

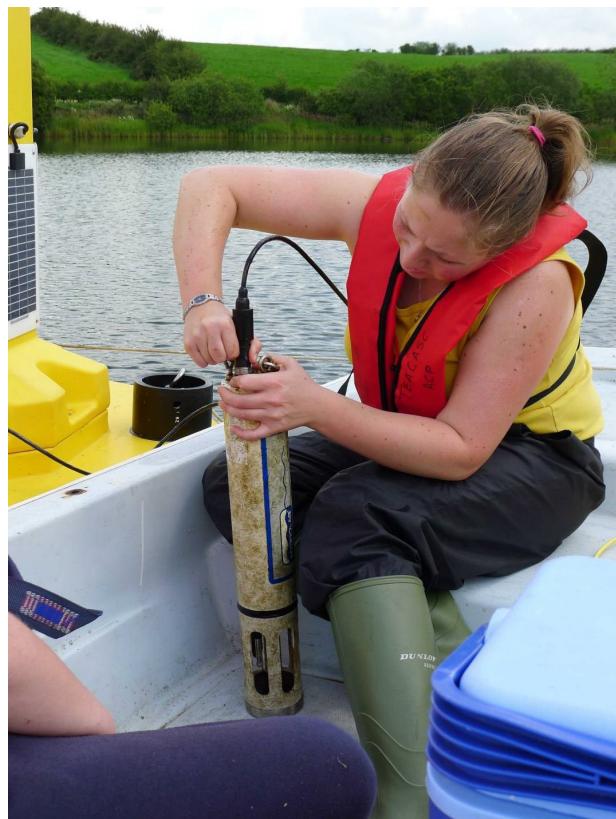
Supplementary material

Supplementary figures A1-A6.

