

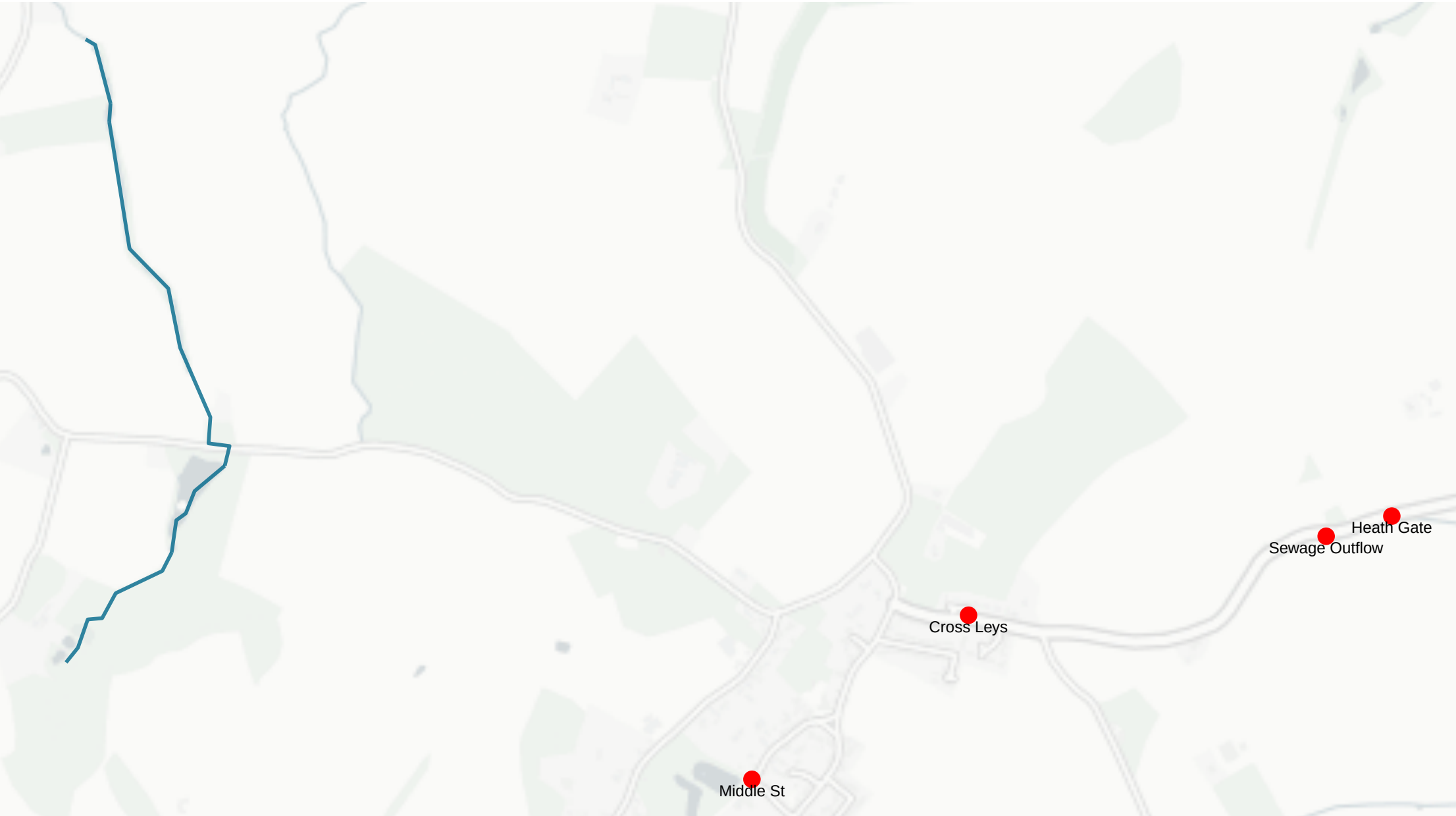
# SafeAvon Nutrient Testing Report: Ilmington

## *SafeAvon Sites By Waterway*

### **Fosseway Brook**

- . Ilmington – Cross Leys
- . Ilmington – Heath Gate
- . Ilmington – Middle St
- . Ilmington – Sewage Outflow

SafeAvon Locations in Ilmington

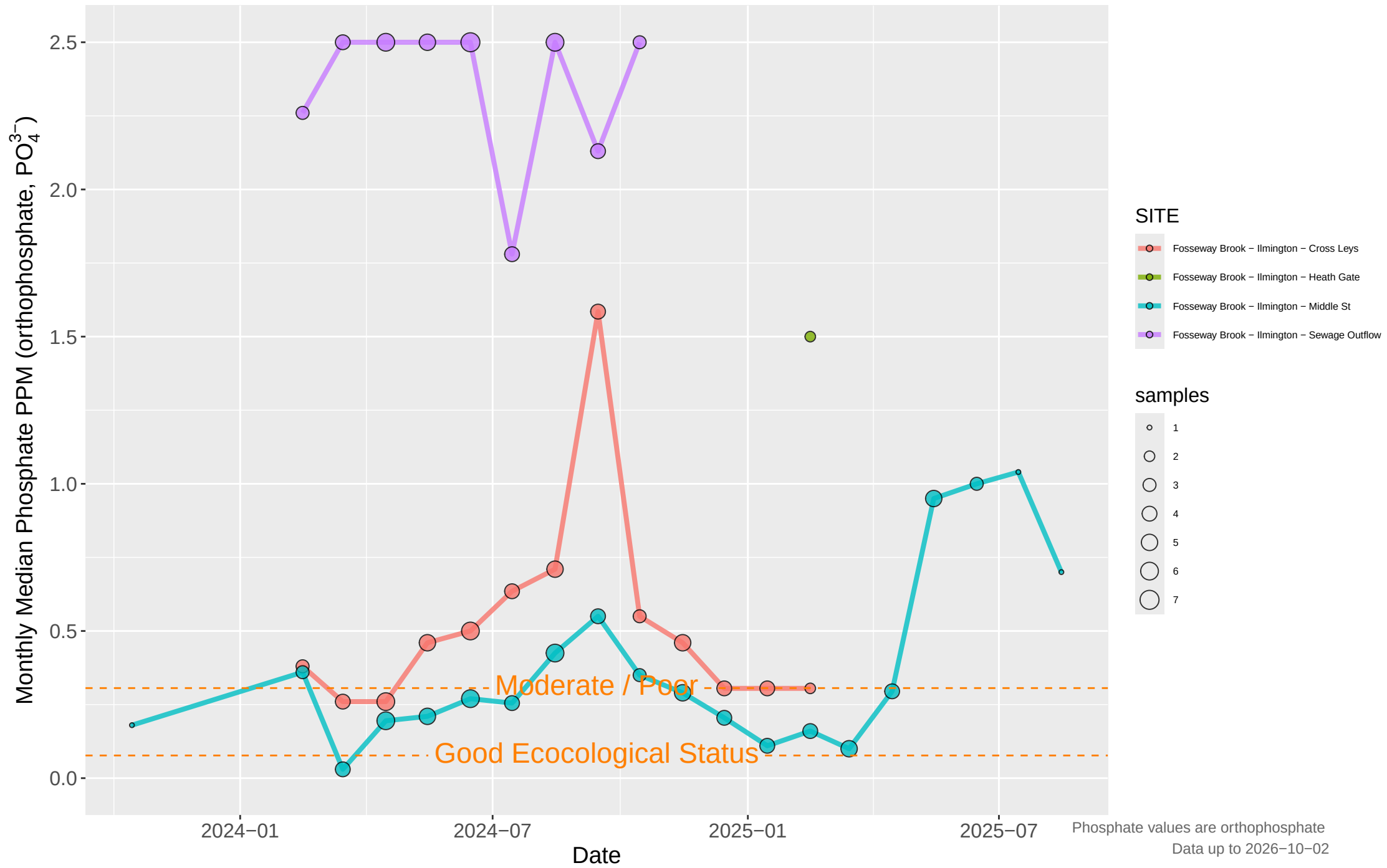


# Summary for sites in Ilmington

| SITE                                        | Start      | Most Recent | Samples | Distinct Volunteers | Median Phosphates PPM | Median Nitrates PPM |
|---------------------------------------------|------------|-------------|---------|---------------------|-----------------------|---------------------|
| Fosseway Brook – Ilmington – Sewage Outflow | 2024-02-11 | 2025-08-20  | 76      | 6                   | 2.50                  | 10                  |
| Fosseway Brook – Ilmington – Heath Gate     | 2025-02-14 | 2025-08-04  | 30      | 4                   | 8.20                  | 5                   |
| Fosseway Brook – Ilmington – Middle St      | 2023-10-07 | 2025-08-04  | 78      | 7                   | 0.24                  | 2                   |
| Fosseway Brook – Ilmington – Cross Leys     | 2024-02-11 | 2025-02-07  | 55      | 6                   | 0.42                  | 2                   |

