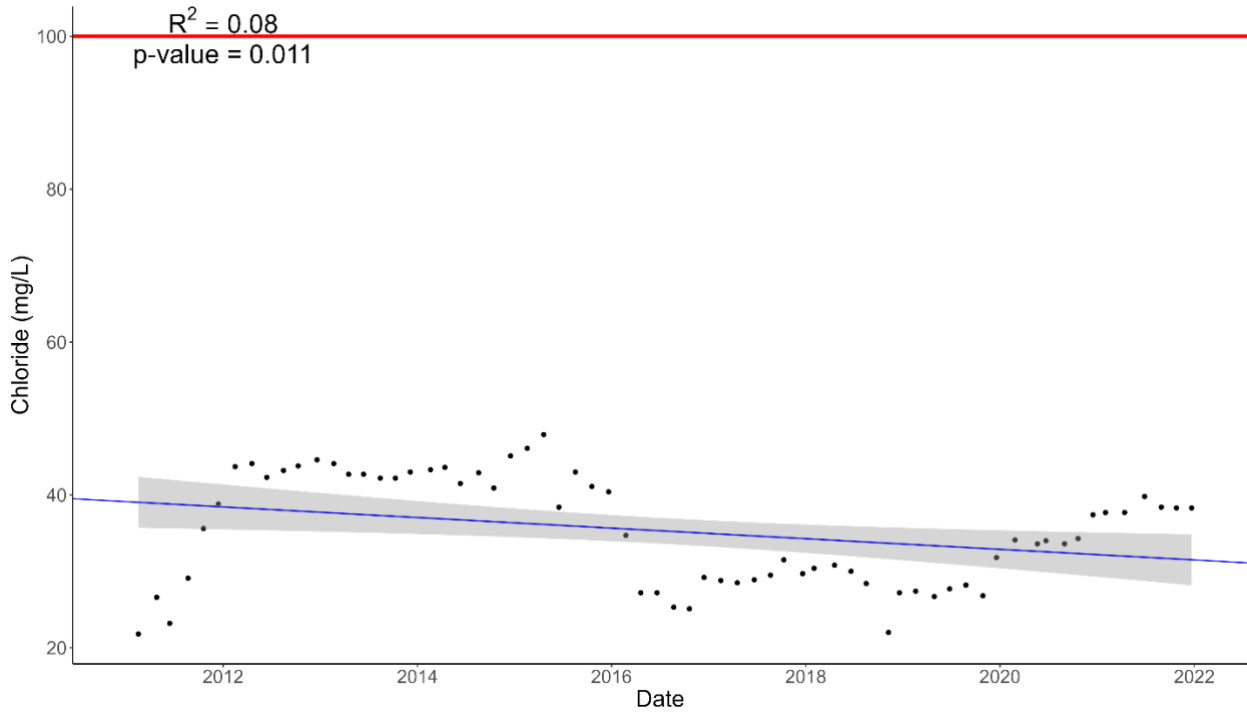
StationID: 12297-SURFACE



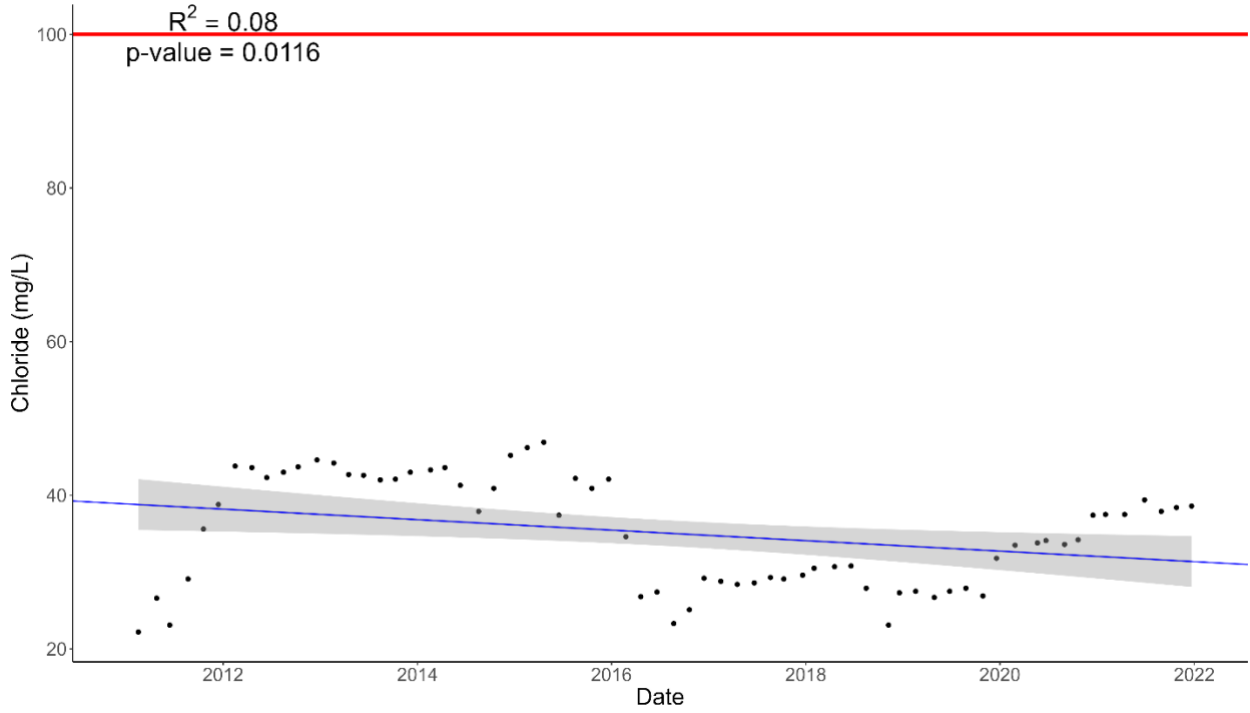
StationID: 12297-BOTTOM



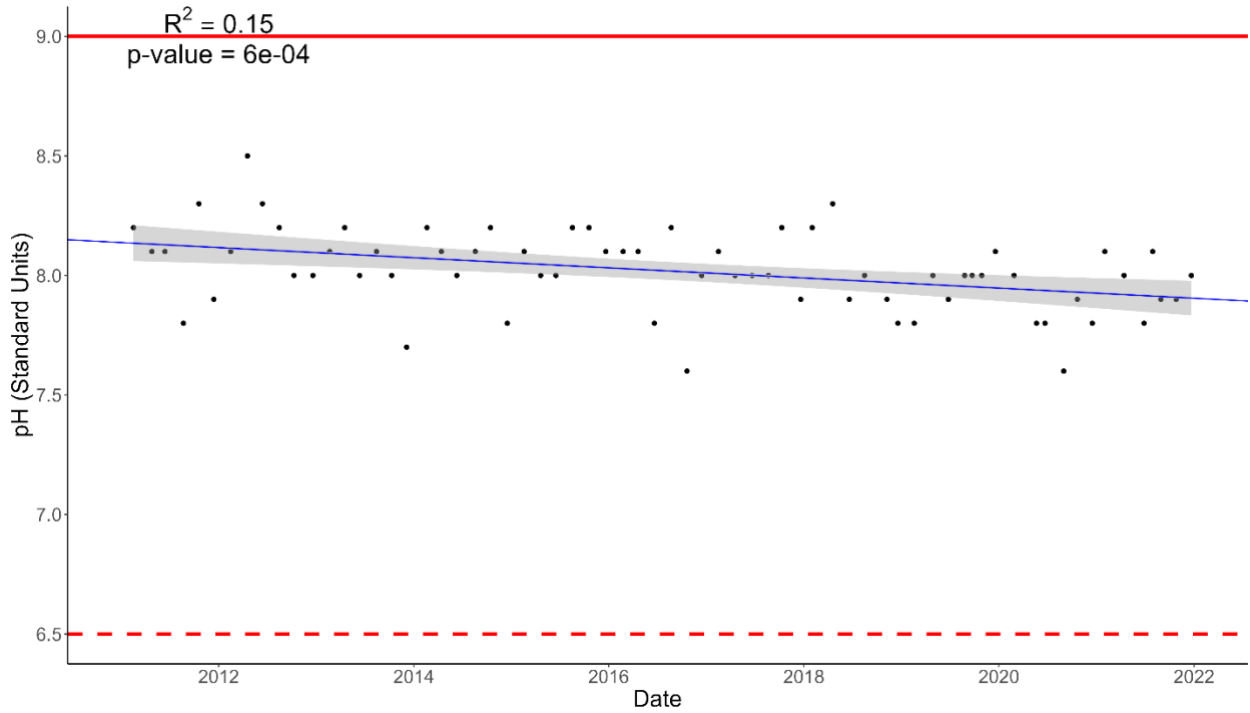
StationID: 12297-SURFACE



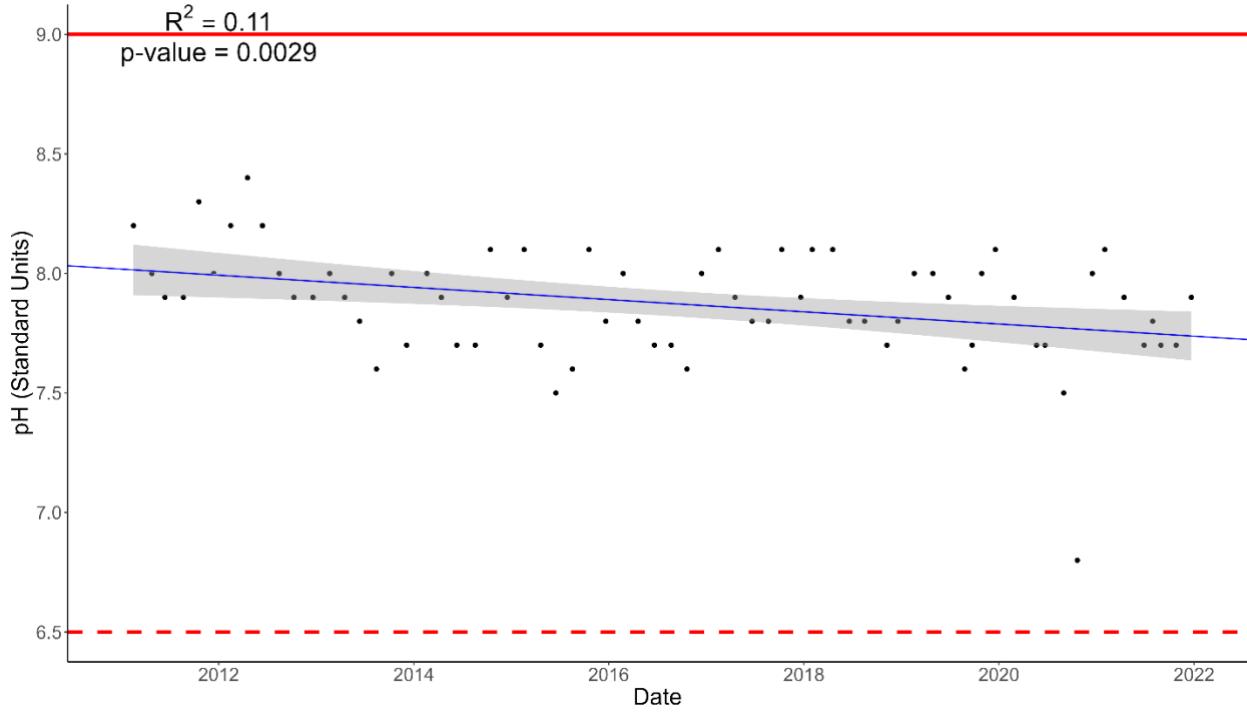
StationID: 12297-BOTTOM



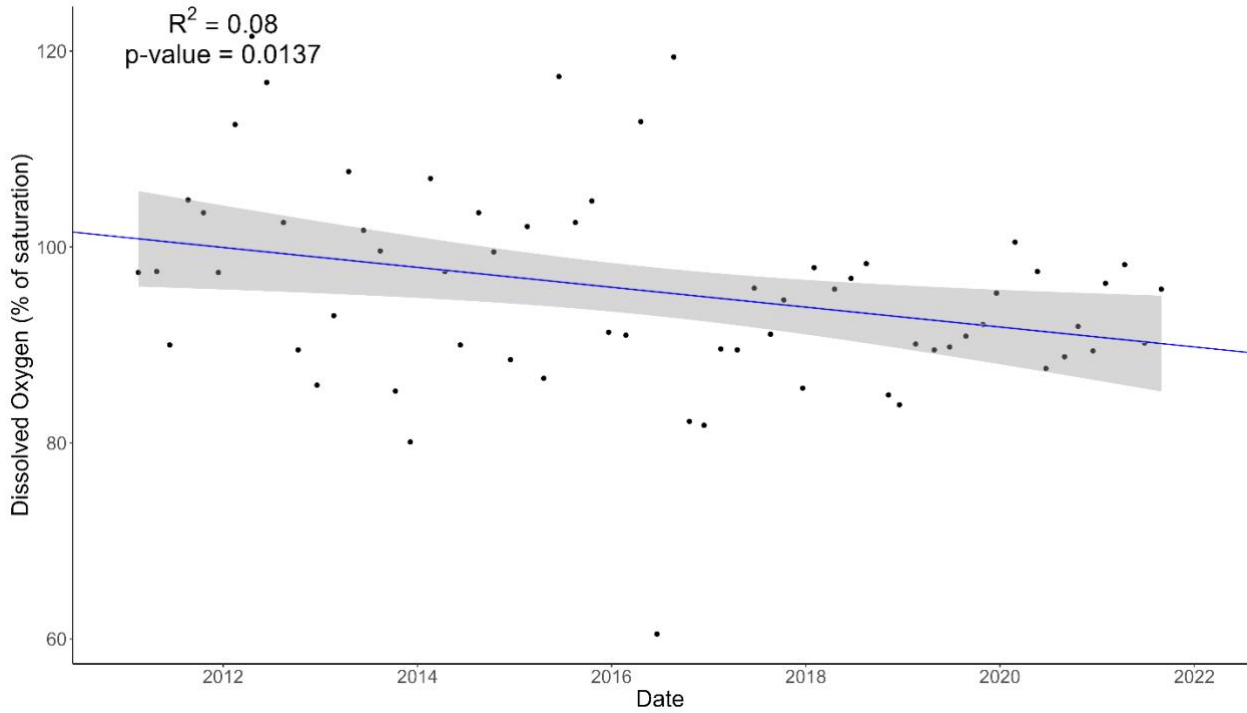
StationID: 12297-SURFACE



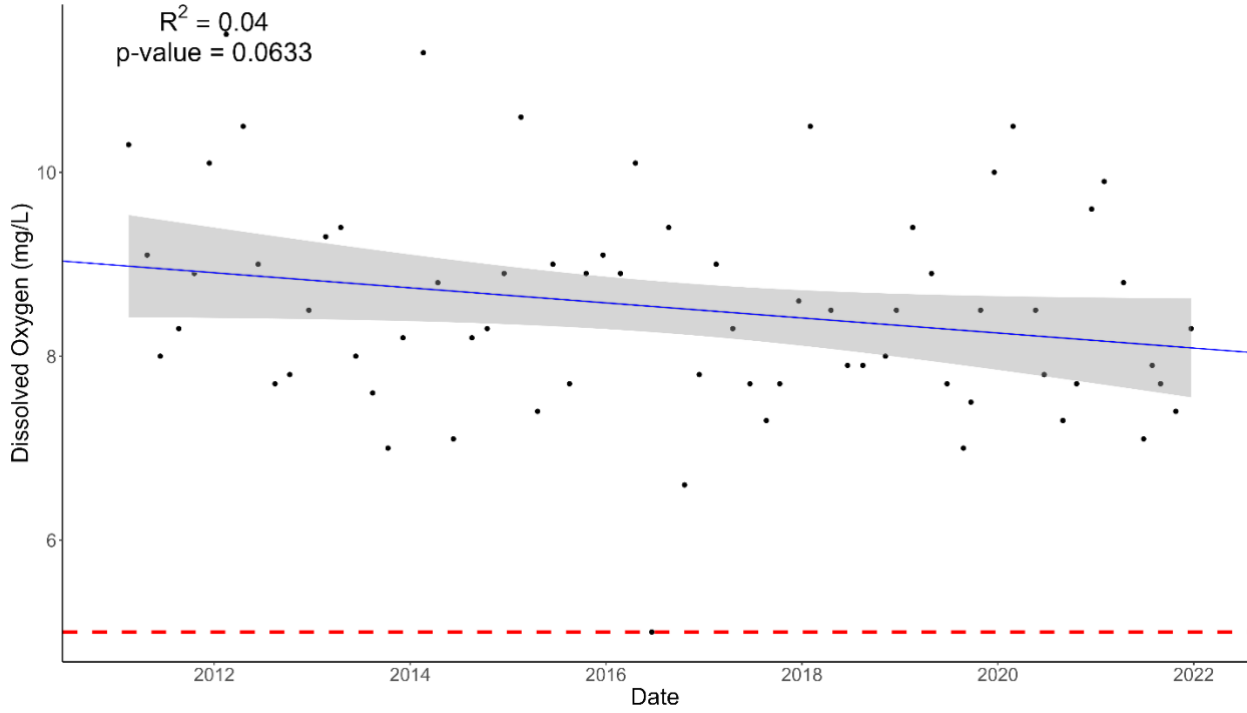
StationID: 12297-BOTTOM



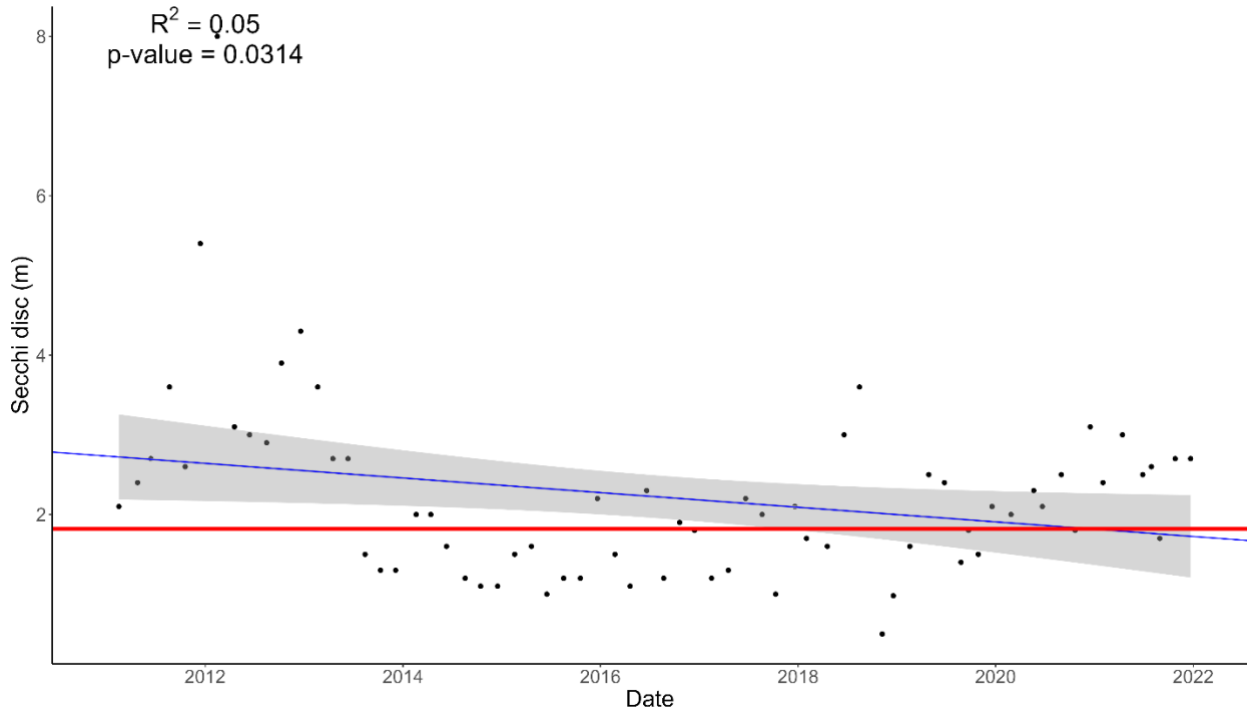
StationID: 12297-SURFACE



StationID: 12297-SURFACE



StationID: 12297-SURFACE



Assessment Unit: 1403_03

No significant trends.

1403A – Bull Creek

Assessment Unit: 1403A_01

No significant trends.

Assessment Unit: 1403A_03

No significant trends.

Assessment Unit: 1403A_04

No significant trends.

Assessment Unit: 1403A_05

No significant trends.

1403H – Bull Creek Tributary 6

Assessment Unit: 1403H_01

No significant trends.

1403I – Bull Creek Tributary 5

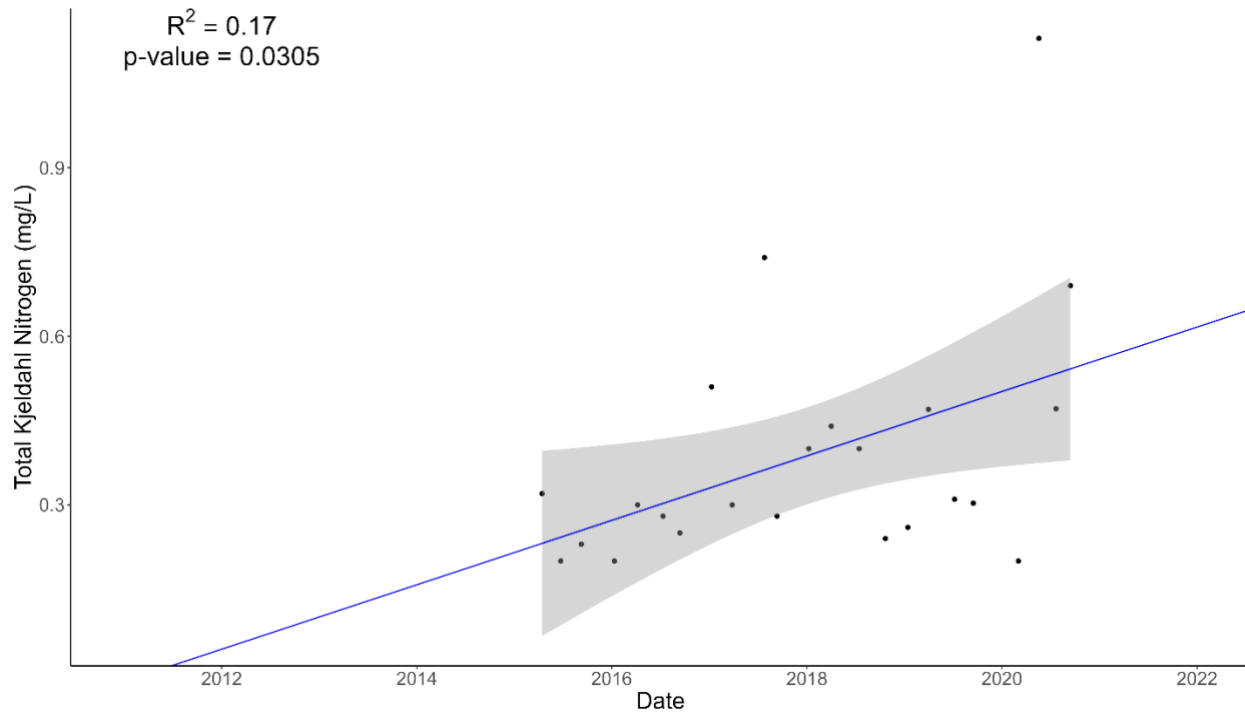
Assessment Unit: 1403I_01

No significant trends.

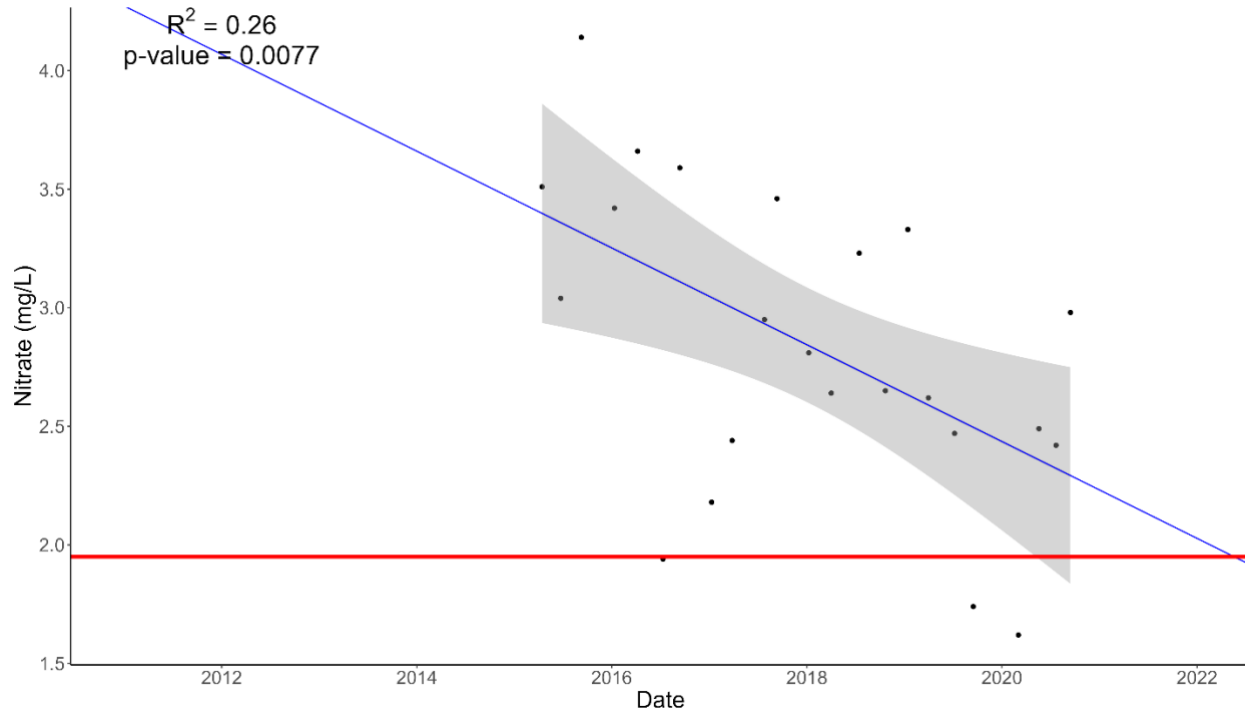
1403J – Spicewood Tributary to Shoal Creek

