

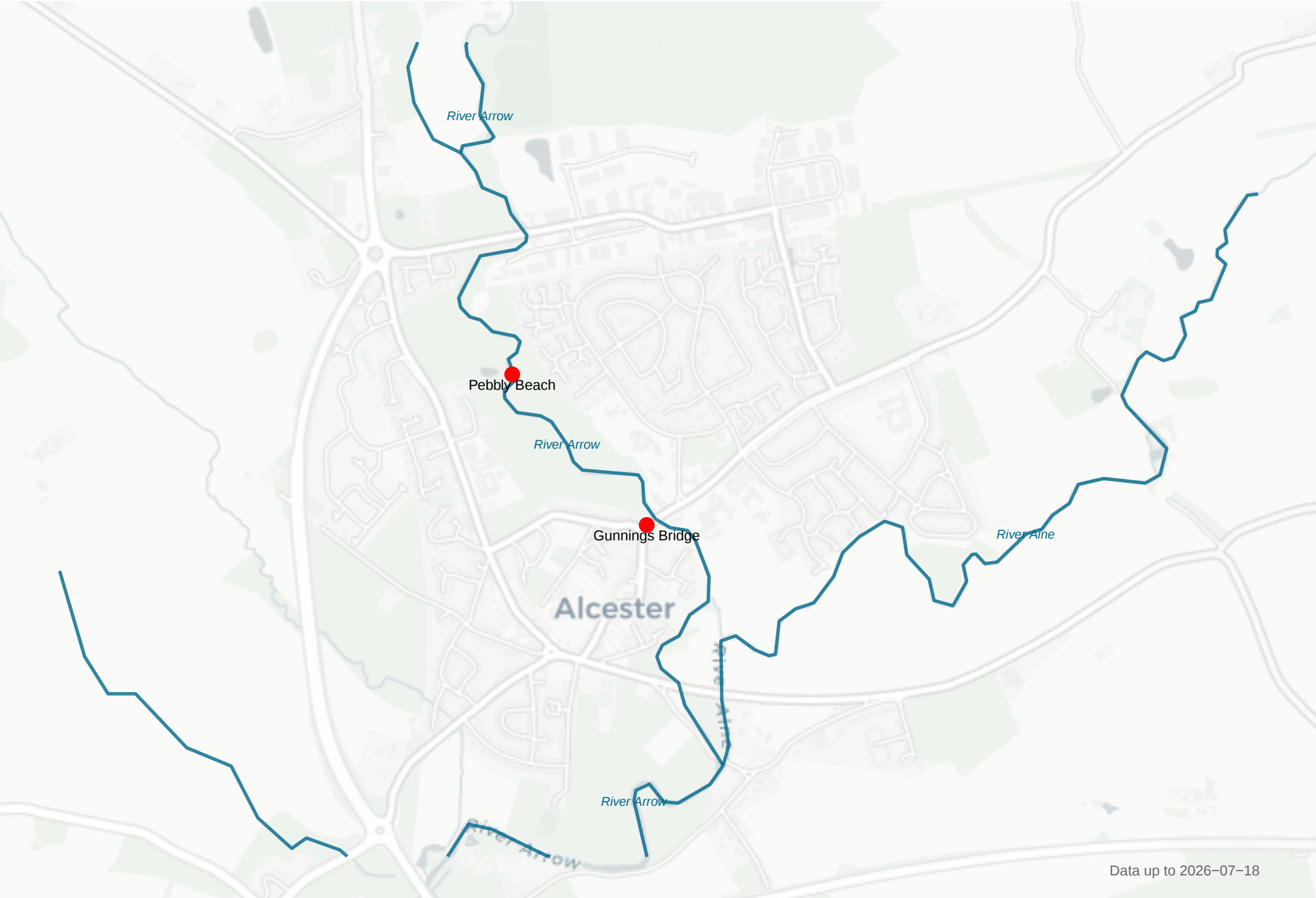
SafeAvon Nutrient Testing Report: Alcester