# SafeAvon Phosphates – By Month

## Ilmington



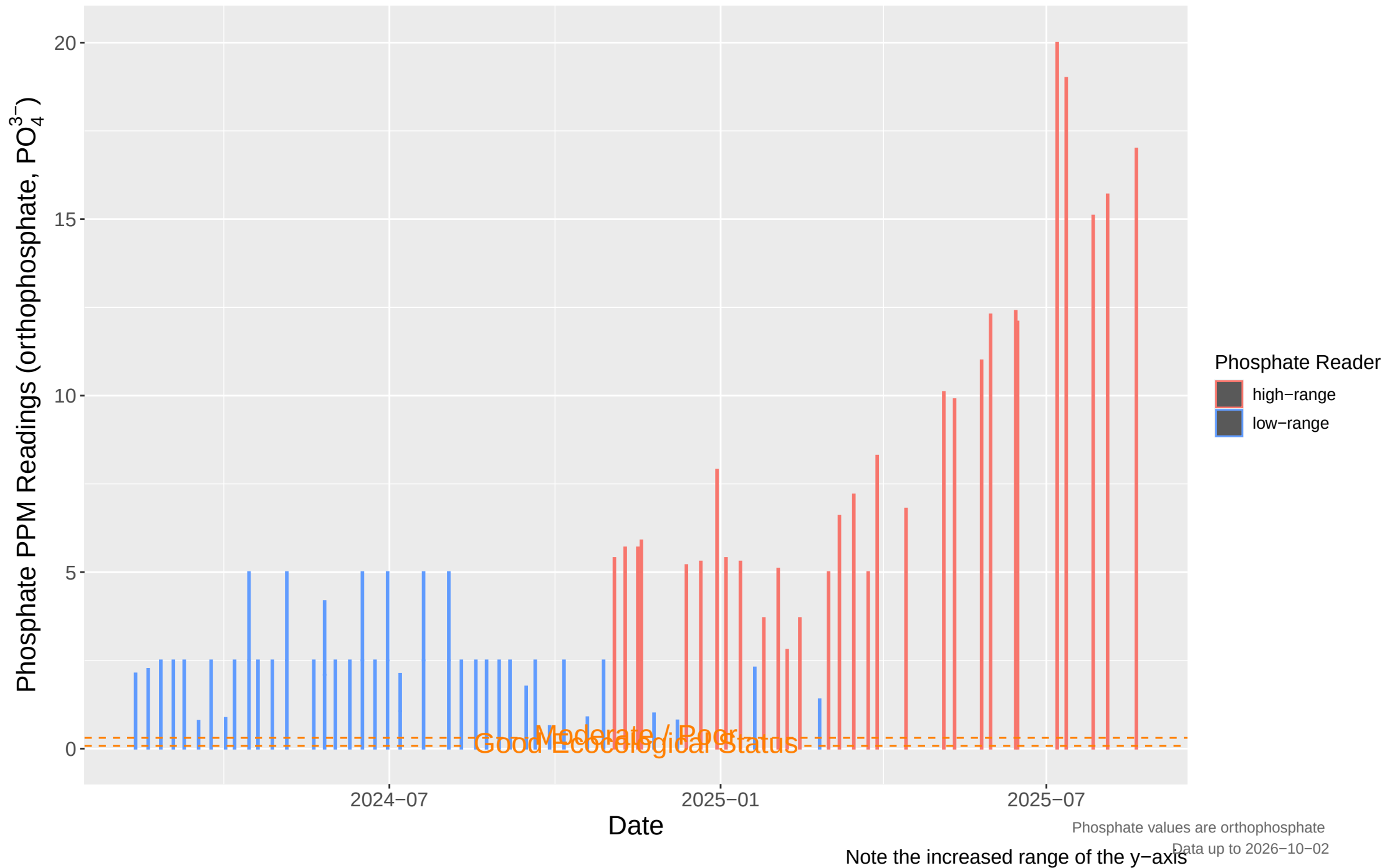
# Site: Fosseway Brook – Ilmington – Sewage Outflow

Start Date: 2024-02-11 | Most Recent: 2025-08-20 | Total Samples: 76 | Distinct Volunteers: 6

| Season       | Count |  | Phos<br>Min | Phos<br>Med | Phos<br>Max |  | Nitr<br>Min | Nitr<br>Med | Nitr<br>Max |  | EC<br>Min | EC<br>Med | EC<br>Max |  | Temp<br>Min | Temp<br>Med | Temp<br>Max |
|--------------|-------|--|-------------|-------------|-------------|--|-------------|-------------|-------------|--|-----------|-----------|-----------|--|-------------|-------------|-------------|
| Winter 23–24 | 3     |  | 2.13        | 2.26        | 2.5         |  | 5           | 5.0         | 5           |  | 640       | 744       | 775       |  | 8.5         | 10.2        | 10.9        |
| Spring 24    | 15    |  | 0.79        | 2.50        | 2.5         |  | 2           | 10.0        | 10          |  | 484       | 830       | 903       |  | 8.8         | 13.9        | 18.3        |
| Summer 24    | 17    |  | 1.06        | 2.50        | 2.5         |  | 5           | 10.0        | 20          |  | 799       | 923       | 1002      |  | 15.0        | 17.8        | 20.1        |
| Autumn 24    | 12    |  | 0.64        | 2.50        | 5.9         |  | 2           | 7.5         | 20          |  | 493       | 796       | 935       |  | 10.7        | 13.6        | 18.3        |
| Winter 24–25 | 12    |  | 0.80        | 4.40        | 7.9         |  | 2           | 5.0         | 10          |  | 688       | 827       | 906       |  | 5.5         | 7.6         | 11.1        |
| Spring 25    | 10    |  | 5.00        | 7.75        | 12.3        |  | 1           | 5.0         | 20          |  | 779       | 960       | 1060      |  | 7.8         | 11.6        | 18.1        |
| Summer 25    | 7     |  | 12.10       | 15.70       | 20.0        |  | 2           | 10.0        | 10          |  | 831       | 1115      | 1220      |  | 17.3        | 18.5        | 19.8        |

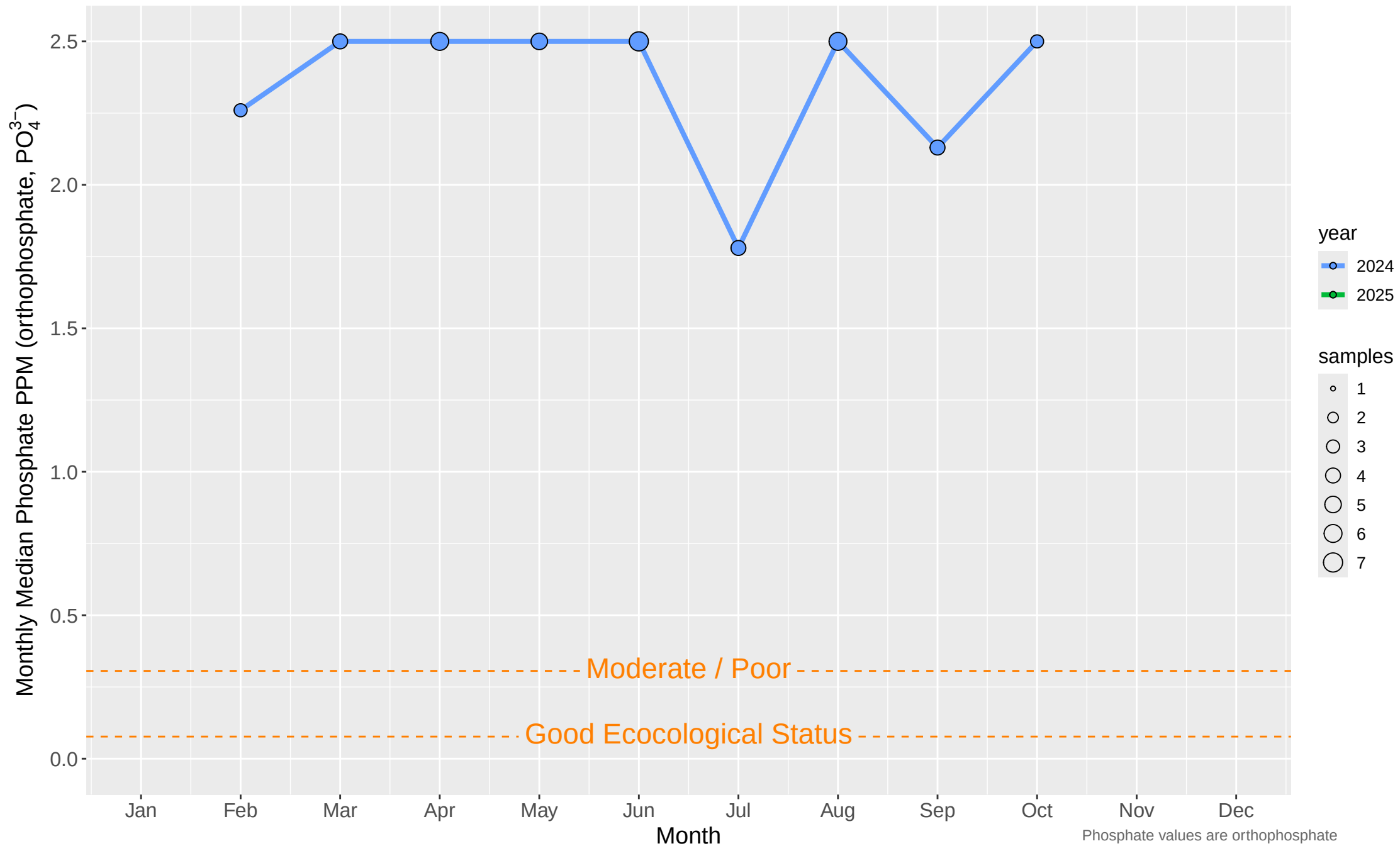
# SafeAvon Phosphates – Individual Readings