Assessment Unit: 1403J_01

StationID: 16316-SURFACE

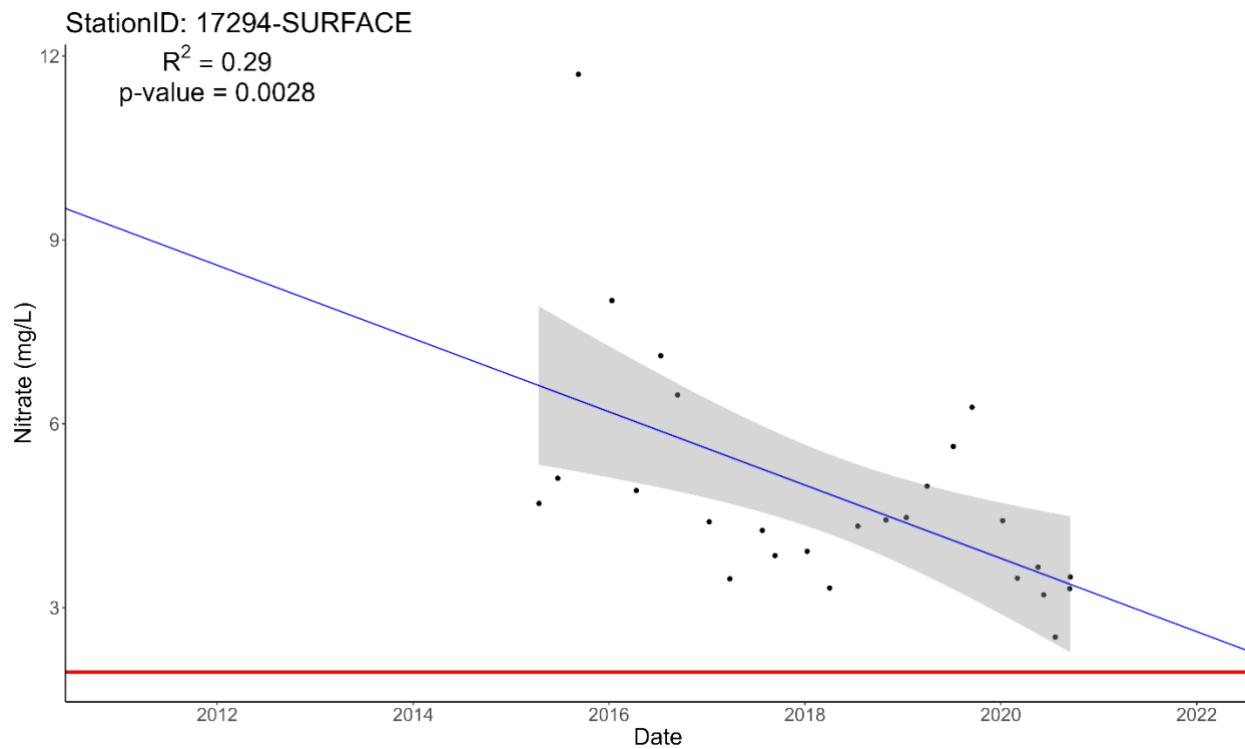


StationID: 16316-SURFACE



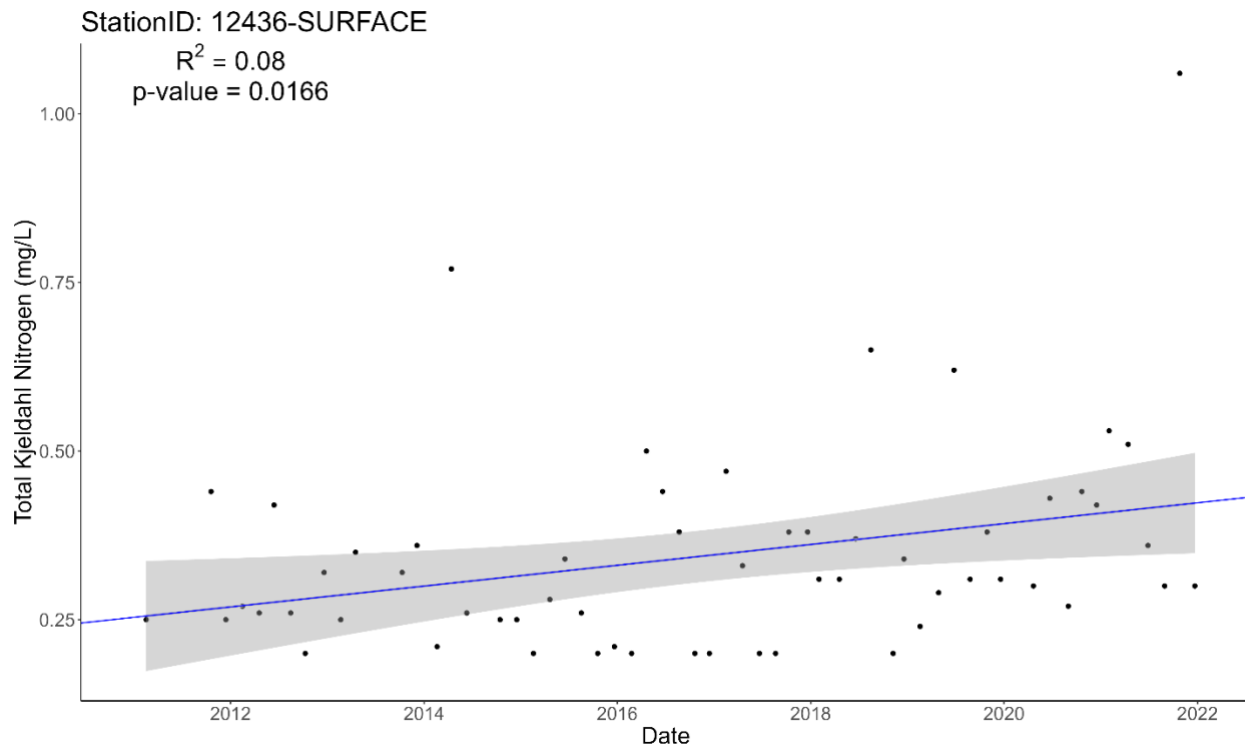
1403K – Taylor Slough South

Assessment Unit: 1403K_01



1427 – Onion Creek

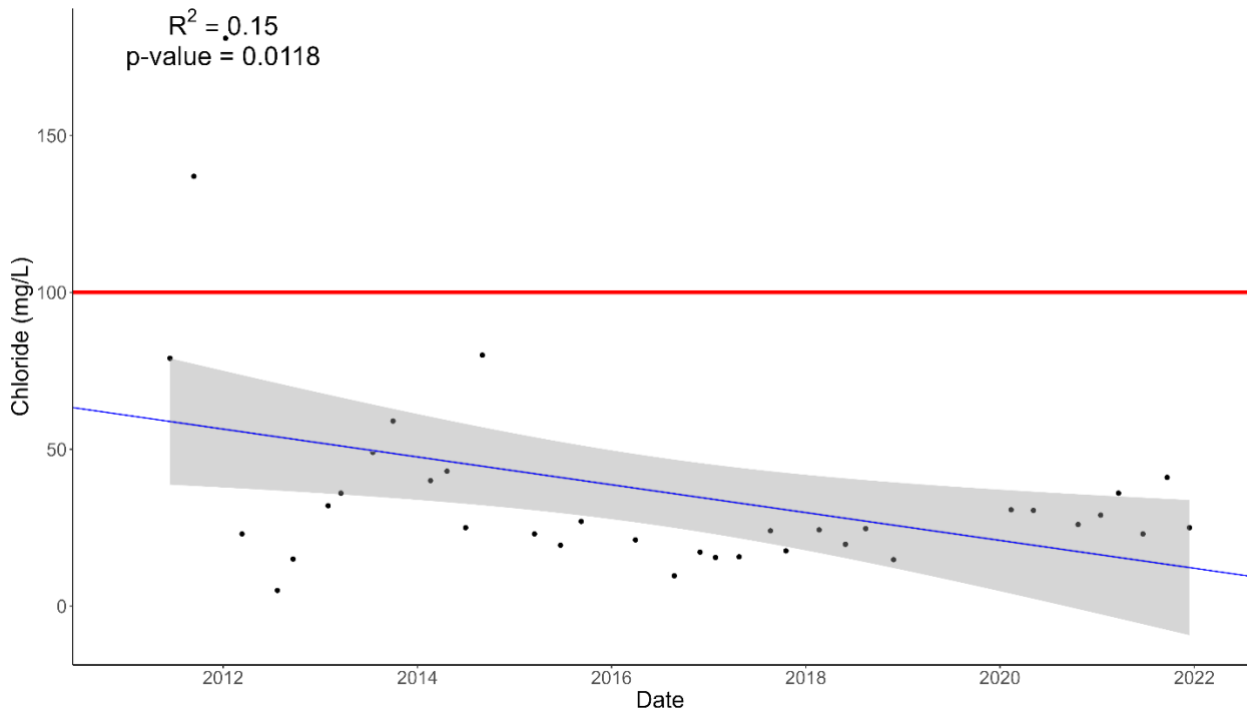
Assessment Unit: 1427_01



Assessment Unit: 1427_02

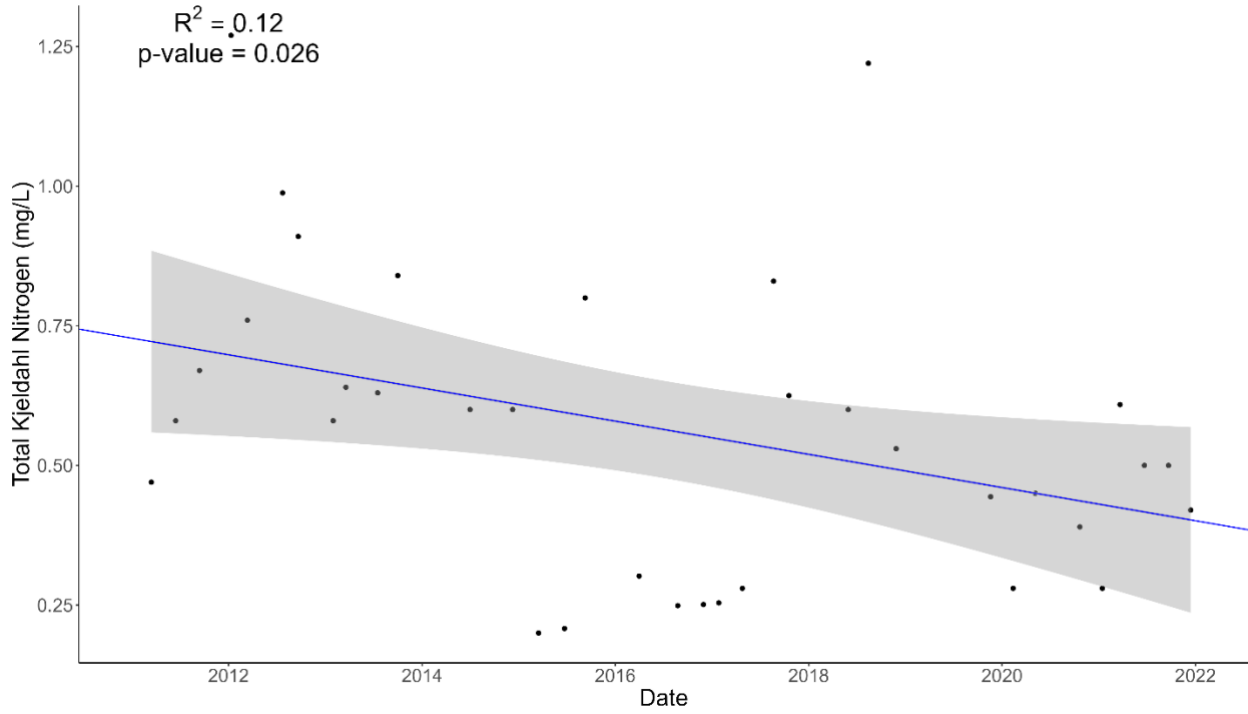
StationID: 12448-SURFACE

$R^2 = 0.15$
p-value = 0.0118

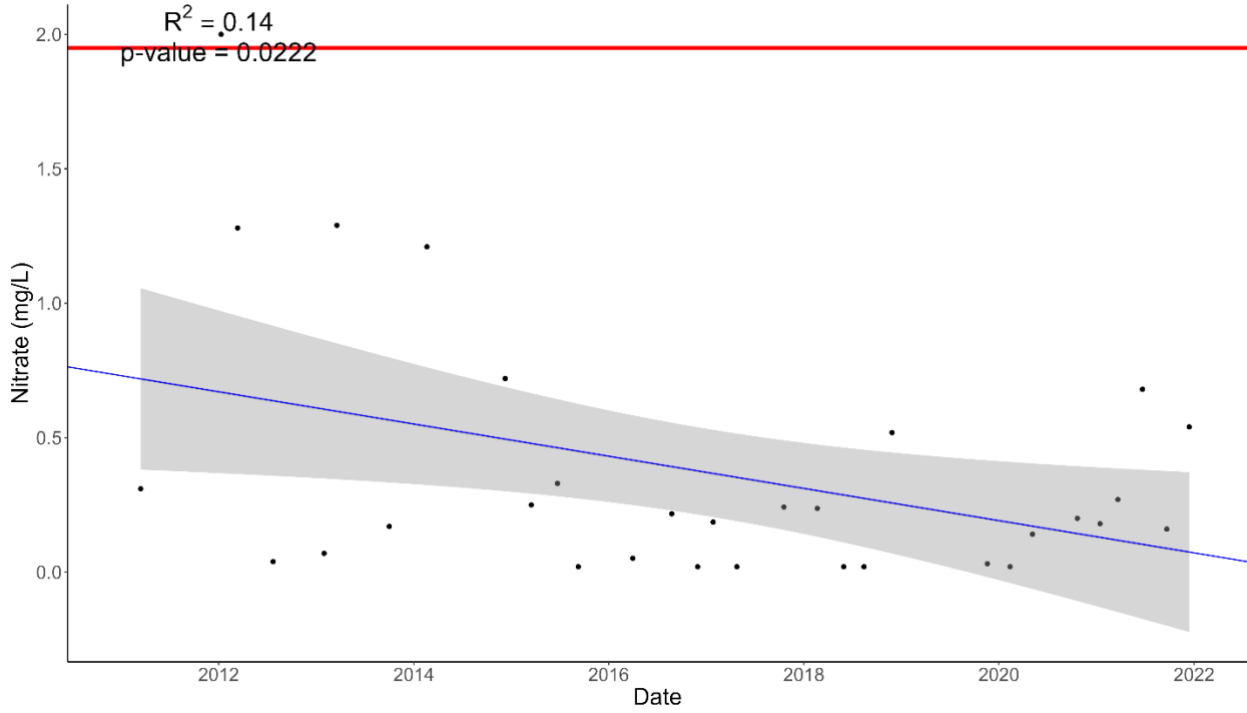


StationID: 12448-SURFACE

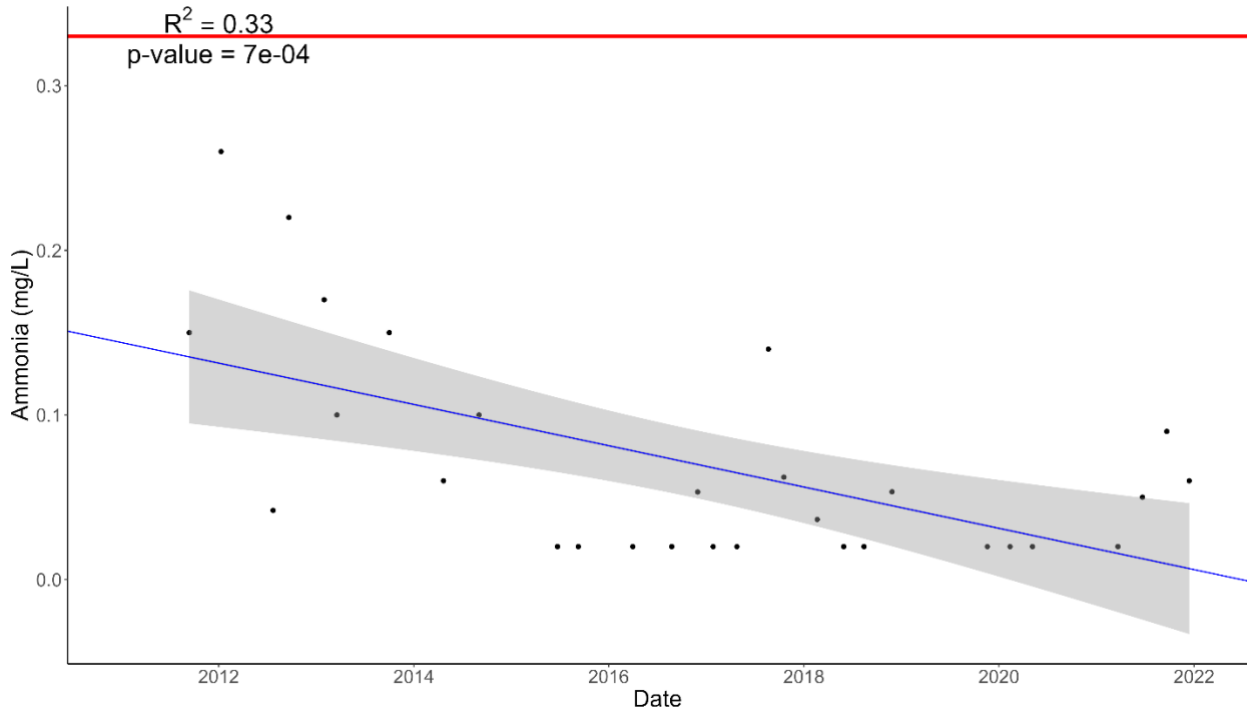
$R^2 = 0.12$
p-value = 0.026



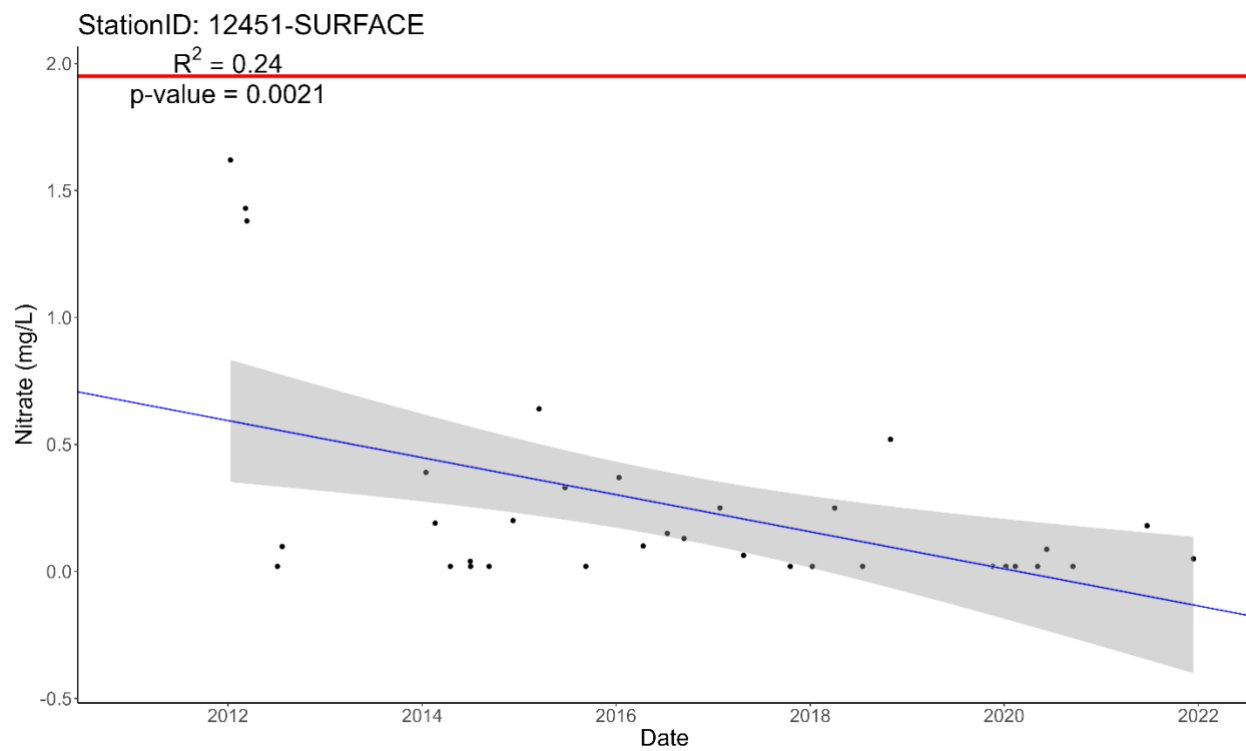
StationID: 12448-SURFACE



StationID: 12448-SURFACE



Assessment Unit: 1427_03

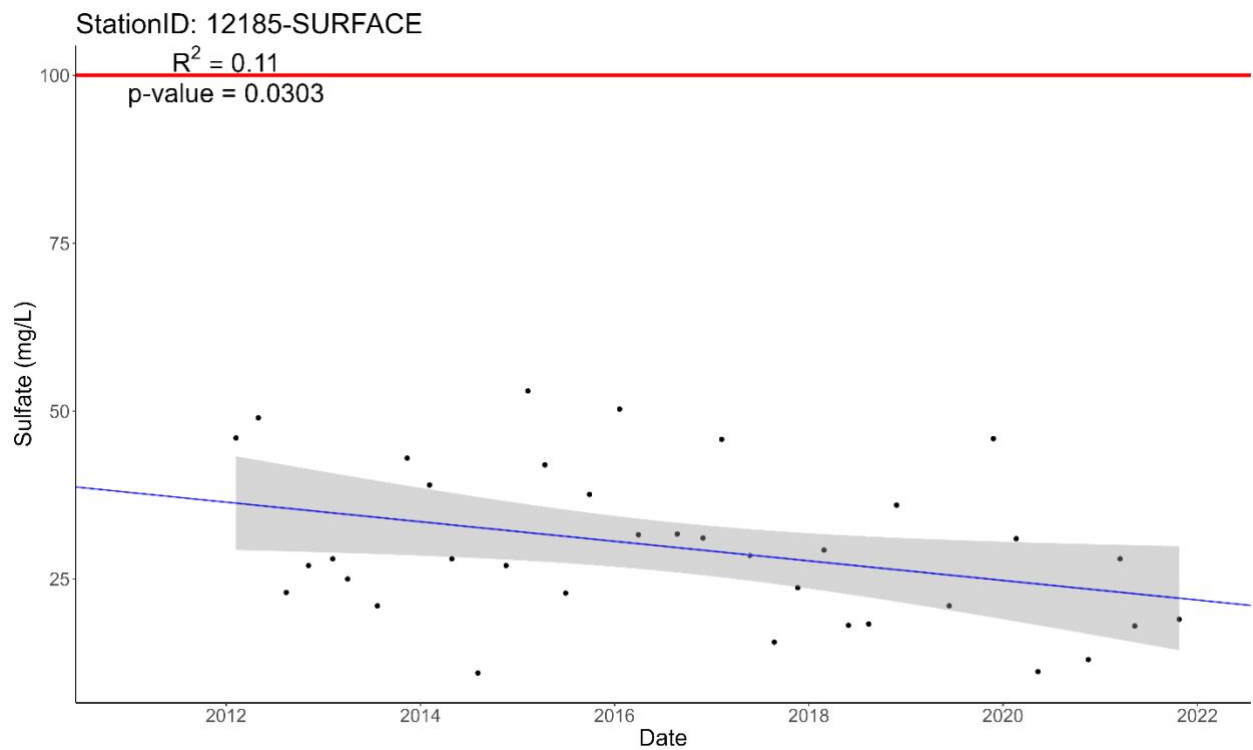
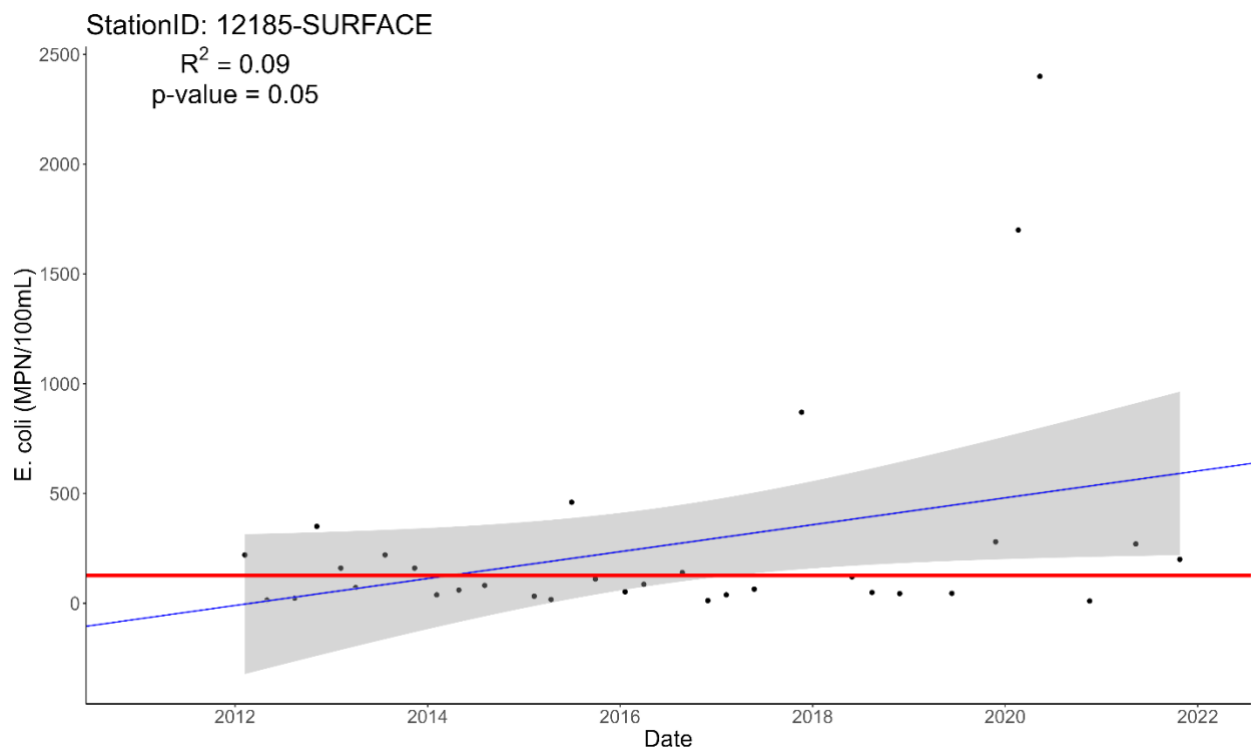


Assessment Unit: 1427_04

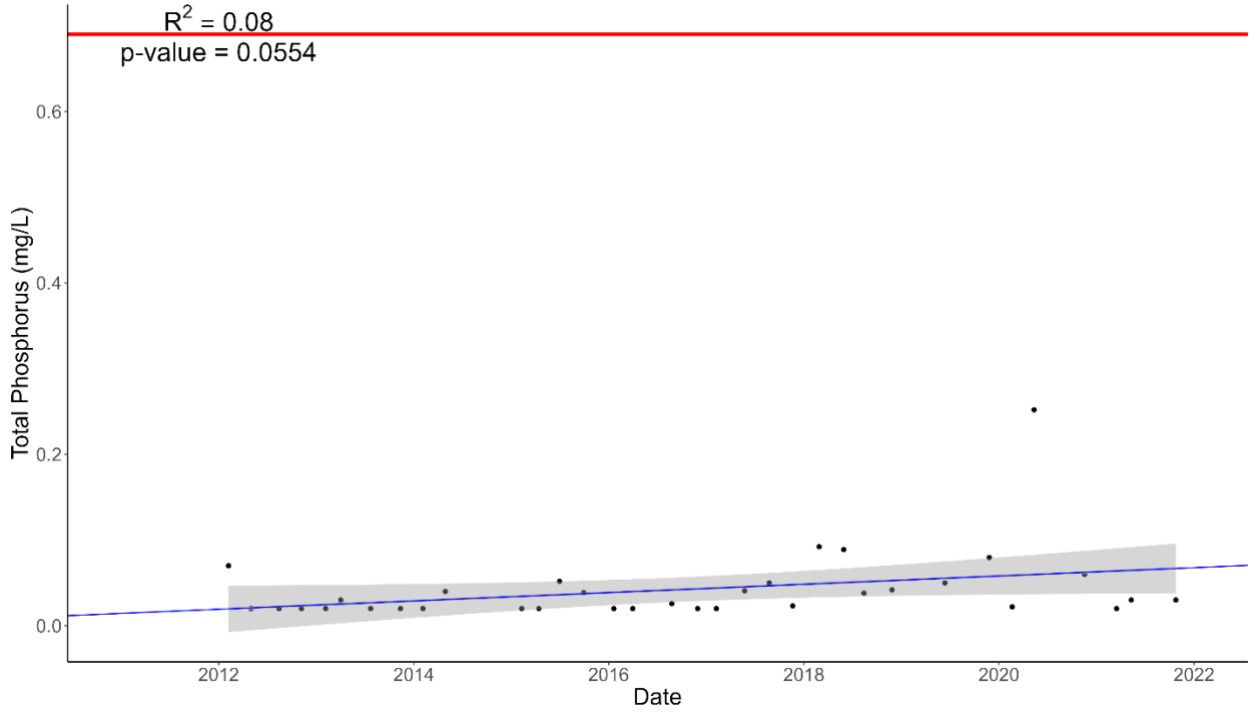
No significant trends.

14027A – Slaughter Creek

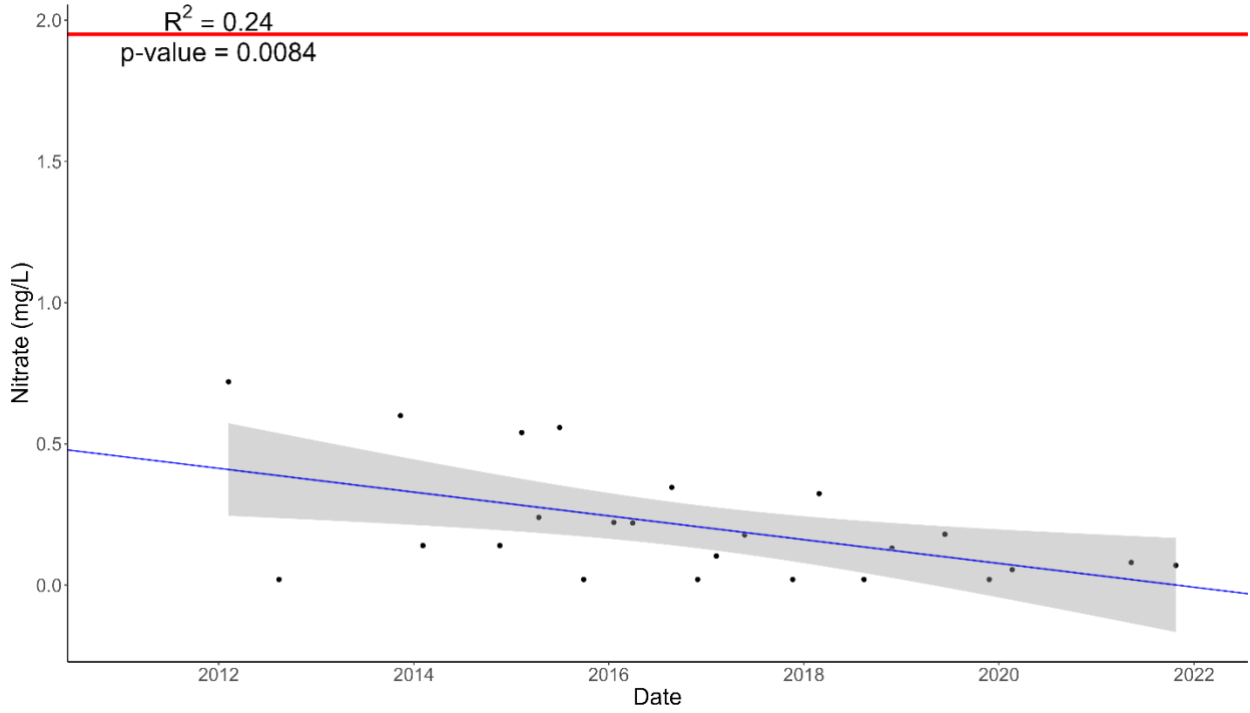
Assessment Unit: 1427A_01



StationID: 12185-SURFACE

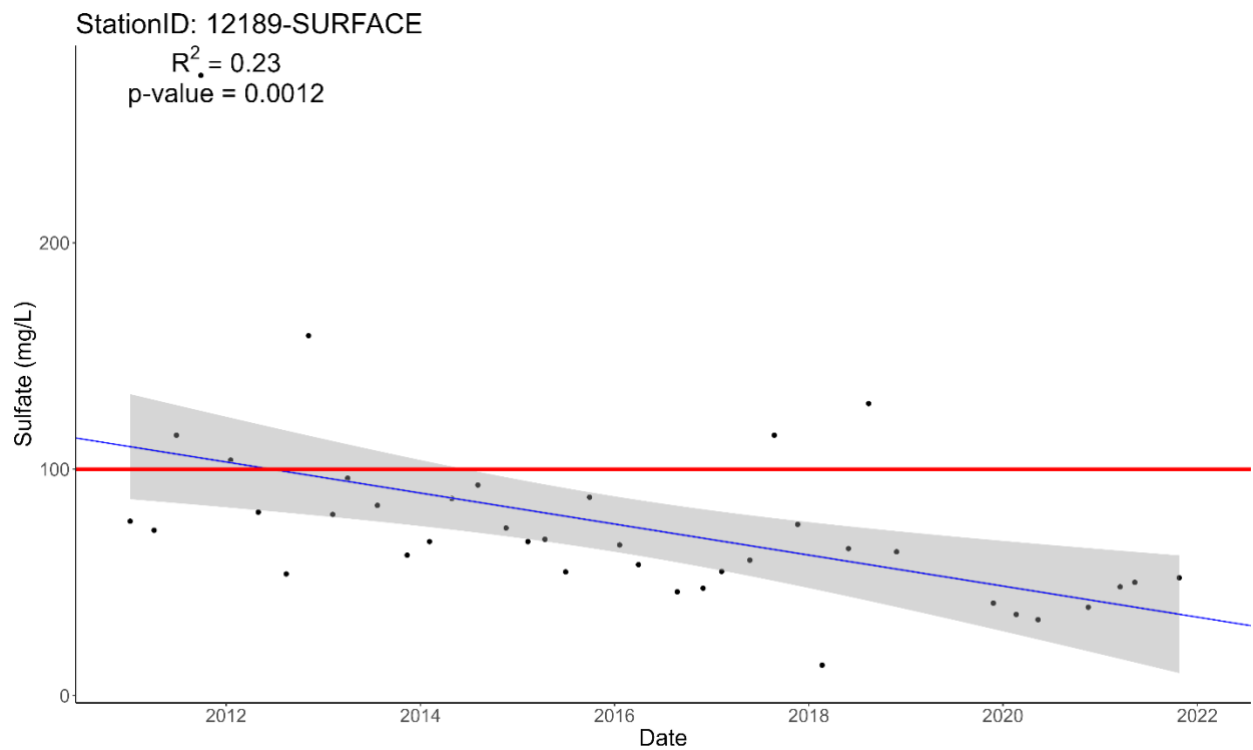
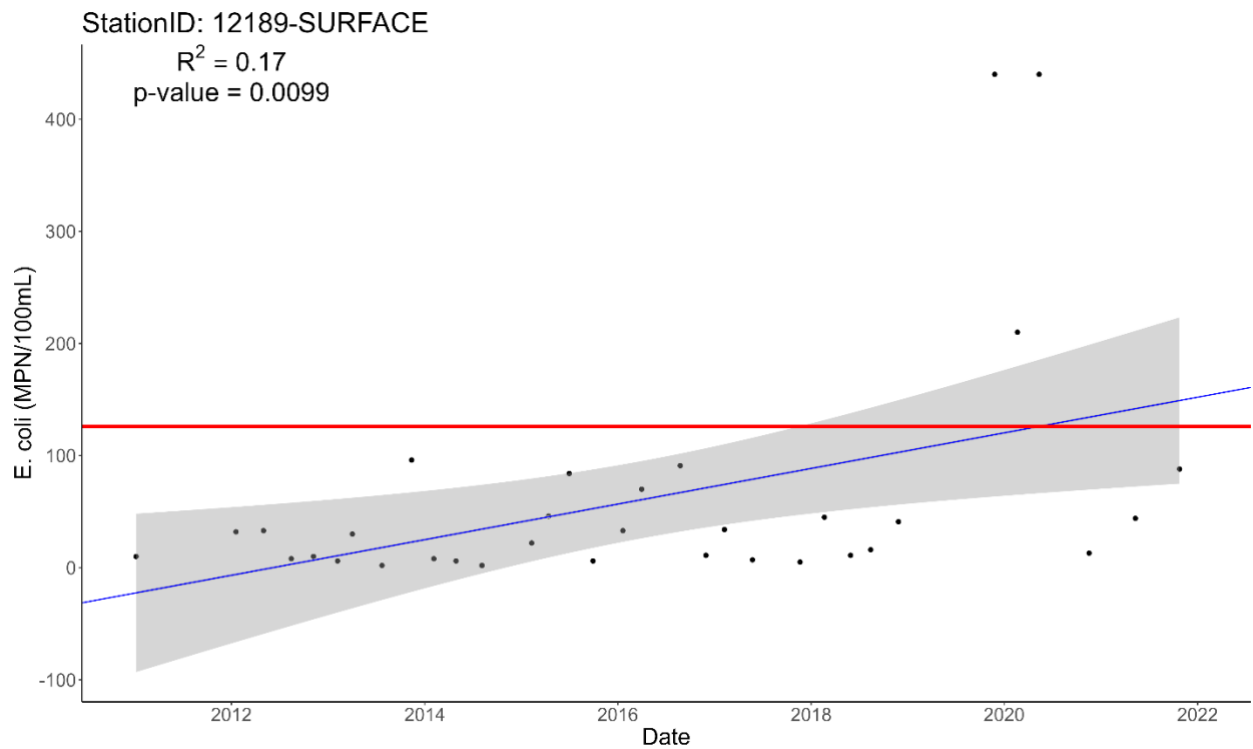