SafeAvon Sites By Waterway

Arrow River

- . Alcester – Gunnings Bridge
- . Alcester – Pebbly Beach

SafeAvon Locations in Alcester

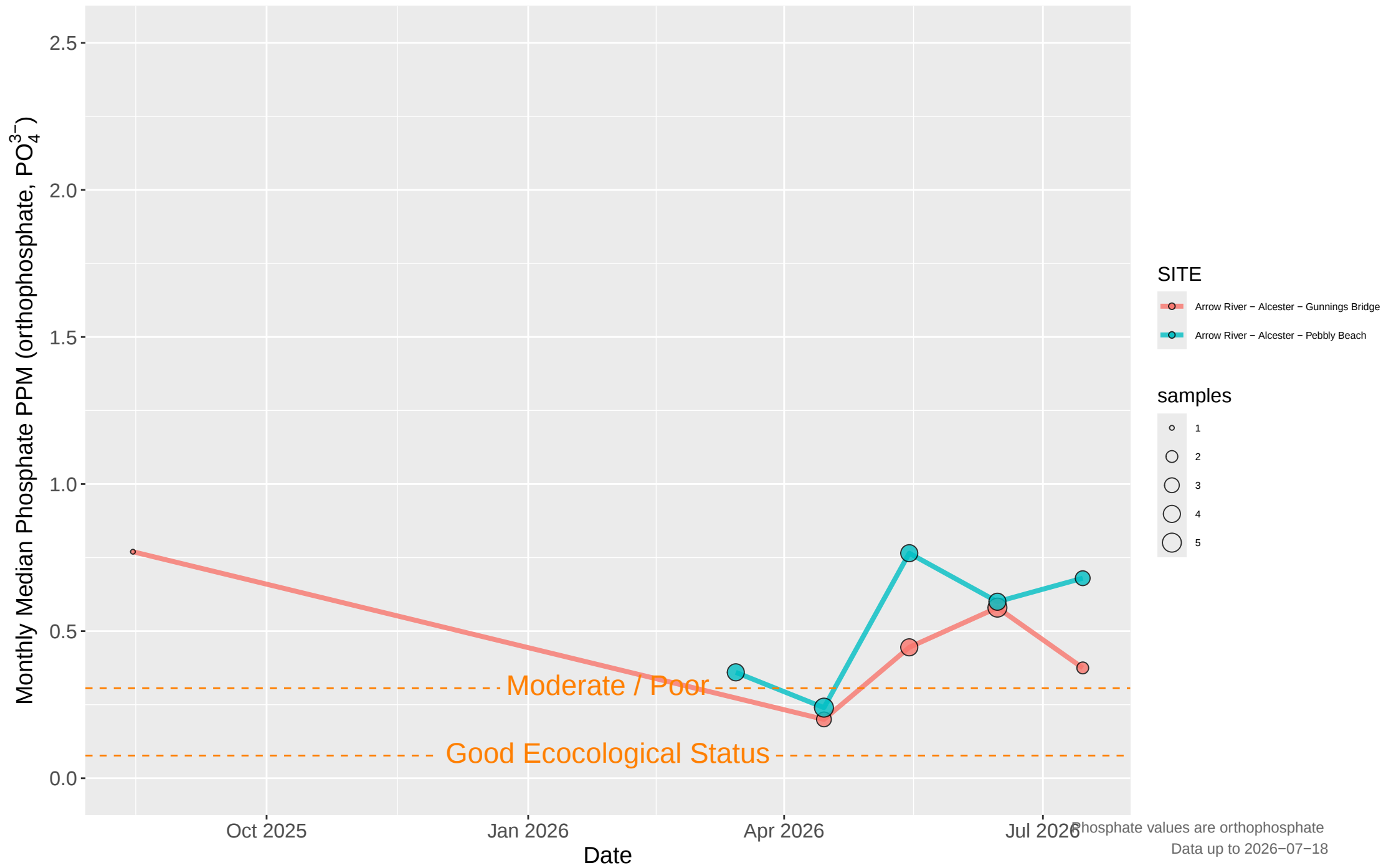


Summary for sites in Alcester

SITE	Start	Most Recent	Samples	Distinct Volunteers	Median Phosphates PPM	Median Nitrates PPM
Arrow River – Alcester – Pebbly Beach	2026-03-05	2026-07-16	20	1	0.495	10
Arrow River – Alcester – Gunnings Bridge	2025-08-25	2026-07-13	16	2	0.450	10