## Fosseway Brook – Ilmington – Sewage Outflow



# SafeAvon Phosphates – By Month

## Fosseway Brook – Ilmington – Sewage Outflow

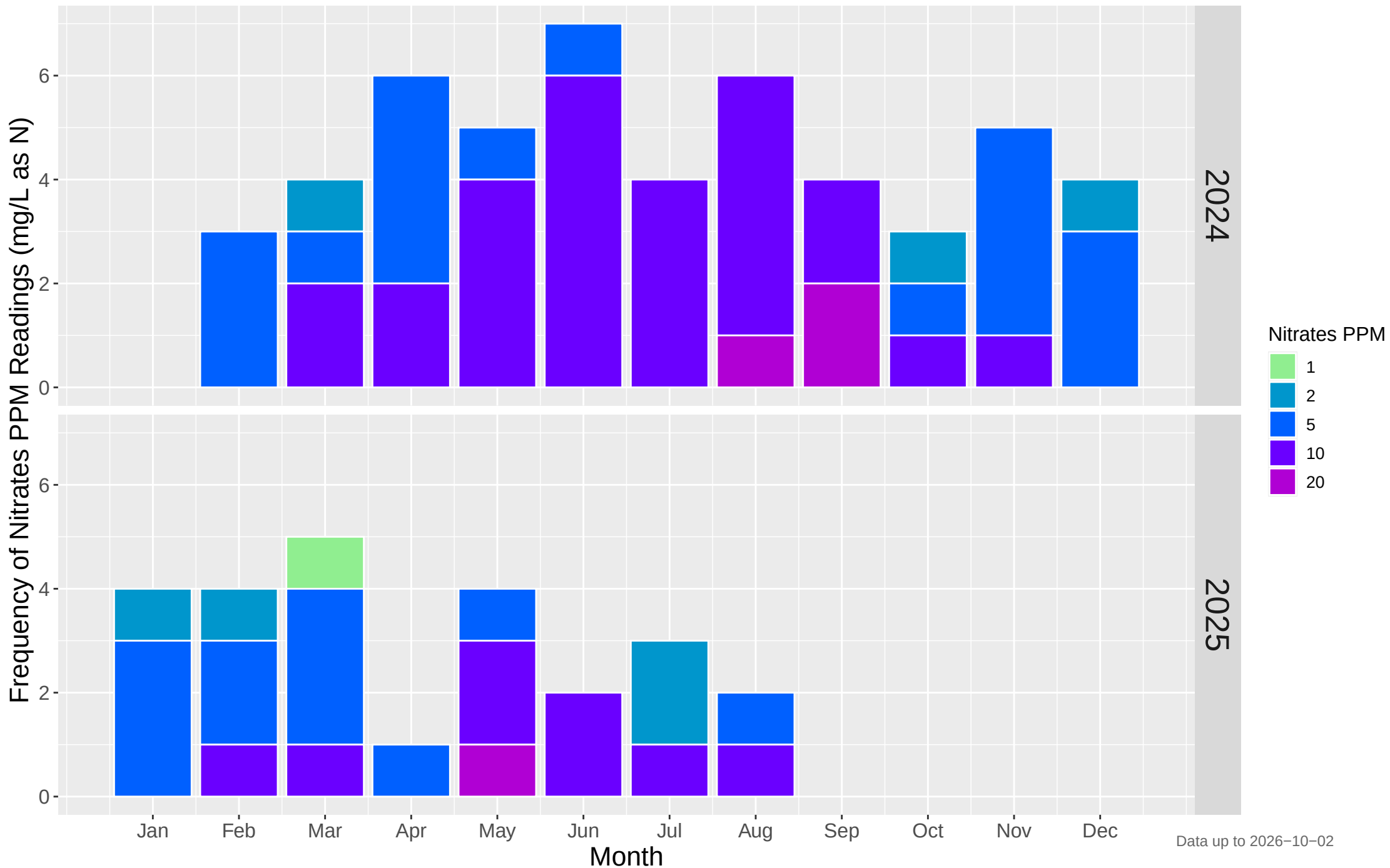


Phosphate values are orthophosphate

Note the increased range of the y-axis  
Data up to 2026-10-02

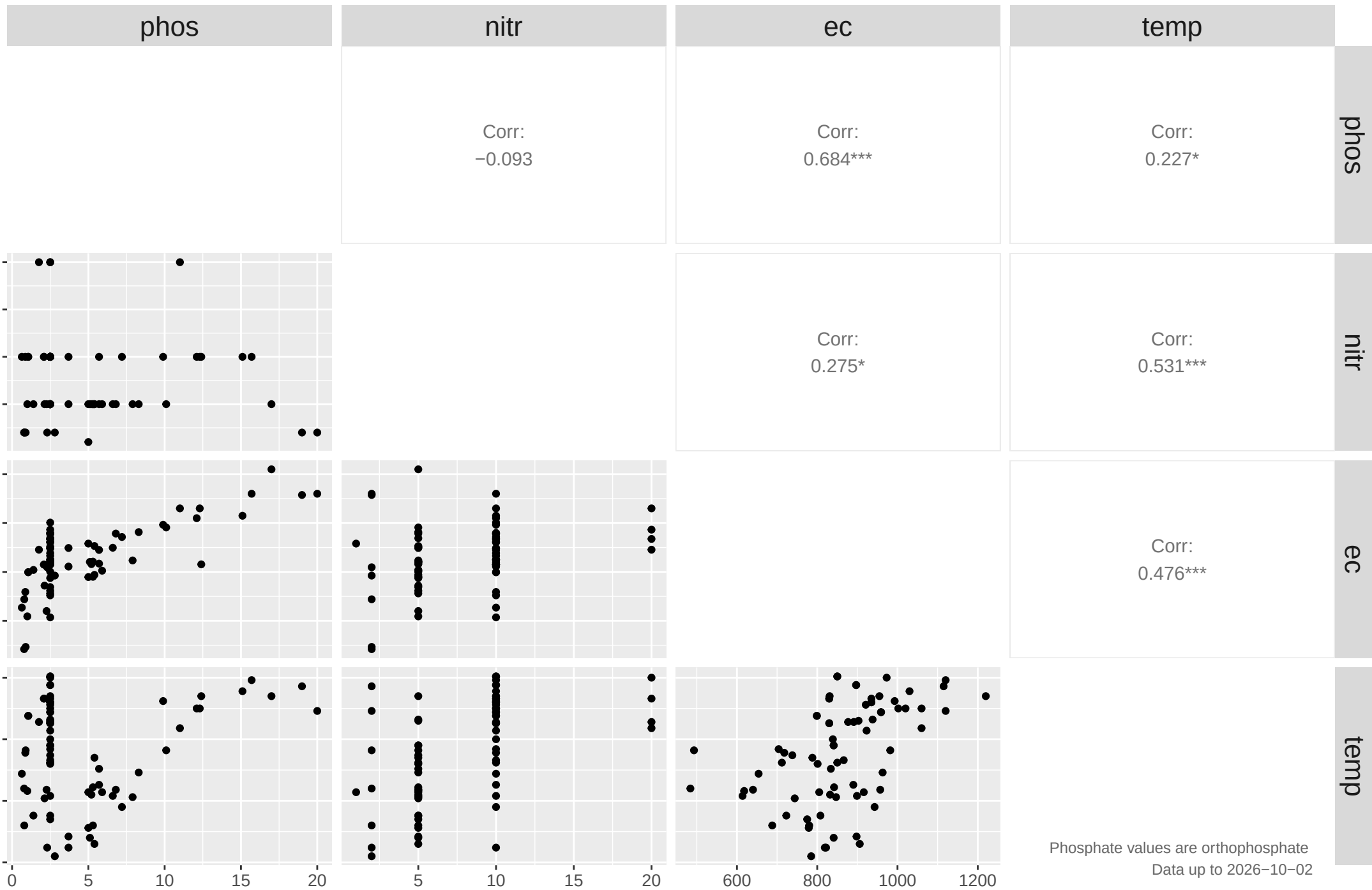
# SafeAvon Nitrates By Month

## Fosseway Brook – Ilmington – Sewage Outflow



# Pairwise Testing Variables Relationships

## Fosseway Brook – Ilmington – Sewage Outflow



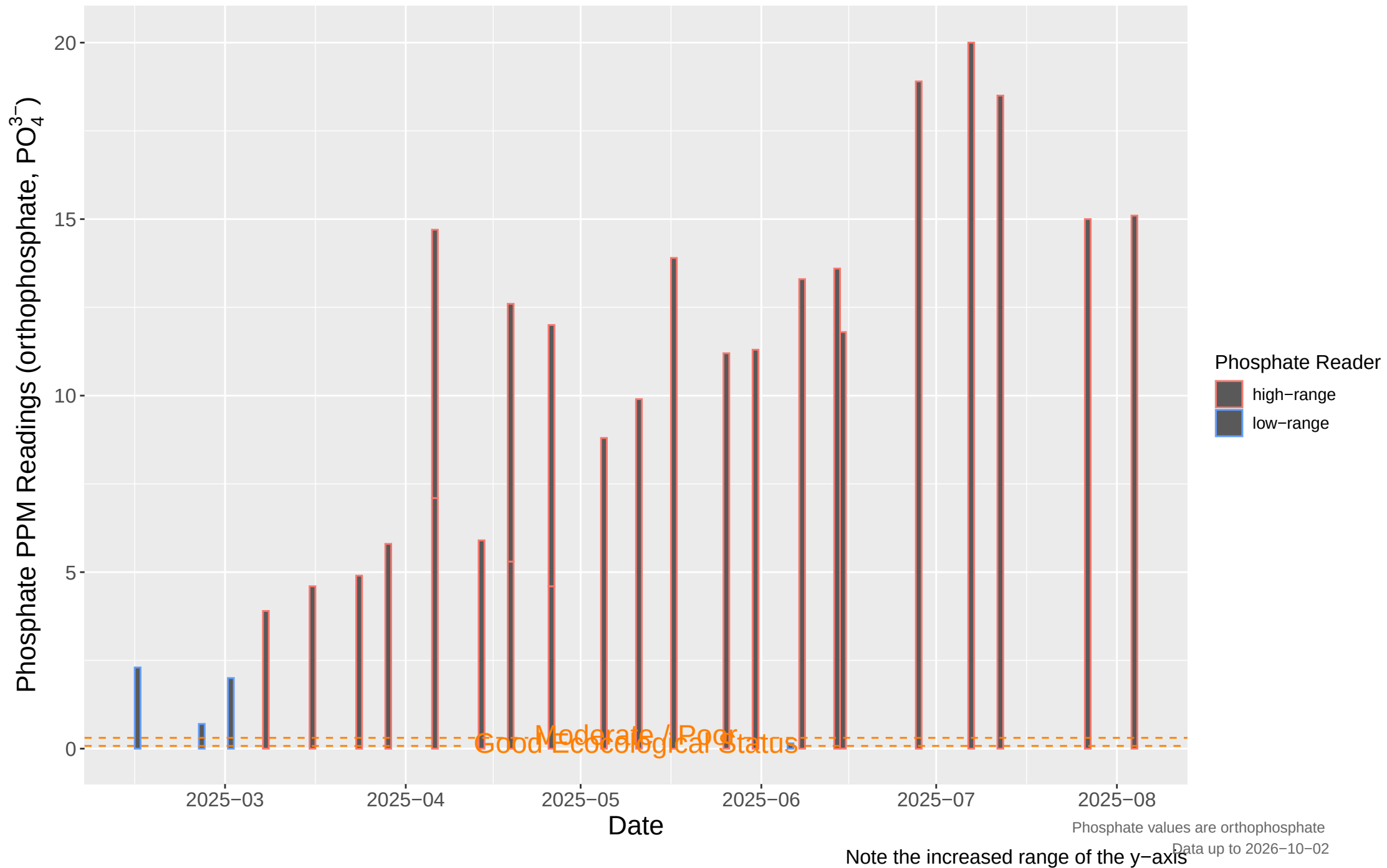
# Site: Fosseway Brook – Ilmington – Heath Gate