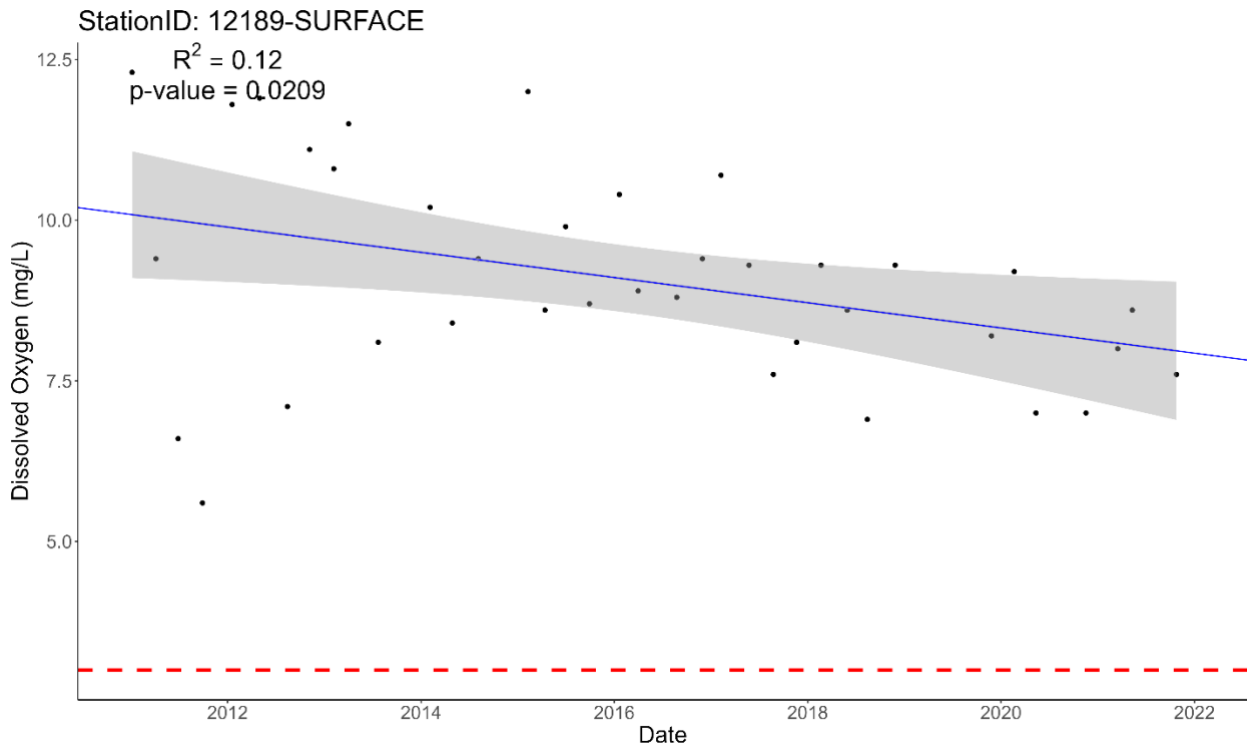
StationID: 12185-SURFACE



1427C – Bear Creek

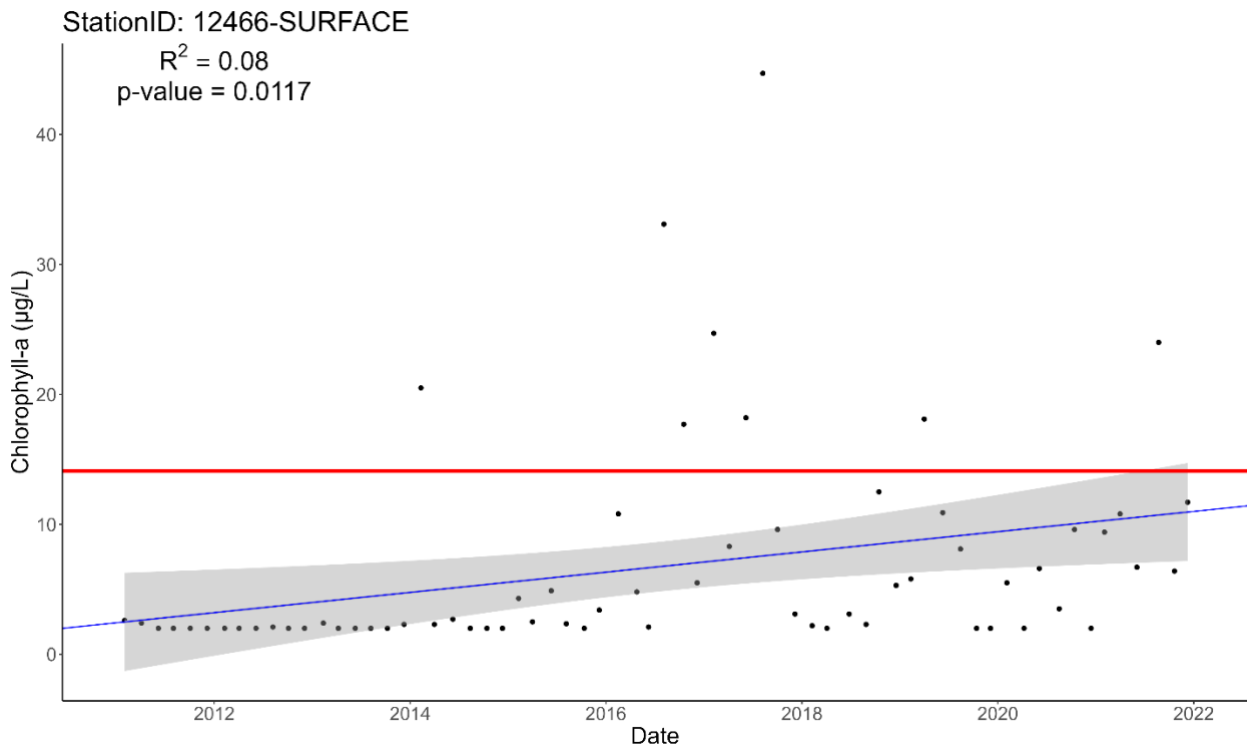
Assessment Unit: 1427C_01



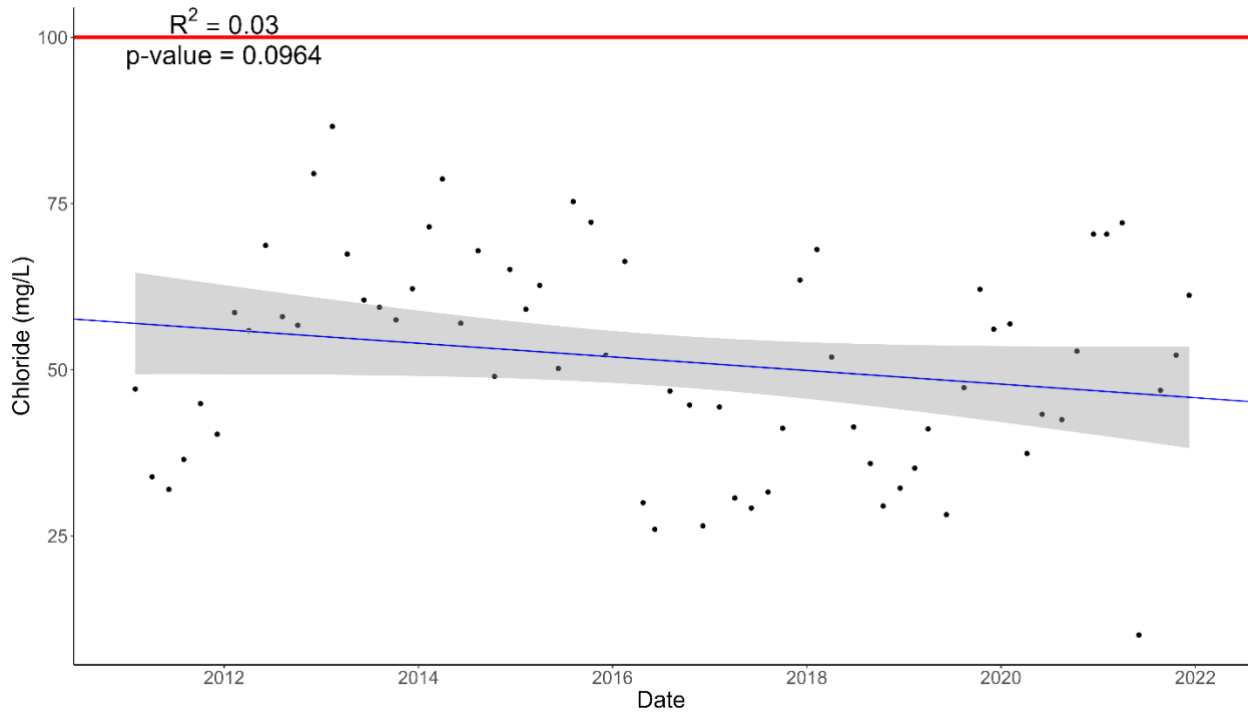


1428 – Colorado River below Lady Bird Lake

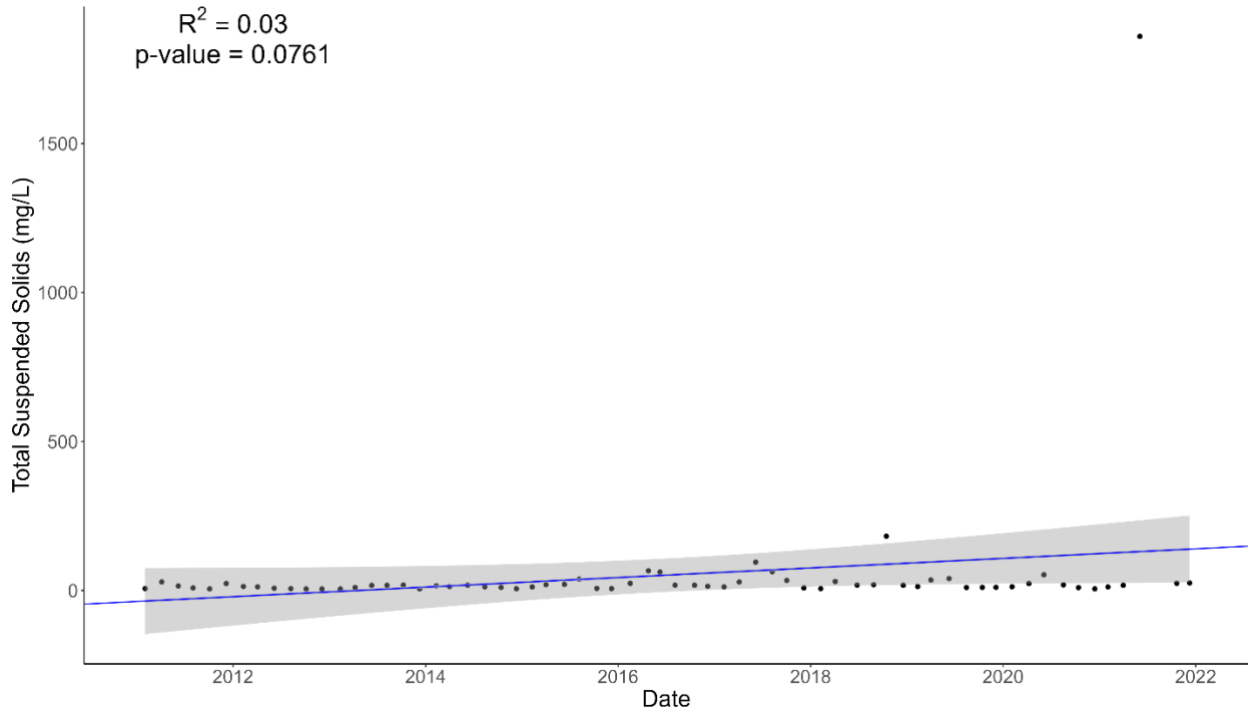
Assessment Unit: 1428_01



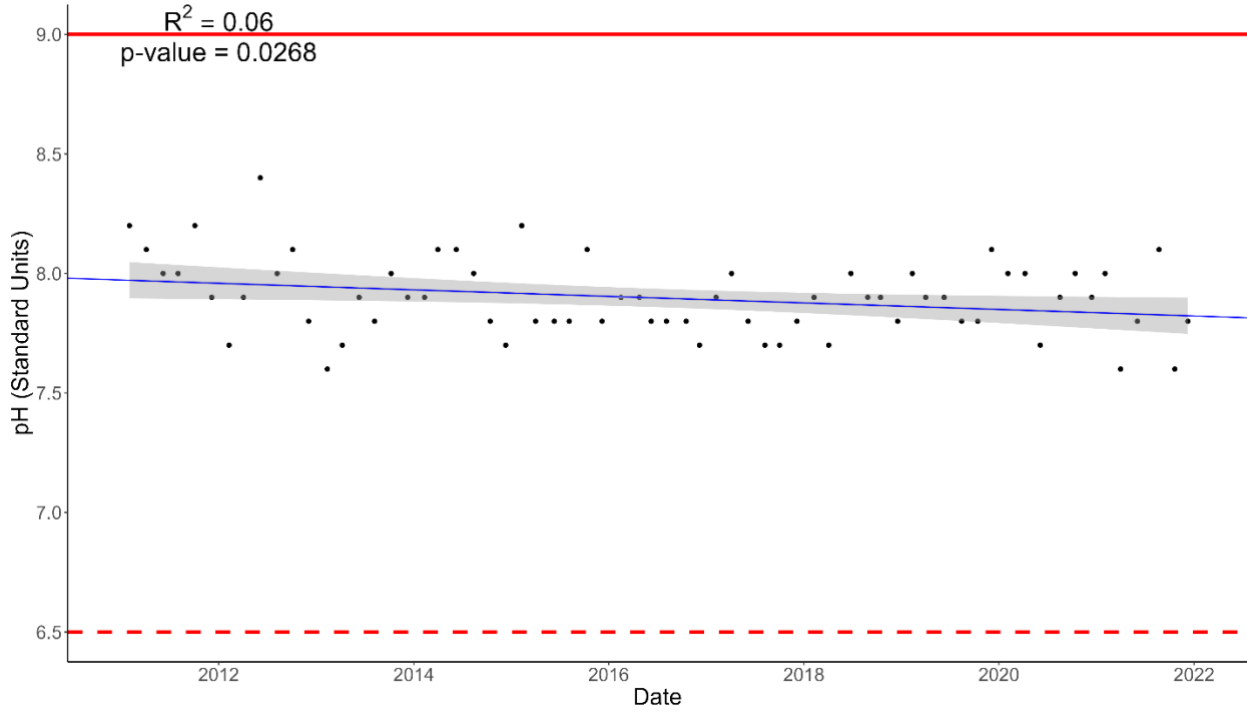
StationID: 12466-SURFACE



StationID: 12466-SURFACE

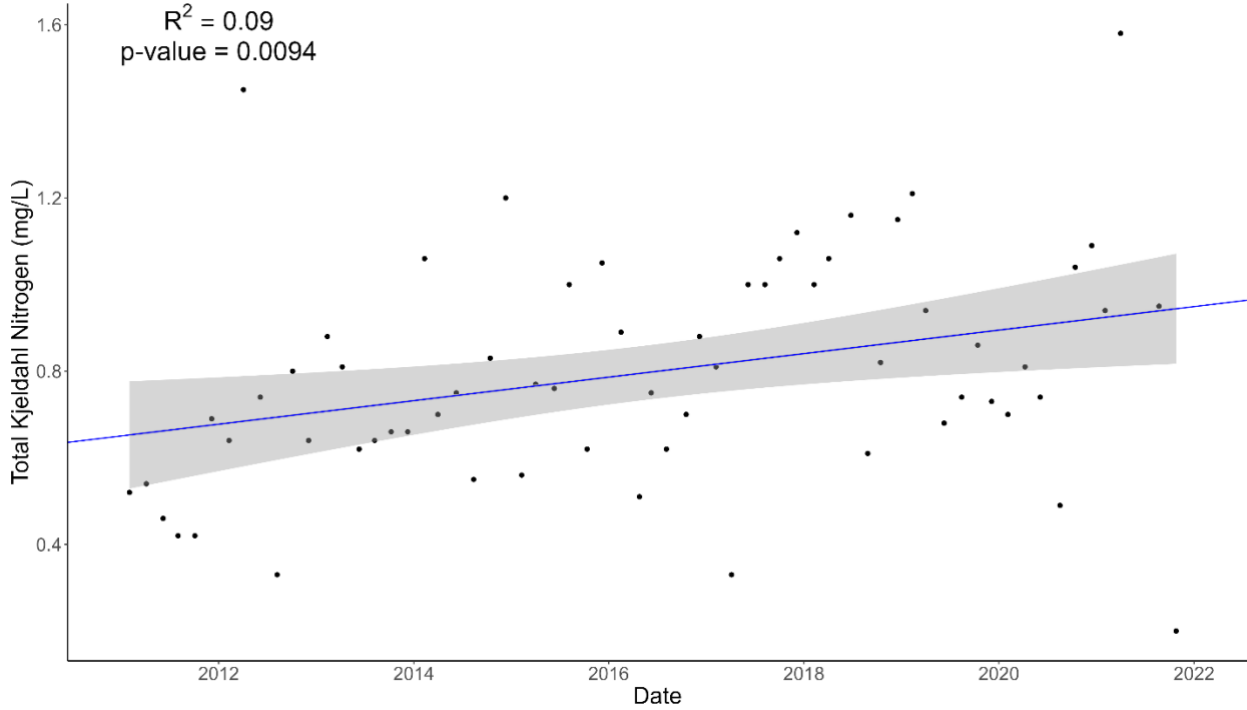


StationID: 12466-SURFACE



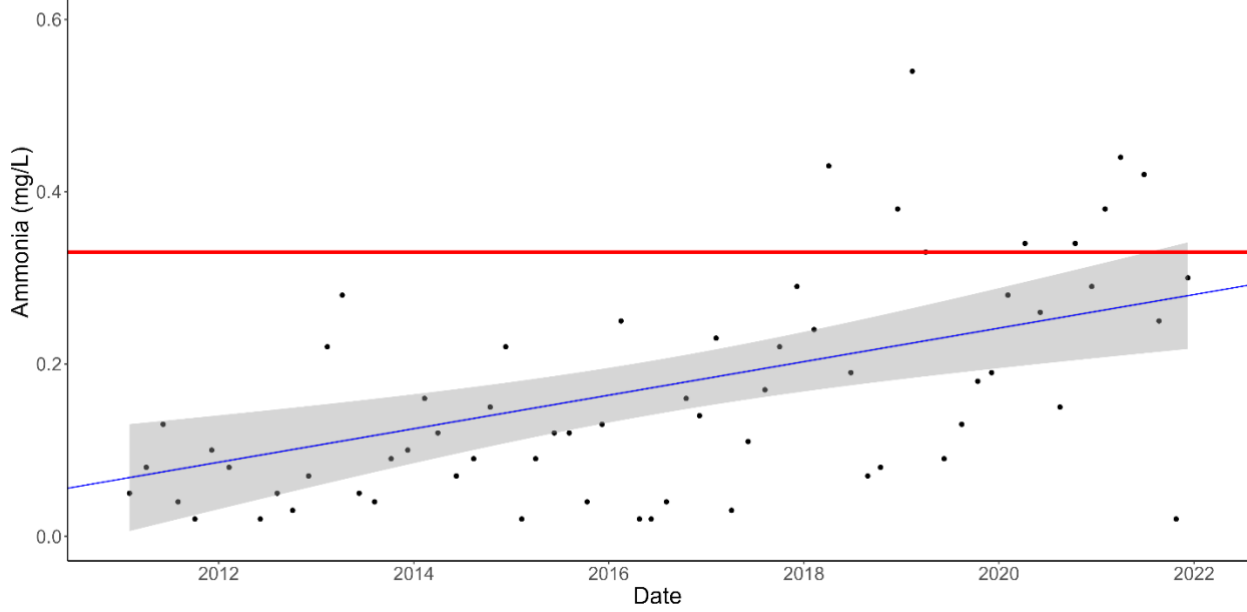
Assessment Unit: 1428_02

StationID: 12469-SURFACE



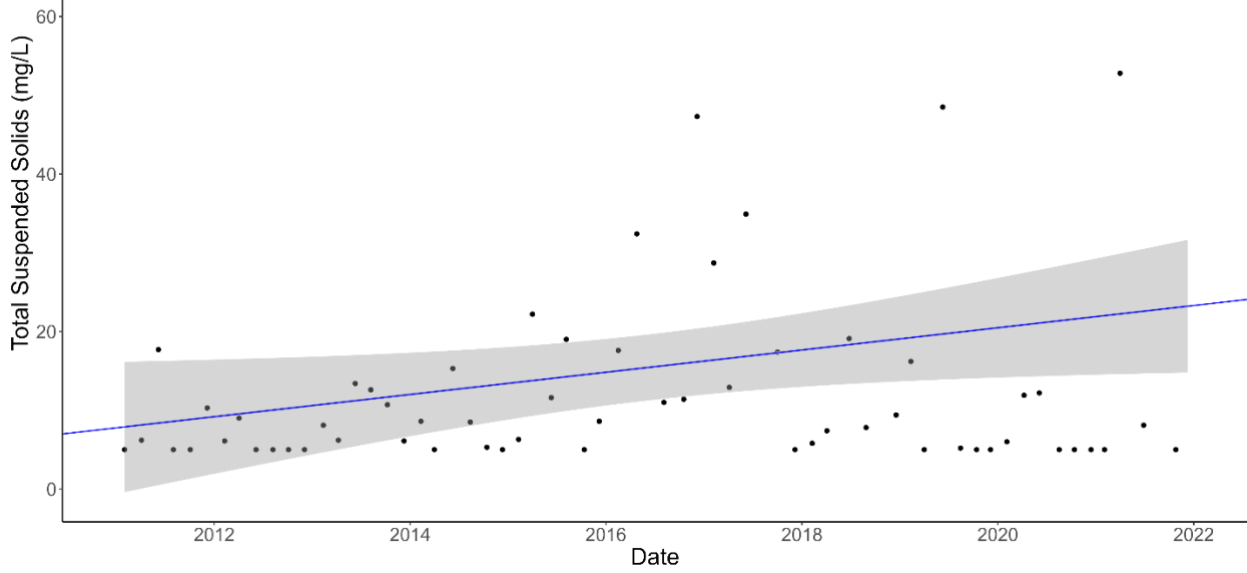
StationID: 12469-SURFACE

$R^2 = 0.18$
p-value = $2e-04$

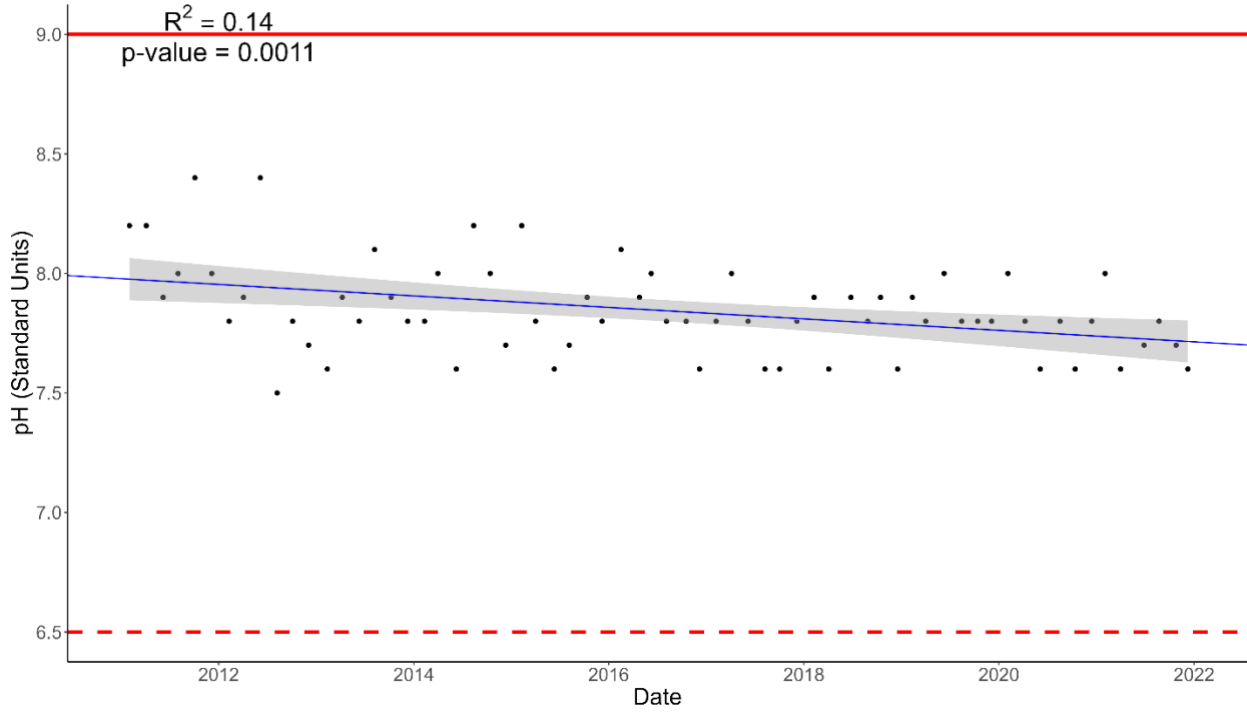


StationID: 12469-SURFACE

$R^2 = 0.05$
p-value = 0.038

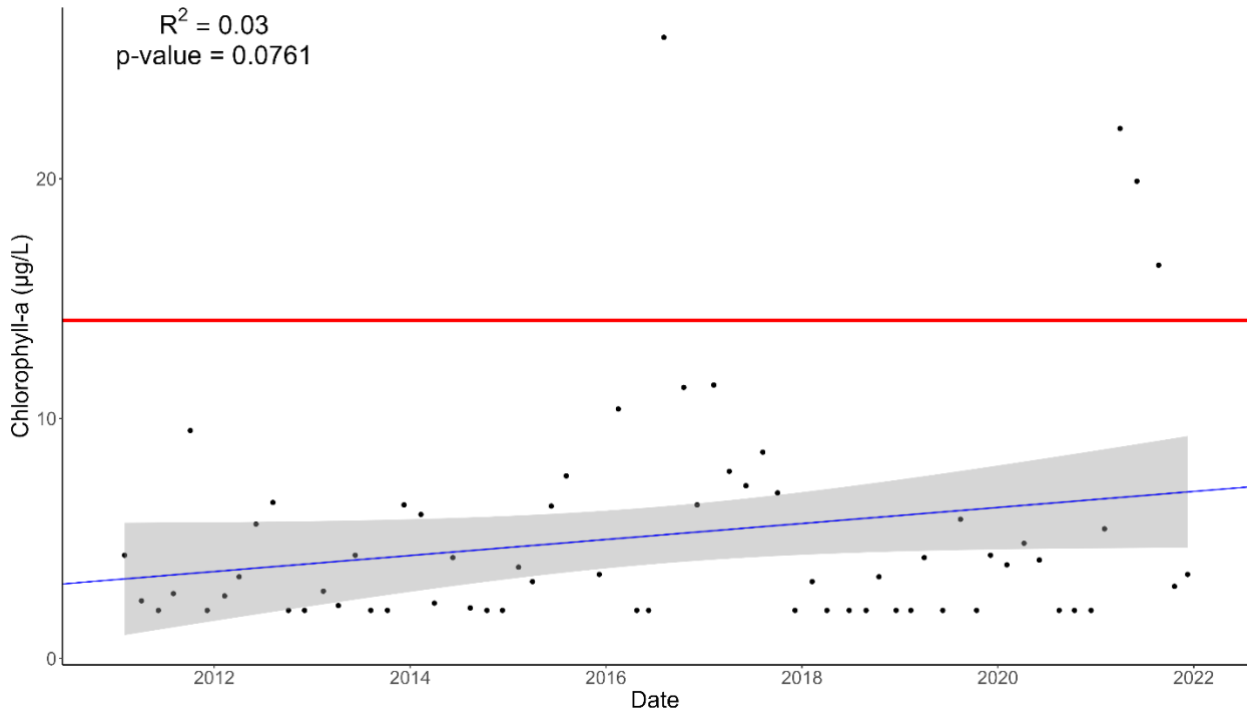


StationID: 12469-SURFACE

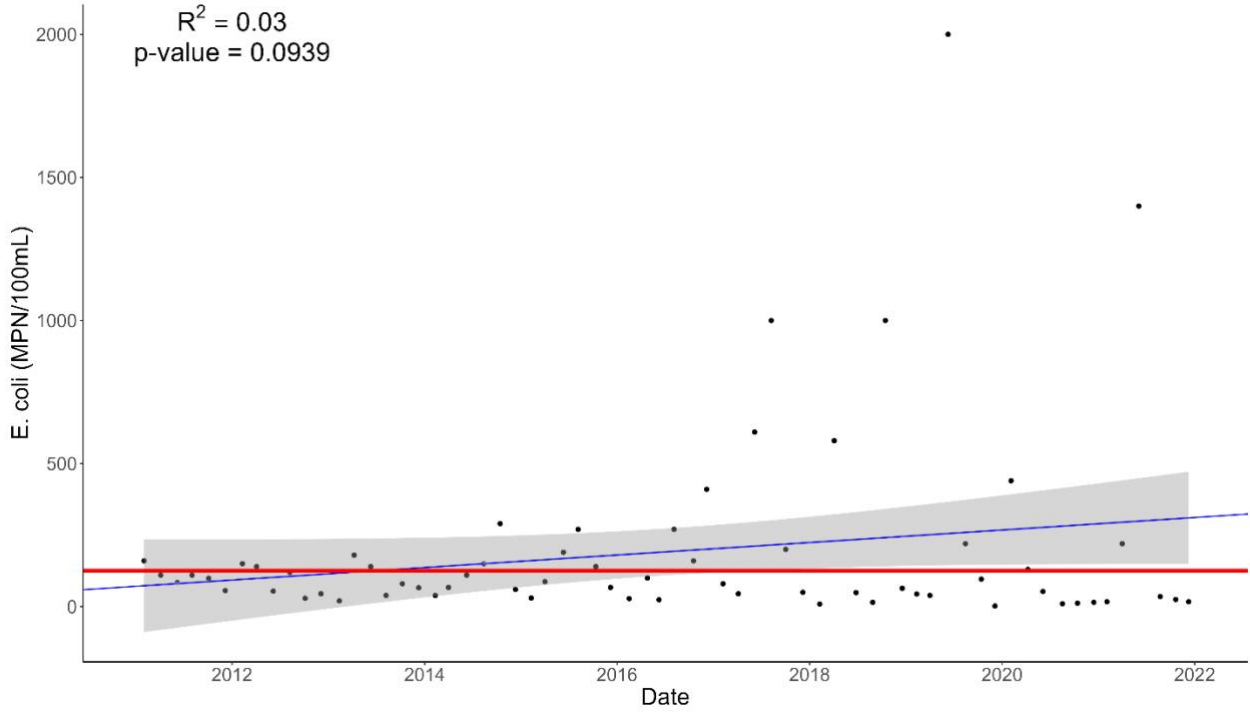


Assessment Unit: 1428_03

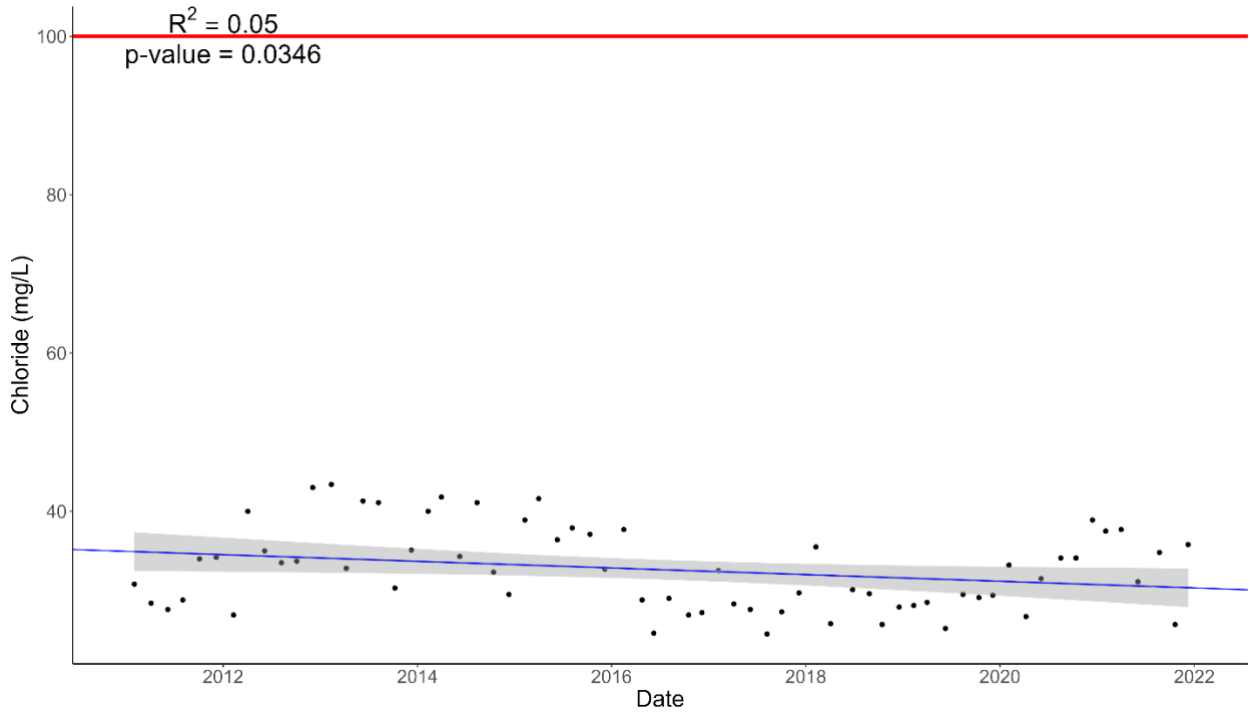
StationID: 12474-SURFACE



StationID: 12474-SURFACE



StationID: 12474-SURFACE



1428B – Walnut Creek

Assessment Unit: 1428B_01

No significant trends.

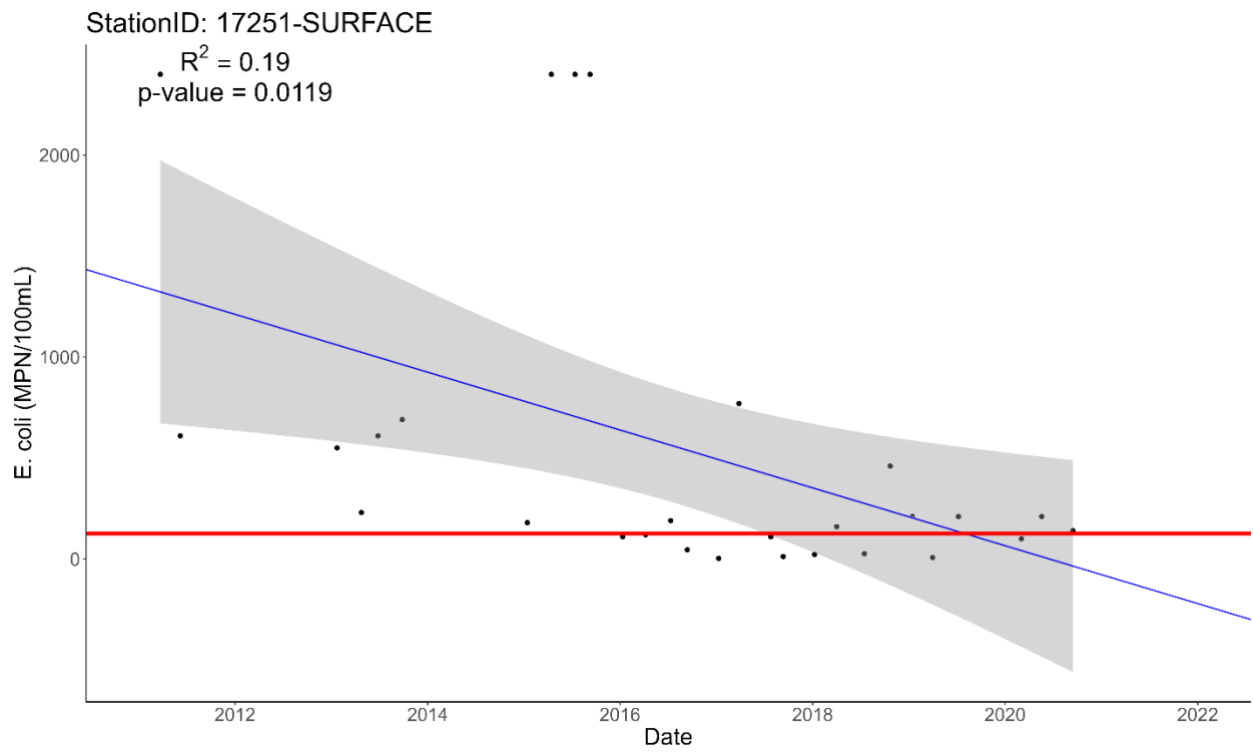
Assessment Unit: 1428B_03

No significant trends.

Assessment Unit: 1428B_04

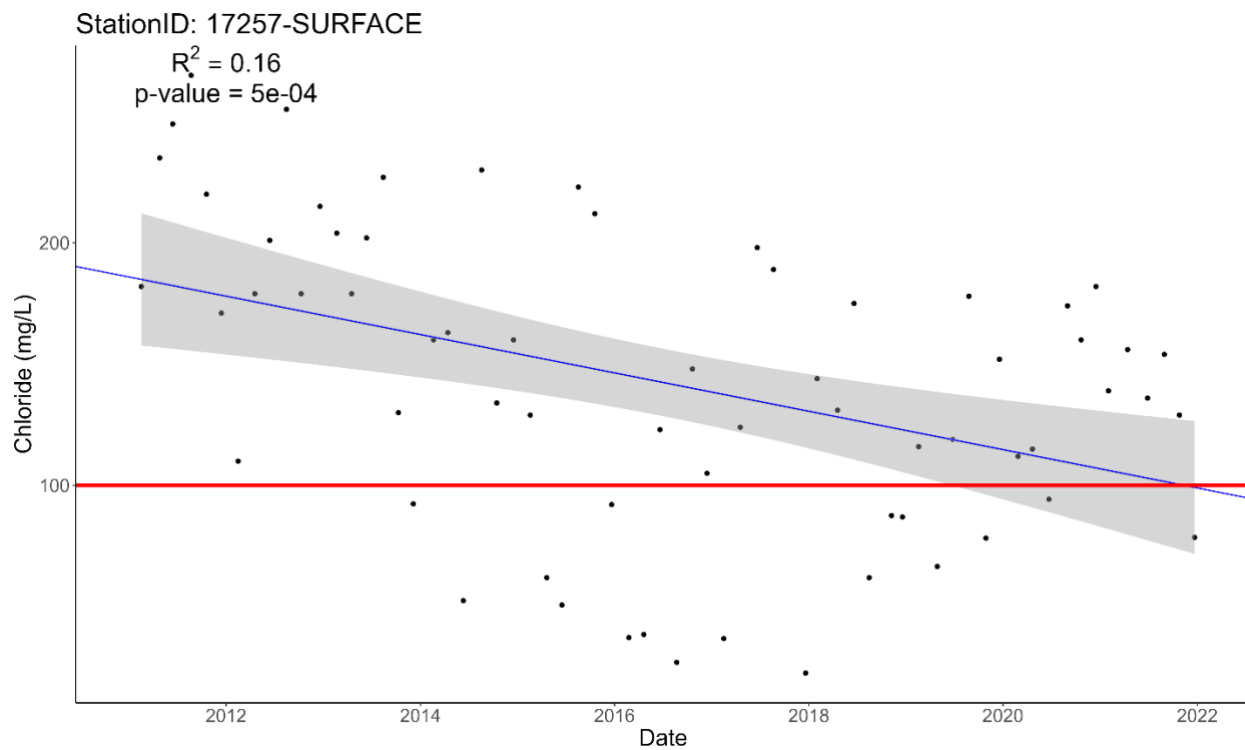
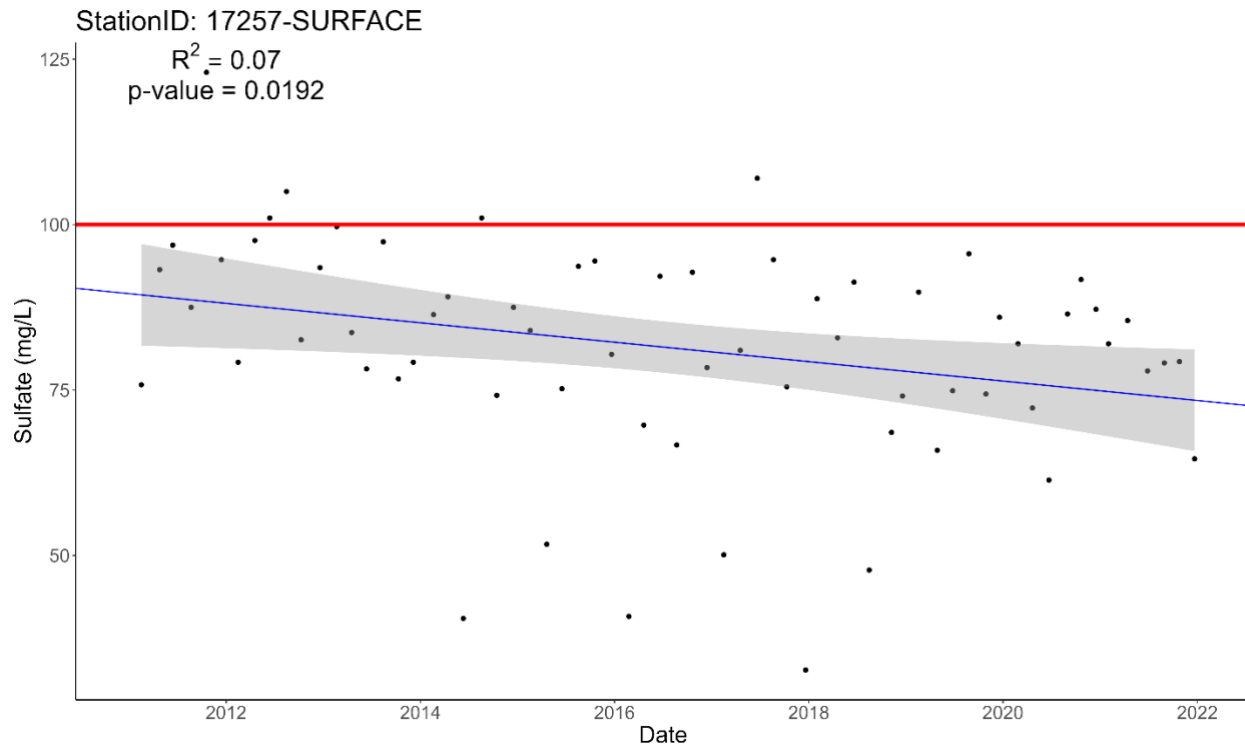
No significant trends.