SafeAvon Phosphates – By Month

Alcester



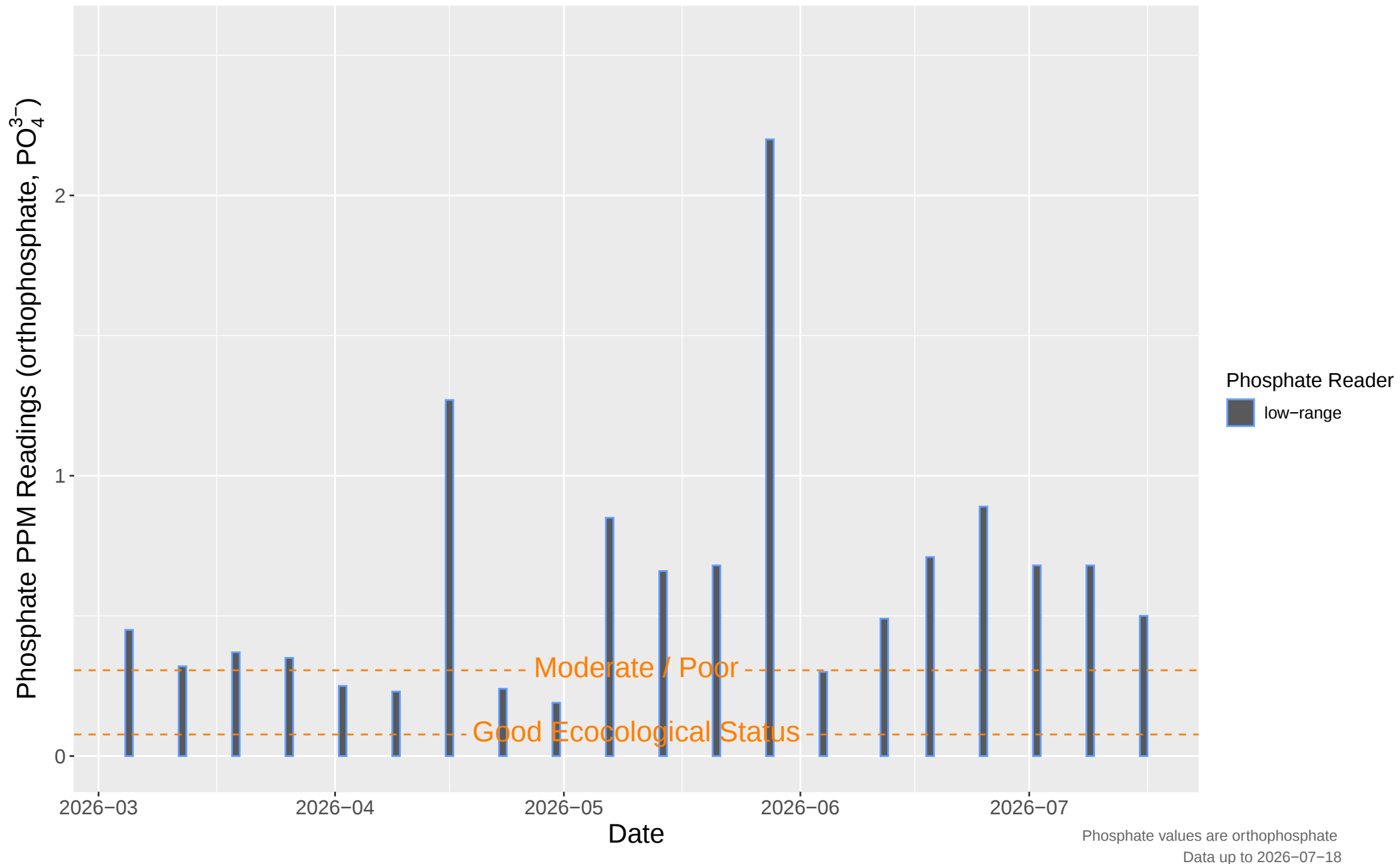
Site: Arrow River – Alcester – Pebbly Beach

Start Date: 2026-03-05 | Most Recent: 2026-07-16 | Total Samples: 20 | Distinct Volunteers: 1

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
Spring 26	13		0.19	0.37	2.20		5	10	20		857	1110	1240		10.0	13.0	21.3
Summer 26	7		0.30	0.68	0.89		2	5	10		777	963	1220		16.8	20.5	23.4