Start Date: 2025-02-14 | Most Recent: 2025-08-04 | Total Samples: 30 | Distinct Volunteers: 4

| Season       | Count |  | Phos<br>Min | Phos<br>Med | Phos<br>Max |  | Nitr<br>Min | Nitr<br>Med | Nitr<br>Max |  | EC<br>Min | EC<br>Med | EC<br>Max |  | Temp<br>Min | Temp<br>Med | Temp<br>Max |
|--------------|-------|--|-------------|-------------|-------------|--|-------------|-------------|-------------|--|-----------|-----------|-----------|--|-------------|-------------|-------------|
| Winter 24–25 | 2     |  | 0.70        | 1.50        | 2.3         |  | 2           | 6           | 10          |  | 585       | 668       | 750       |  | 6.9         | 8.1         | 9.2         |
| Spring 25    | 18    |  | 2.00        | 7.20        | 13.9        |  | 2           | 5           | 20          |  | 761       | 928       | 1050      |  | 7.9         | 13.5        | 17.8        |
| Summer 25    | 10    |  | 0.15        | 15.05       | 20.0        |  | 2           | 5           | 10          |  | 942       | 1020      | 1130      |  | 17.0        | 18.6        | 20.7        |

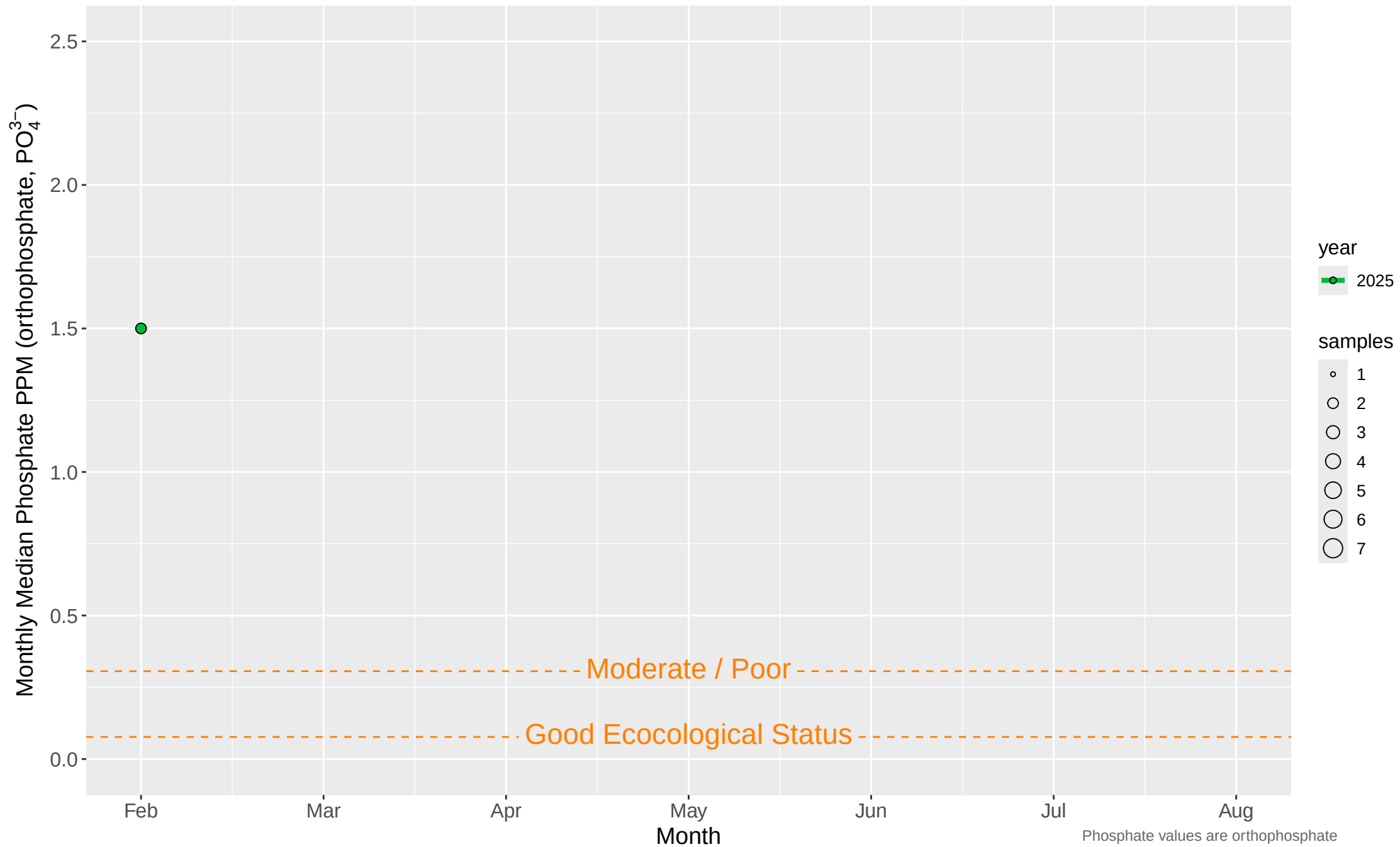
# SafeAvon Phosphates – Individual Readings