Assessment Unit: 1428B_05



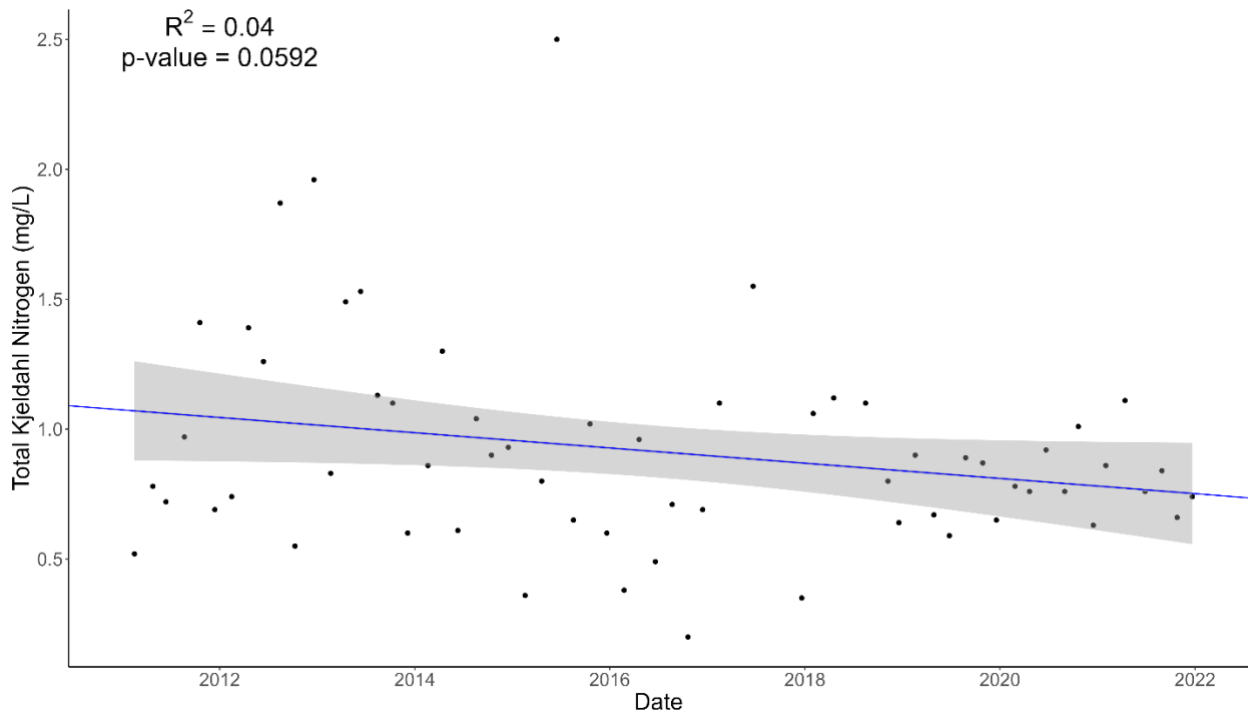
1428C – Gilleland Creek

Assessment Unit: 1428C_01



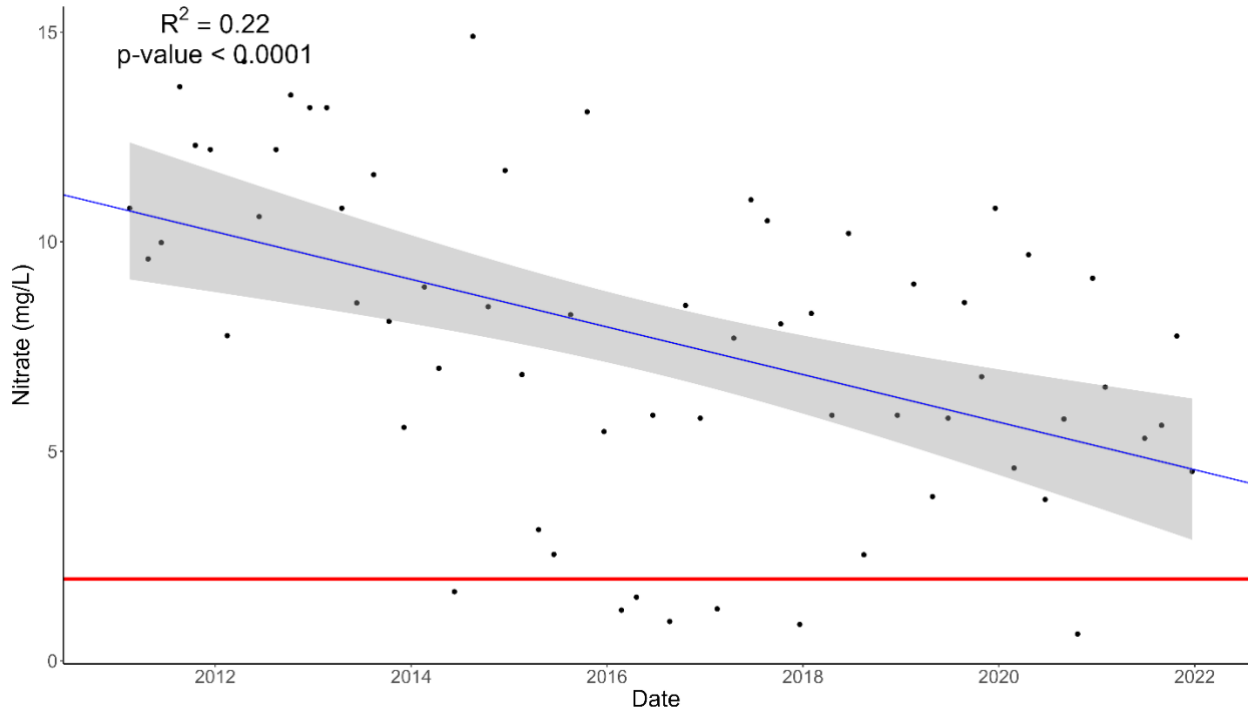
StationID: 17257-SURFACE

$R^2 = 0.04$
p-value = 0.0592



StationID: 17257-SURFACE

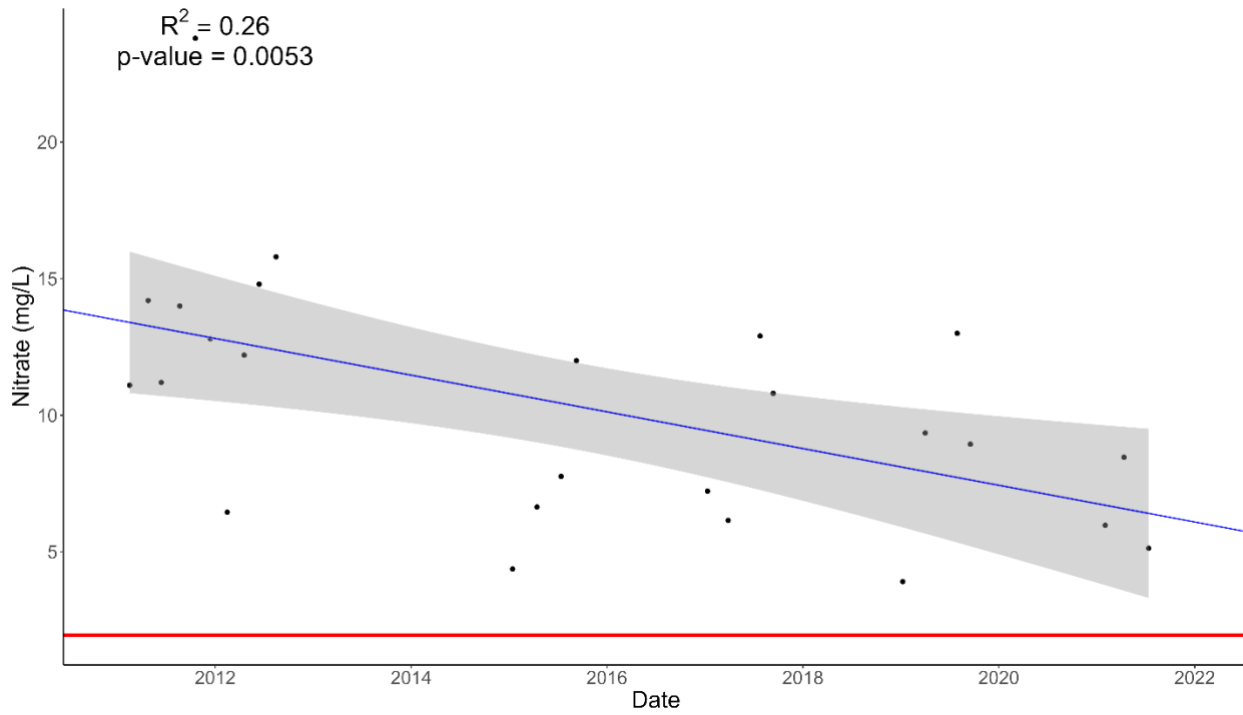
$R^2 = 0.22$
p-value < 0.0001



Assessment Unit: 1428C_02

StationID: 12235-SURFACE

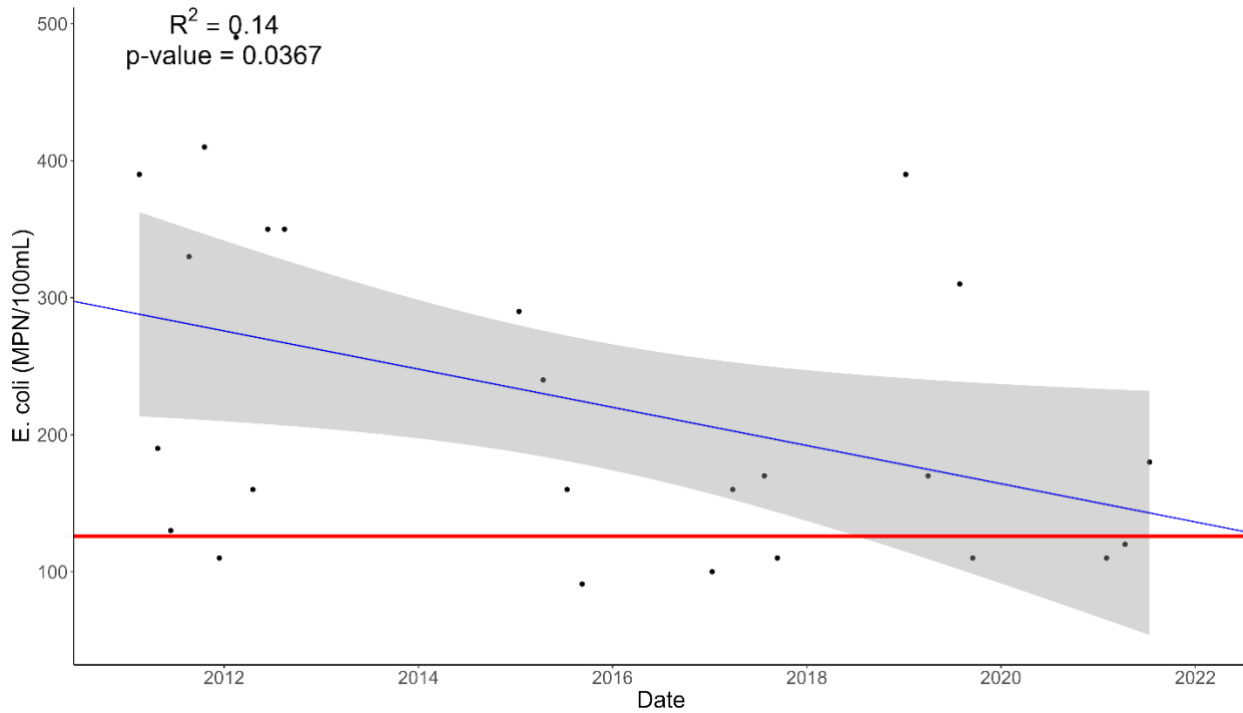
$R^2 = 0.26$
p-value = 0.0053



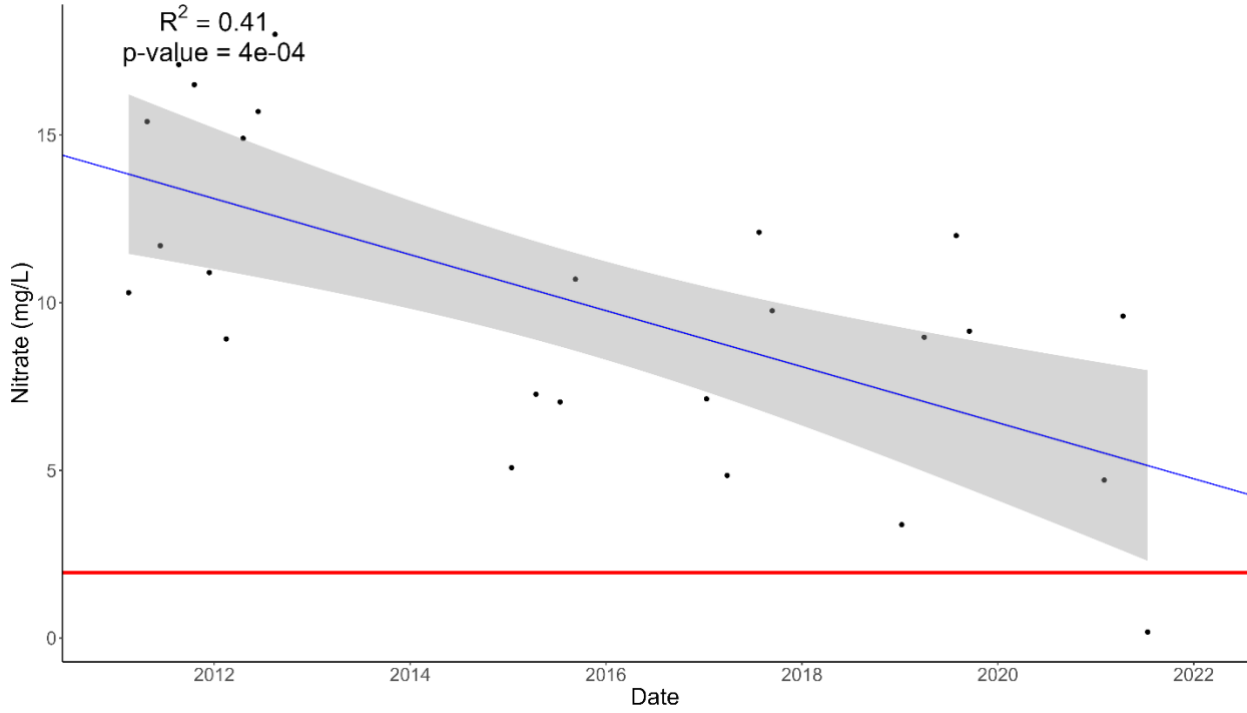
Assessment Unit: 1428C_03

StationID: 12236-SURFACE

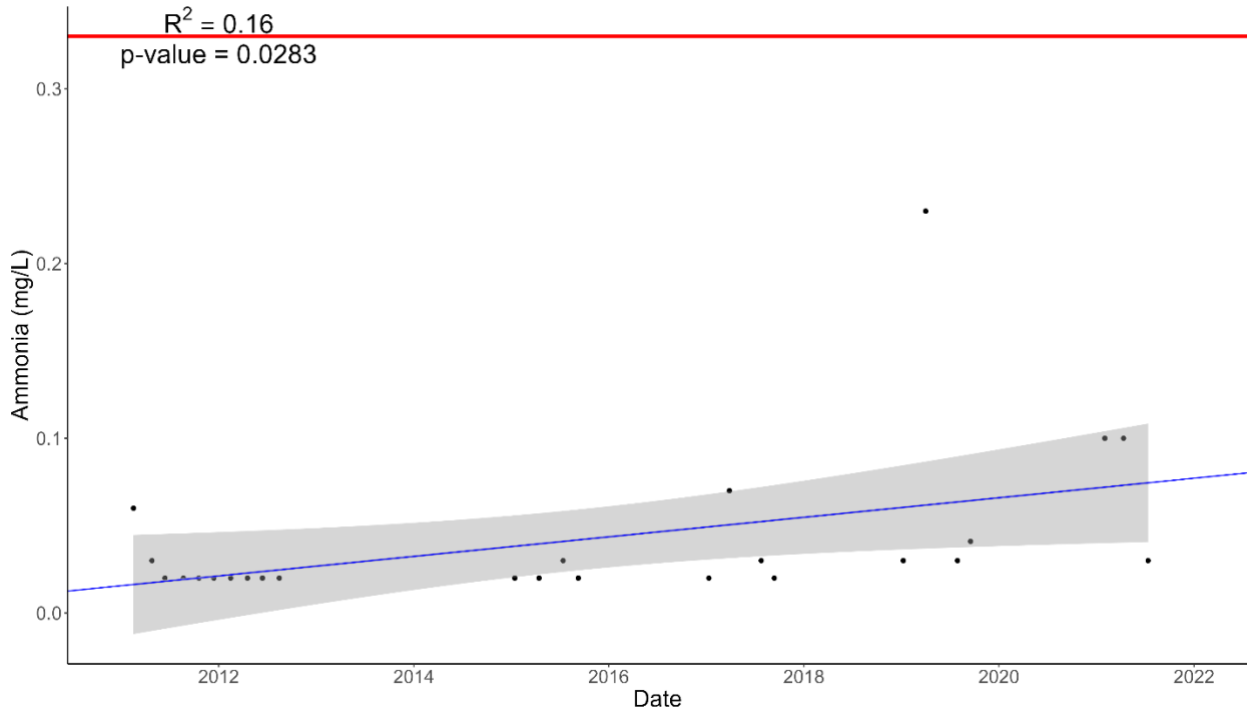
$R^2 = 0.14$
p-value = 0.0367



StationID: 12236-SURFACE

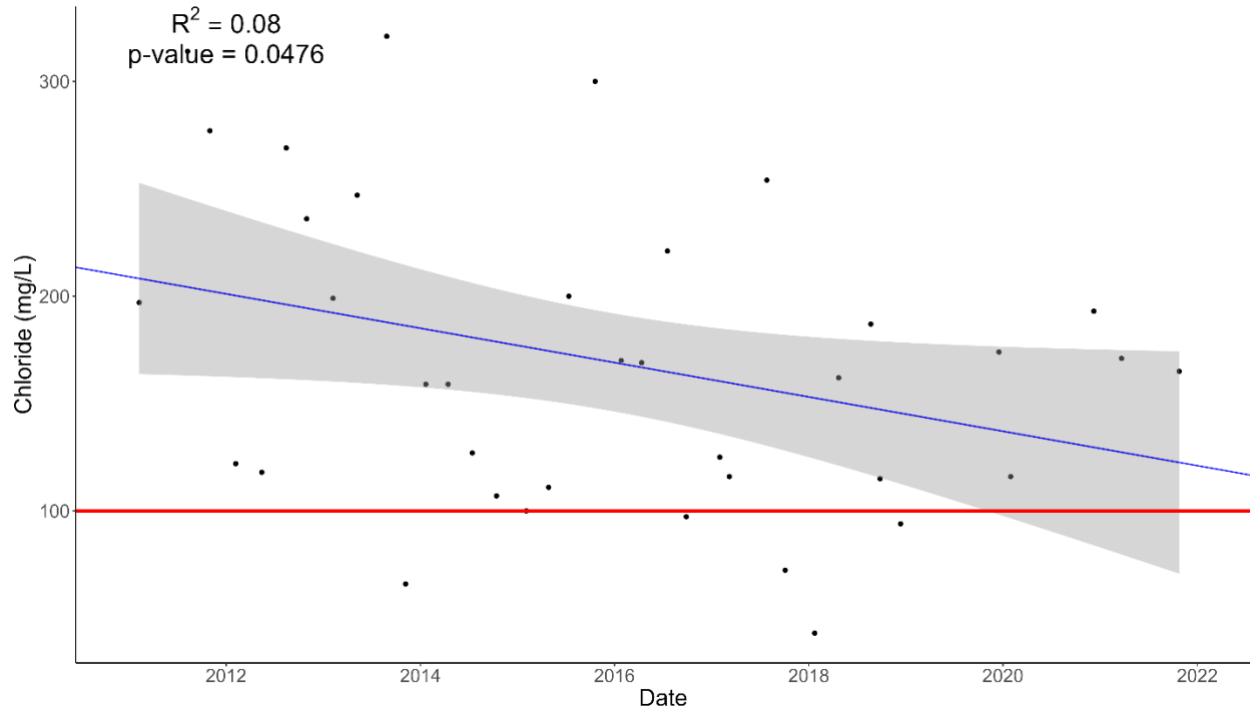


StationID: 12236-SURFACE

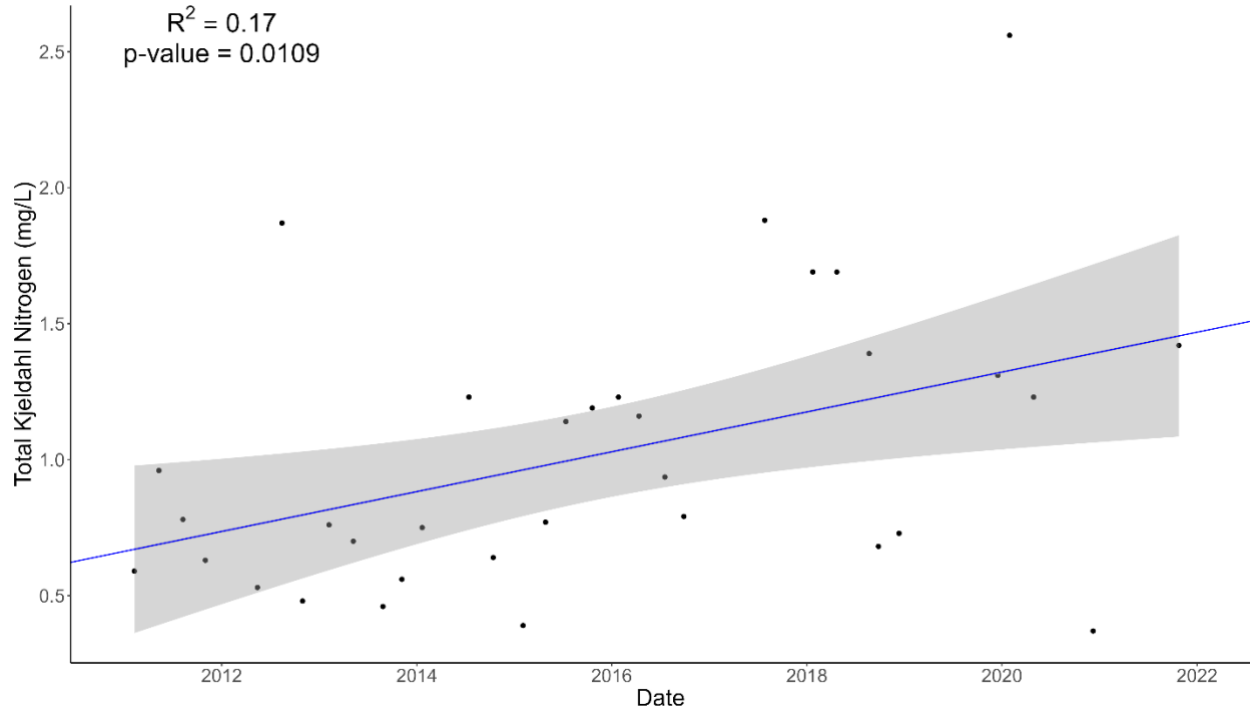


Assessment Unit: 1428C_04

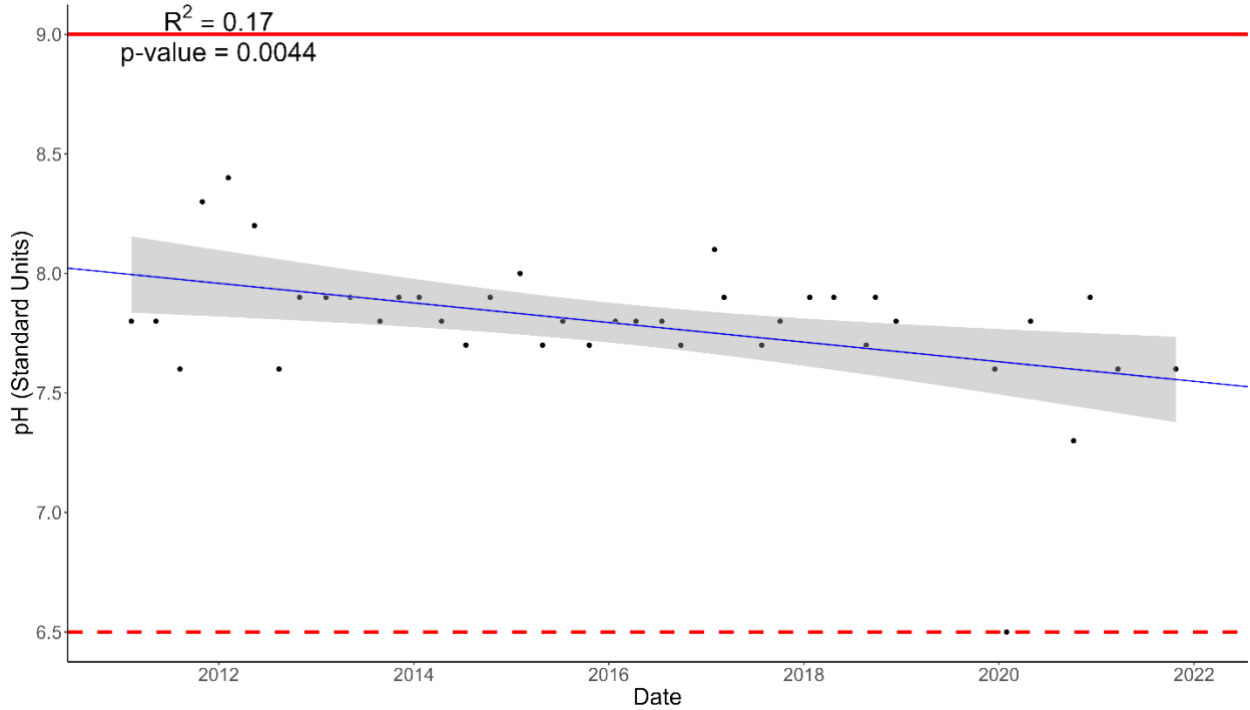
StationID: 20474-SURFACE



StationID: 20474-SURFACE



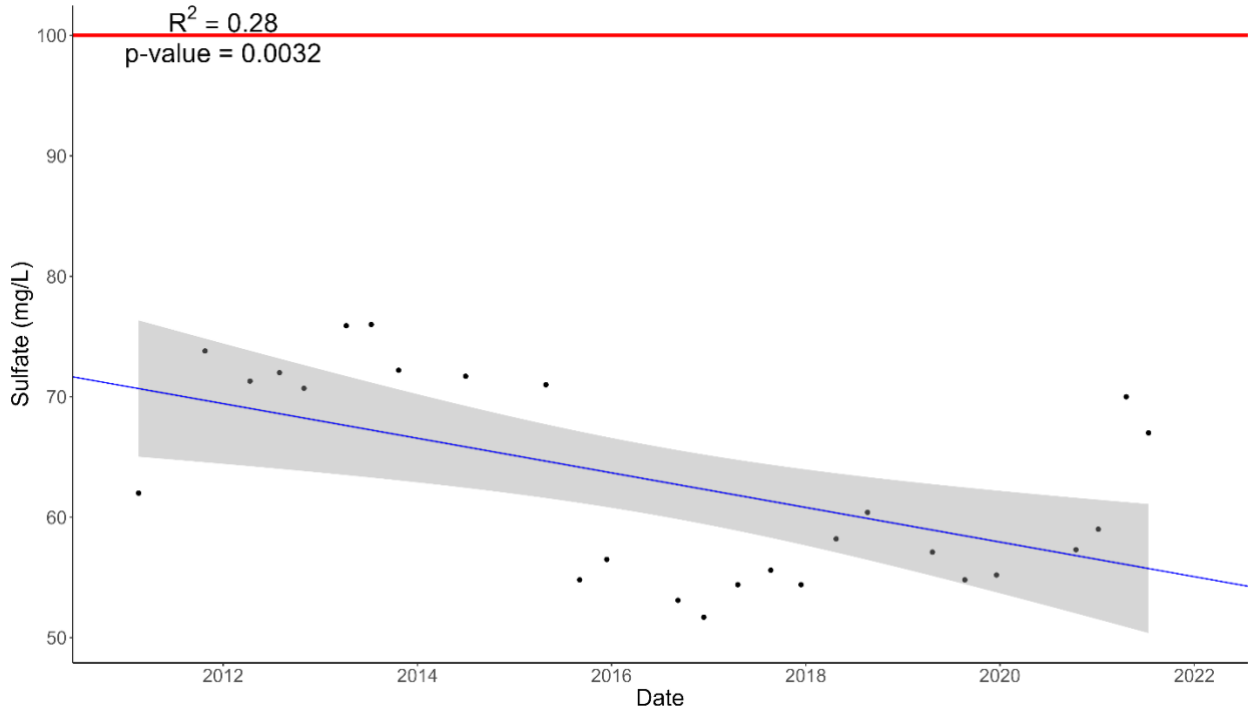
StationID: 20474-SURFACE



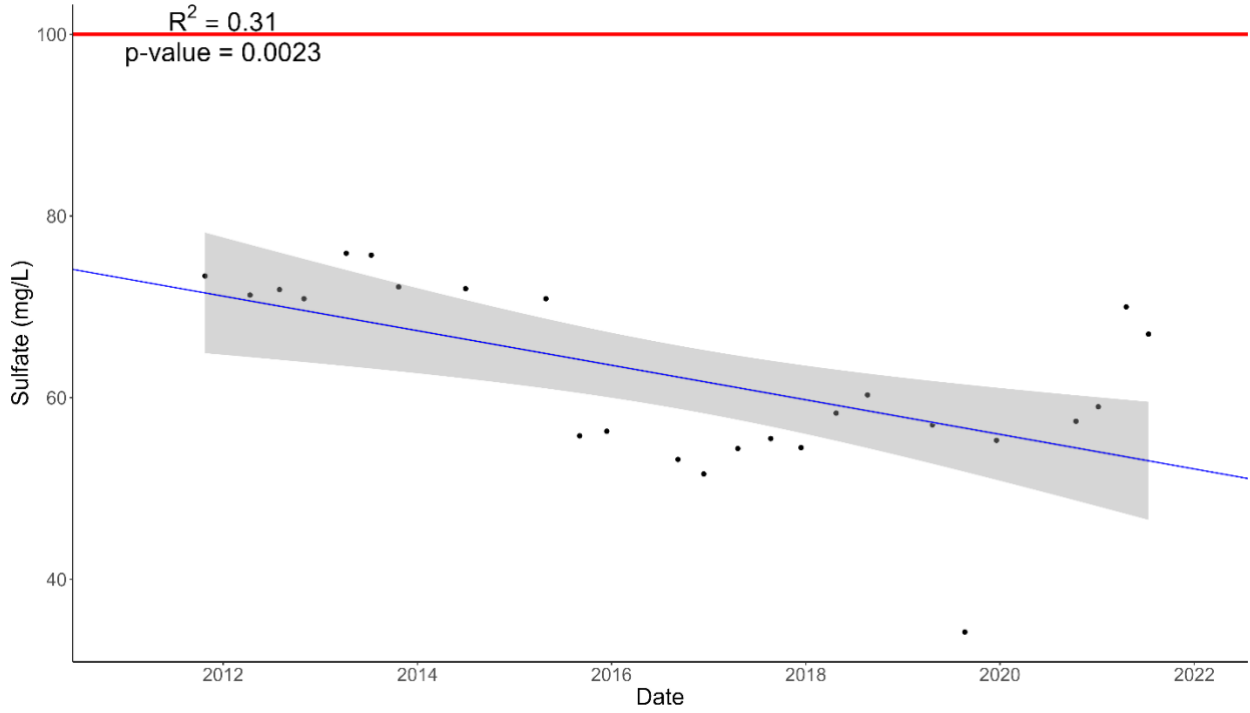
1428K – Walter E. Long Lake

Assessment Unit: 1428K_01

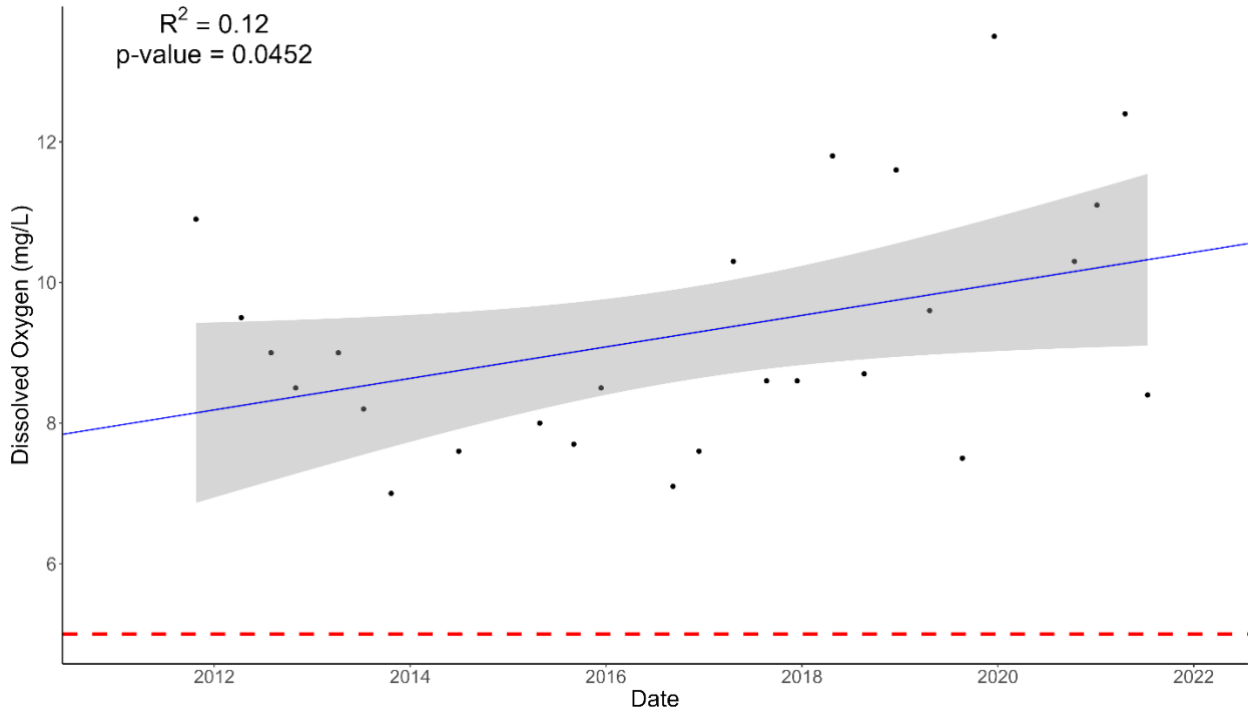
StationID: 20161-SURFACE



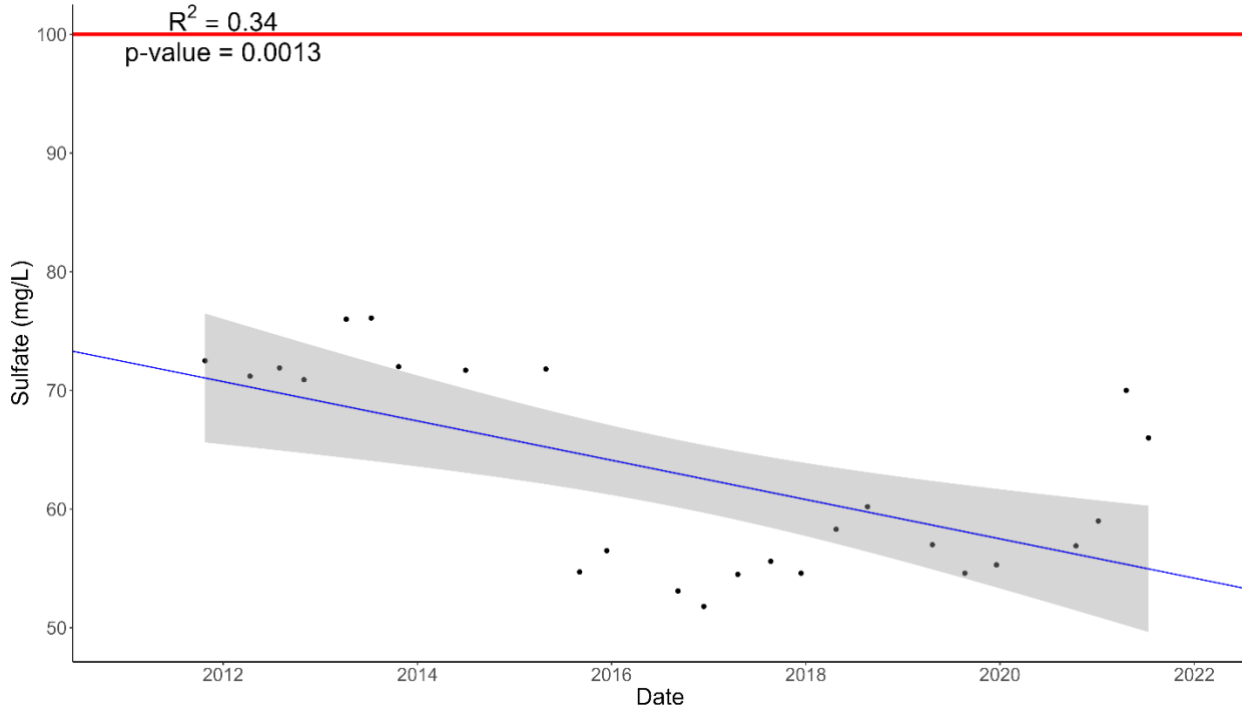
StationID: 21022-SURFACE



StationID: 21022-SURFACE



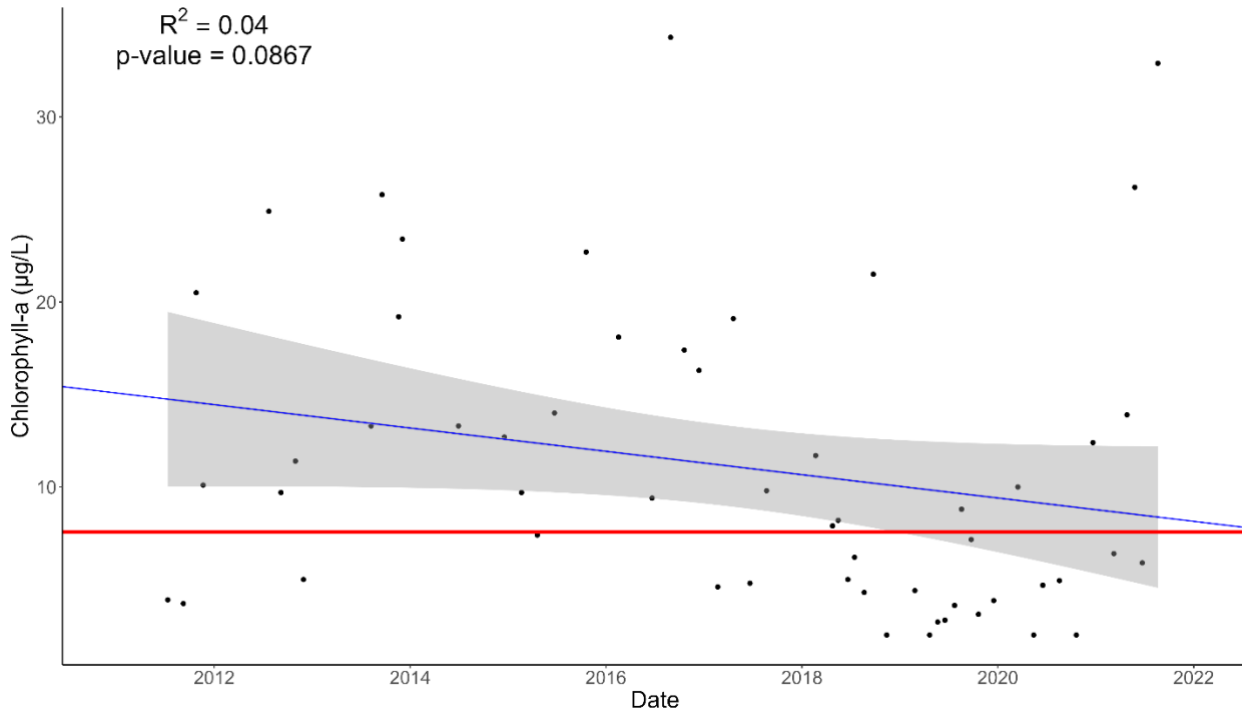
StationID: 21023-SURFACE



1429 – Lady Bird Lake (formerly Town Lake)