SafeAvon Phosphates – Individual Readings

Arrow River – Alcester – Pebbly Beach



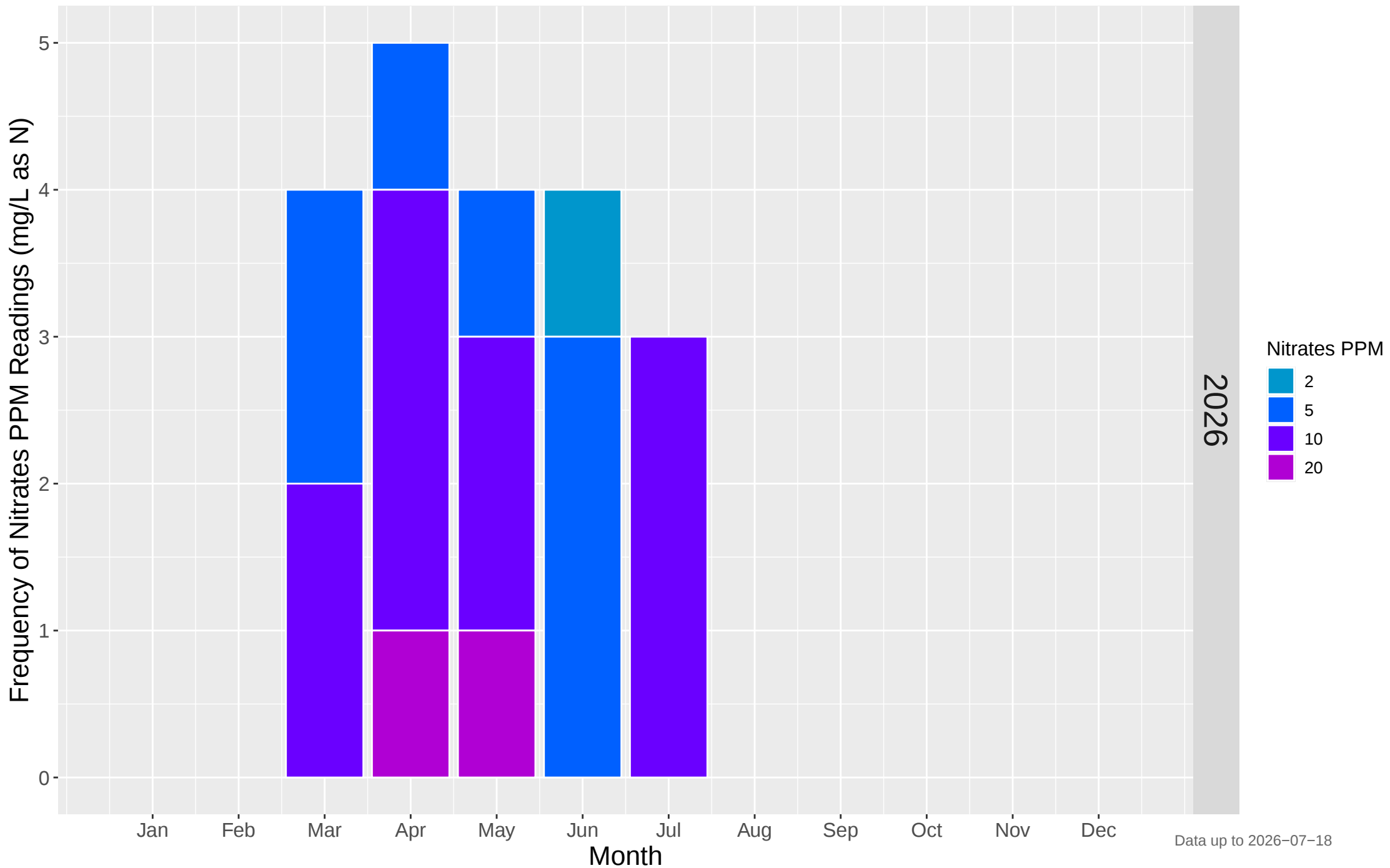
SafeAvon Phosphates – By Month

Arrow River – Alcester – Pebbly Beach



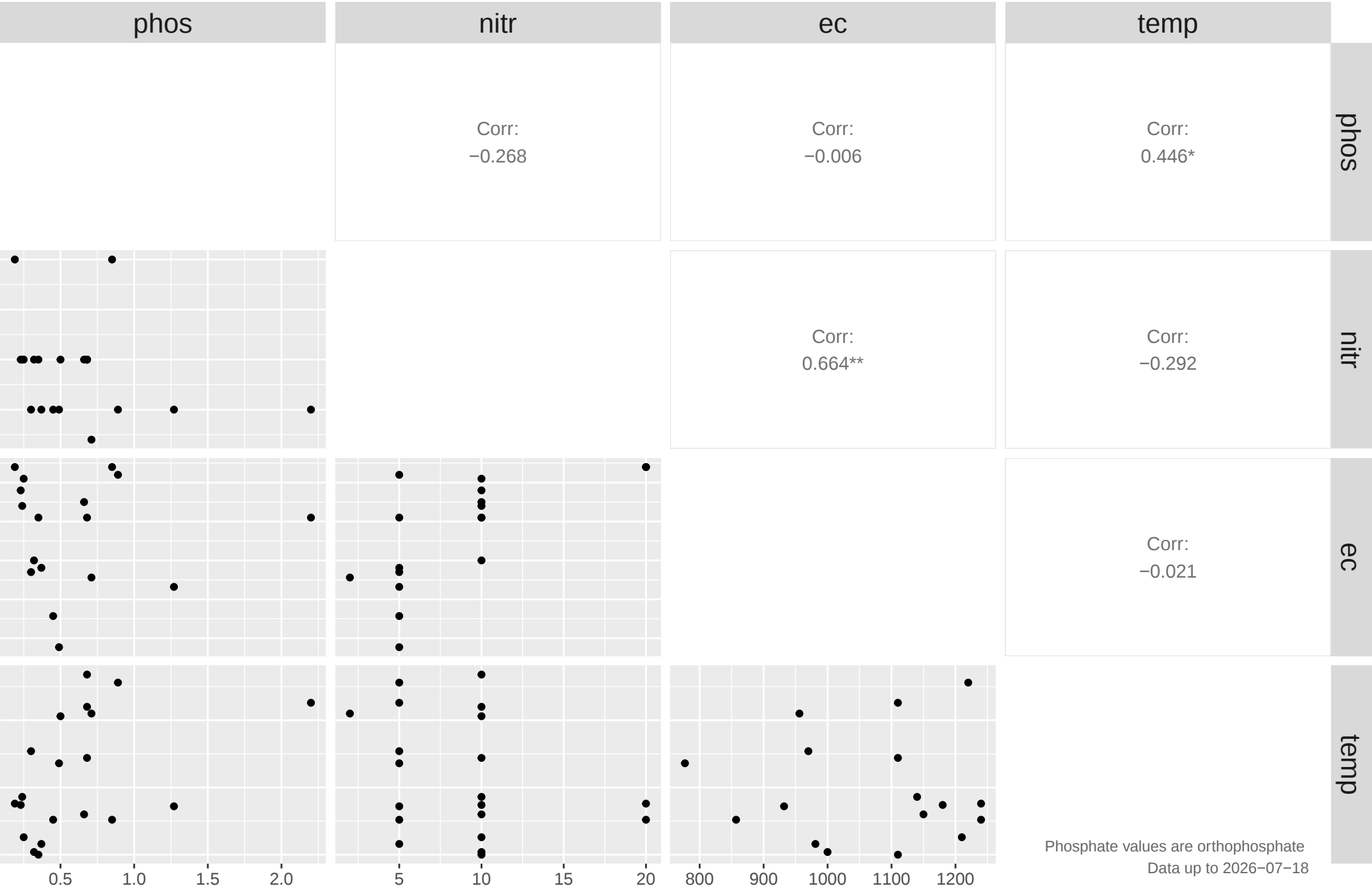