## Fosseway Brook – Ilmington – Heath Gate



# SafeAvon Phosphates – By Month

## Fosseway Brook – Ilmington – Heath Gate



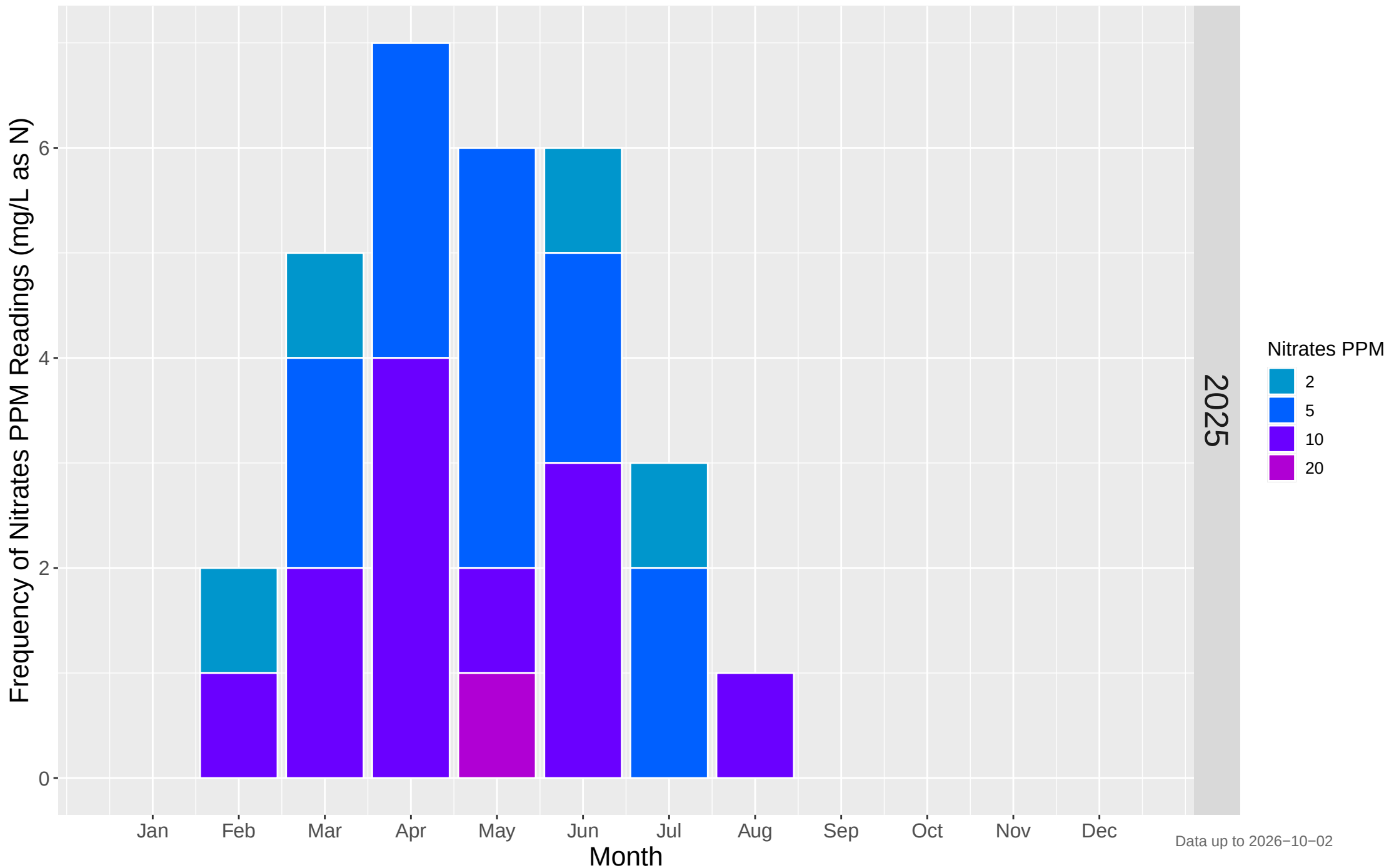
Phosphate values are orthophosphate

Data up to 2026-10-02

Note the increased range of the y-axis

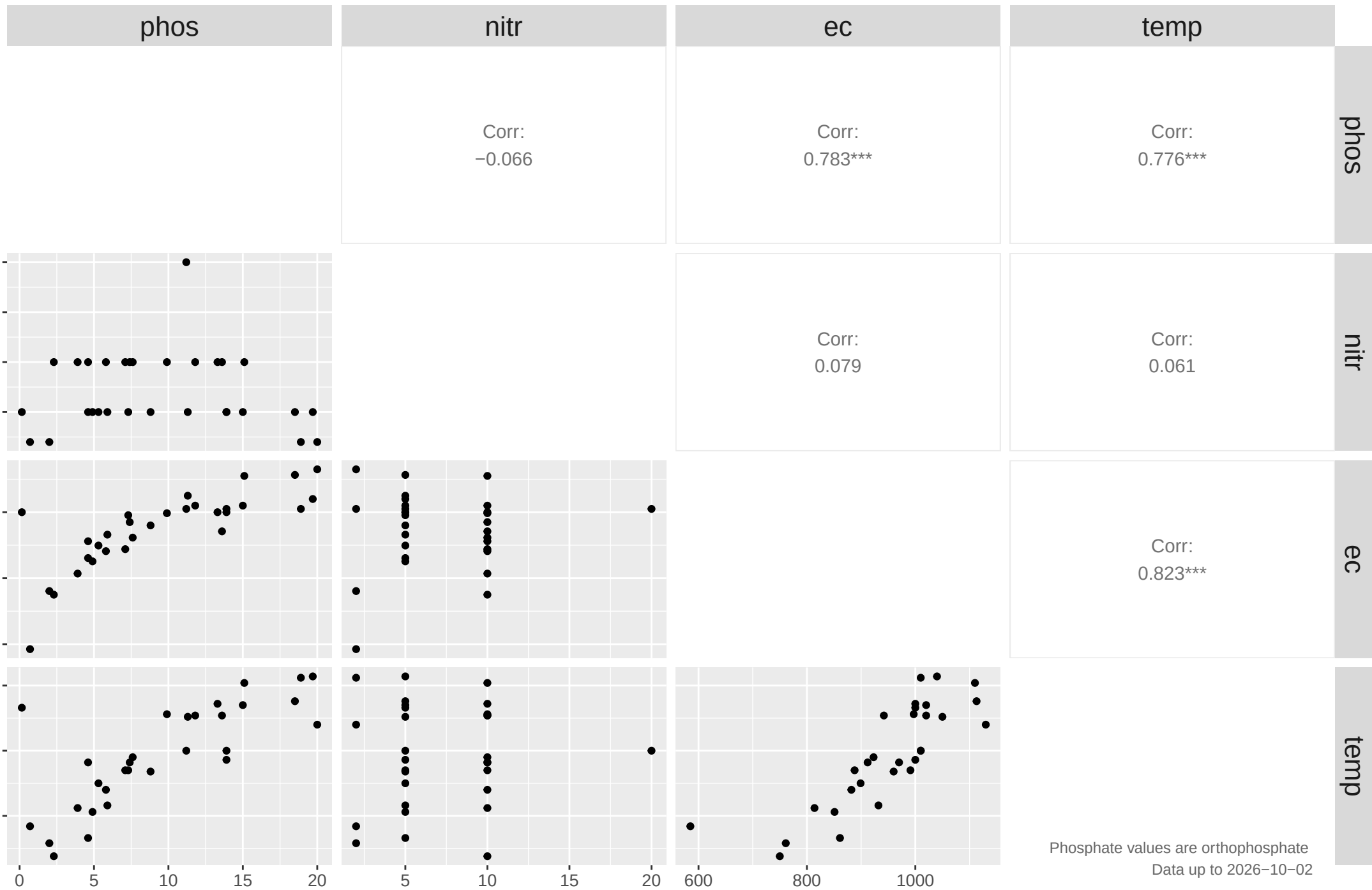
# SafeAvon Nitrates By Month

## Fosseway Brook – Ilmington – Heath Gate



# Pairwise Testing Variables Relationships

## Fosseway Brook – Ilmington – Heath Gate



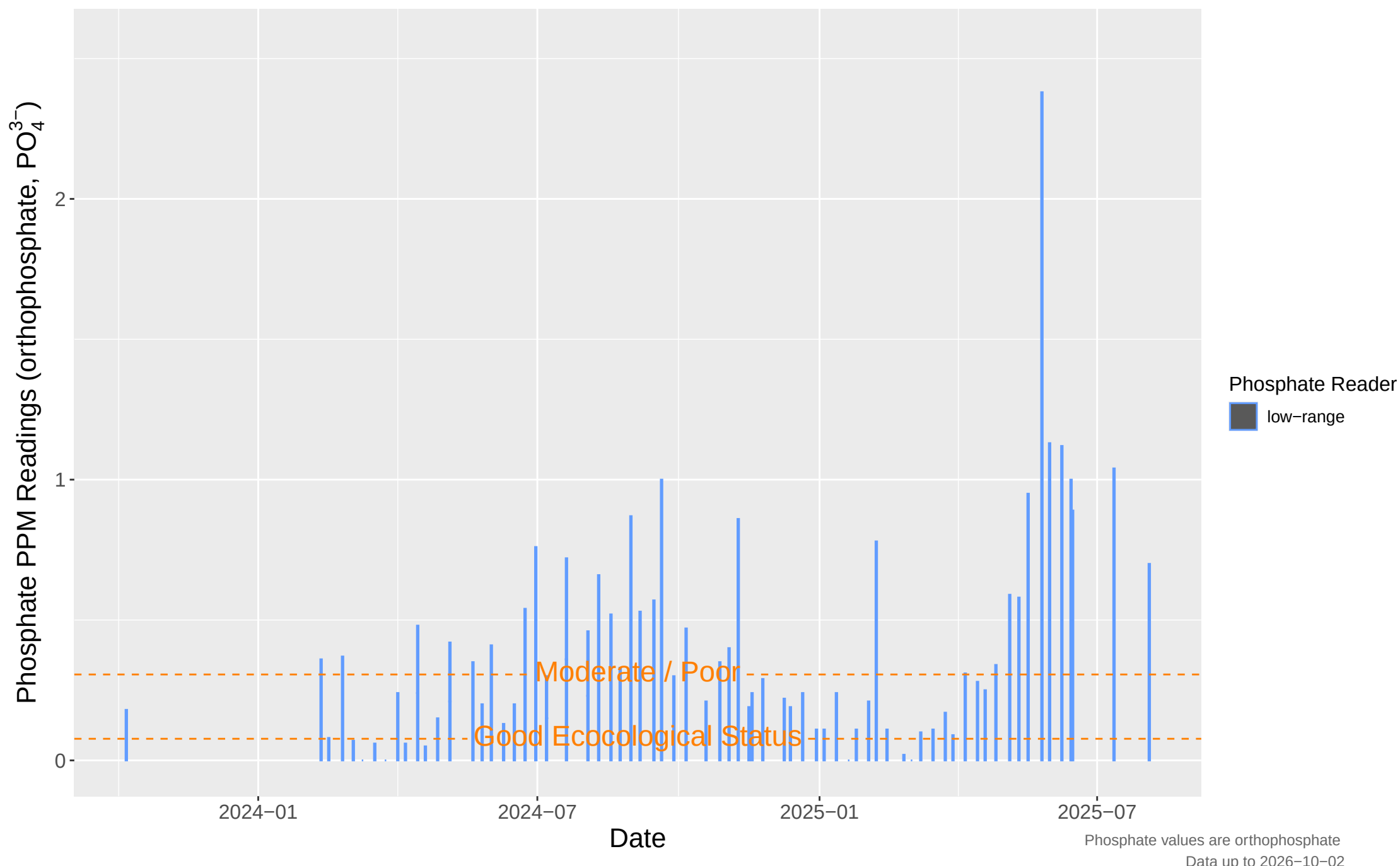
# Site: Fosseway Brook – Ilmington – Middle St

Start Date: 2023-10-07 | Most Recent: 2025-08-04 | Total Samples: 78 | Distinct Volunteers: 7

| Season       | Count |  | Phos<br>Min | Phos<br>Med | Phos<br>Max |  | Nitr<br>Min | Nitr<br>Med | Nitr<br>Max |  | EC<br>Min | EC<br>Med | EC<br>Max |  | Temp<br>Min | Temp<br>Med | Temp<br>Max |
|--------------|-------|--|-------------|-------------|-------------|--|-------------|-------------|-------------|--|-----------|-----------|-----------|--|-------------|-------------|-------------|
| Autumn 23    | 1     |  | 0.18        | 0.18        | 0.18        |  | 1           | 1           | 1           |  | 608       | 608       | 608       |  | 17.1        | 17.1        | 17.1        |
| Winter 23-24 | 3     |  | 0.08        | 0.36        | 0.37        |  | 2           | 2           | 5           |  | 561       | 584       | 607       |  | 8.4         | 10.4        | 12.3        |
| Spring 24    | 15    |  | 0.00        | 0.10        | 0.35        |  | 2           | 2           | 5           |  | 470       | 571       | 626       |  | 7.8         | 14.8        | 20.3        |
| Summer 24    | 16    |  | 0.10        | 0.34        | 0.87        |  | 0           | 2           | 2           |  | 585       | 632       | 684       |  | 15.4        | 18.9        | 21.7        |
| Autumn 24    | 12    |  | 0.19        | 0.38        | 1.00        |  | 1           | 2           | 5           |  | 380       | 594       | 668       |  | 8.9         | 13.3        | 18.0        |
| Winter 24-25 | 12    |  | 0.00        | 0.15        | 0.78        |  | 1           | 2           | 2           |  | 526       | 602       | 688       |  | 4.2         | 6.4         | 10.2        |
| Spring 25    | 14    |  | 0.00        | 0.30        | 2.38        |  | 1           | 2           | 5           |  | 593       | 639       | 721       |  | 6.3         | 13.8        | 19.7        |
| Summer 25    | 5     |  | 0.70        | 1.00        | 1.12        |  | 2           | 2           | 5           |  | 649       | 728       | 782       |  | 18.9        | 19.4        | 21.8        |