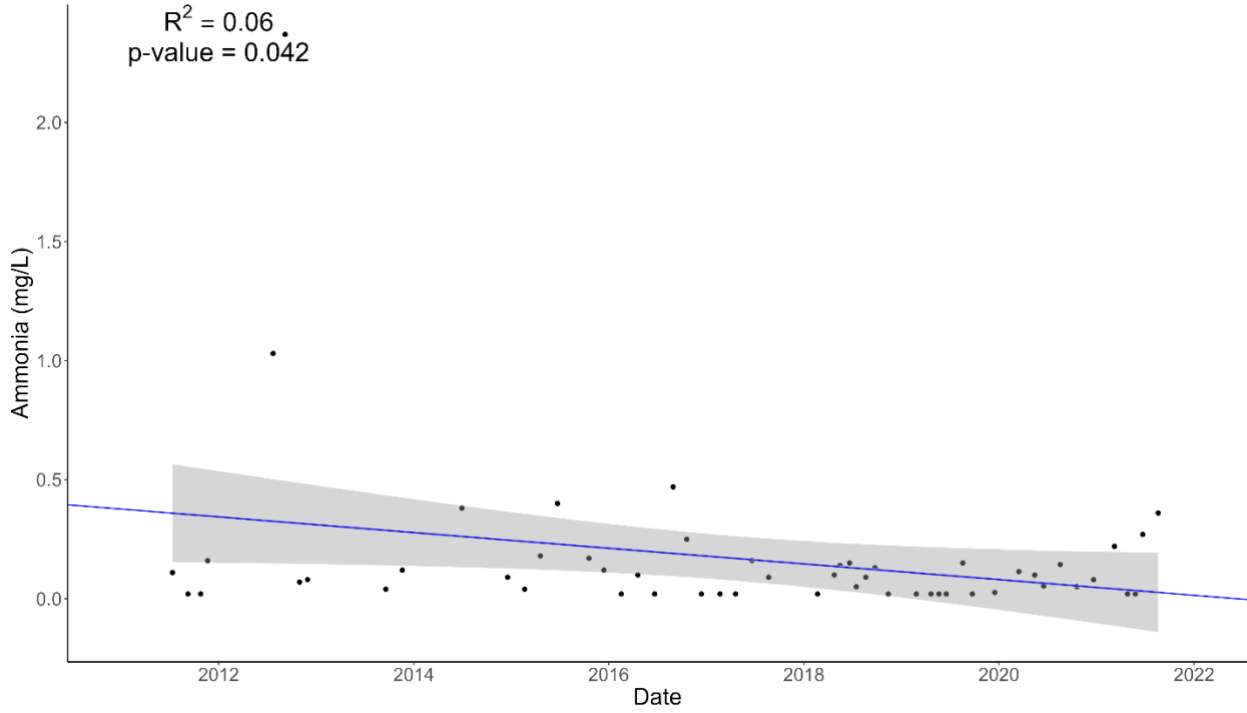
Assessment Unit: 1429_01

StationID: 12476-SURFACE



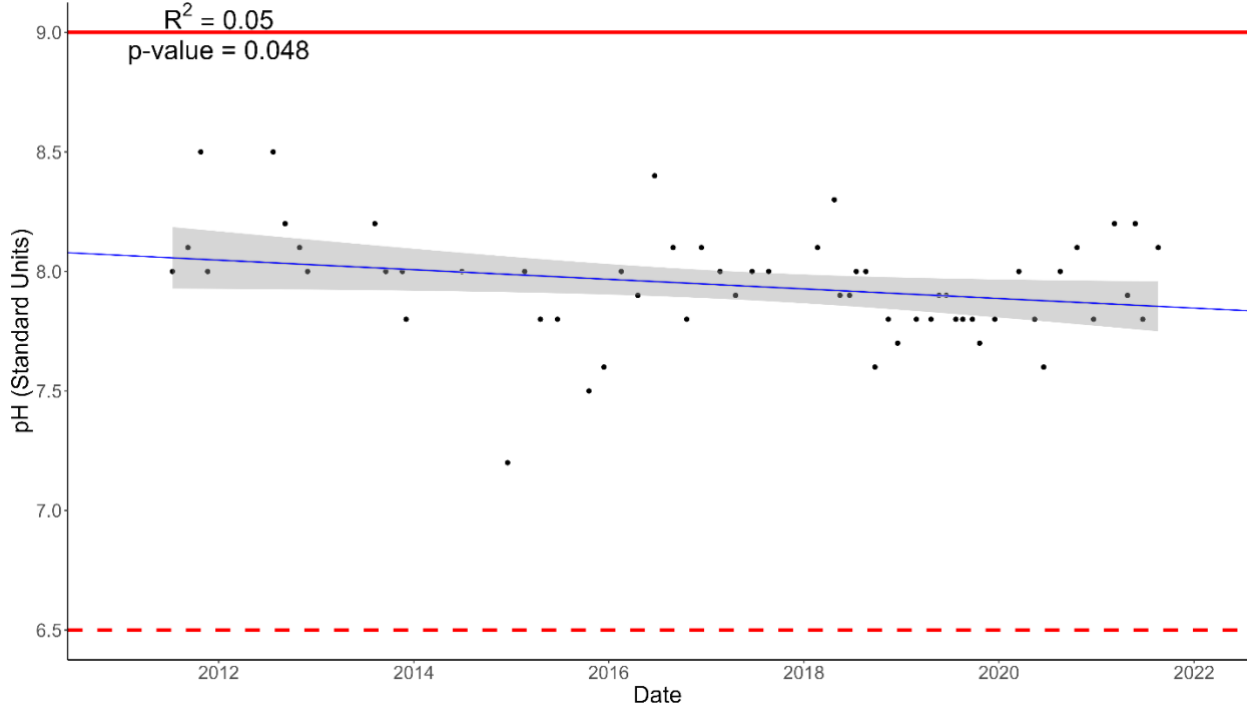
StationID: 12476-BOTTOM

$R^2 = 0.06$
p-value = 0.042

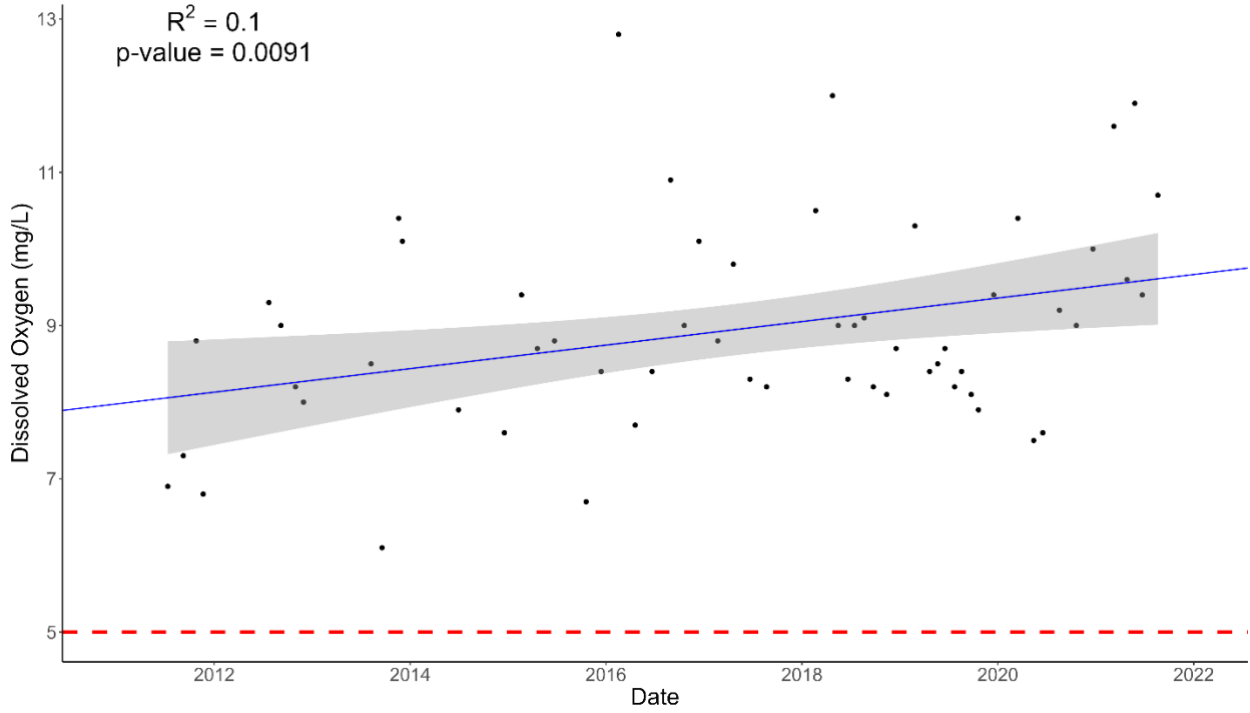


StationID: 12476-SURFACE

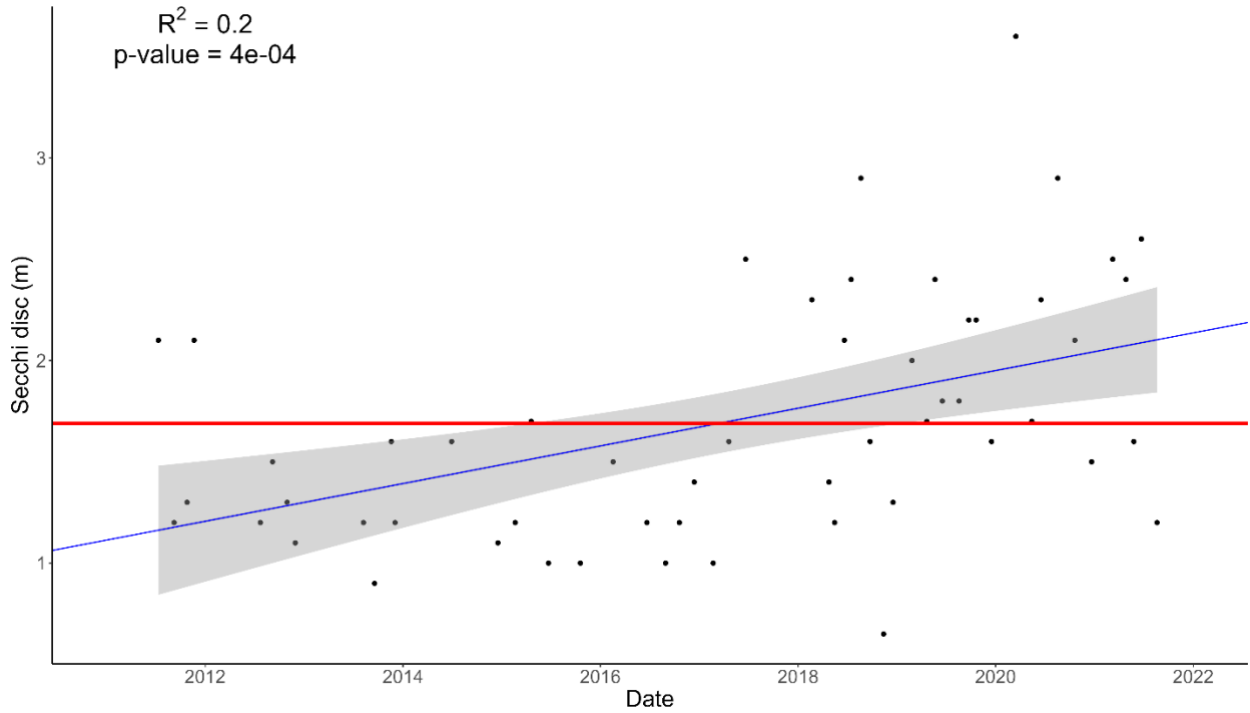
$R^2 = 0.05$
p-value = 0.048



StationID: 12476-SURFACE

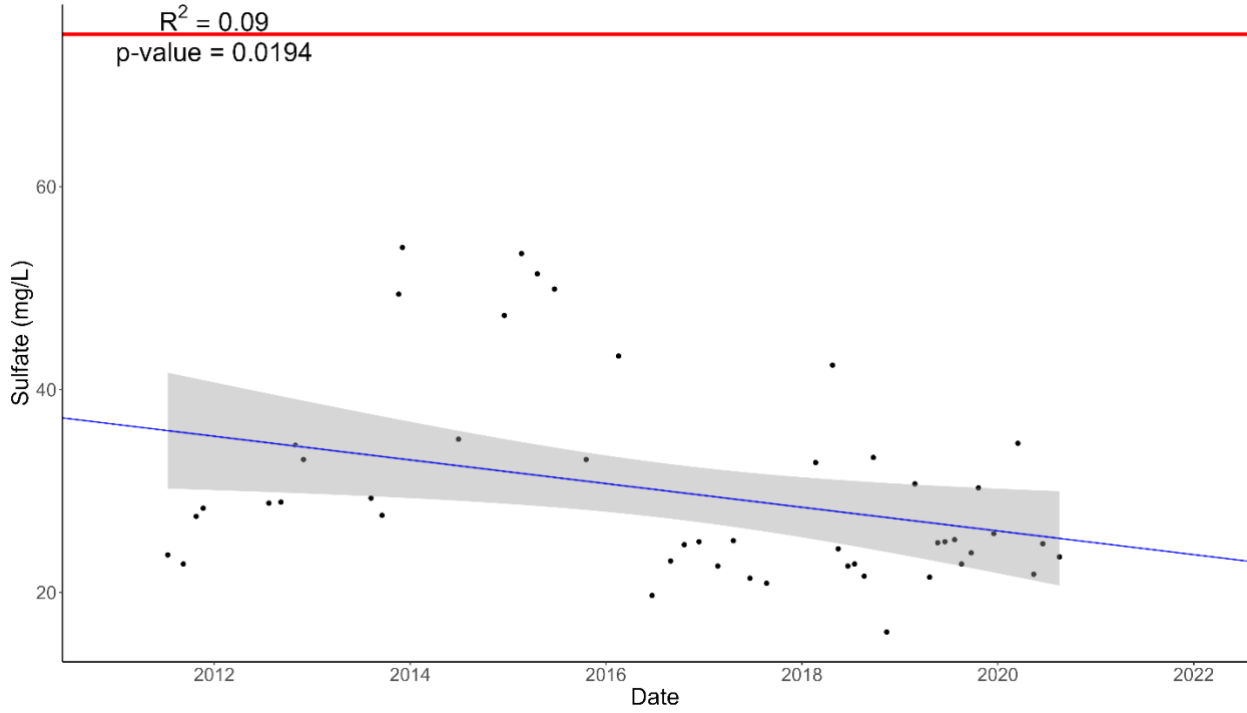


StationID: 12476-SURFACE



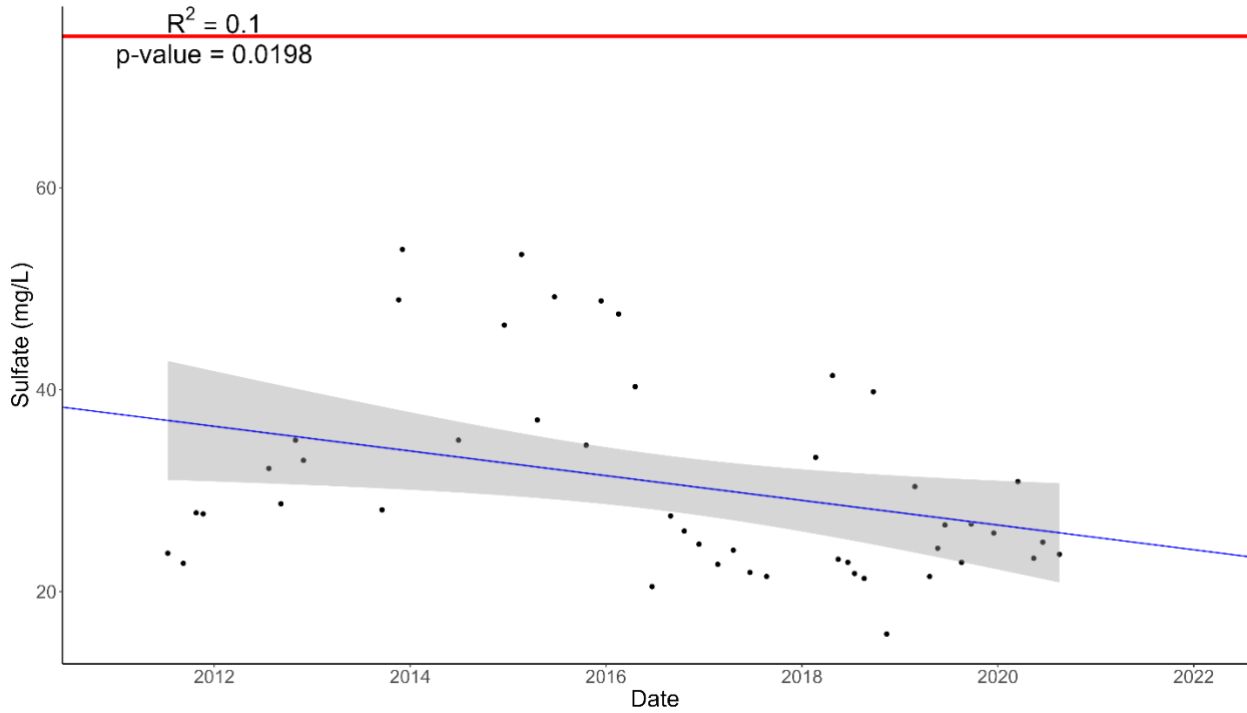
StationID: 14067-SURFACE

$R^2 = 0.09$
p-value = 0.0194

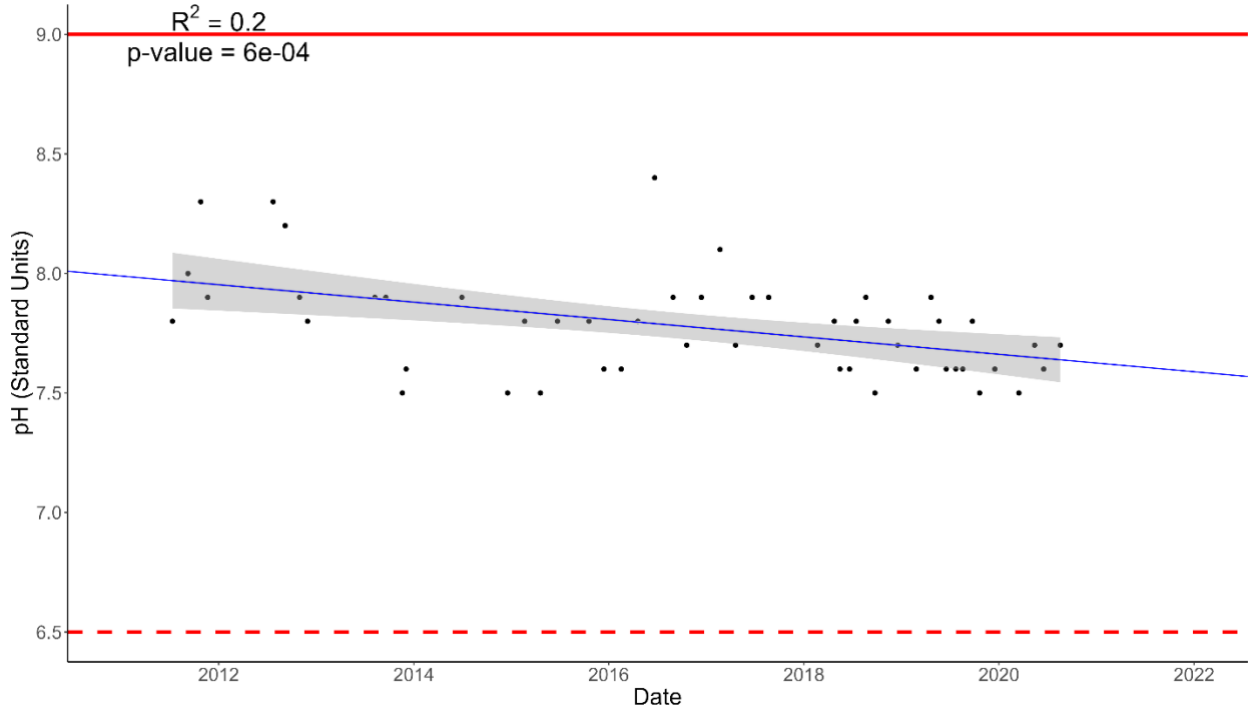


StationID: 14067-BOTTOM

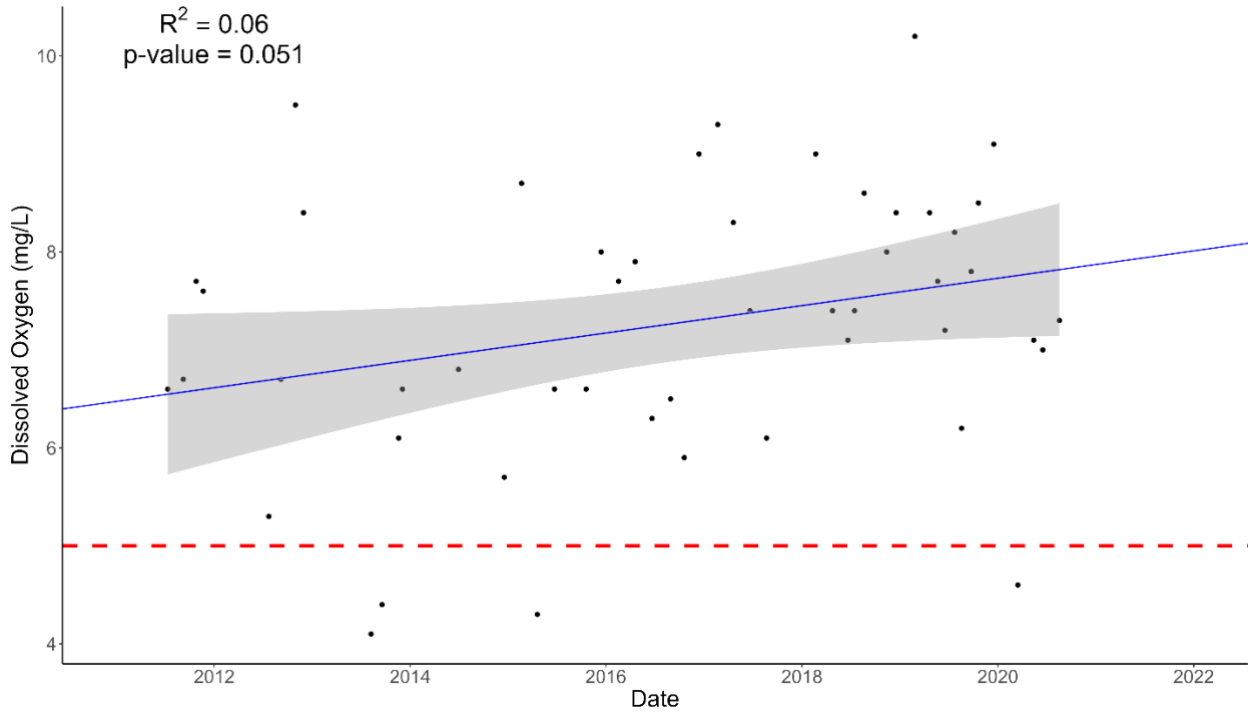
$R^2 = 0.1$
p-value = 0.0198



StationID: 14067-SURFACE

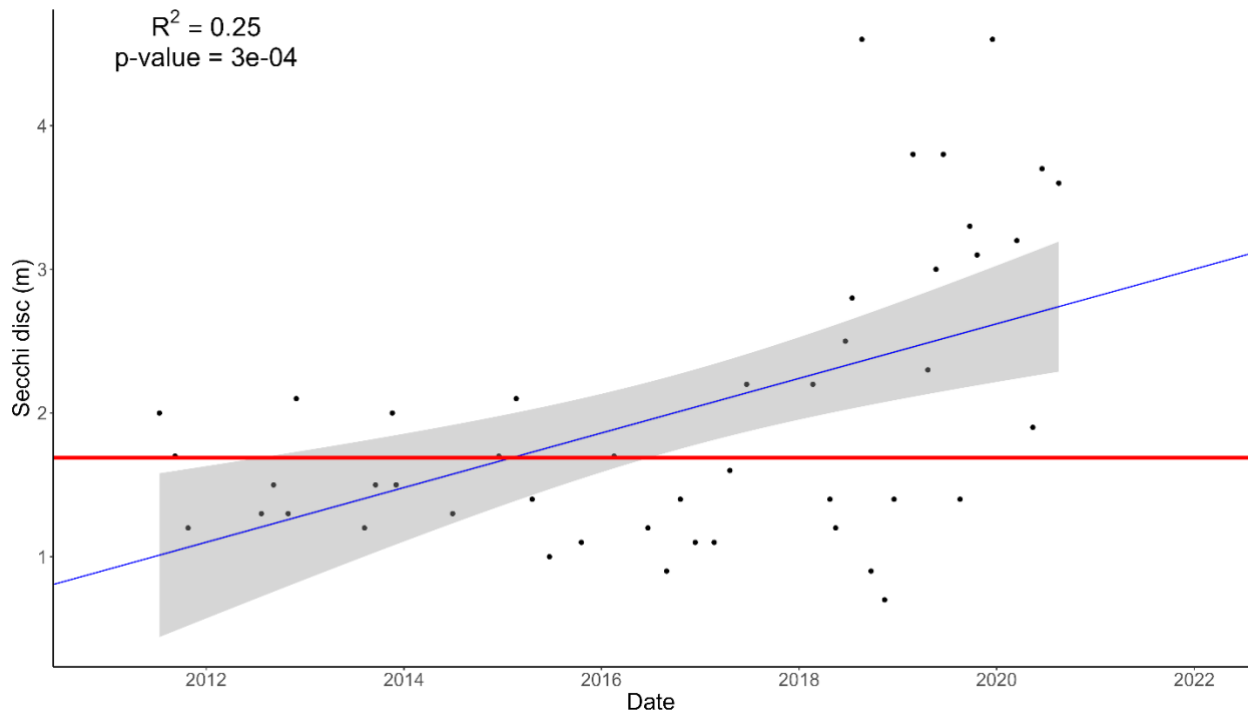


StationID: 14067-BOTTOM



StationID: 14067-SURFACE

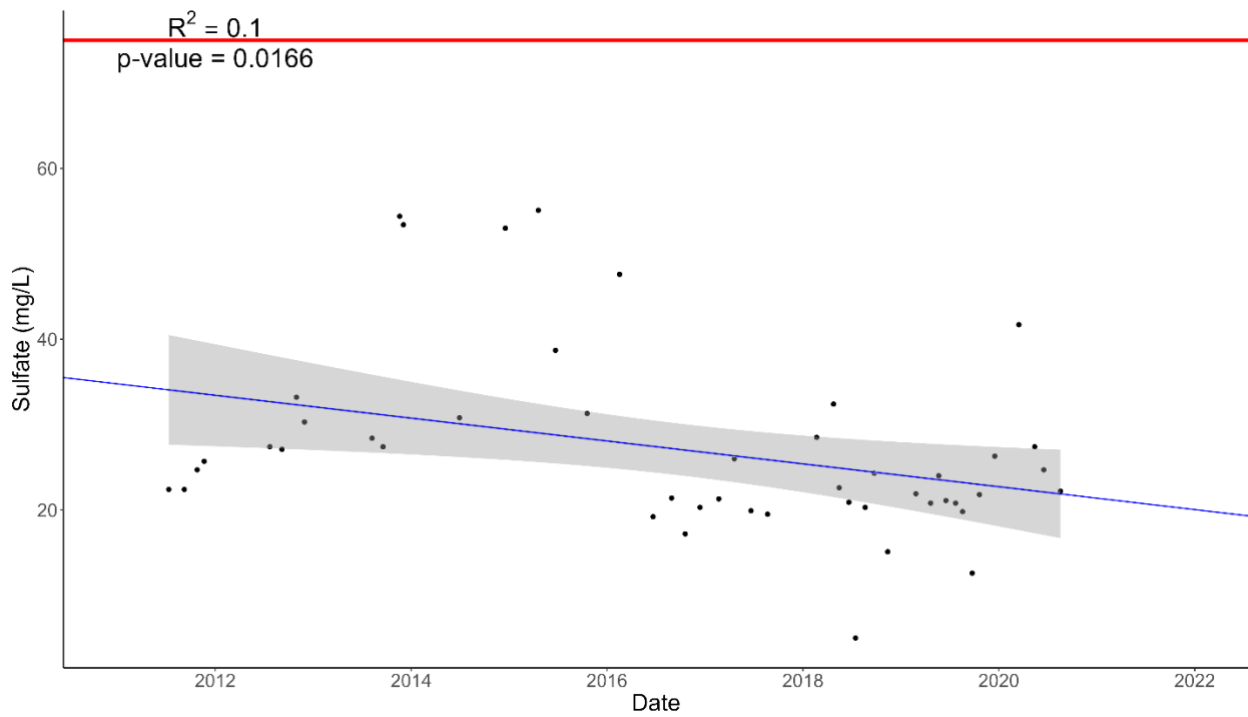
$R^2 = 0.25$
p-value = $3e-04$



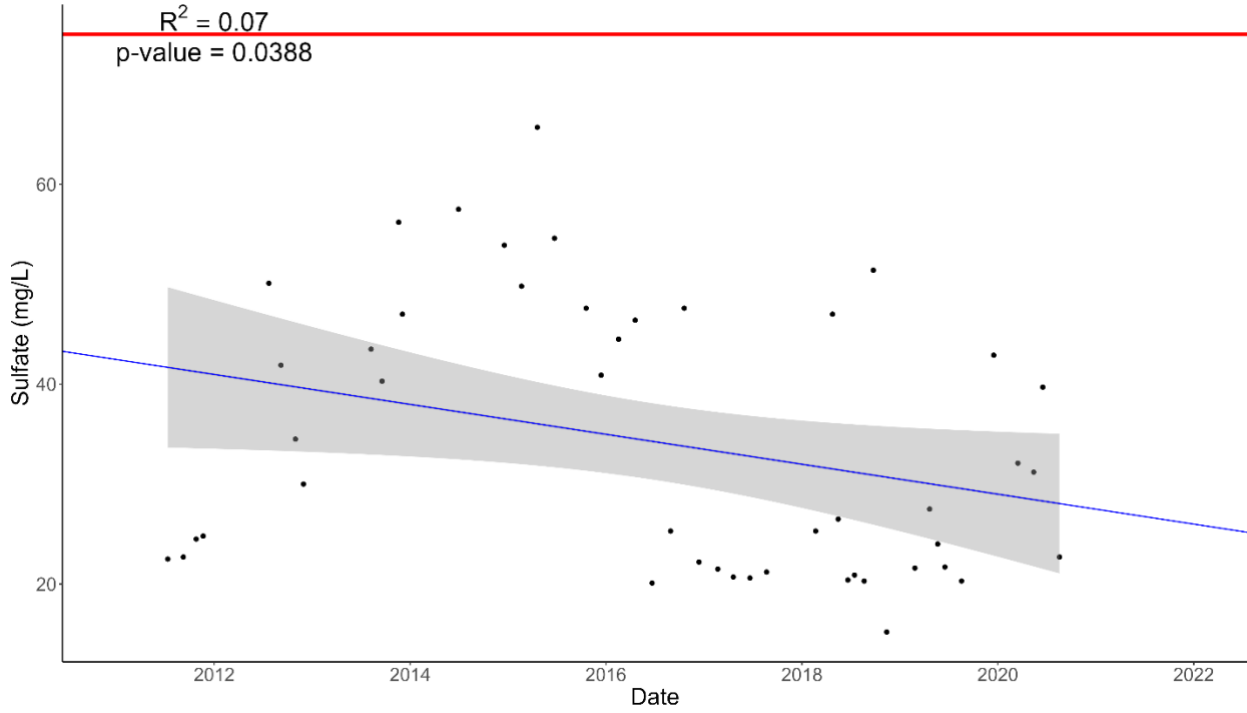
Assessment Unit: 1429_02

StationID: 12486-SURFACE

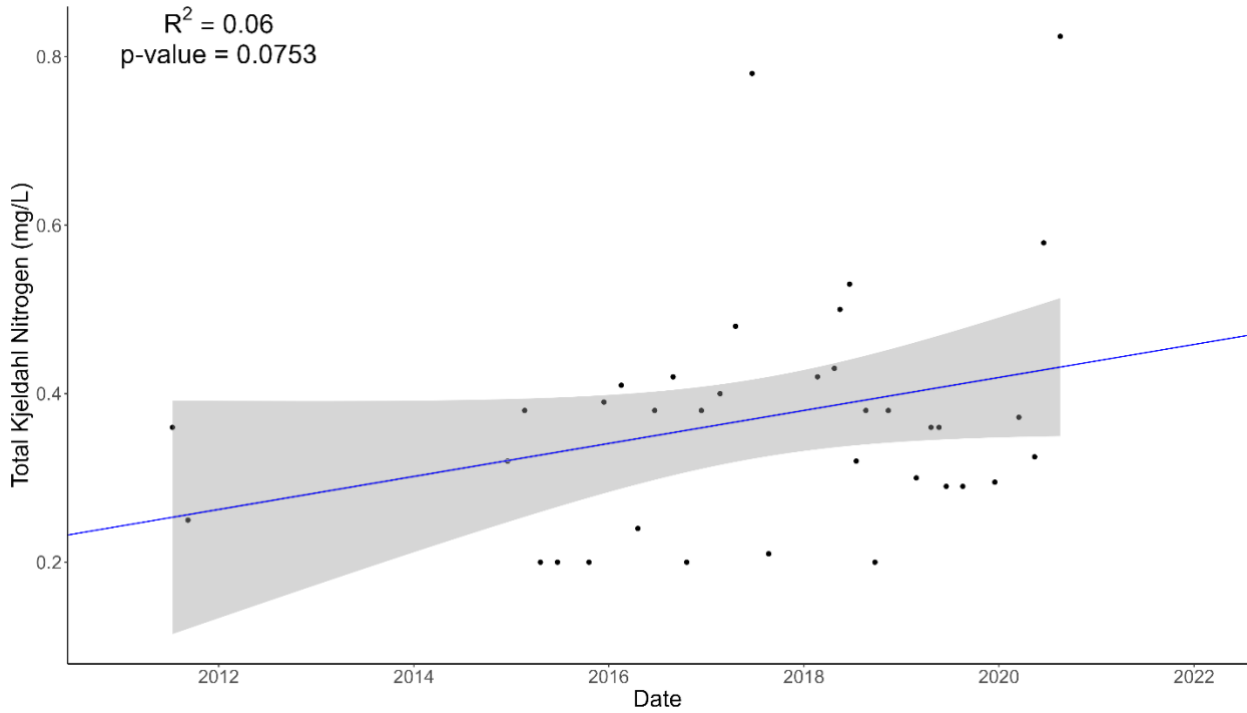
$R^2 = 0.1$
p-value = 0.0166



StationID: 12486-BOTTOM

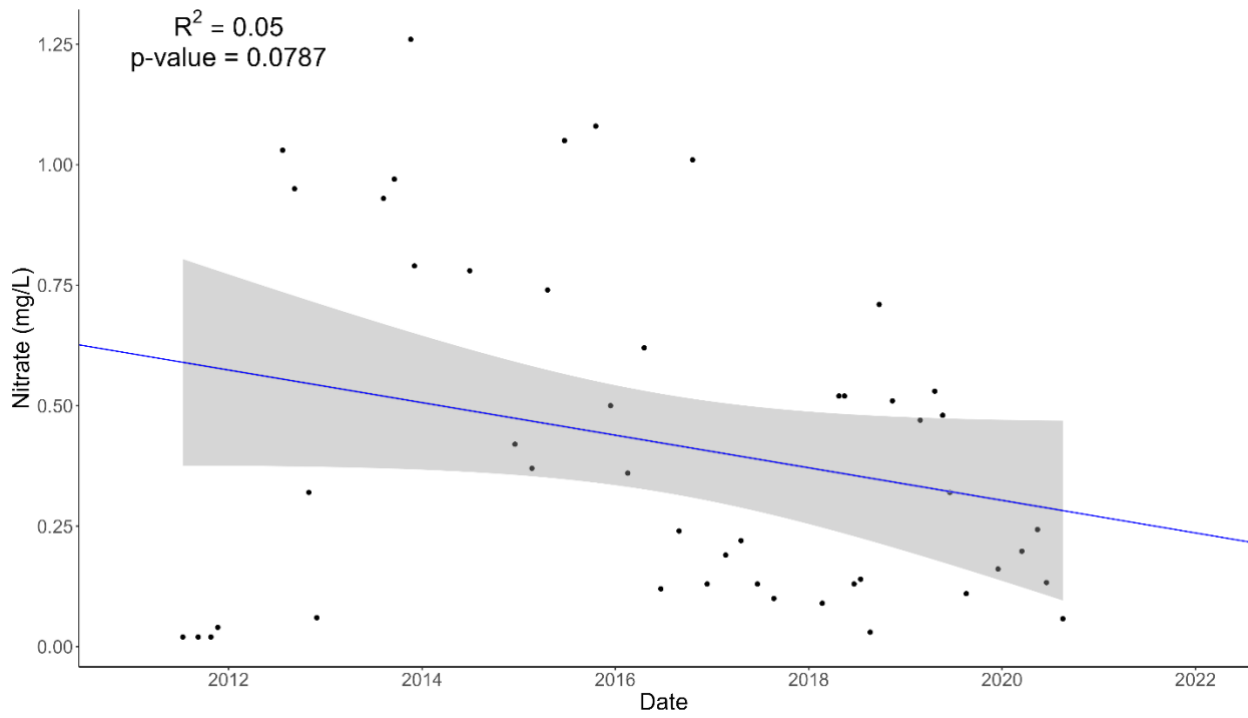


StationID: 12486-BOTTOM



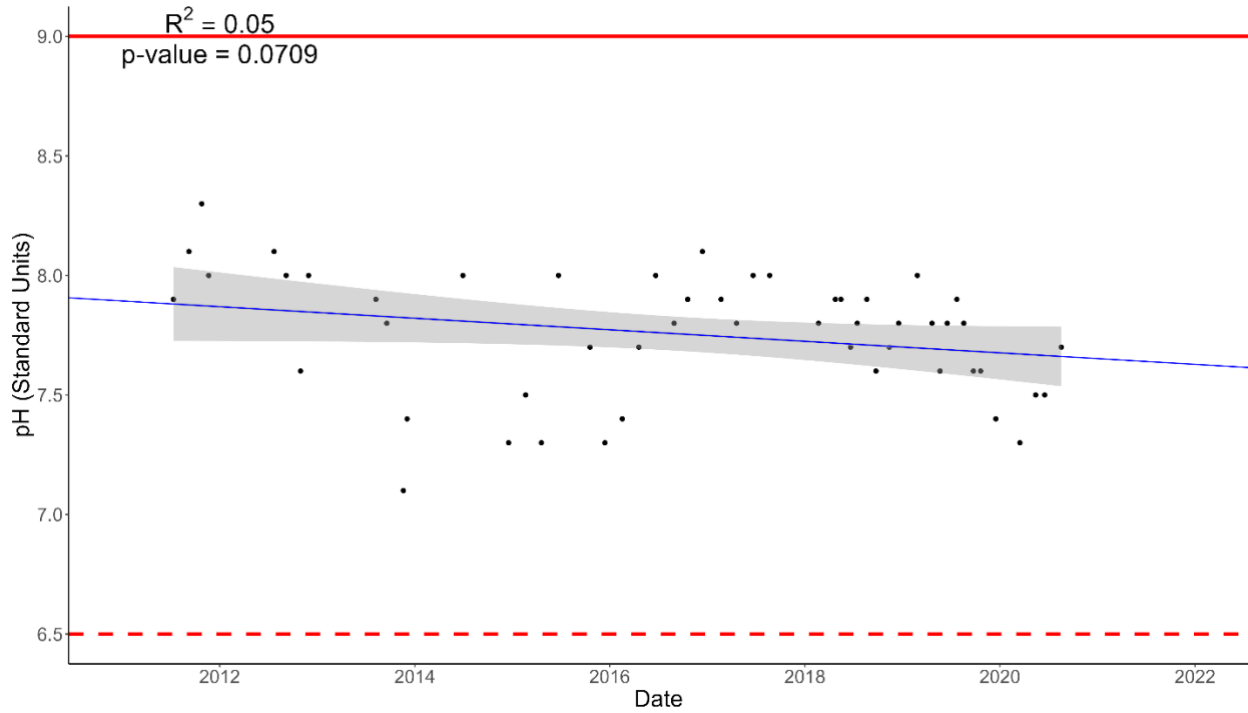
StationID: 12486-BOTTOM

$R^2 = 0.05$
p-value = 0.0787

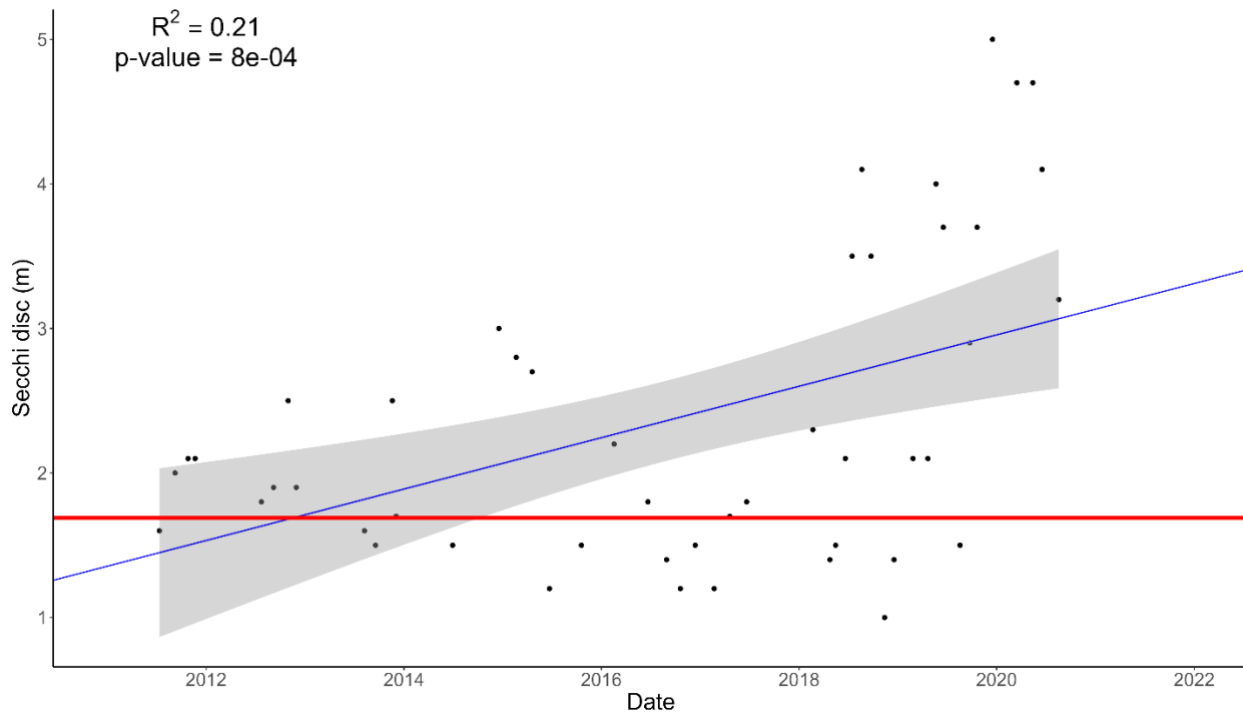


StationID: 12486-SURFACE

$R^2 = 0.05$
p-value = 0.0709



StationID: 12486-SURFACE



1429C – Waller Creek

Assessment Unit: 1429C_01

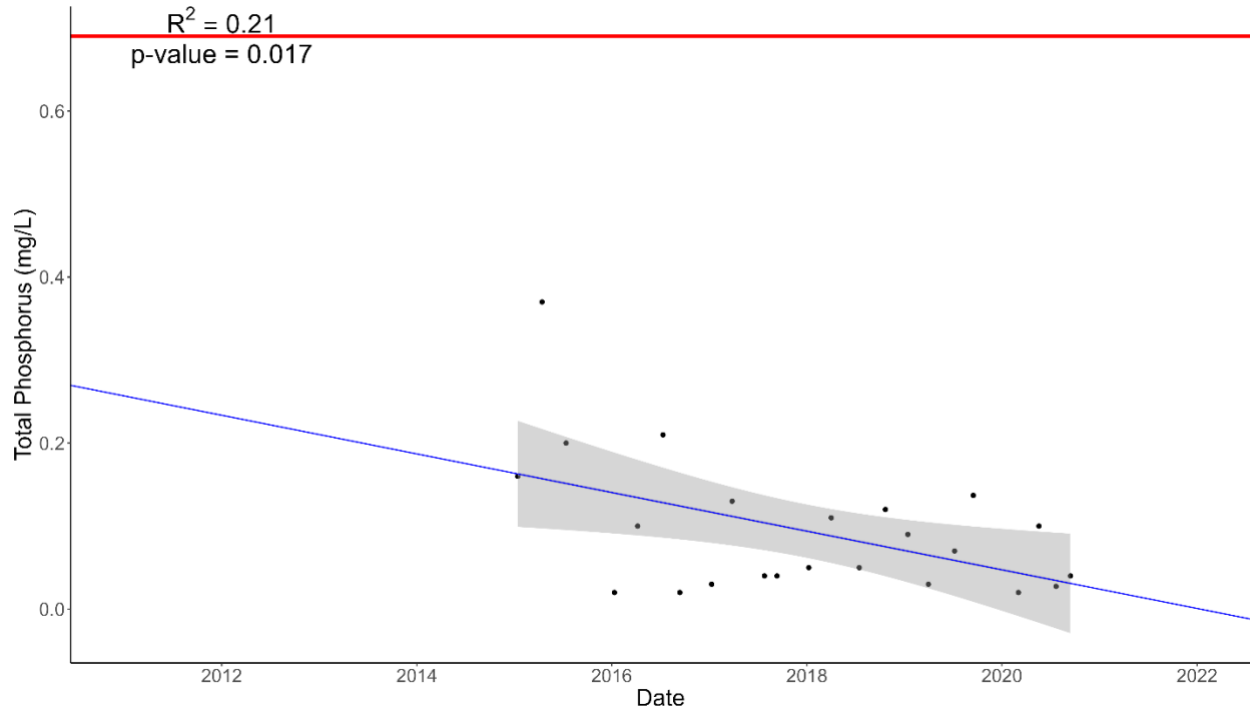
No significant trends.