SafeAvon Nitrates By Month

Arrow River – Alcester – Pebbly Beach



Pairwise Testing Variables Relationships

Arrow River – Alcester – Pebbly Beach



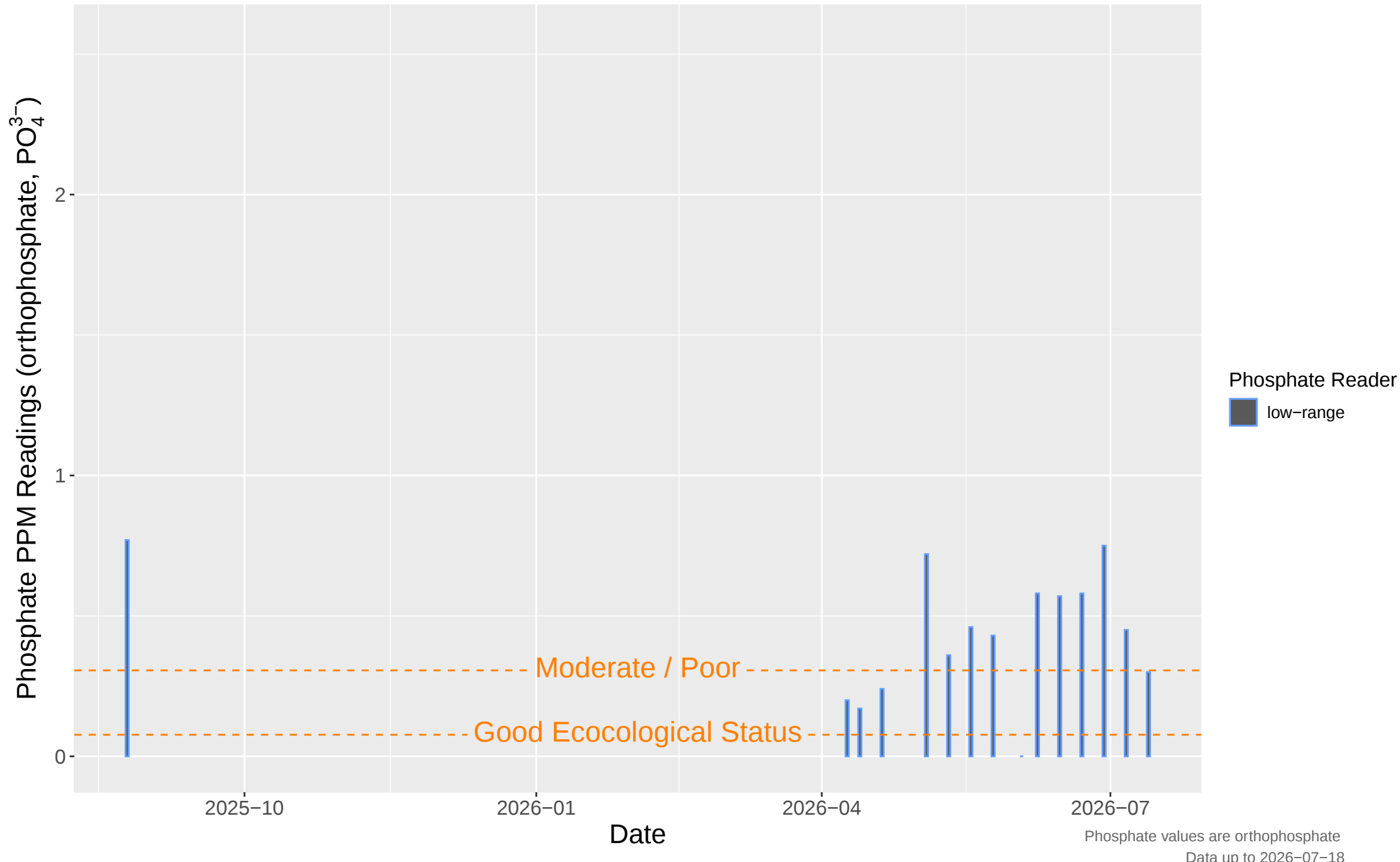
Site: Arrow River – Alcester – Gunnings Bridge