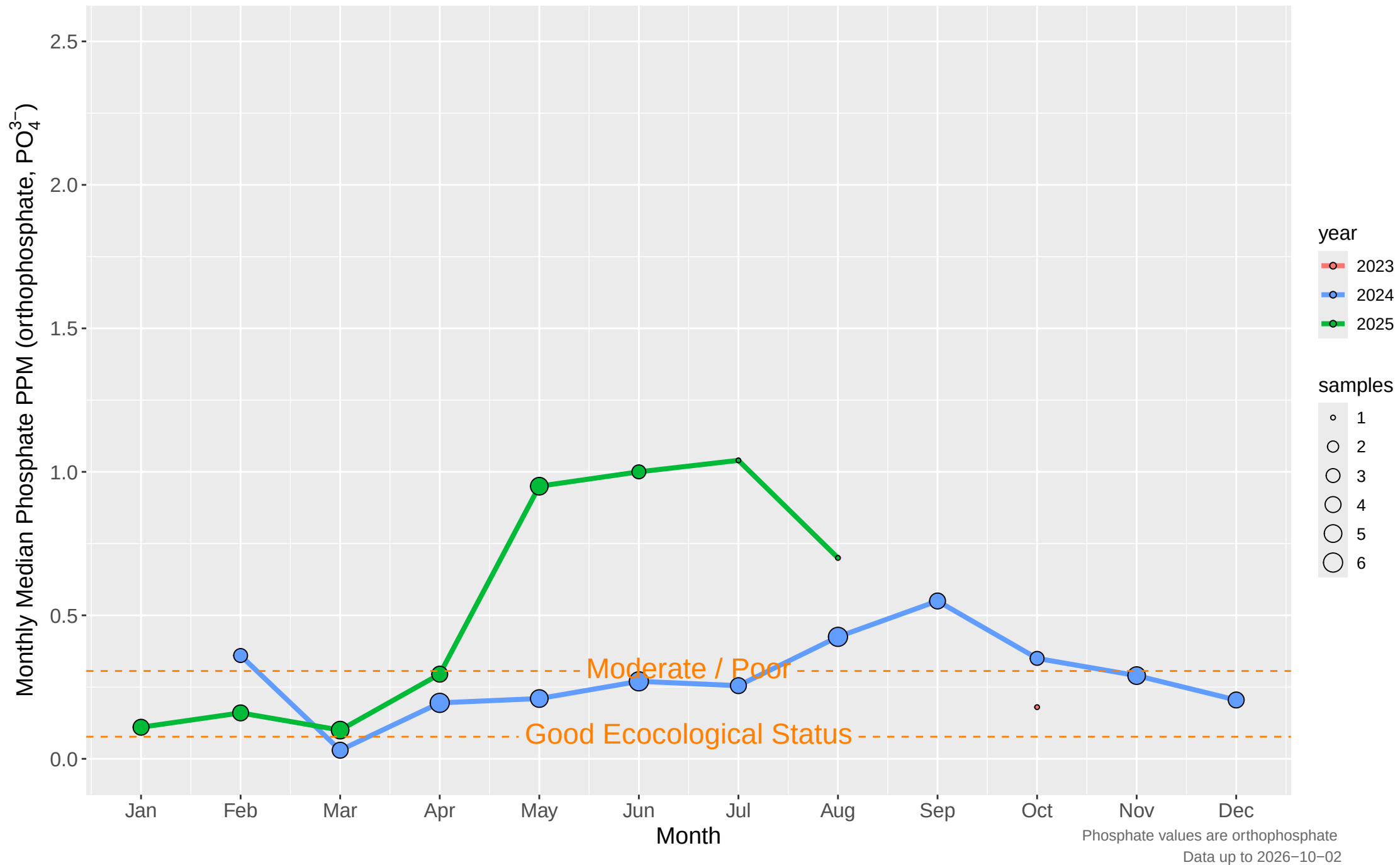
# SafeAvon Phosphates – Individual Readings