Assessment Unit: 1429C_02

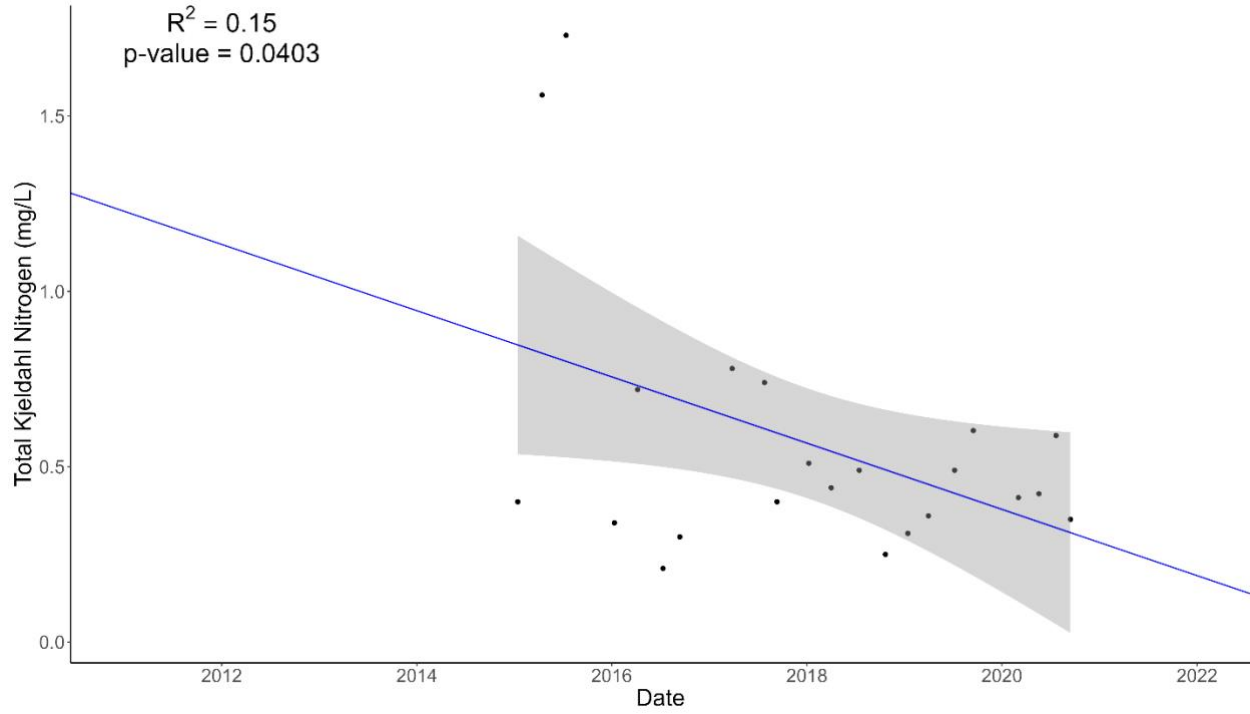
No significant trends.

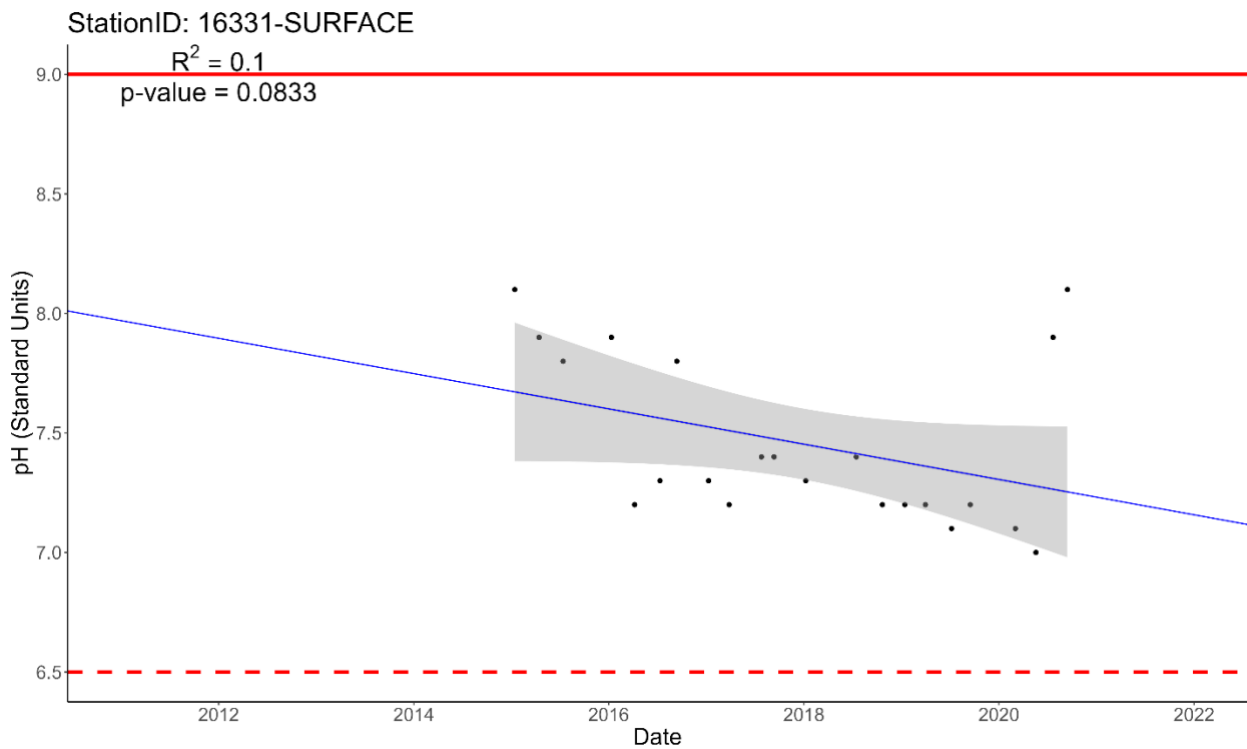
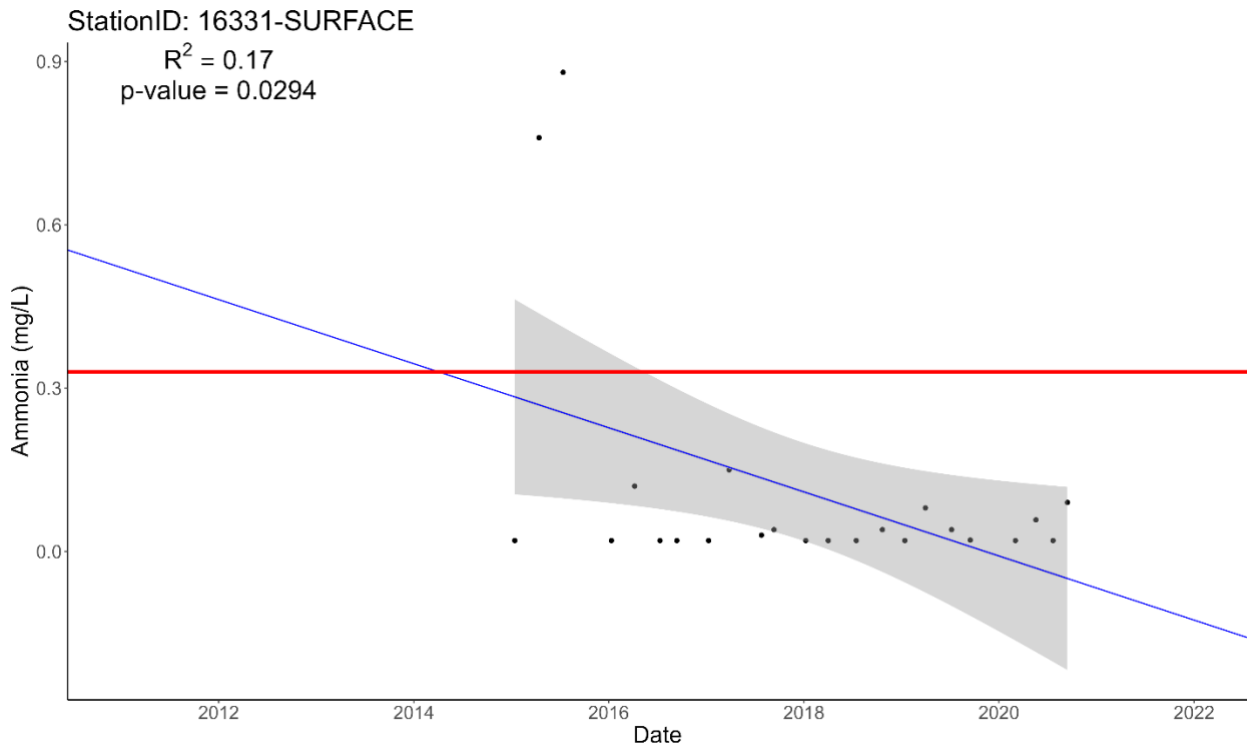
Assessment Unit: 1429C_03

StationID: 16331-SURFACE



StationID: 16331-SURFACE





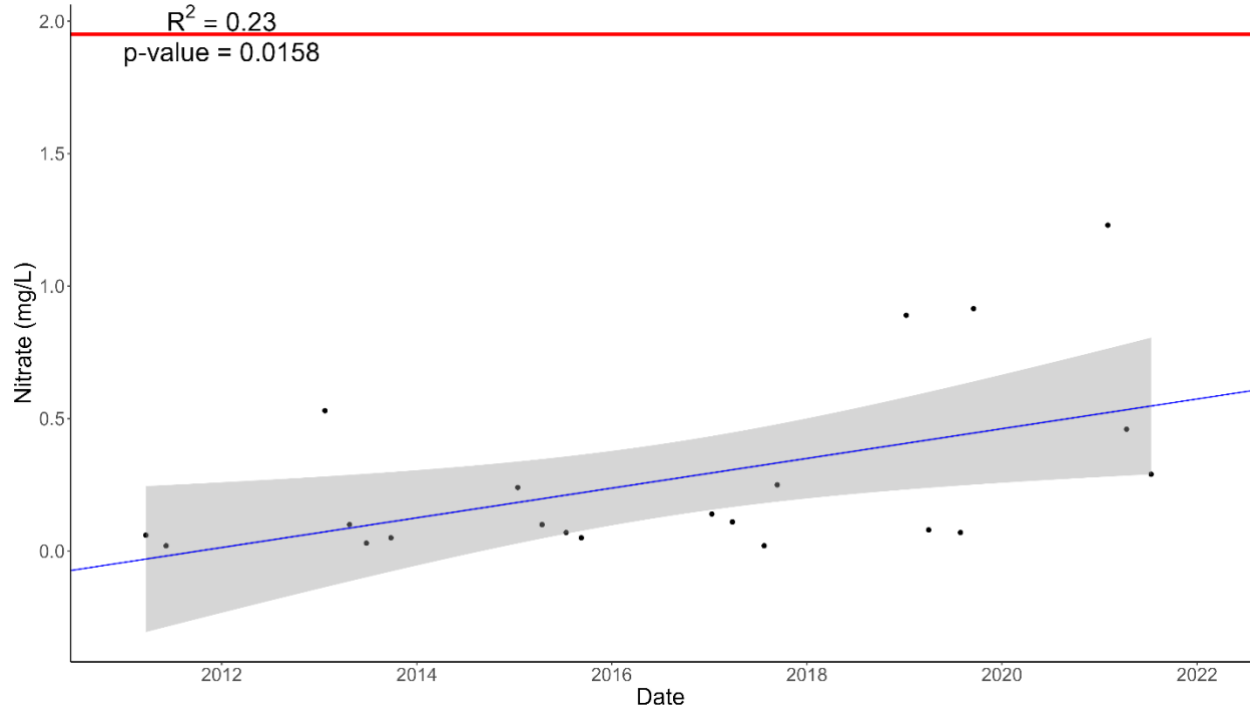
1430 – Barton Creek

Assessment Unit: 1430_02

No significant trend.

Assessment Unit: 1430_03

StationID: 13555-SURFACE



Assessment Unit: 1430_04

No significant trend.

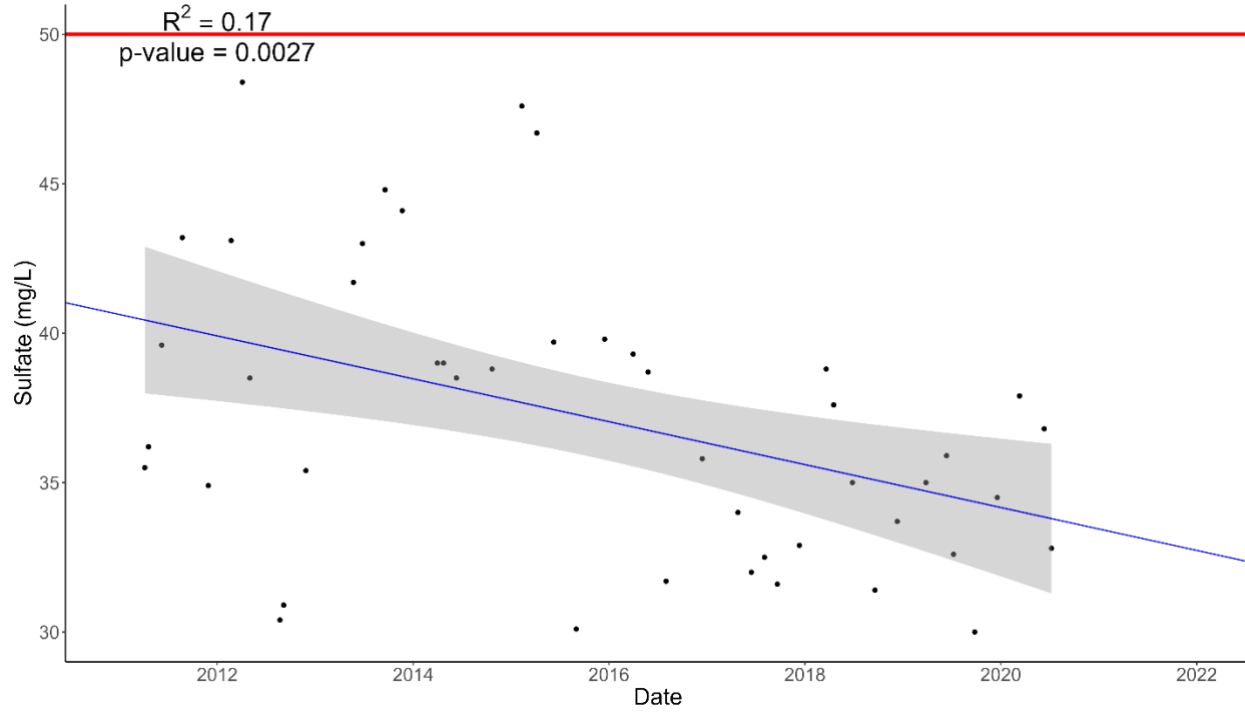
Assessment Unit: 1430_05

No significant trend.

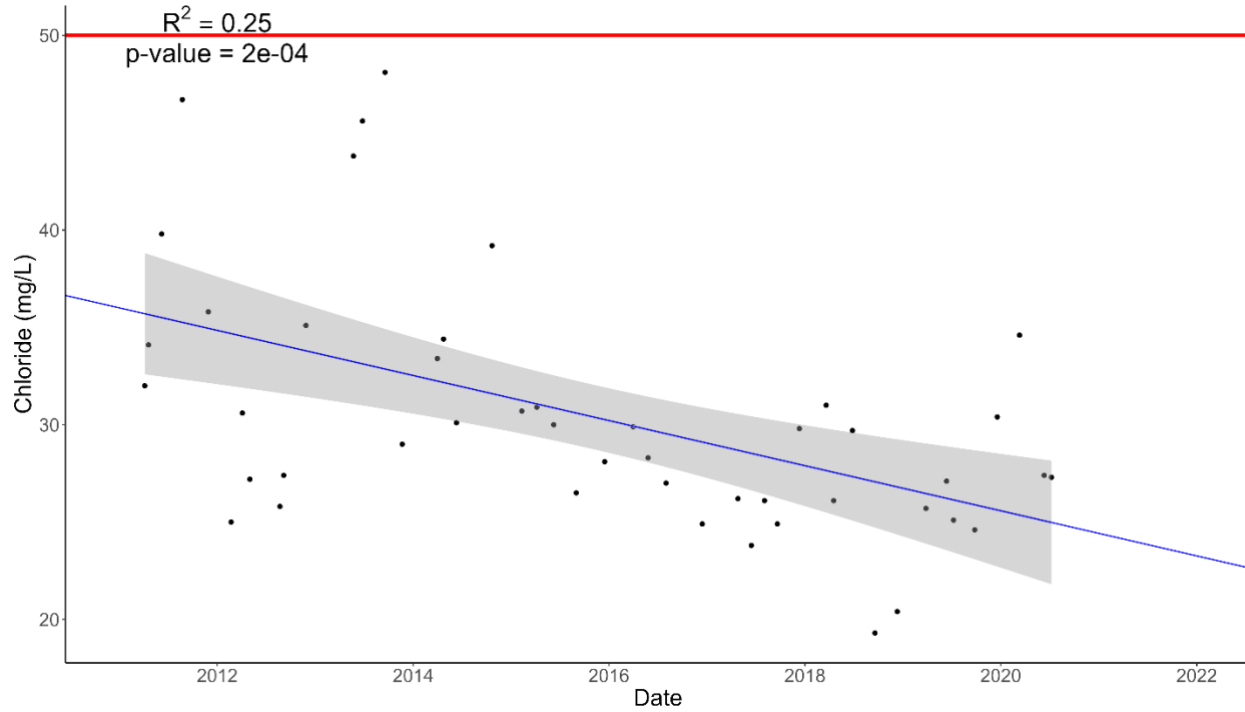
1430A – Barton Springs

Assessment Unit: 1430A_01

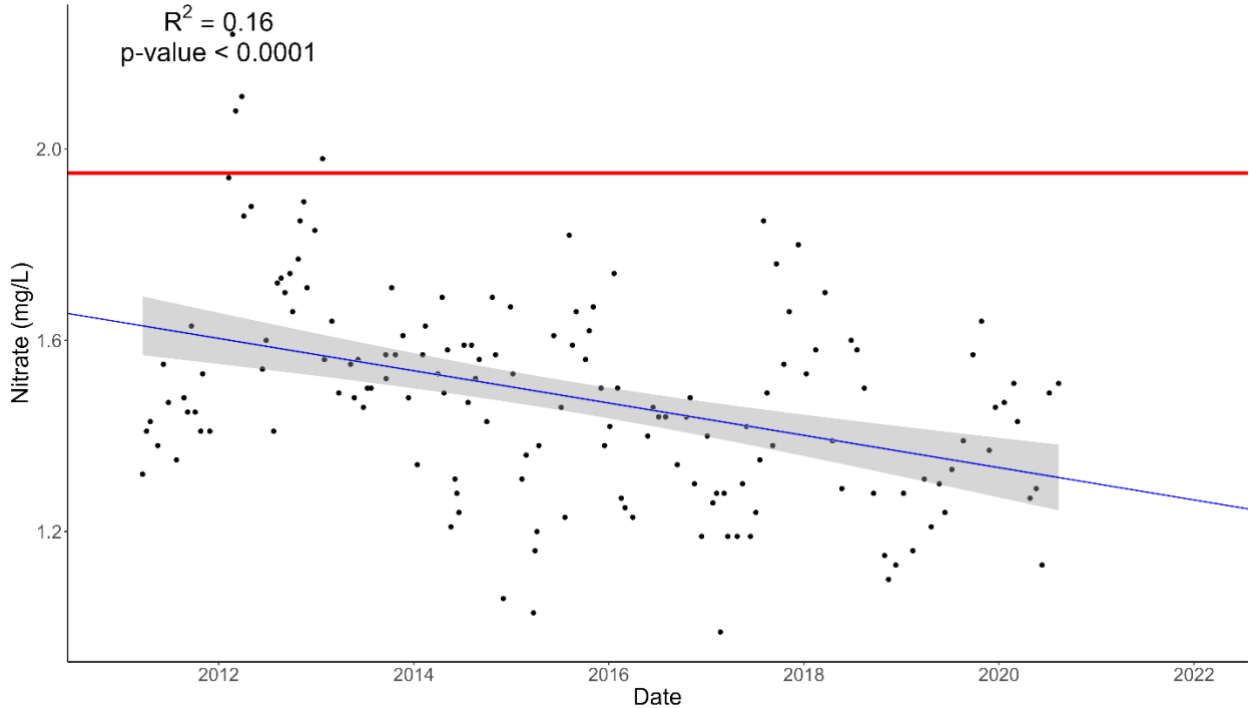
StationID: 15696-SURFACE



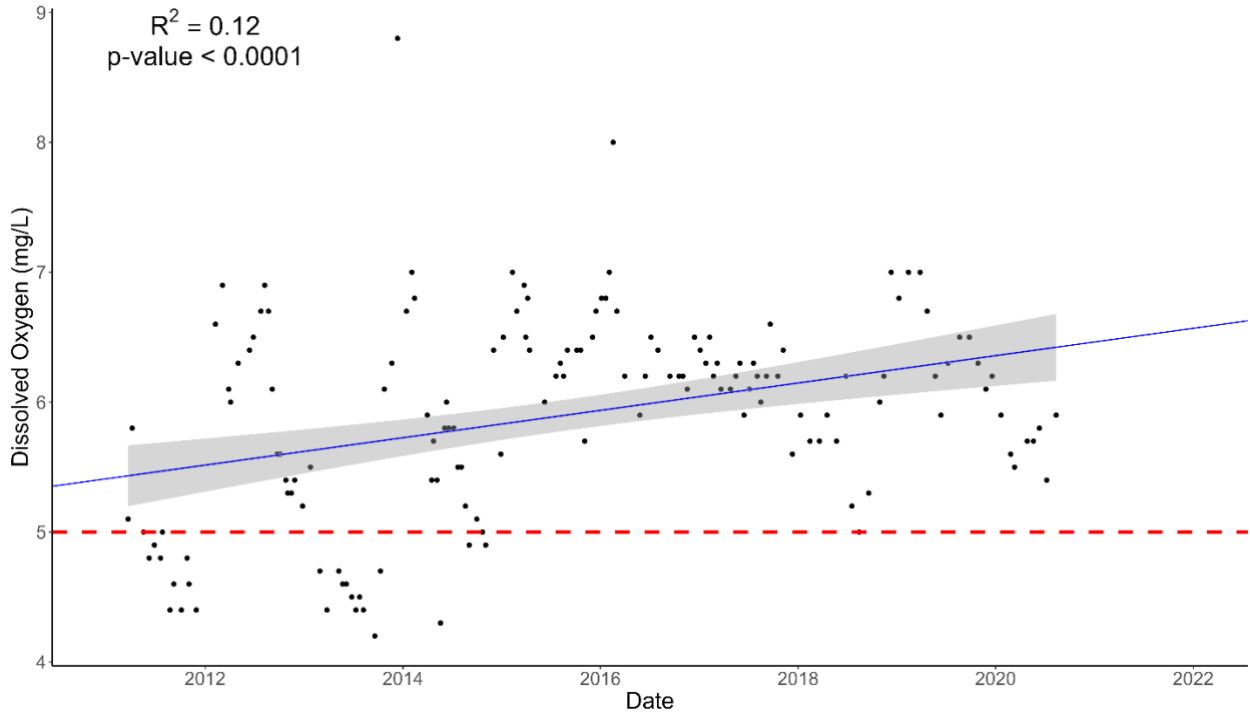
StationID: 15696-SURFACE



StationID: 15696-SURFACE



StationID: 15696-SURFACE



1430B – Tributaries to Barton Creek

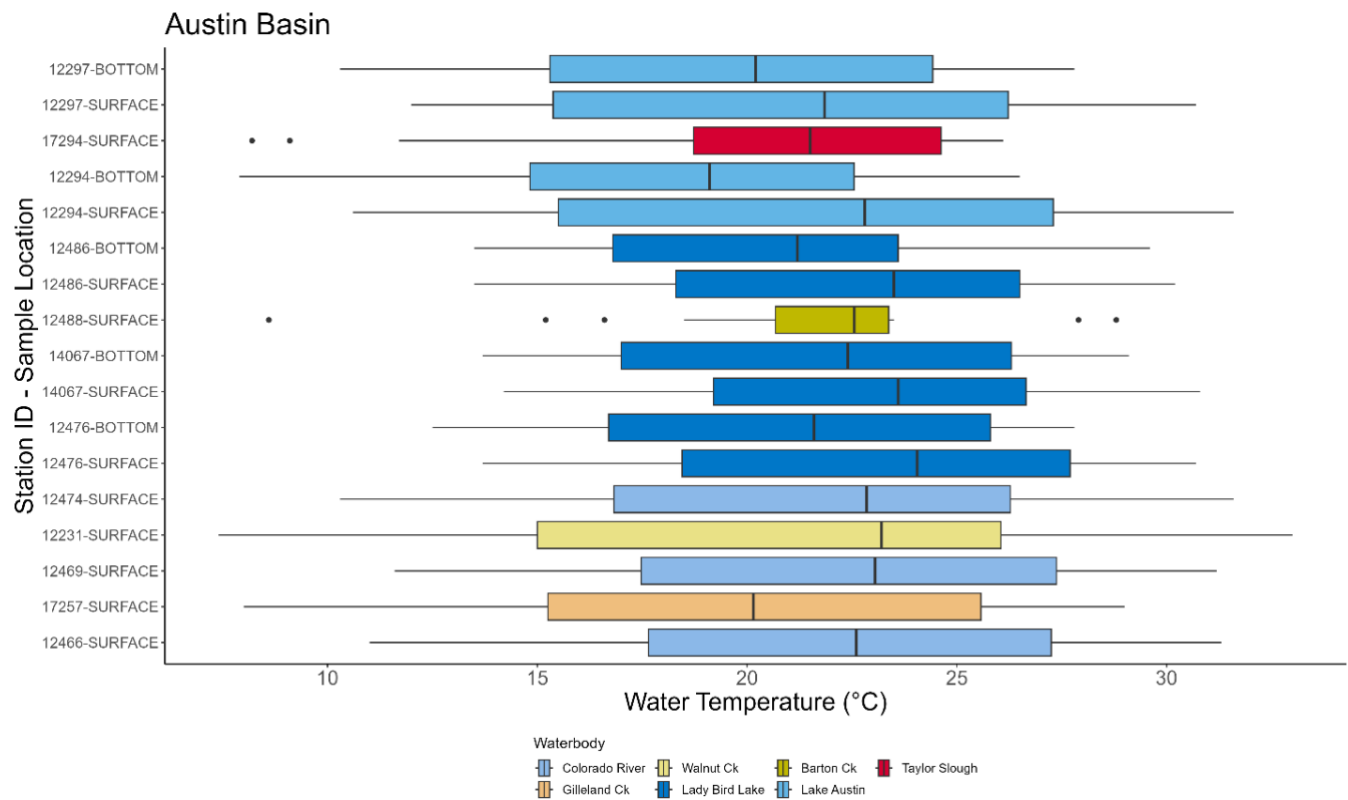
Assessment Unit: 1430B_05

No significant trend.

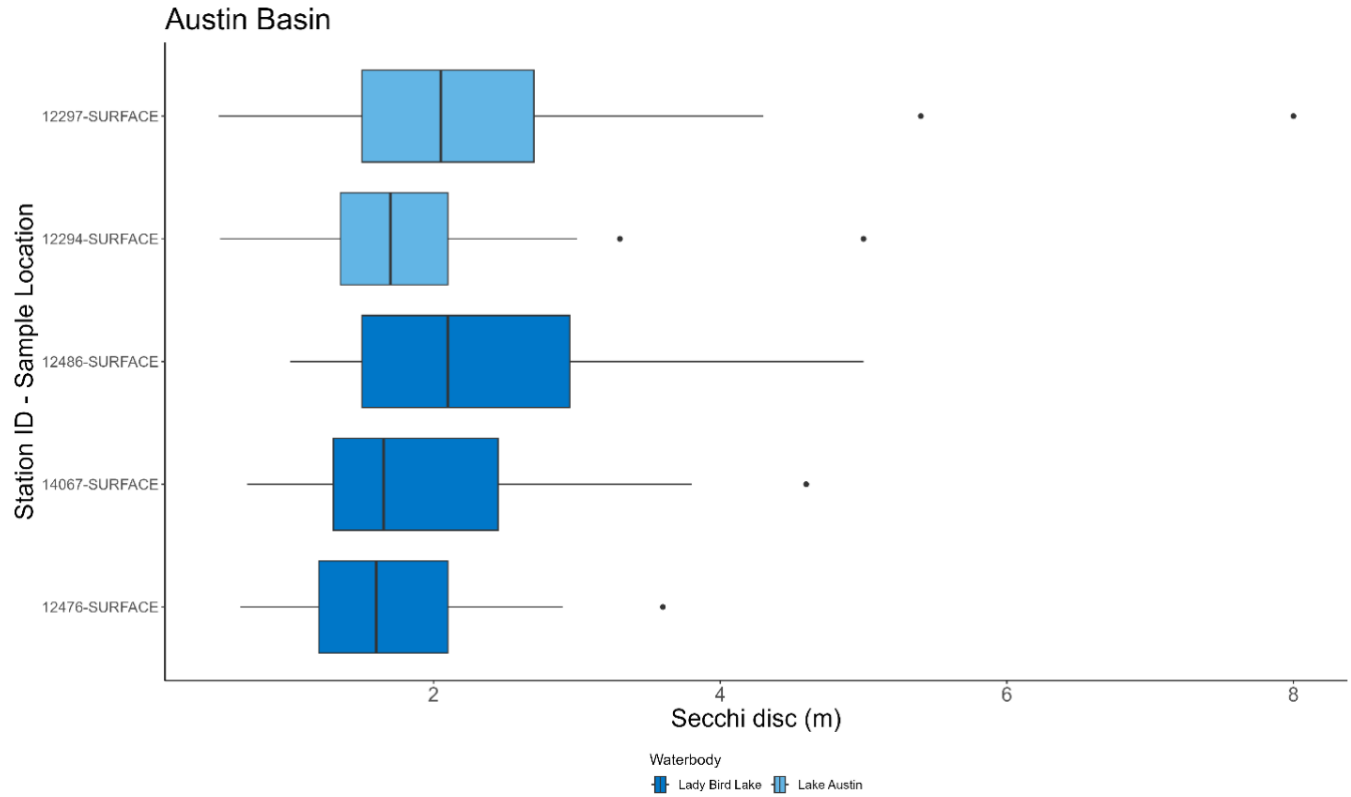
Appendix X13

Spatial comparison of parameters collected within the Austin Basin. Boxplots of each parameter are presented first followed by a table of site-by-site comparisons using a Tukey-HSD analysis. Only statistically different station comparisons for each parameter are presented (p -value < 0.05).