Start Date: 2025-08-25 | Most Recent: 2026-07-13 | Total Samples: 16 | Distinct Volunteers: 2

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
Summer 25	1		0.77	0.77	0.77		20	20	20		116	116	116		22.6	22.6	22.6
Spring 26	8		0.17	0.36	0.72		5	10	20		198	532	579		12.6	13.8	21.6
Summer 26	7		0.00	0.57	0.75		5	10	20		380	543	589		16.1	20.2	22.8

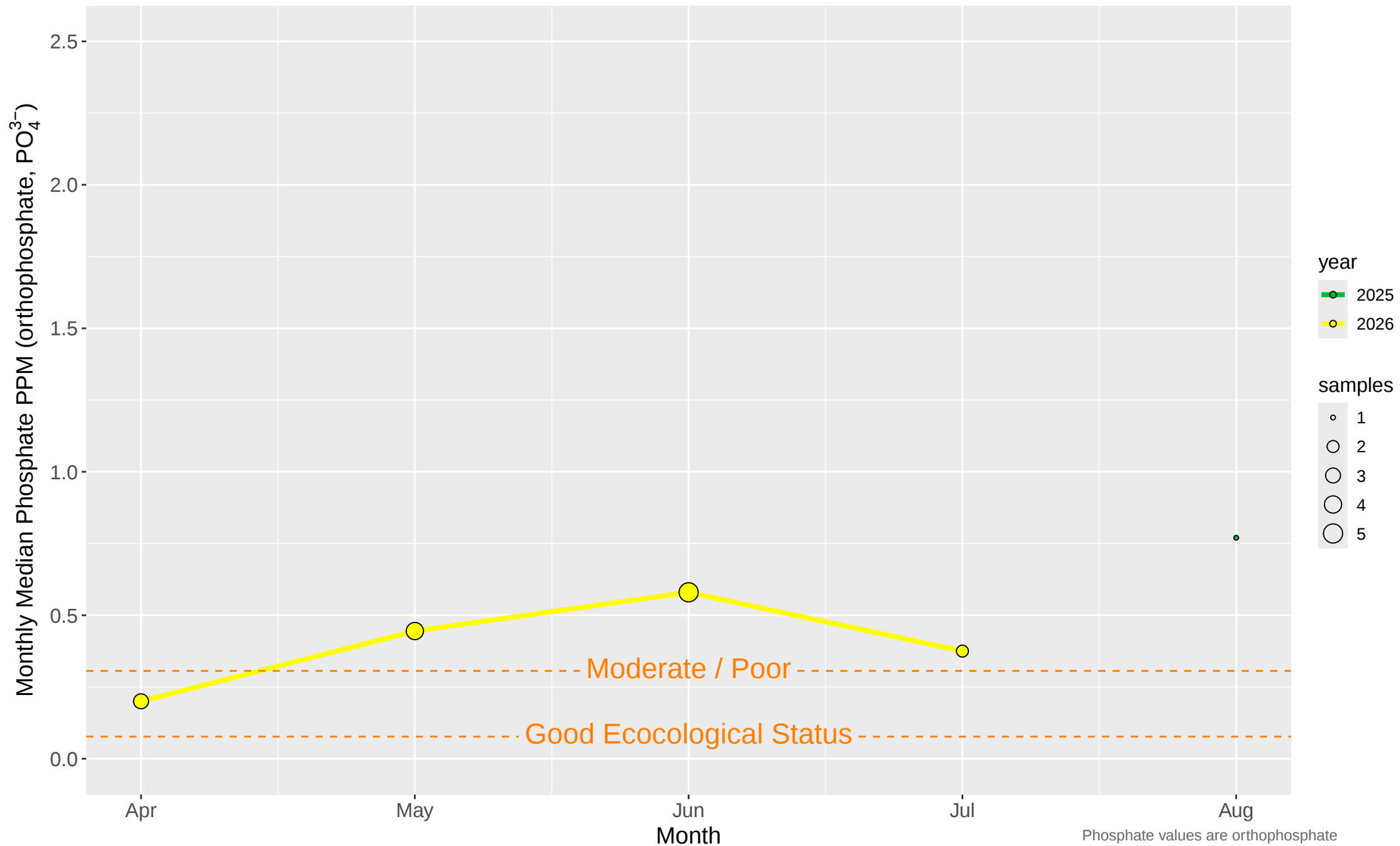
SafeAvon Phosphates – Individual Readings