## Fosseway Brook – Ilmington – Middle St



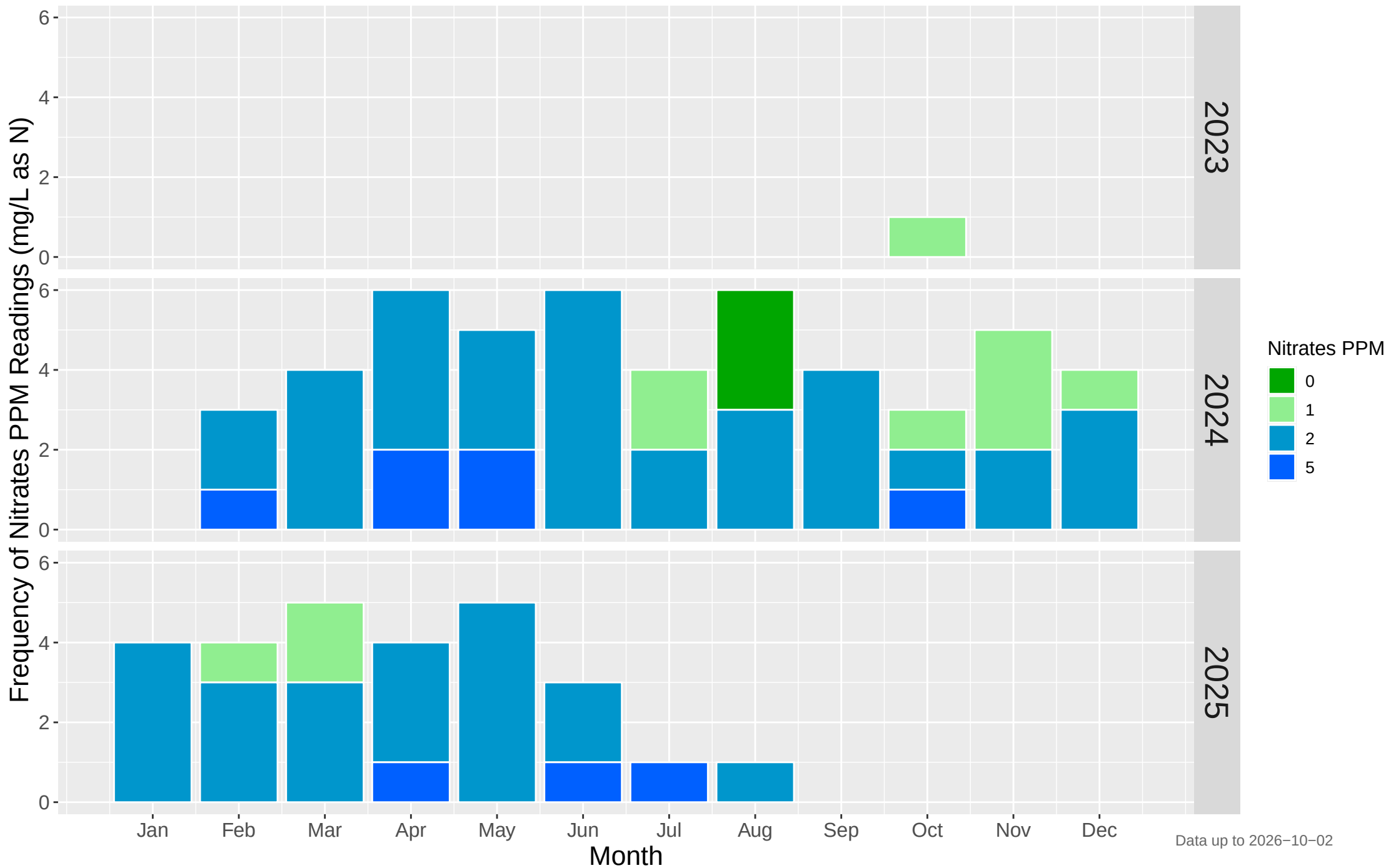
# SafeAvon Phosphates – By Month

## Fosseway Brook – Ilmington – Middle St



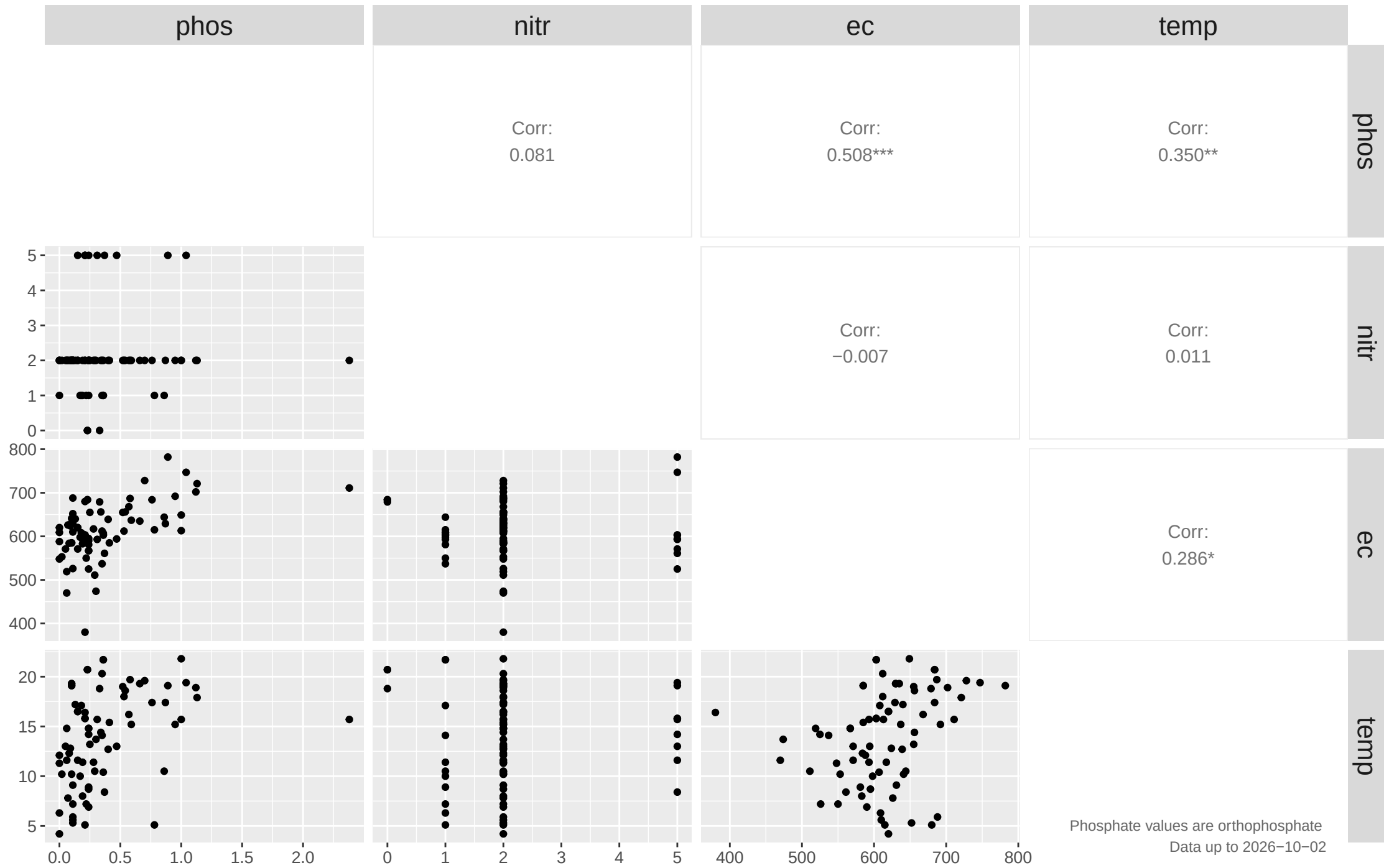
# SafeAvon Nitrates By Month

## Fosseway Brook – Ilmington – Middle St



# Pairwise Testing Variables Relationships

## Fosseway Brook – Ilmington – Middle St



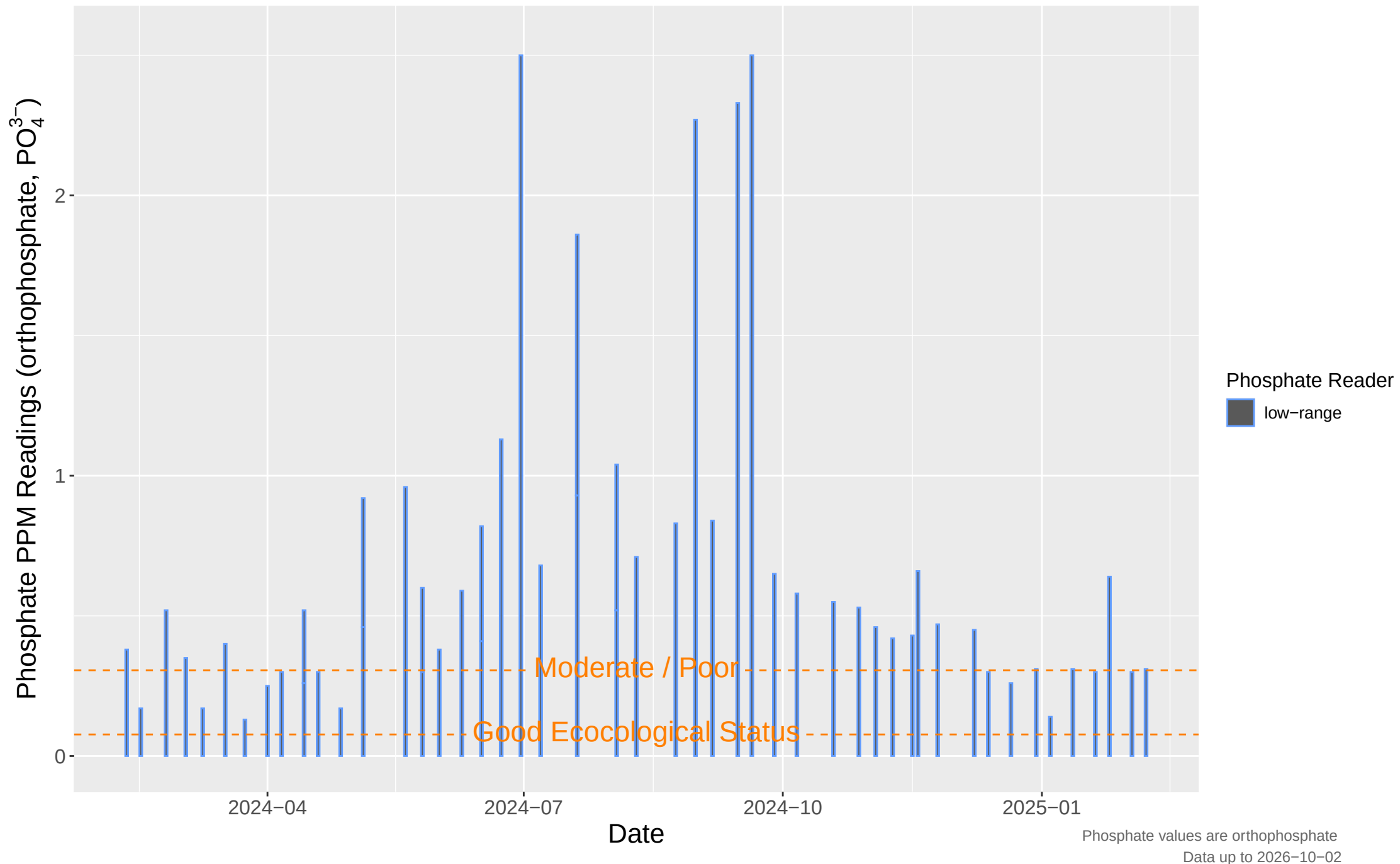
# Site: Fosseway Brook – Ilmington – Cross Leys

Start Date: 2024-02-11 | Most Recent: 2025-02-07 | Total Samples: 55 | Distinct Volunteers: 6

| Season       | Count |  | Phos Min | Phos Med | Phos Max |  | Nitr Min | Nitr Med | Nitr Max |  | EC Min | EC Med | EC Max |  | Temp Min | Temp Med | Temp Max |
|--------------|-------|--|----------|----------|----------|--|----------|----------|----------|--|--------|--------|--------|--|----------|----------|----------|
| Winter 23-24 | 3     |  | 0.17     | 0.38     | 0.52     |  | 2        | 2.0      | 2        |  | 592    | 625    | 628    |  | 7.8      | 9.3      | 11.0     |
| Spring 24    | 15    |  | 0.13     | 0.30     | 0.96     |  | 2        | 2.0      | 5        |  | 456    | 638    | 698    |  | 7.7      | 13.7     | 18.0     |
| Summer 24    | 15    |  | 0.34     | 0.59     | 2.50     |  | 0        | 1.5      | 2        |  | 572    | 830    | 1100   |  | 13.3     | 16.7     | 19.2     |
| Autumn 24    | 12    |  | 0.42     | 0.56     | 2.50     |  | 0        | 2.0      | 2        |  | 450    | 691    | 1010   |  | 9.4      | 12.8     | 17.6     |
| Winter 24-25 | 10    |  | 0.14     | 0.30     | 0.64     |  | 2        | 2.0      | 2        |  | 605    | 656    | 769    |  | 5.1      | 6.3      | 10.0     |

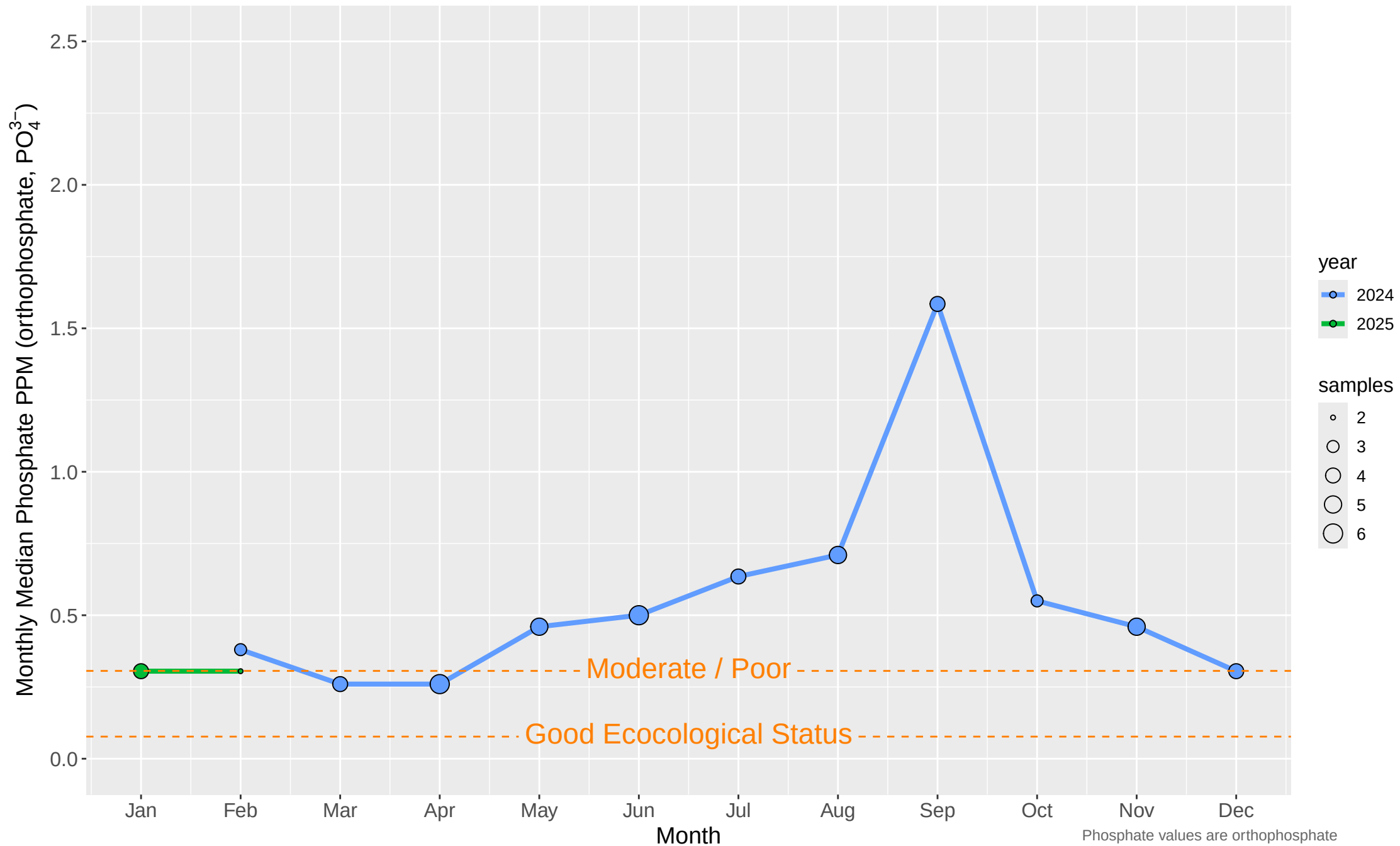
# SafeAvon Phosphates – Individual Readings