A1



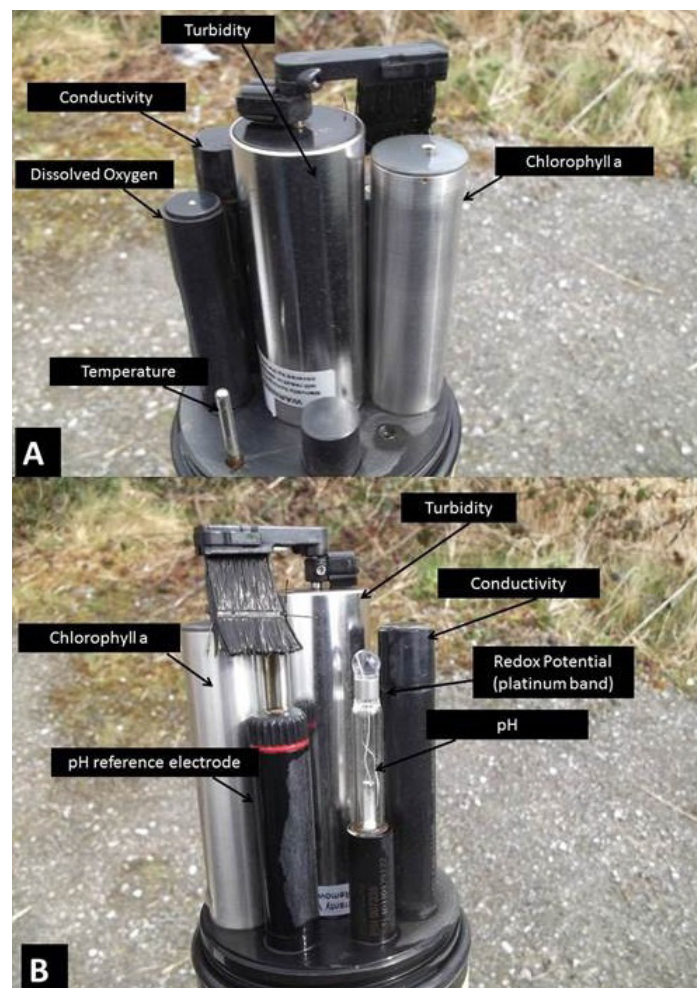
A2



A3



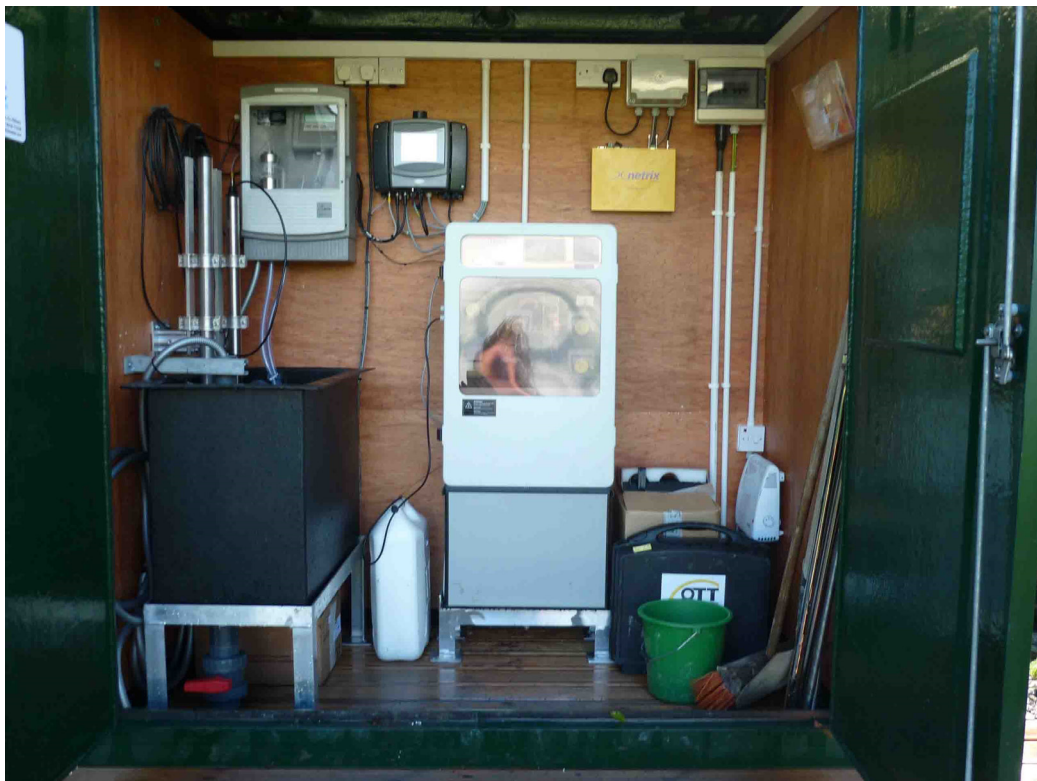
A4



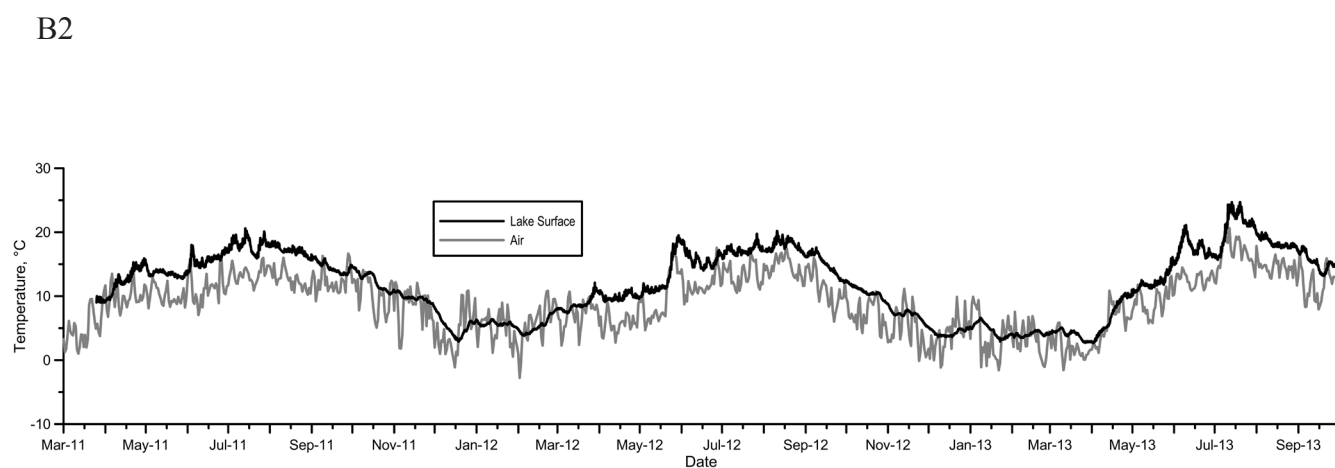