Arrow River – Alcester – Gunnings Bridge



SafeAvon Phosphates – By Month

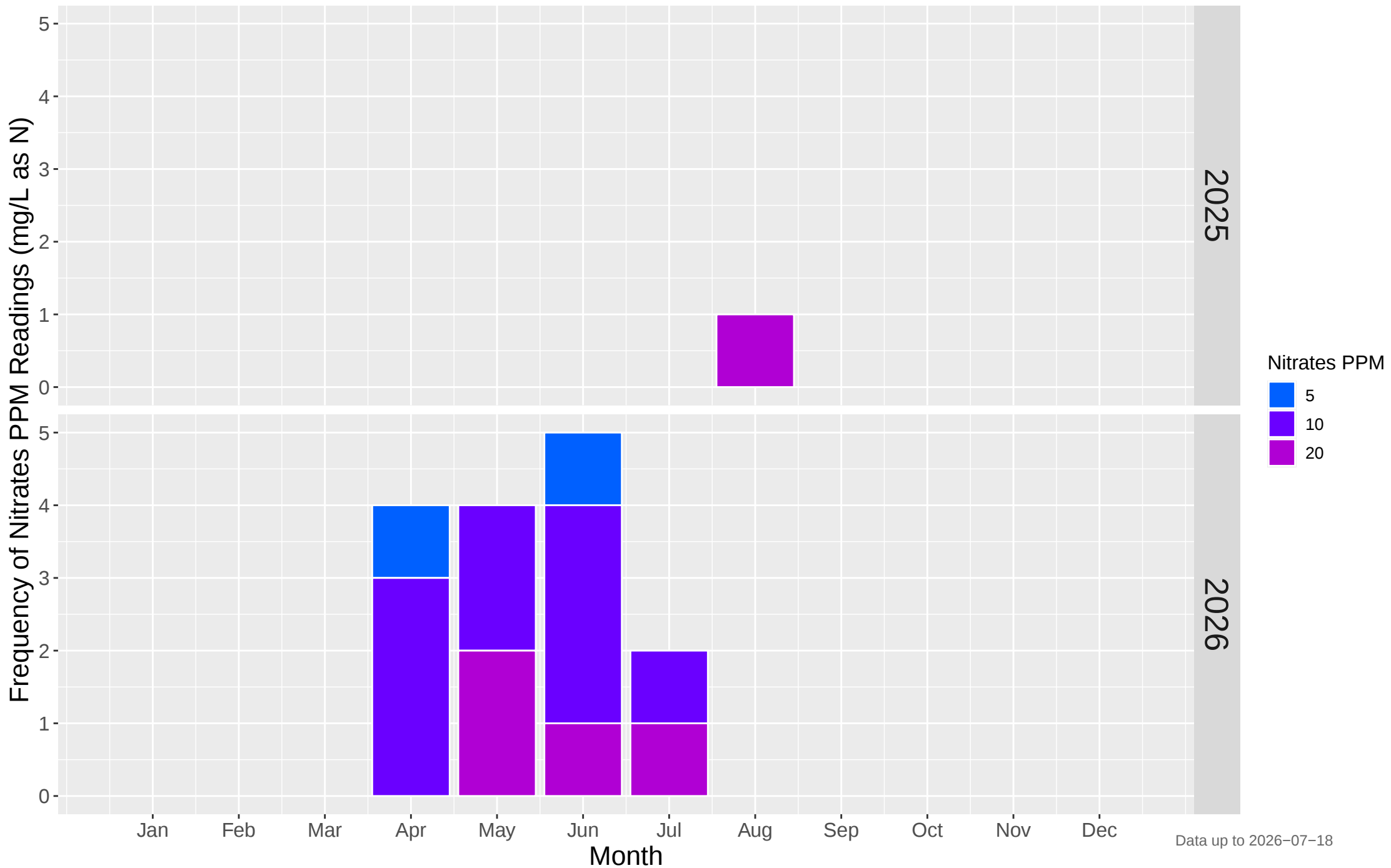
Arrow River – Alcester – Gunnings Bridge