## Fosseway Brook – Ilmington – Cross Leys



# SafeAvon Phosphates – By Month

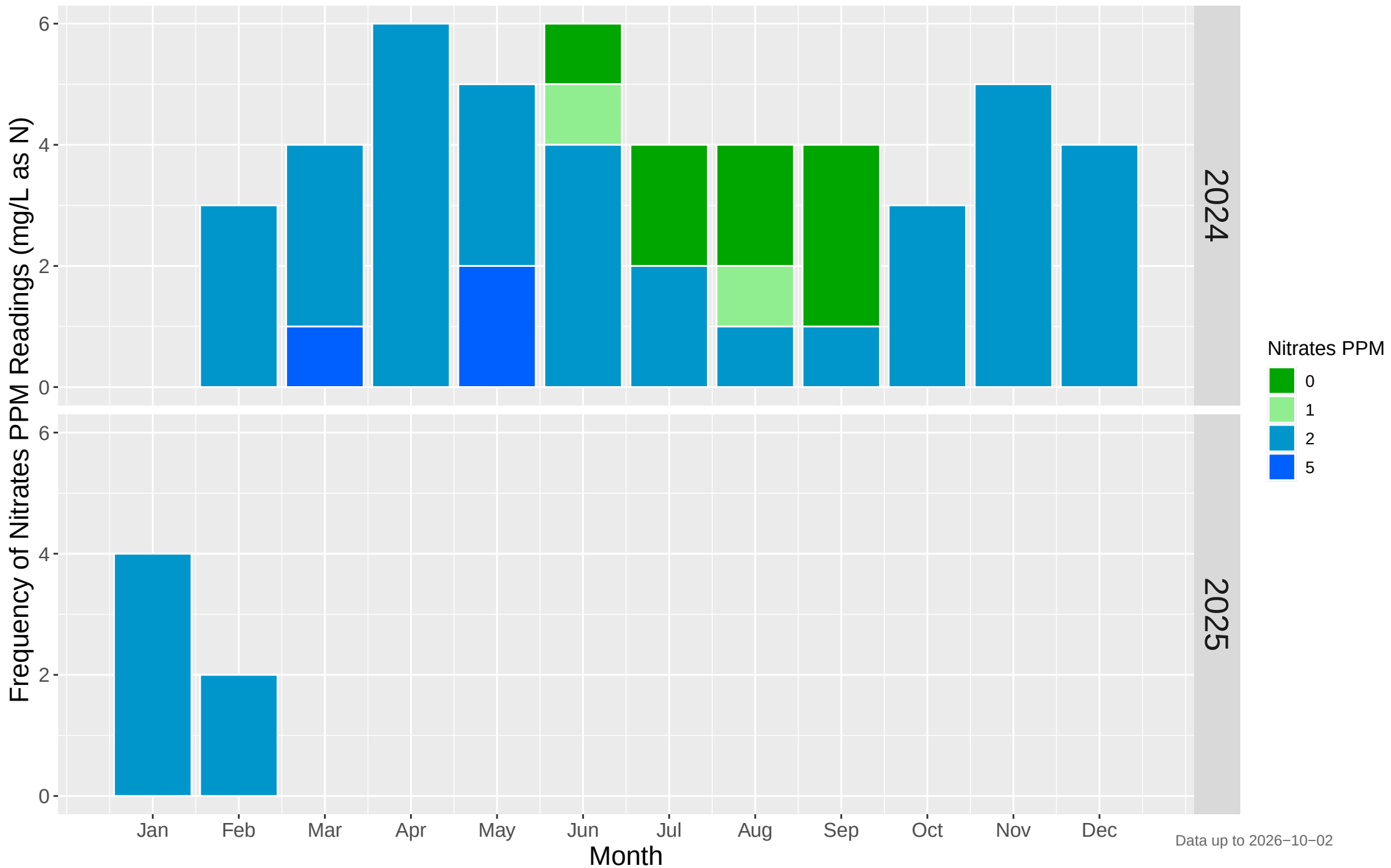
## Fosseway Brook – Ilmington – Cross Leys



Phosphate values are orthophosphate  
Data up to 2026-10-02

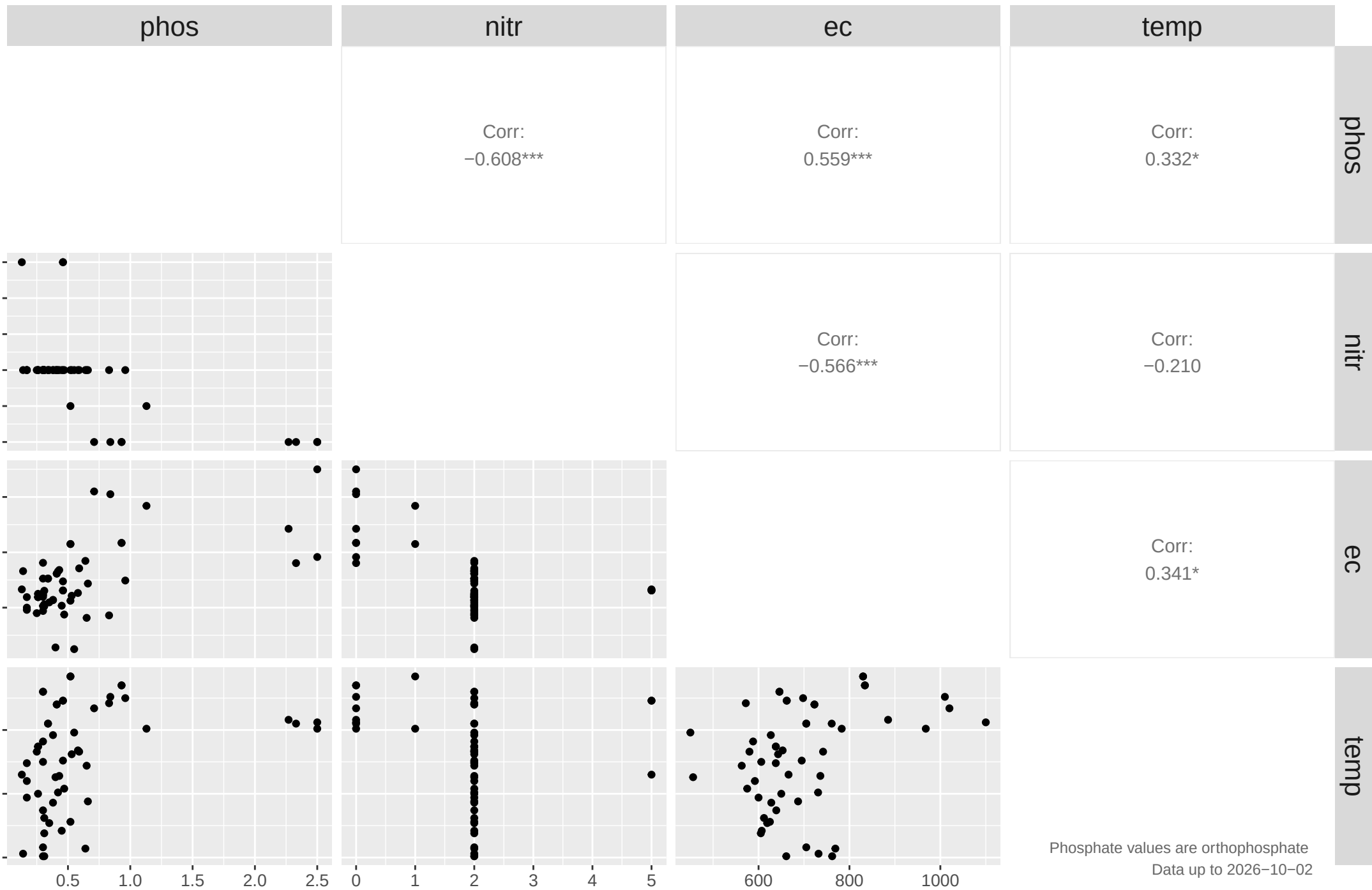
# SafeAvon Nitrates By Month

## Fosseway Brook – Ilmington – Cross Leys



# Pairwise Testing Variables Relationships

## Fosseway Brook – Ilmington – Cross Leys



# Report Glossary & Interpretation Guide

## Understanding the Charts

### Pairwise Correlation Matrices

- . Valuation Scale (–1 to +1): Quantifies correlation between variables.
- (+1) Perfect Positive Correlation: Variables track each other; if one scales up, the other increases.
- (0) No Correlation: Variable movements appear independent.
- (–1) Perfect Negative Correlation: Variables track inversely; when one scales up, the other drops.
- . Practical Application: If a pair of variables have a correlation approaching 1, it demonstrates that typically on any given sample, these values are likely to be strongly correlated. This indicates they may share similar sources and/or similar ways of exiting out into the watercourse.

## Ecological Threshold Frameworks

### Phosphate Status (Orthophosphate, PO<sub>4</sub>–)

- Monitored using Hanna pocket checker:
- . High Status:  $x < 0.077$  PPM
  - . Good Ecological Status:  $0.077 \leq x \leq 0.306$  PPM
  - . Moderate / Poor Ecological Status:  $x > 0.306$  PPM

### Nitrate Levels (Nitrate–as–N)

- Monitored using WaterWorks/Hach Nitrate kit:
- . Natural Levels:  $x < 1.0$  PPM
  - . Elevated Levels:  $1.0 \leq x < 5.0$  PPM
  - . Excessive Levels:  $x \geq 5.0$  PPM

## Data Access

Data pulled from EpiCollect API.  
Full dataset accessible via SafeAvon website  
which has links to EpiCollect and the Google Sheet.  
URL: [https://safeavon.org.uk/?page\\_id=151](https://safeavon.org.uk/?page_id=151)