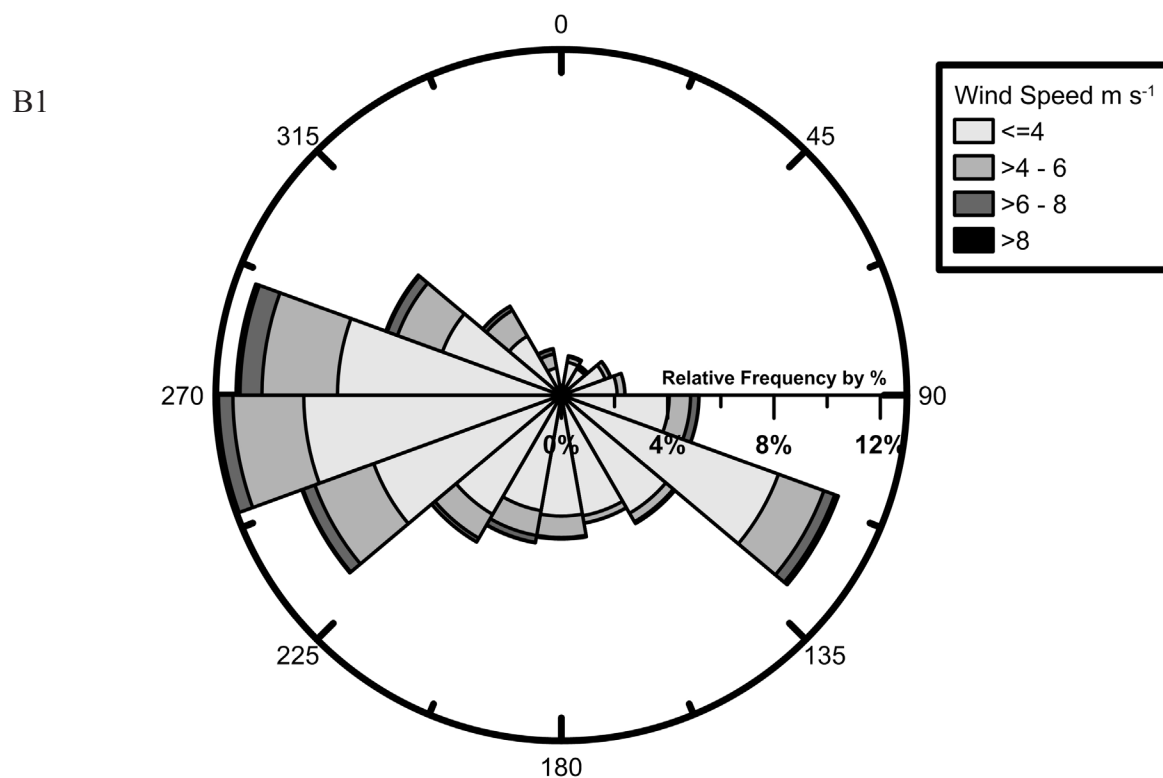
A5



A6



Supplementary figures B1-B2.



Supplementary tables B1-B3.