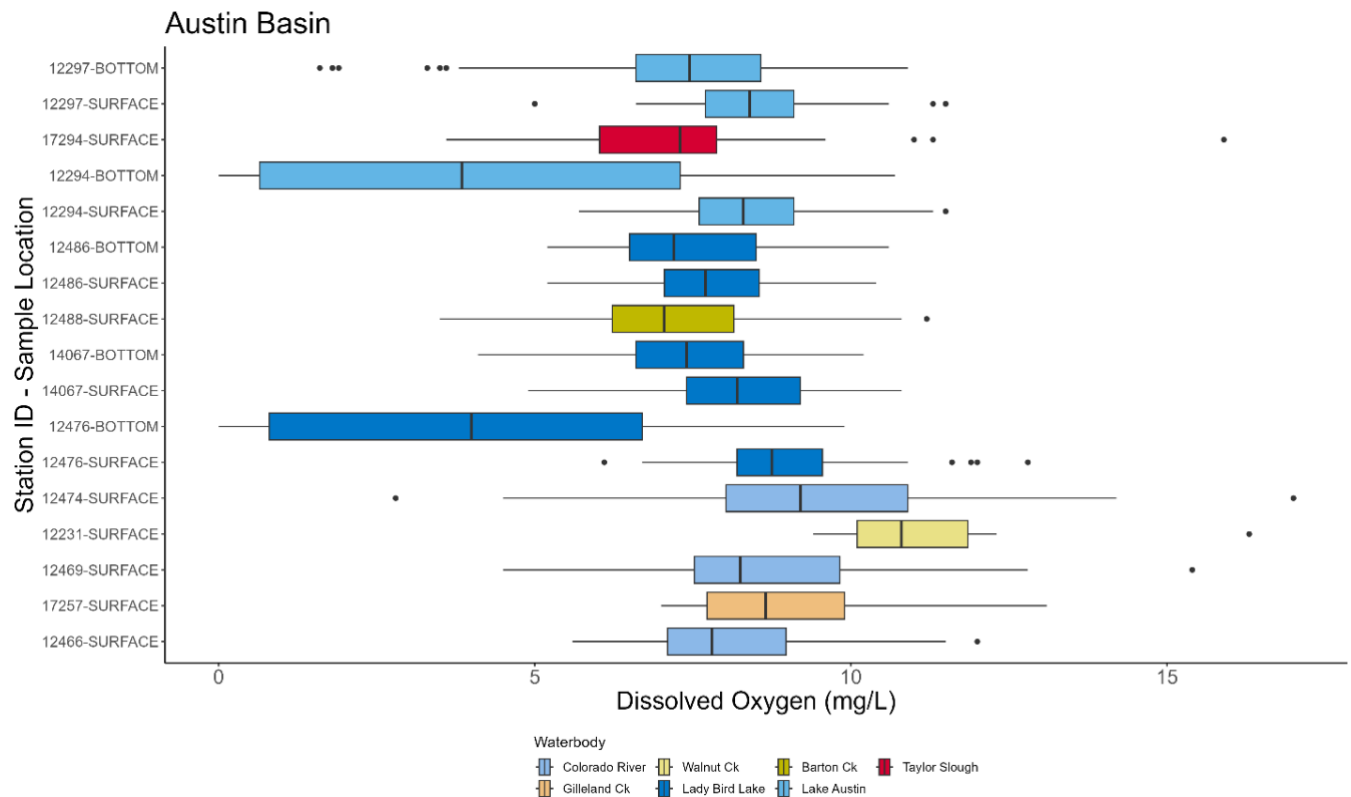
Water Temperature



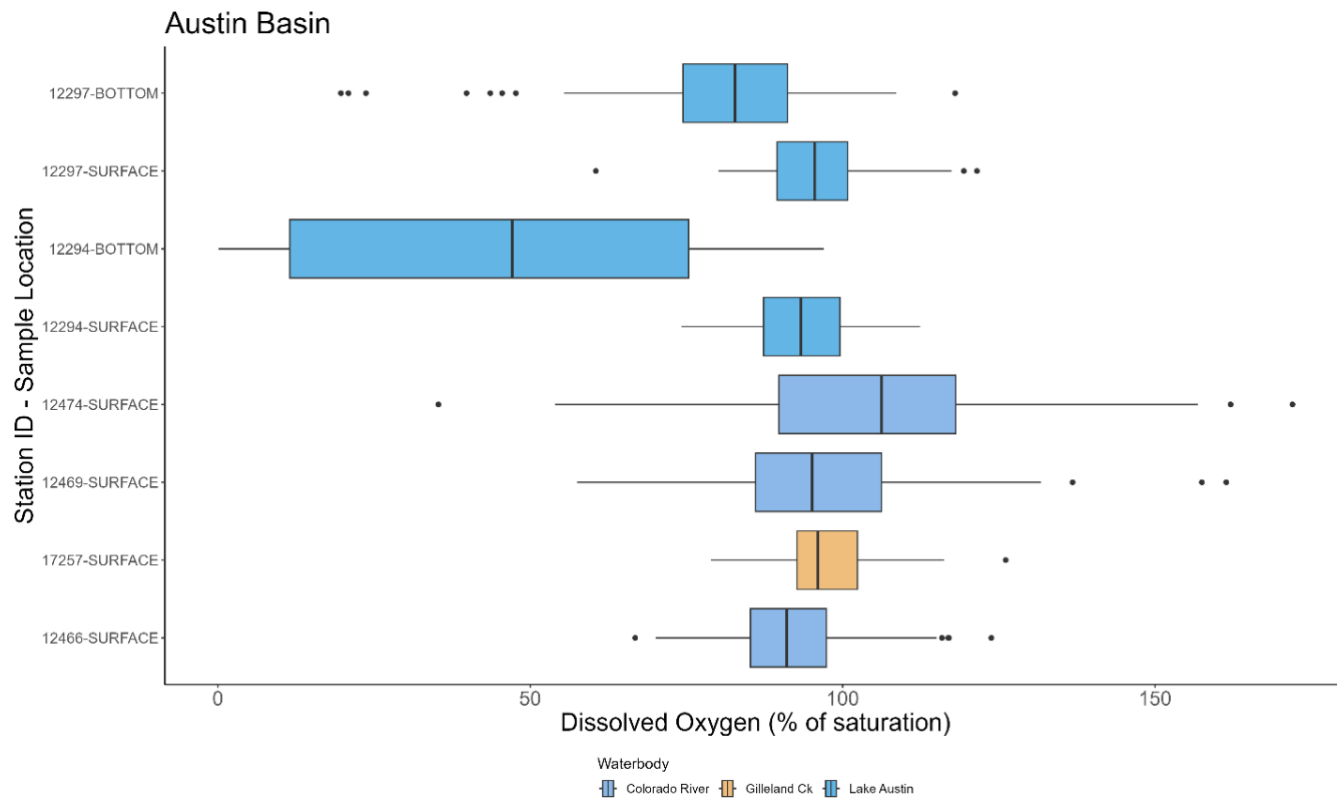
Secchi disc depth



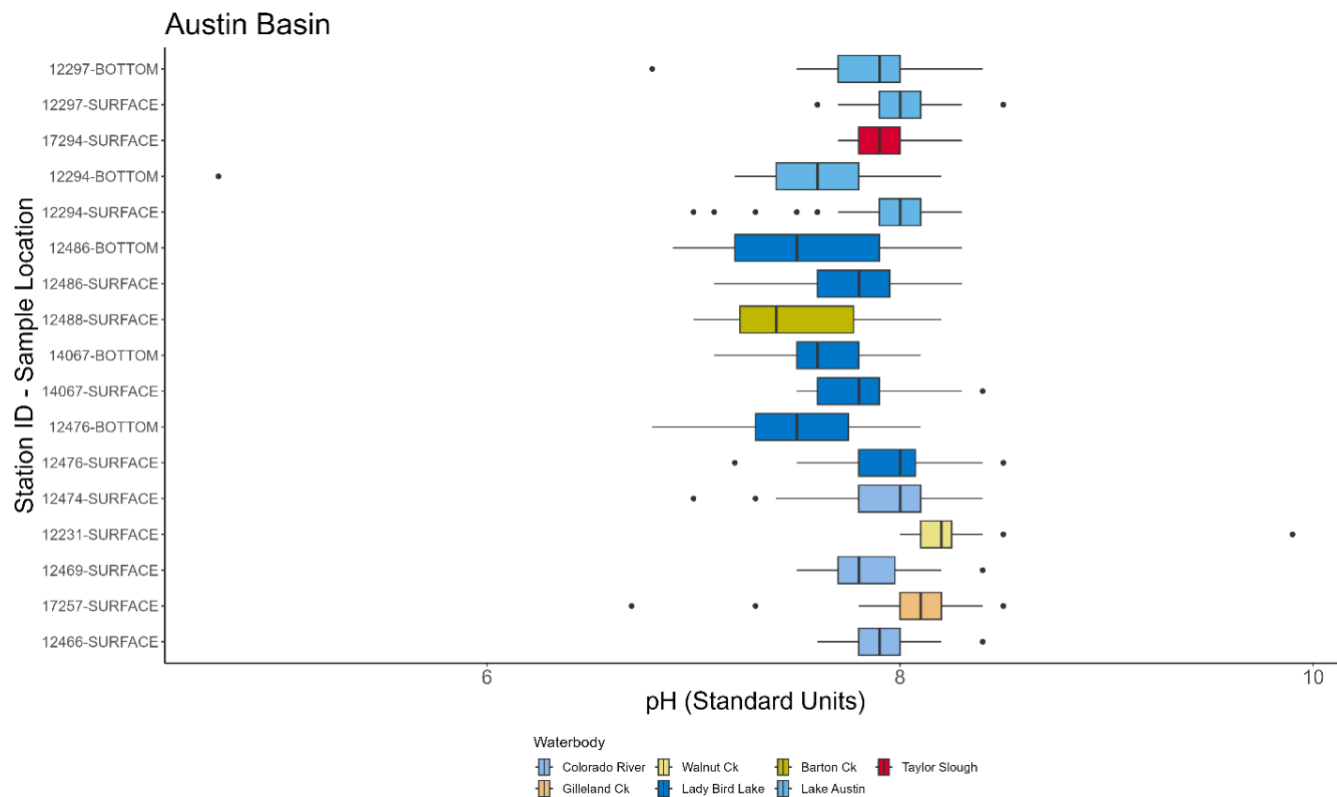
Dissolved Oxygen



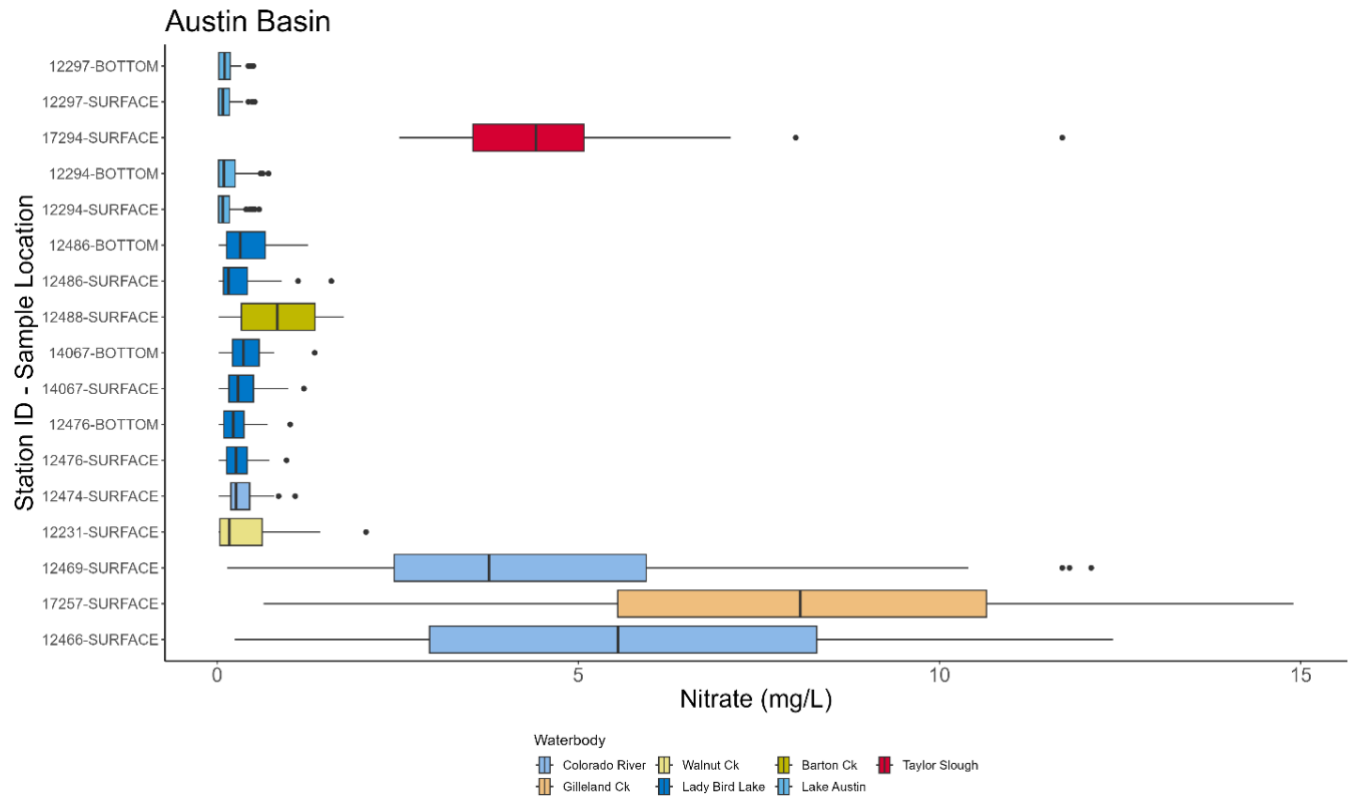
Dissolved Oxygen (% of saturation)



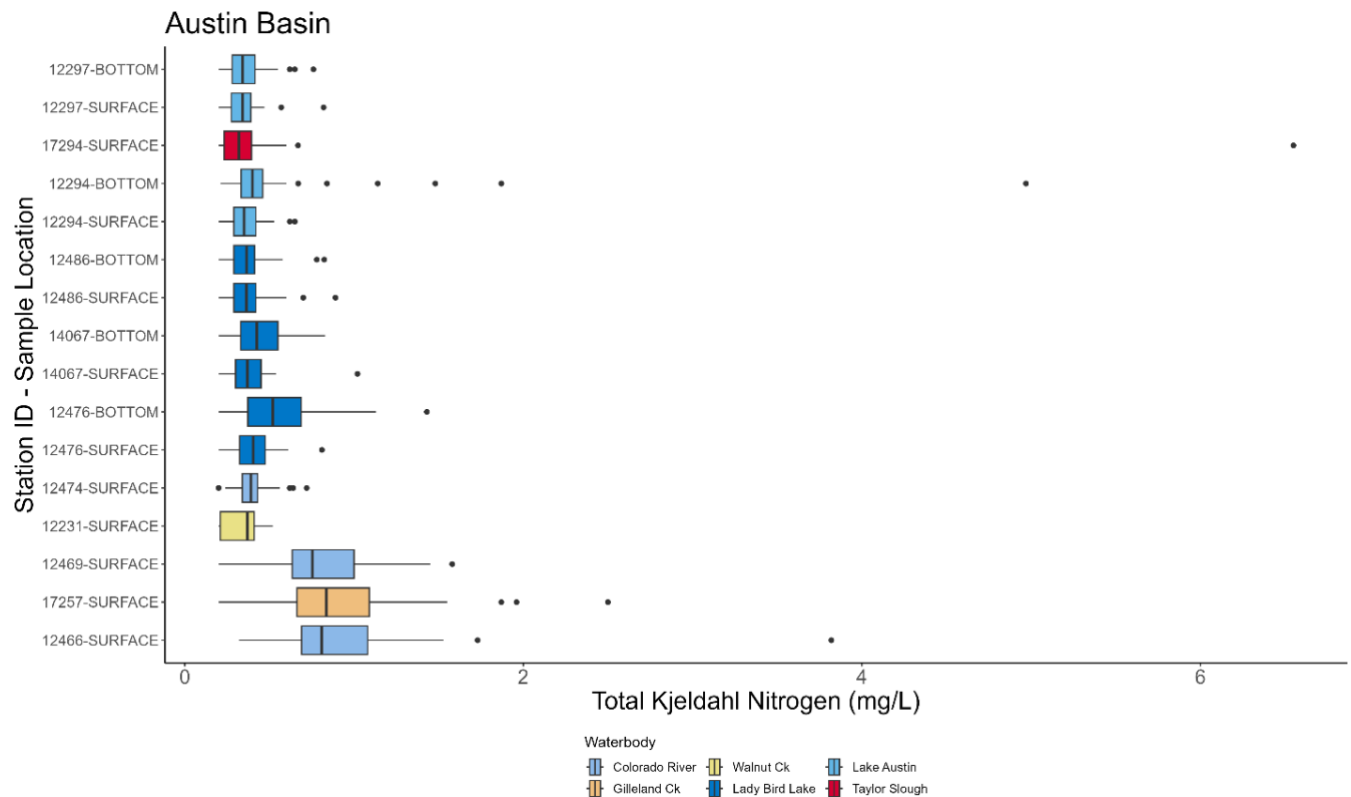
pH



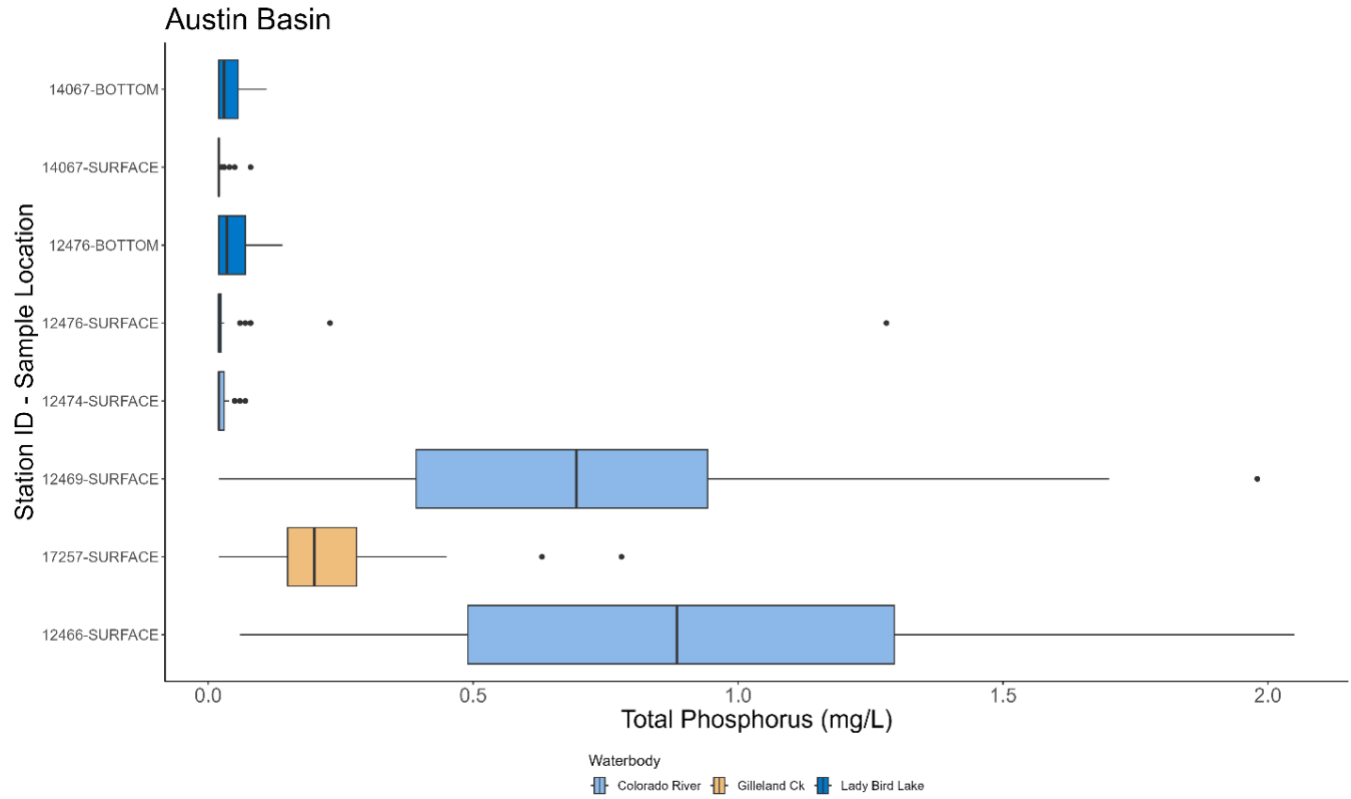
Nitrate



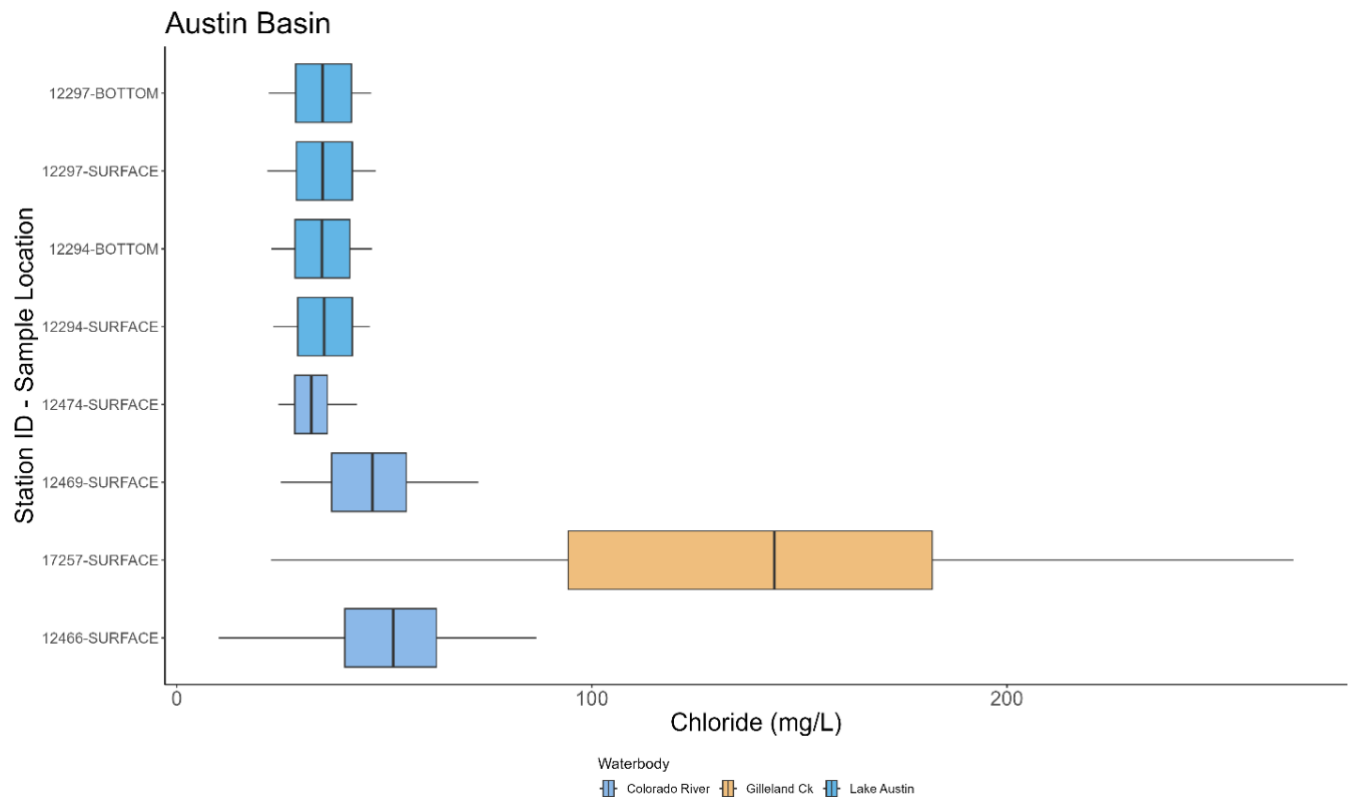
Total Kjeldahl Nitrogen



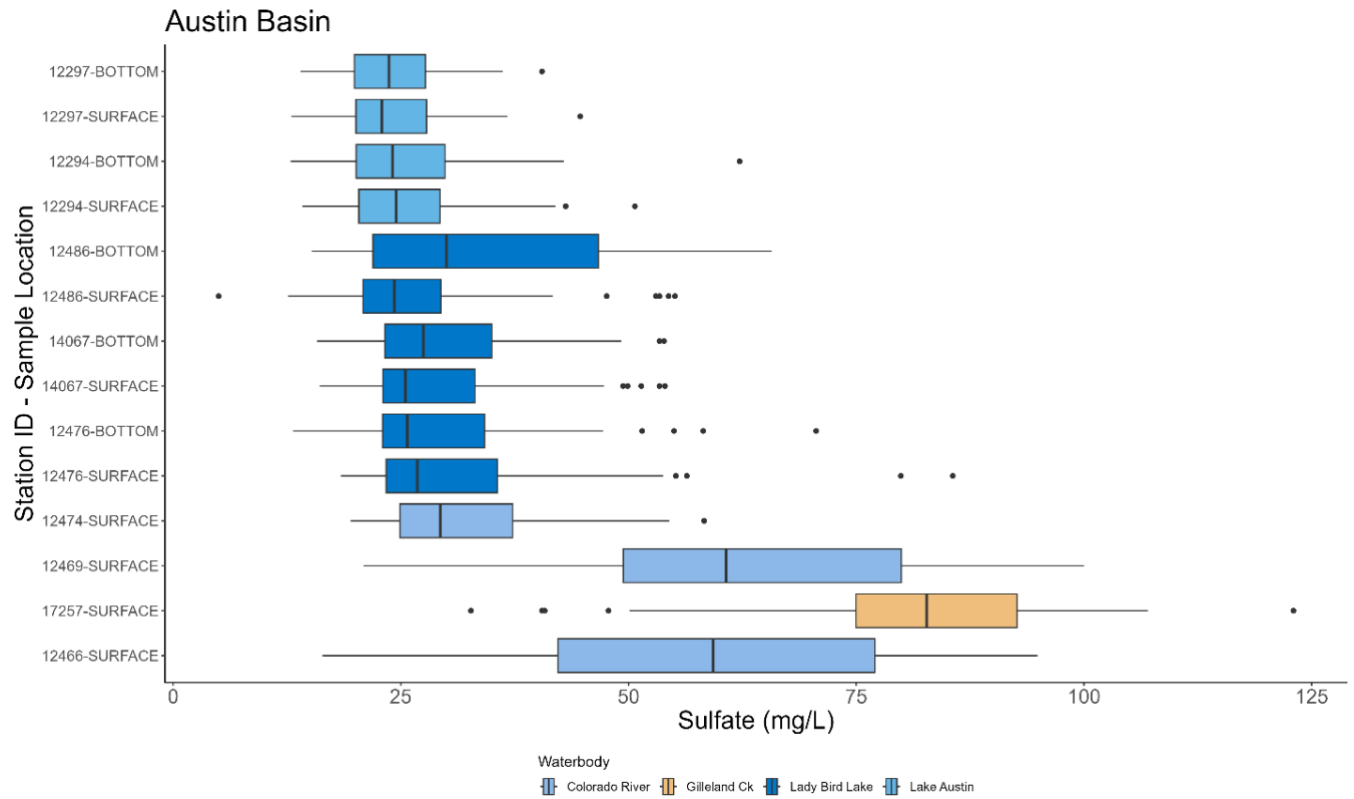
Total Phosphorus



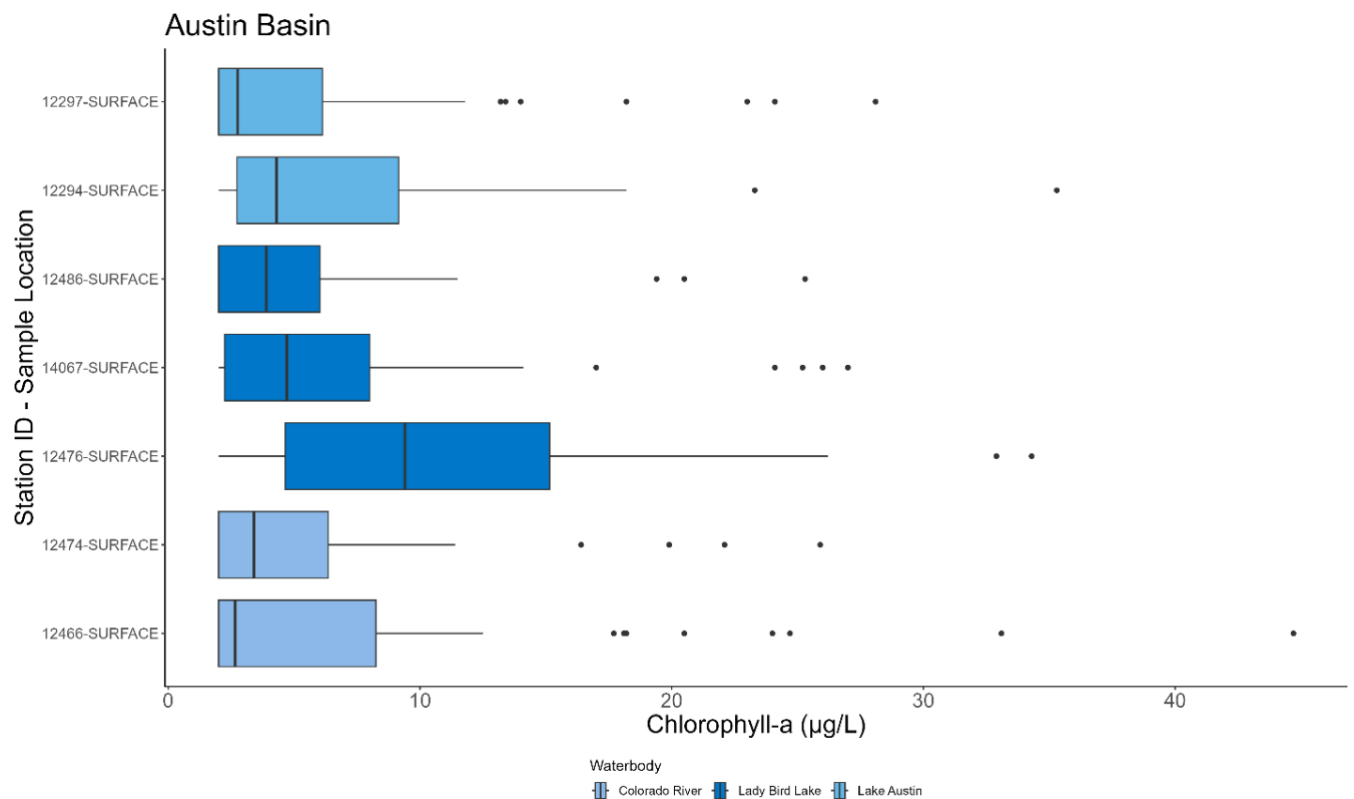
Chloride



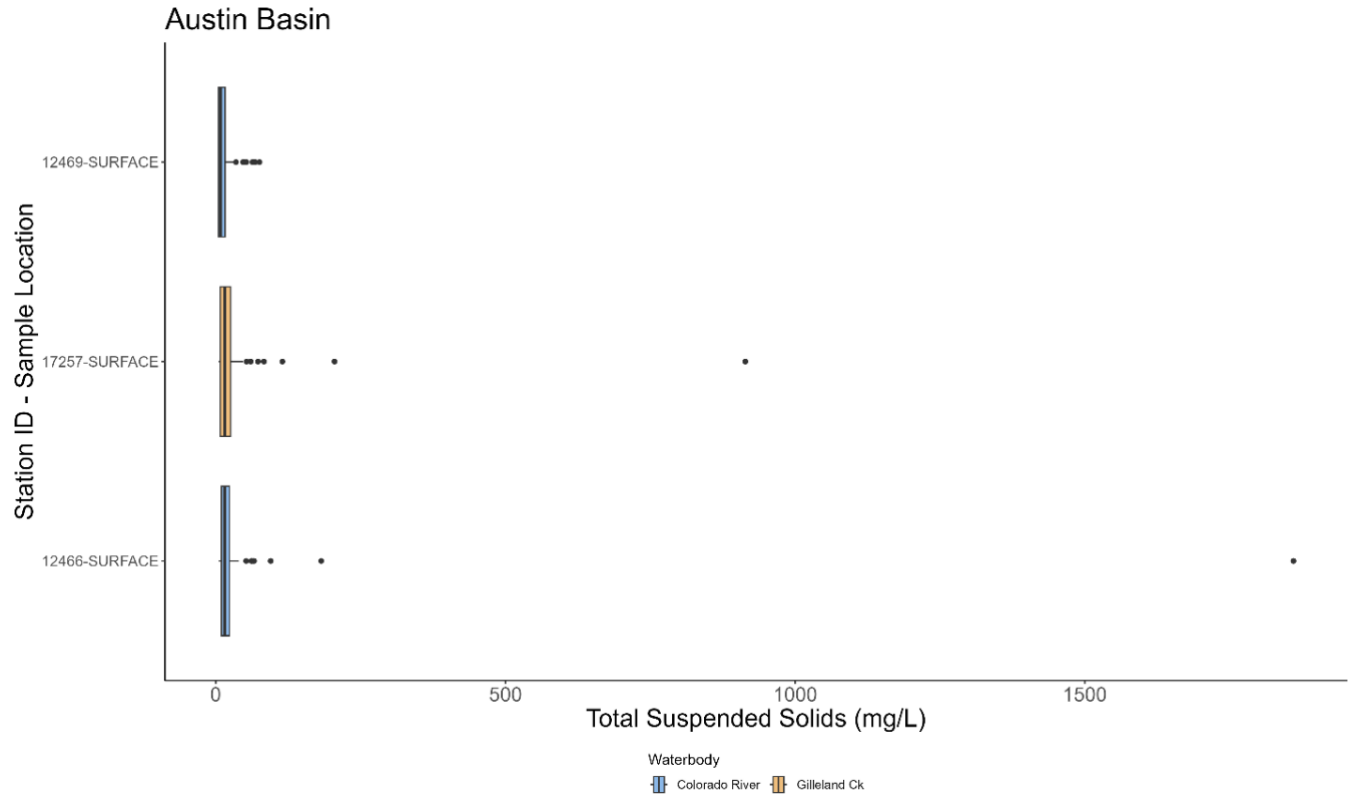
Sulfate



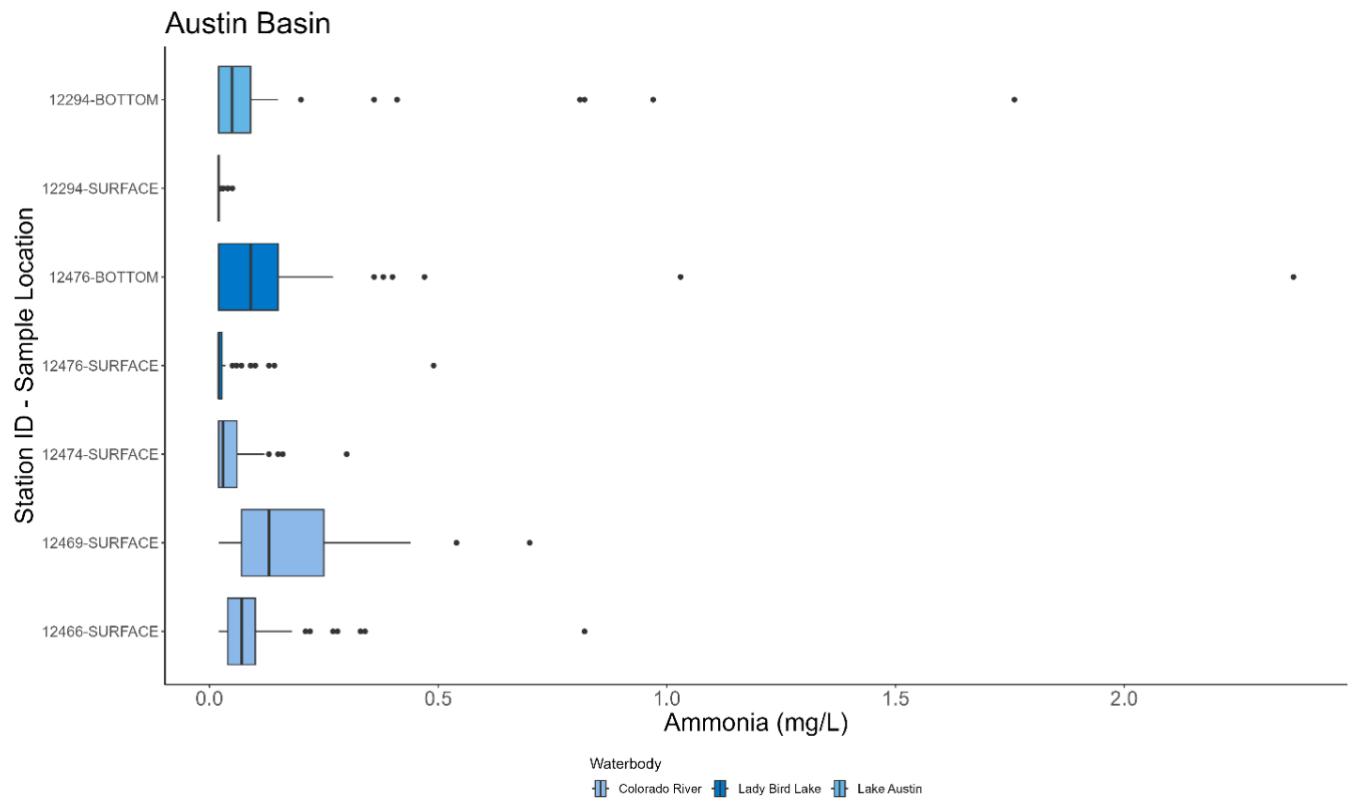
Chlorophyll a



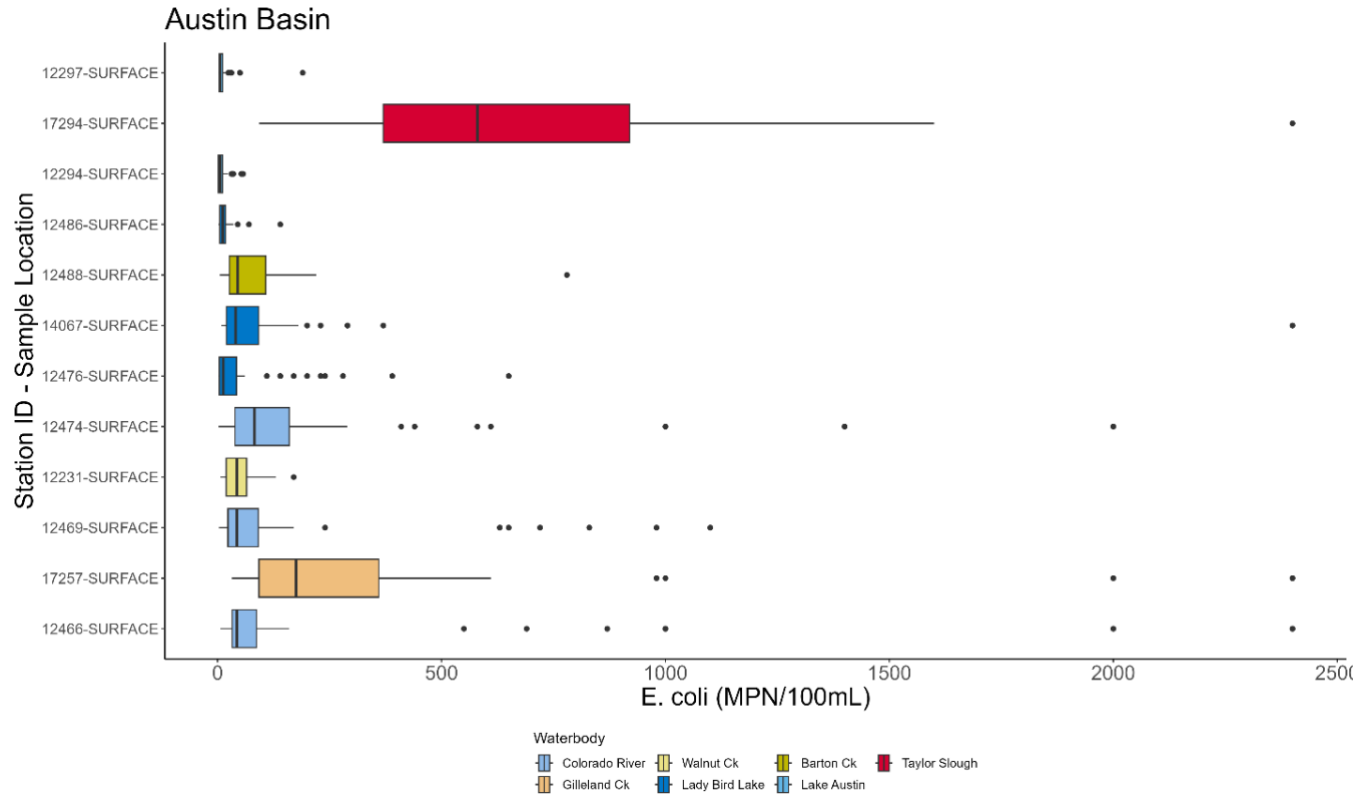
Total Suspended Solids



Ammonia



E. coli



Multiple Comparison Table

Multiple comparisons using Tukey-HSD after a significant ANOVA has been noted for the parameter. Sites that are being compared on a given row are mentioned in the Site Comparison column. The estimated difference between the sites for a given parameter is in the Difference column with the 95% confidence interval for the difference lying between the 95% Low and 95% High columns. As long as the 95% confidence interval does not contain zero, the sites should be statistically different (p-value < 0.05) for a given parameter.