Phosphate values are orthophosphate
Data up to 2026-07-18

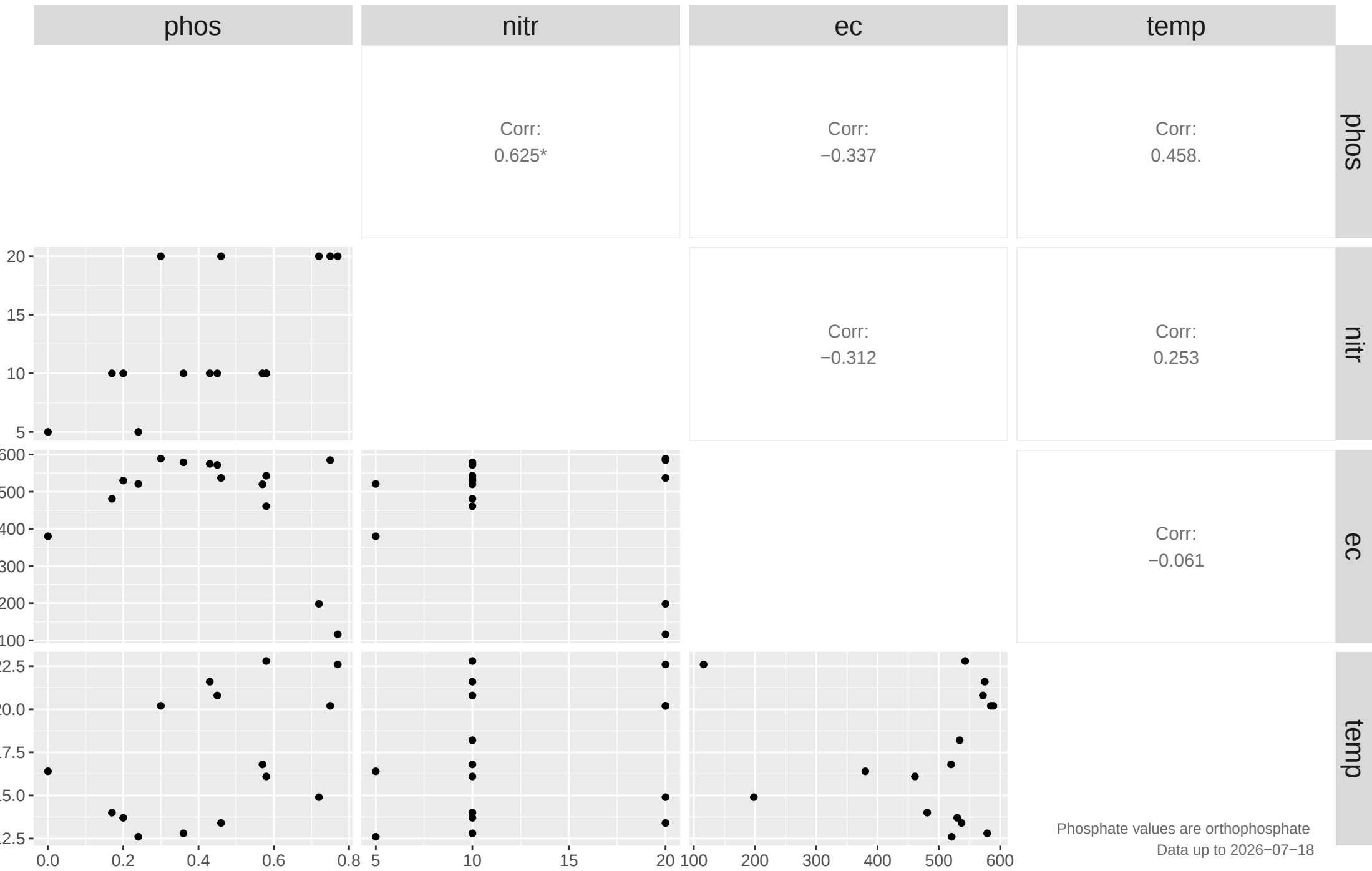
SafeAvon Nitrates By Month

Arrow River – Alcester – Gunnings Bridge



Pairwise Testing Variables Relationships

Arrow River – Alcester – Gunnings Bridge



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, PO₄^{3–})

- 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