B1

		Temperature (°C)					
		March	April	May	June	July	August
<i>Air</i>							
Year 1	Mean	4.9	9.9	10.1	11.3	13.4	12.6
	Min	-5.6	-0.5	2.6	0.8	4.0	3.0
	Max	14.9	18.4	16.6	22.7	21.5	19.1
Year 2	Mean	7.2	5.8	9.8	11.8	13.3	14.6
	Min	-3.3	-4.5	-2.6	1.0	3.4	5.9
	Max	18.9	13.7	22.9	21.6	20.9	21.3
Year 3	Mean	2.0	5.8	9.1	12.6	16.7	14.5
	Min	-4.8	-7.9	-1.5	3.4	7.5	7.4
	Max	8.2	13.9	18.3	21.3	28.6	21.2
<i>Lake Surface</i>							
Year 1	Mean	9.4	12.6	13.5	15.7	18.0	17.1
	Min	9.0	9.2	12.7	13.6	15.9	15.6
	Max	19	15.9	15.2	18	20.6	18.6
Year 2	Mean	8.8	9.9	12.9	15.8	17.2	17.9
	Min	7.3	9.1	9.8	14	15.8	16.2
	Max	12.1	11.3	19.5	18.8	19.8	20.2
Year 3	Mean	4.0	6.9	12.3	17.5	20.9	18.3
	Min	2.7	2.7	10.1	14.9	15.7	17.1
	Max	5.1	11.0	16.1	21.1	24.7	20.0

B2

Source	TP (kg)	TDP (kg)	TRP (kg)	SRP (kg)
2011				
<i>Apr 2011 – Mar 2012</i>				
Catchment Total	159.7	105.4	54.2	43.5
<i>Spring 2011 (Mar, Apr, May)</i>				
Catchment Total	4.1	3.5	2	1.7
Catchment Events Only*	2	1.6	0.8	0.7
Sediment-Derived (Linear)	5.9	5.8	5.8	5.5
<i>Summer 2011 (Jun, Jul, Aug)</i>				
Catchment Total	11	7.5	4.4	3.8
Catchment Events Only*	10.2	6.9	4	3.4
Sediment-Derived (Linear)	13	11.5	9.1	8.3
2012				
<i>Apr 2012 – Mar 2013</i>				
Catchment Total	183.5	121.6	71.3	54.2
<i>Spring 2012 (Mar, Apr, May)</i>				
Catchment Total	9.1	7.3	4.0	2.8
Catchment Events Only*	6.4	5.0	2.3	1.0
Sediment-Derived (Linear)	NA	NA	NA	NA
<i>Early Summer 2012 (Jun)</i>				
Catchment Total	34.5	23.5	10.9	9.5
Catchment Events Only*	27	18.4	8.6	7.5
Sediment-Derived (Linear)	5.1	4.7	5.1	4.5
<i>Late Summer 2012 (Jul, Aug)</i>				
Catchment Total	20.5	15.3	9.5	8.3
Catchment Events Only*	16.7	12	7.3	6.4
Sediment-Derived (Linear)	3	1.7	1.8	1.7
2013				
<i>Apr – Sept 2013</i>				
Catchment Total	17.3	13.3	12.2	7.4
<i>Spring 2013 (Mar, Apr, May)</i>				
Catchment Total**	38.2	30	22.2	12
Catchment Events Only*	29.6	22.1	9.5	4.1
Sediment Derived (Linear)	NA	NA	NA	NA
<i>Summer 2013 (Jun, Jul, Aug)</i>				
Catchment Total	6.6	4.8	3	2.6
Catchment Events Only*	6.1	4.2	2.7	2.3
Sediment-Derived (Linear)	2.8	2.2	2.1	1.9

*includes baseflow and stormflow loading

** large P export from catchment during Mar 2013

B3

Variables	Season	Regression equation	R ²
TP vs TDP (mg L ⁻¹)	Spring	TDP = 0.7367*TP + 0.0048	0.696
	Summer	TDP = 0.5610*TP + 0.0169	0.864
	Autumn	TDP = 0.5851*TP + 0.0106	0.891
	Winter	TDP = 0.2804*TP + 0.0206	0.844
TRP vs SRP (mg L ⁻¹)	Spring	SRP = 0.2111*TRP + 0.0178	0.802
	Summer	SRP = 0.7813*TRP + 0.0042	0.874
	Autumn	SRP = 0.7817*TRP + 0.0042	0.871
	Winter	SRP = 0.9728*TRP - 0.0095	0.949