| Parameter Code | Parameter | WSHED | Site Comparison | Difference | 95% Low Diff | 95% High Diff | p-value |
|----------------|-------------------------|--------|-----------------------------|------------|--------------|---------------|---------|
| 00010 | Water Temperature (°C) | Austin | 12294-SURFACE-12294-BOTTOM | 3.1302 | 0.0149 | 6.2455 | 0.0474 |
| 00010 | Water Temperature (°C) | Austin | 12466-SURFACE-12294-BOTTOM | 3.6581 | 0.4848 | 6.8314 | 0.0077 |
| 00010 | Water Temperature (°C) | Austin | 12469-SURFACE-12294-BOTTOM | 3.7854 | 0.6120 | 6.9587 | 0.0044 |
| 00010 | Water Temperature (°C) | Austin | 12474-SURFACE-12294-BOTTOM | 3.2399 | 0.0666 | 6.4132 | 0.0395 |
| 00010 | Water Temperature (°C) | Austin | 12476-SURFACE-12294-BOTTOM | 4.5121 | 1.2281 | 7.7962 | 3e-04 |
| 00010 | Water Temperature (°C) | Austin | 12486-SURFACE-12294-BOTTOM | 3.7473 | 0.3422 | 7.1524 | 0.0152 |
| 00010 | Water Temperature (°C) | Austin | 14067-SURFACE-12294-BOTTOM | 4.2512 | 0.8462 | 7.6563 | 0.002 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12294-BOTTOM-12231-SURFACE | -6.9290 | -8.8794 | -4.9787 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12294-SURFACE-12231-SURFACE | -2.7964 | -4.7444 | -0.8485 | 1e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12297-BOTTOM-12231-SURFACE | -3.7707 | -5.7261 | -1.8153 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12297-SURFACE-12231-SURFACE | -2.5883 | -4.5438 | -0.6329 | 6e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12466-SURFACE-12231-SURFACE | -2.9967 | -4.9574 | -1.0359 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12469-SURFACE-12231-SURFACE | -2.5800 | -4.5408 | -0.6192 | 7e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12231-SURFACE | -7.1035 | -9.1170 | -5.0901 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-SURFACE-12231-SURFACE | -2.1720 | -4.1576 | -0.1863 | 0.0166 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-BOTTOM-12231-SURFACE | -3.6276 | -5.6504 | -1.6048 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-SURFACE-12231-SURFACE | -3.3035 | -5.3170 | -1.2901 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12488-SURFACE-12231-SURFACE | -3.8967 | -6.2932 | -1.5002 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-BOTTOM-12231-SURFACE | -3.8480 | -5.8708 | -1.8252 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-SURFACE-12231-SURFACE | -2.8957 | -4.9092 | -0.8822 | 1e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17257-SURFACE-12231-SURFACE | -2.1558 | -4.1165 | -0.1950 | 0.0154 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17294-SURFACE-12231-SURFACE | -3.7133 | -5.9359 | -1.4907 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12294-SURFACE-12294-BOTTOM | 4.1326 | 2.9780 | 5.2872 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12297-BOTTOM-12294-BOTTOM | 3.1584 | 1.9912 | 4.3255 | <0.0001 |

| | | | | | | | |
|-------|-------------------------|--------|-----------------------------|---------|---------|---------|---------|
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12297-SURFACE-12294-BOTTOM | 4.3407 | 3.1735 | 5.5079 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12466-SURFACE-12294-BOTTOM | 3.9324 | 2.7563 | 5.1085 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12469-SURFACE-12294-BOTTOM | 4.3490 | 3.1729 | 5.5252 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12474-SURFACE-12294-BOTTOM | 5.0612 | 3.8851 | 6.2373 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-SURFACE-12294-BOTTOM | 4.7571 | 3.5399 | 5.9742 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-BOTTOM-12294-BOTTOM | 3.3014 | 2.0246 | 4.5782 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-SURFACE-12294-BOTTOM | 3.6255 | 2.3635 | 4.8875 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12488-SURFACE-12294-BOTTOM | 3.0324 | 1.2208 | 4.8440 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-BOTTOM-12294-BOTTOM | 3.0810 | 1.8042 | 4.3578 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-SURFACE-12294-BOTTOM | 4.0334 | 2.7714 | 5.2954 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17257-SURFACE-12294-BOTTOM | 4.7733 | 3.5972 | 5.9494 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17294-SURFACE-12294-BOTTOM | 3.2157 | 1.6414 | 4.7901 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12294-SURFACE | -4.3071 | -5.5654 | -3.0488 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12297-SURFACE-12297-BOTTOM | 1.1824 | 0.0067 | 2.3580 | 0.0469 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12469-SURFACE-12297-BOTTOM | 1.1907 | 0.0062 | 2.3752 | 0.0472 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12474-SURFACE-12297-BOTTOM | 1.9028 | 0.7183 | 3.0873 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12297-BOTTOM | -3.3328 | -4.6026 | -2.0630 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-SURFACE-12297-BOTTOM | 1.5987 | 0.3735 | 2.8240 | 8e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17257-SURFACE-12297-BOTTOM | 1.6149 | 0.4304 | 2.7994 | 3e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12297-SURFACE | -4.5152 | -5.7850 | -3.2454 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12466-SURFACE | -4.1069 | -5.3849 | -2.8288 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12469-SURFACE | -4.5235 | -5.8016 | -3.2455 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-BOTTOM-12474-SURFACE | -5.2357 | -6.5137 | -3.9576 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-BOTTOM-12474-SURFACE | -1.7597 | -3.0524 | -0.4671 | 3e-04 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-SURFACE-12474-SURFACE | -1.4357 | -2.7137 | -0.1576 | 0.0114 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12488-SURFACE-12474-SURFACE | -2.0288 | -3.8516 | -0.2060 | 0.013 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-BOTTOM-12474-SURFACE | -1.9801 | -3.2728 | -0.6875 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17294-SURFACE-12474-SURFACE | -1.8455 | -3.4327 | -0.2582 | 0.0067 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12476-SURFACE-12476-BOTTOM | 4.9316 | 3.6157 | 6.2475 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-BOTTOM-12476-BOTTOM | 3.4759 | 2.1047 | 4.8472 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-SURFACE-12476-BOTTOM | 3.8000 | 2.4425 | 5.1575 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12488-SURFACE-12476-BOTTOM | 3.2069 | 1.3275 | 5.0862 | <0.0001 |

| | | | | | | | |
|-------|-------------------------|--------|-----------------------------|---------|---------|---------|---------|
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-BOTTOM-12476-BOTTOM | 3.2555 | 1.8842 | 4.6268 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-SURFACE-12476-BOTTOM | 4.2078 | 2.8504 | 5.5653 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17257-SURFACE-12476-BOTTOM | 4.9478 | 3.6697 | 6.2258 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17294-SURFACE-12476-BOTTOM | 3.3902 | 1.7383 | 5.0421 | <0.0001 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 12486-BOTTOM-12476-SURFACE | -1.4557 | -2.7858 | -0.1256 | 0.0164 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 14067-BOTTOM-12476-SURFACE | -1.6761 | -3.0062 | -0.3460 | 0.0017 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17257-SURFACE-12486-BOTTOM | 1.4719 | 0.1792 | 2.7645 | 0.0093 |
| 00300 | Dissolved Oxygen (mg/L) | Austin | 17257-SURFACE-14067-BOTTOM | 1.6923 | 0.3996 | 2.9849 | 8e-04 |
| 00400 | pH (Standard Units) | Austin | 12294-BOTTOM-12231-SURFACE | -0.6933 | -0.9571 | -0.4296 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12294-SURFACE-12231-SURFACE | -0.3384 | -0.6018 | -0.0750 | 0.0012 |
| 00400 | pH (Standard Units) | Austin | 12297-BOTTOM-12231-SURFACE | -0.4198 | -0.6842 | -0.1554 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12297-SURFACE-12231-SURFACE | -0.2757 | -0.5401 | -0.0113 | 0.0308 |
| 00400 | pH (Standard Units) | Austin | 12466-SURFACE-12231-SURFACE | -0.3964 | -0.6615 | -0.1312 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12469-SURFACE-12231-SURFACE | -0.4479 | -0.7130 | -0.1827 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12474-SURFACE-12231-SURFACE | -0.3706 | -0.6358 | -0.1055 | 2e-04 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12231-SURFACE | -0.7973 | -1.0695 | -0.5250 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12476-SURFACE-12231-SURFACE | -0.3520 | -0.6205 | -0.0834 | 8e-04 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12231-SURFACE | -0.7852 | -1.0587 | -0.5116 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-SURFACE-12231-SURFACE | -0.5384 | -0.8107 | -0.2662 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12231-SURFACE | -0.7933 | -1.1174 | -0.4693 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12231-SURFACE | -0.6790 | -0.9526 | -0.4055 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12231-SURFACE | -0.5129 | -0.7852 | -0.2407 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17294-SURFACE-12231-SURFACE | -0.3653 | -0.6681 | -0.0626 | 0.0036 |
| 00400 | pH (Standard Units) | Austin | 12294-SURFACE-12294-BOTTOM | 0.3549 | 0.1988 | 0.5111 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12297-BOTTOM-12294-BOTTOM | 0.2735 | 0.1157 | 0.4314 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12297-SURFACE-12294-BOTTOM | 0.4176 | 0.2598 | 0.5755 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12466-SURFACE-12294-BOTTOM | 0.2970 | 0.1379 | 0.4560 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12469-SURFACE-12294-BOTTOM | 0.2455 | 0.0864 | 0.4045 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12474-SURFACE-12294-BOTTOM | 0.3227 | 0.1637 | 0.4818 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12476-SURFACE-12294-BOTTOM | 0.3414 | 0.1768 | 0.5060 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12294-BOTTOM | 0.1804 | 0.0097 | 0.3510 | 0.026 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12294-BOTTOM | 0.4500 | 0.2910 | 0.6090 | <0.0001 |

| | | | | | | | |
|-------|---------------------|--------|-----------------------------|---------|---------|---------|---------|
| 00400 | pH (Standard Units) | Austin | 17294-SURFACE-12294-BOTTOM | 0.3280 | 0.1120 | 0.5440 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12294-SURFACE | -0.4589 | -0.6290 | -0.2887 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12294-SURFACE | -0.4468 | -0.6189 | -0.2746 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-SURFACE-12294-SURFACE | -0.2000 | -0.3702 | -0.0299 | 0.0056 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12294-SURFACE | -0.4549 | -0.6995 | -0.2103 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12294-SURFACE | -0.3406 | -0.5128 | -0.1685 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12294-SURFACE | -0.1745 | -0.3447 | -0.0044 | 0.0374 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12297-BOTTOM | -0.3775 | -0.5492 | -0.2057 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12297-BOTTOM | -0.3654 | -0.5391 | -0.1917 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12297-BOTTOM | -0.3735 | -0.6192 | -0.1278 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12297-BOTTOM | -0.2592 | -0.4329 | -0.0855 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12297-BOTTOM | 0.1765 | 0.0163 | 0.3366 | 0.015 |
| 00400 | pH (Standard Units) | Austin | 12469-SURFACE-12297-SURFACE | -0.1722 | -0.3324 | -0.0120 | 0.0209 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12297-SURFACE | -0.5216 | -0.6933 | -0.3499 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12297-SURFACE | -0.5095 | -0.6832 | -0.3358 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-SURFACE-12297-SURFACE | -0.2627 | -0.4345 | -0.0910 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12297-SURFACE | -0.5176 | -0.7634 | -0.2719 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12297-SURFACE | -0.4034 | -0.5771 | -0.2297 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12297-SURFACE | -0.2373 | -0.4090 | -0.0655 | 2e-04 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12466-SURFACE | -0.4009 | -0.5737 | -0.2281 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12466-SURFACE | -0.3888 | -0.5636 | -0.2140 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12466-SURFACE | -0.3970 | -0.6435 | -0.1505 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12466-SURFACE | -0.2827 | -0.4575 | -0.1079 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12469-SURFACE | -0.3494 | -0.5222 | -0.1766 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12469-SURFACE | -0.3373 | -0.5121 | -0.1625 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12469-SURFACE | -0.3455 | -0.5919 | -0.0990 | 2e-04 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12469-SURFACE | -0.2312 | -0.4060 | -0.0564 | 6e-04 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12469-SURFACE | 0.2045 | 0.0432 | 0.3659 | 0.0015 |
| 00400 | pH (Standard Units) | Austin | 12476-BOTTOM-12474-SURFACE | -0.4266 | -0.5995 | -0.2538 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12474-SURFACE | -0.4146 | -0.5894 | -0.2398 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12474-SURFACE | -0.4227 | -0.6692 | -0.1762 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12474-SURFACE | -0.3084 | -0.4832 | -0.1336 | <0.0001 |

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|-------|---------------------|--------|-----------------------------|---------|---------|---------|---------|
| 00400 | pH (Standard Units) | Austin | 12476-SURFACE-12476-BOTTOM | 0.4453 | 0.2674 | 0.6232 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-SURFACE-12476-BOTTOM | 0.2588 | 0.0753 | 0.4424 | 2e-04 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12476-BOTTOM | 0.2843 | 0.1007 | 0.4679 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12476-BOTTOM | 0.5539 | 0.3811 | 0.7267 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17294-SURFACE-12476-BOTTOM | 0.4319 | 0.2056 | 0.6582 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-BOTTOM-12476-SURFACE | -0.4332 | -0.6131 | -0.2534 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-SURFACE-12476-SURFACE | -0.1865 | -0.3644 | -0.0085 | 0.0289 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12476-SURFACE | -0.4414 | -0.6915 | -0.1913 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-BOTTOM-12476-SURFACE | -0.3271 | -0.5070 | -0.1472 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12486-SURFACE-12486-BOTTOM | 0.2467 | 0.0613 | 0.4322 | 6e-04 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12486-BOTTOM | 0.2722 | 0.0868 | 0.4577 | 1e-04 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12486-BOTTOM | 0.5418 | 0.3670 | 0.7166 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17294-SURFACE-12486-BOTTOM | 0.4198 | 0.1920 | 0.6477 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 12488-SURFACE-12486-SURFACE | -0.2549 | -0.5090 | -0.0008 | 0.0484 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12486-SURFACE | 0.2951 | 0.1223 | 0.4679 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 14067-SURFACE-12488-SURFACE | 0.2804 | 0.0263 | 0.5345 | 0.0147 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-12488-SURFACE | 0.5500 | 0.3035 | 0.7965 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17294-SURFACE-12488-SURFACE | 0.4280 | 0.1415 | 0.7145 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-14067-BOTTOM | 0.4357 | 0.2609 | 0.6105 | <0.0001 |
| 00400 | pH (Standard Units) | Austin | 17294-SURFACE-14067-BOTTOM | 0.3137 | 0.0859 | 0.5415 | 3e-04 |
| 00400 | pH (Standard Units) | Austin | 17257-SURFACE-14067-SURFACE | 0.2696 | 0.0968 | 0.4424 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12466-SURFACE-12231-SURFACE | 5.3739 | 3.7307 | 7.0171 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12469-SURFACE-12231-SURFACE | 3.7880 | 2.1402 | 5.4359 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12231-SURFACE | 7.2580 | 5.6125 | 8.9035 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12231-SURFACE | 4.3639 | 2.5151 | 6.2127 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12466-SURFACE-12294-BOTTOM | 5.6673 | 4.6927 | 6.6418 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12469-SURFACE-12294-BOTTOM | 4.0814 | 3.0990 | 5.0637 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12294-BOTTOM | 7.5514 | 6.5730 | 8.5298 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12294-BOTTOM | 4.6573 | 3.3659 | 5.9486 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12466-SURFACE-12294-SURFACE | 5.7014 | 4.7305 | 6.6724 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12469-SURFACE-12294-SURFACE | 4.1155 | 3.1368 | 5.0943 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12294-SURFACE | 7.5855 | 6.6107 | 8.5603 | <0.0001 |

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|-------|----------------|--------|-----------------------------|---------|---------|---------|---------|
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12294-SURFACE | 4.6914 | 3.4028 | 5.9800 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12466-SURFACE-12297-BOTTOM | 5.7092 | 4.7346 | 6.6837 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12469-SURFACE-12297-BOTTOM | 4.1233 | 3.1409 | 5.1056 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12297-BOTTOM | 7.5933 | 6.6149 | 8.5717 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12297-BOTTOM | 4.6992 | 3.4078 | 5.9905 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12466-SURFACE-12297-SURFACE | 5.7134 | 4.7351 | 6.6917 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12469-SURFACE-12297-SURFACE | 4.1275 | 3.1415 | 5.1135 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12297-SURFACE | 7.5975 | 6.6154 | 8.5796 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12297-SURFACE | 4.7034 | 3.4093 | 5.9975 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12469-SURFACE-12466-SURFACE | -1.5859 | -2.5719 | -0.5999 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12474-SURFACE-12466-SURFACE | -5.5008 | -6.4754 | -4.5263 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12476-BOTTOM-12466-SURFACE | -5.5827 | -6.6149 | -4.5505 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12476-SURFACE-12466-SURFACE | -5.5485 | -6.5703 | -4.5267 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12486-BOTTOM-12466-SURFACE | -5.4129 | -6.4807 | -4.3450 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12486-SURFACE-12466-SURFACE | -5.5524 | -6.6138 | -4.4910 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12488-SURFACE-12466-SURFACE | -4.9765 | -6.5329 | -3.4201 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 14067-BOTTOM-12466-SURFACE | -5.4323 | -6.4936 | -4.3709 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 14067-SURFACE-12466-SURFACE | -5.4645 | -6.5258 | -4.4031 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12466-SURFACE | 1.8841 | 0.9020 | 2.8662 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12474-SURFACE-12469-SURFACE | -3.9149 | -4.8973 | -2.9326 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12476-BOTTOM-12469-SURFACE | -3.9968 | -5.0363 | -2.9573 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12476-SURFACE-12469-SURFACE | -3.9626 | -4.9918 | -2.9335 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12486-BOTTOM-12469-SURFACE | -3.8270 | -4.9019 | -2.7520 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12486-SURFACE-12469-SURFACE | -3.9665 | -5.0350 | -2.8980 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 12488-SURFACE-12469-SURFACE | -3.3906 | -4.9519 | -1.8293 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 14067-BOTTOM-12469-SURFACE | -3.8464 | -4.9149 | -2.7779 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 14067-SURFACE-12469-SURFACE | -3.8786 | -4.9471 | -2.8101 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12469-SURFACE | 3.4700 | 2.4802 | 4.4598 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12474-SURFACE | 7.3850 | 6.4066 | 8.3634 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12474-SURFACE | 4.4908 | 3.1995 | 5.7822 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12476-BOTTOM | 7.4668 | 6.4310 | 8.5026 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12476-BOTTOM | 4.5727 | 3.2373 | 5.9080 | <0.0001 |

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| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12476-SURFACE | 7.4327 | 6.4072 | 8.4581 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12476-SURFACE | 4.5385 | 3.2112 | 5.8659 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12486-BOTTOM | 7.2970 | 6.2256 | 8.3683 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12486-BOTTOM | 4.4029 | 3.0397 | 5.7660 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12486-SURFACE | 7.4365 | 6.3716 | 8.5014 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12486-SURFACE | 4.5424 | 3.1844 | 5.9004 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-12488-SURFACE | 6.8606 | 5.3018 | 8.4195 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-12488-SURFACE | 3.9665 | 2.1944 | 5.7386 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-14067-BOTTOM | 7.3164 | 6.2515 | 8.3813 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-14067-BOTTOM | 4.4223 | 3.0642 | 5.7803 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17257-SURFACE-14067-SURFACE | 7.3486 | 6.2837 | 8.4135 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-14067-SURFACE | 4.4545 | 3.0964 | 5.8125 | <0.0001 |
| 00620 | Nitrate (mg/L) | Austin | 17294-SURFACE-17257-SURFACE | -2.8941 | -4.1912 | -1.5971 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12466-SURFACE-12231-SURFACE | 0.5582 | 0.1577 | 0.9588 | 2e-04 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12469-SURFACE-12231-SURFACE | 0.4514 | 0.0504 | 0.8524 | 0.0113 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12231-SURFACE | 0.5693 | 0.1674 | 0.9713 | 2e-04 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12466-SURFACE-12294-BOTTOM | 0.3772 | 0.1625 | 0.5919 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12469-SURFACE-12294-BOTTOM | 0.2703 | 0.0548 | 0.4859 | 0.0019 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12294-BOTTOM | 0.3883 | 0.1710 | 0.6056 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12466-SURFACE-12294-SURFACE | 0.5435 | 0.3304 | 0.7566 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12469-SURFACE-12294-SURFACE | 0.4367 | 0.2227 | 0.6506 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12294-SURFACE | 0.5546 | 0.3389 | 0.7703 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12466-SURFACE-12297-BOTTOM | 0.5446 | 0.3307 | 0.7585 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12469-SURFACE-12297-BOTTOM | 0.4377 | 0.2230 | 0.6525 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12297-BOTTOM | 0.5557 | 0.3392 | 0.7722 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12466-SURFACE-12297-SURFACE | 0.5581 | 0.3442 | 0.7720 | <0.0001 |

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| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12469-SURFACE-12297-SURFACE | 0.4512 | 0.2365 | 0.6660 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12297-SURFACE | 0.5692 | 0.3527 | 0.7857 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12474-SURFACE-12466-SURFACE | -0.5061 | -0.7233 | -0.2889 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12476-BOTTOM-12466-SURFACE | -0.3214 | -0.5613 | -0.0816 | 5e-04 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12476-SURFACE-12466-SURFACE | -0.4859 | -0.7258 | -0.2461 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12486-BOTTOM-12466-SURFACE | -0.5318 | -0.7870 | -0.2766 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12486-SURFACE-12466-SURFACE | -0.5201 | -0.7731 | -0.2671 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 14067-BOTTOM-12466-SURFACE | -0.4532 | -0.7062 | -0.2002 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 14067-SURFACE-12466-SURFACE | -0.5200 | -0.7731 | -0.2670 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17294-SURFACE-12466-SURFACE | -0.3305 | -0.6156 | -0.0454 | 0.0073 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12474-SURFACE-12469-SURFACE | -0.3993 | -0.6173 | -0.1812 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12476-SURFACE-12469-SURFACE | -0.3791 | -0.6197 | -0.1385 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12486-BOTTOM-12469-SURFACE | -0.4250 | -0.6809 | -0.1690 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 12486-SURFACE-12469-SURFACE | -0.4133 | -0.6670 | -0.1595 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 14067-BOTTOM-12469-SURFACE | -0.3464 | -0.6001 | -0.0927 | 4e-04 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 14067-SURFACE-12469-SURFACE | -0.4132 | -0.6669 | -0.1595 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12474-SURFACE | 0.5172 | 0.2974 | 0.7370 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12476-BOTTOM | 0.3325 | 0.0904 | 0.5747 | 3e-04 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12476-SURFACE | 0.4970 | 0.2548 | 0.7392 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12486-BOTTOM | 0.5429 | 0.2855 | 0.8003 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-12486-SURFACE | 0.5312 | 0.2760 | 0.7864 | <0.0001 |

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|-------|------------------------------------|--------|-----------------------------|-----------|-----------|-----------|---------|
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-14067-BOTTOM | 0.4643 | 0.2091 | 0.7196 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17257-SURFACE-14067-SURFACE | 0.5311 | 0.2759 | 0.7864 | <0.0001 |
| 00625 | Total Kjeldahl Nitrogen (mg/L) | Austin | 17294-SURFACE-17257-SURFACE | -0.3416 | -0.6287 | -0.0546 | 0.0048 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12231-SURFACE | 329.1775 | 6.6040 | 651.7509 | 0.0407 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12231-SURFACE | 645.8914 | 279.9447 | 1011.8382 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 12466-SURFACE-12294-SURFACE | 229.8199 | 41.7289 | 417.9109 | 0.0039 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12294-SURFACE | 375.5775 | 187.4865 | 563.6685 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12294-SURFACE | 692.2914 | 436.8670 | 947.7158 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 12466-SURFACE-12297-SURFACE | 226.6132 | 37.1846 | 416.0418 | 0.0054 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12297-SURFACE | 372.3708 | 182.9421 | 561.7994 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12297-SURFACE | 689.0847 | 432.6737 | 945.4957 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 12486-SURFACE-12466-SURFACE | -222.5985 | -430.5583 | -14.6387 | 0.0239 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12466-SURFACE | 462.4715 | 205.0183 | 719.9247 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12469-SURFACE | 261.7273 | 70.8902 | 452.5643 | 5e-04 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12469-SURFACE | 578.4412 | 320.9880 | 835.8944 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12474-SURFACE | 192.9242 | 2.0872 | 383.7613 | 0.0448 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12474-SURFACE | 509.6382 | 252.1850 | 767.0914 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12476-SURFACE | 325.4394 | 124.2795 | 526.5993 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12476-SURFACE | 642.1533 | 376.9578 | 907.3489 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-12486-SURFACE | 368.3561 | 160.3962 | 576.3159 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12486-SURFACE | 685.0700 | 414.6801 | 955.4599 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-12488-SURFACE | 586.5075 | 235.5282 | 937.4868 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17257-SURFACE-14067-SURFACE | 263.4811 | 55.5212 | 471.4409 | 0.0022 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-14067-SURFACE | 580.1950 | 309.8051 | 850.5849 | <0.0001 |
| 31699 | E. coli (MPN/100mL) | Austin | 17294-SURFACE-17257-SURFACE | 316.7139 | 59.2607 | 574.1672 | 0.0035 |
| 00078 | Secchi disc (m) | Austin | 12486-SURFACE-12294-SURFACE | 0.5699 | 0.0964 | 1.0434 | 0.0094 |
| 00078 | Secchi disc (m) | Austin | 12476-SURFACE-12297-SURFACE | -0.5157 | -0.9746 | -0.0568 | 0.0188 |
| 00078 | Secchi disc (m) | Austin | 12486-SURFACE-12476-SURFACE | 0.6687 | 0.1665 | 1.1710 | 0.0028 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12294-SURFACE-12294-BOTTOM | 49.1808 | 38.7938 | 59.5677 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12297-BOTTOM-12294-BOTTOM | 35.3917 | 25.0048 | 45.7786 | <0.0001 |

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|-------|------------------------------------|--------|-----------------------------|----------|----------|----------|---------|
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12297-SURFACE-12294-BOTTOM | 51.4761 | 41.0892 | 61.8630 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12466-SURFACE-12294-BOTTOM | 48.2604 | 37.8735 | 58.6474 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12469-SURFACE-12294-BOTTOM | 53.6042 | 43.2173 | 63.9911 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12474-SURFACE-12294-BOTTOM | 60.1886 | 49.8017 | 70.5755 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 17257-SURFACE-12294-BOTTOM | 53.9511 | 43.5642 | 64.3380 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12297-BOTTOM-12294-SURFACE | -13.7891 | -24.1350 | -3.4431 | 0.0015 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12474-SURFACE-12294-SURFACE | 11.0078 | 0.6619 | 21.3538 | 0.0278 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12297-SURFACE-12297-BOTTOM | 16.0844 | 5.7384 | 26.4303 | 1e-04 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12466-SURFACE-12297-BOTTOM | 12.8688 | 2.5228 | 23.2147 | 0.0042 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12469-SURFACE-12297-BOTTOM | 18.2125 | 7.8666 | 28.5584 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12474-SURFACE-12297-BOTTOM | 24.7969 | 14.4509 | 35.1428 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 17257-SURFACE-12297-BOTTOM | 18.5594 | 8.2134 | 28.9053 | <0.0001 |
| 00301 | Dissolved Oxygen (% of saturation) | Austin | 12474-SURFACE-12466-SURFACE | 11.9281 | 1.5822 | 22.2741 | 0.0114 |
| 00610 | Ammonia (mg/L) | Austin | 12294-SURFACE-12294-BOTTOM | -0.1049 | -0.1964 | -0.0134 | 0.0132 |
| 00610 | Ammonia (mg/L) | Austin | 12469-SURFACE-12294-SURFACE | 0.1508 | 0.0597 | 0.2420 | <0.0001 |
| 00610 | Ammonia (mg/L) | Austin | 12476-BOTTOM-12294-SURFACE | 0.1463 | 0.0495 | 0.2430 | 2e-04 |
| 00610 | Ammonia (mg/L) | Austin | 12474-SURFACE-12469-SURFACE | -0.1239 | -0.2161 | -0.0318 | 0.0015 |
| 00610 | Ammonia (mg/L) | Austin | 12476-SURFACE-12469-SURFACE | -0.1336 | -0.2308 | -0.0364 | 0.0011 |
| 00610 | Ammonia (mg/L) | Austin | 12476-BOTTOM-12474-SURFACE | 0.1194 | 0.0217 | 0.2171 | 0.006 |
| 00610 | Ammonia (mg/L) | Austin | 12476-SURFACE-12476-BOTTOM | -0.1290 | -0.2314 | -0.0266 | 0.004 |
| 00940 | Chloride (mg/L) | Austin | 12466-SURFACE-12294-BOTTOM | 16.2461 | 3.8927 | 28.5995 | 0.0018 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12294-BOTTOM | 107.0523 | 94.6518 | 119.4528 | <0.0001 |
| 00940 | Chloride (mg/L) | Austin | 12466-SURFACE-12294-SURFACE | 15.9652 | 3.6590 | 28.2713 | 0.0023 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12294-SURFACE | 106.7714 | 94.4180 | 119.1248 | <0.0001 |
| 00940 | Chloride (mg/L) | Austin | 12466-SURFACE-12297-BOTTOM | 16.3197 | 4.0135 | 28.6259 | 0.0016 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12297-BOTTOM | 107.1259 | 94.7725 | 119.4793 | <0.0001 |

| | | | | | | | |
|-------|-----------------|--------|-----------------------------|----------|----------|----------|---------|
| 00940 | Chloride (mg/L) | Austin | 12466-SURFACE-12297-SURFACE | 16.1303 | 3.8241 | 28.4365 | 0.0019 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12297-SURFACE | 106.9365 | 94.5831 | 119.2899 | <0.0001 |
| 00940 | Chloride (mg/L) | Austin | 12474-SURFACE-12466-SURFACE | -18.7818 | -31.0880 | -6.4756 | 1e-04 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12466-SURFACE | 90.8062 | 78.4528 | 103.1596 | <0.0001 |
| 00940 | Chloride (mg/L) | Austin | 12474-SURFACE-12469-SURFACE | -13.7985 | -26.1047 | -1.4923 | 0.0159 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12469-SURFACE | 95.7896 | 83.4361 | 108.1430 | <0.0001 |
| 00940 | Chloride (mg/L) | Austin | 17257-SURFACE-12474-SURFACE | 109.5880 | 97.2346 | 121.9415 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12466-SURFACE-12294-BOTTOM | 33.3008 | 25.9962 | 40.6053 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12469-SURFACE-12294-BOTTOM | 35.5114 | 28.2068 | 42.8159 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12486-BOTTOM-12294-BOTTOM | 8.1790 | 0.1651 | 16.1929 | 0.0402 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12294-BOTTOM | 55.3780 | 48.0735 | 62.6826 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12466-SURFACE-12294-SURFACE | 33.1572 | 25.9308 | 40.3837 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12469-SURFACE-12294-SURFACE | 35.3678 | 28.1414 | 42.5943 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12486-BOTTOM-12294-SURFACE | 8.0355 | 0.0927 | 15.9783 | 0.0442 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12294-SURFACE | 55.2345 | 48.0080 | 62.4610 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12466-SURFACE-12297-BOTTOM | 35.1814 | 27.8768 | 42.4859 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12469-SURFACE-12297-BOTTOM | 37.3920 | 30.0874 | 44.6965 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12474-SURFACE-12297-BOTTOM | 8.1571 | 0.8526 | 15.4617 | 0.0133 |
| 00945 | Sulfate (mg/L) | Austin | 12486-BOTTOM-12297-BOTTOM | 10.0596 | 2.0457 | 18.0735 | 0.0022 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12297-BOTTOM | 57.2586 | 49.9541 | 64.5632 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12466-SURFACE-12297-SURFACE | 35.1530 | 27.8751 | 42.4309 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12469-SURFACE-12297-SURFACE | 37.3636 | 30.0857 | 44.6415 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12474-SURFACE-12297-SURFACE | 8.1287 | 0.8509 | 15.4066 | 0.0133 |
| 00945 | Sulfate (mg/L) | Austin | 12486-BOTTOM-12297-SURFACE | 10.0313 | 2.0417 | 18.0208 | 0.0022 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12297-SURFACE | 57.2303 | 49.9524 | 64.5081 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12474-SURFACE-12466-SURFACE | -27.0242 | -34.3562 | -19.6923 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12476-BOTTOM-12466-SURFACE | -29.6987 | -37.4673 | -21.9301 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12476-SURFACE-12466-SURFACE | -27.5770 | -35.2668 | -19.8871 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12486-BOTTOM-12466-SURFACE | -25.1217 | -33.1606 | -17.0828 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12486-SURFACE-12466-SURFACE | -32.2813 | -40.3202 | -24.2424 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 14067-BOTTOM-12466-SURFACE | -28.6409 | -36.6798 | -20.6020 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 14067-SURFACE-12466-SURFACE | -29.4619 | -37.4518 | -21.4721 | <0.0001 |

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|-------|-------------------------|--------|-----------------------------|----------|----------|----------|---------|
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12466-SURFACE | 22.0773 | 14.7453 | 29.4093 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12474-SURFACE-12469-SURFACE | -29.2348 | -36.5668 | -21.9029 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12476-BOTTOM-12469-SURFACE | -31.9093 | -39.6779 | -24.1407 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12476-SURFACE-12469-SURFACE | -29.7876 | -37.4774 | -22.0977 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12486-BOTTOM-12469-SURFACE | -27.3323 | -35.3712 | -19.2934 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 12486-SURFACE-12469-SURFACE | -34.4919 | -42.5308 | -26.4530 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 14067-BOTTOM-12469-SURFACE | -30.8515 | -38.8904 | -22.8126 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 14067-SURFACE-12469-SURFACE | -31.6725 | -39.6624 | -23.6827 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12469-SURFACE | 19.8667 | 12.5347 | 27.1986 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12474-SURFACE | 49.1015 | 41.7695 | 56.4335 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12476-BOTTOM | 51.7760 | 44.0074 | 59.5445 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12476-SURFACE | 49.6542 | 41.9644 | 57.3441 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12486-BOTTOM | 47.1990 | 39.1601 | 55.2379 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-12486-SURFACE | 54.3586 | 46.3197 | 62.3975 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-14067-BOTTOM | 50.7181 | 42.6793 | 58.7570 | <0.0001 |
| 00945 | Sulfate (mg/L) | Austin | 17257-SURFACE-14067-SURFACE | 51.5392 | 43.5494 | 59.5290 | <0.0001 |
| 70953 | Chlorophyll-a (µg/L) | Austin | 12476-SURFACE-12294-SURFACE | 4.7774 | 1.3530 | 8.2017 | 8e-04 |
| 70953 | Chlorophyll-a (µg/L) | Austin | 12476-SURFACE-12297-SURFACE | 5.6139 | 2.1675 | 9.0603 | <0.0001 |
| 70953 | Chlorophyll-a (µg/L) | Austin | 12476-SURFACE-12466-SURFACE | 4.3855 | 0.9158 | 7.8552 | 0.0039 |
| 70953 | Chlorophyll-a (µg/L) | Austin | 12476-SURFACE-12474-SURFACE | 5.9771 | 2.4953 | 9.4589 | <0.0001 |
| 70953 | Chlorophyll-a (µg/L) | Austin | 12486-SURFACE-12476-SURFACE | -5.8270 | -9.6020 | -2.0519 | 1e-04 |
| 70953 | Chlorophyll-a (µg/L) | Austin | 14067-SURFACE-12476-SURFACE | -4.0306 | -7.8056 | -0.2556 | 0.0277 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12469-SURFACE-12466-SURFACE | -0.2086 | -0.3577 | -0.0596 | 7e-04 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12474-SURFACE-12466-SURFACE | -0.8999 | -1.0501 | -0.7496 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12476-BOTTOM-12466-SURFACE | -0.8812 | -1.0479 | -0.7145 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12476-SURFACE-12466-SURFACE | -0.8687 | -1.0366 | -0.7009 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 14067-BOTTOM-12466-SURFACE | -0.8887 | -1.0646 | -0.7128 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 14067-SURFACE-12466-SURFACE | -0.9045 | -1.0804 | -0.7286 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 17257-SURFACE-12466-SURFACE | -0.7012 | -0.8509 | -0.5516 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12474-SURFACE-12469-SURFACE | -0.6912 | -0.8415 | -0.5410 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12476-BOTTOM-12469-SURFACE | -0.6726 | -0.8392 | -0.5059 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 12476-SURFACE-12469-SURFACE | -0.6601 | -0.8279 | -0.4923 | <0.0001 |

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|-------|-------------------------|--------|-----------------------------|---------|---------|---------|---------|
| 00665 | Total Phosphorus (mg/L) | Austin | 14067-BOTTOM-12469-SURFACE | -0.6801 | -0.8559 | -0.5042 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 14067-SURFACE-12469-SURFACE | -0.6958 | -0.8717 | -0.5200 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 17257-SURFACE-12469-SURFACE | -0.4926 | -0.6423 | -0.3430 | <0.0001 |
| 00665 | Total Phosphorus (mg/L) | Austin | 17257-SURFACE-12474-SURFACE | 0.1986 | 0.0478 | 0.3494 | 0.0018 |
| 00665 | Total Phosphorus (mg/L) | Austin | 17257-SURFACE-12476-BOTTOM | 0.1800 | 0.0128 | 0.3471 | 0.0248 |
| 00665 | Total Phosphorus (mg/L) | Austin | 17257-SURFACE-14067-BOTTOM | 0.1874 | 0.0111 | 0.3638 | 0.0282 |
| 00665 | Total Phosphorus (mg/L) | Austin | 17257-SURFACE-14067-SURFACE | 0.2032 | 0.0269 | 0.3796 | 0.0116 |