# TORRIDGE RIVERFLY REPORT 2016

## 2016 Update

The last Riverfly sampling for 2016 was done by our volunteers in September. During the year, our 32 volunteers took 149 samples from 34 different sites in the Torridge catchment. Only 4 samples failed their trigger level test, and after investigation, the Environment Agency attributed them to the dry Autumn and low flows.

Thanks to all past, current and in advance, future volunteers.

We can do nothing without you

In May 2016, nine new volunteers were trained at an event at Hatherleigh Community Centre. For the first time, two volunteers took part who were going to establish sites in the River Taw catchment. They purchased their own equipment and at the end of the season, one site was active (Nymet Rowland) and 3 samples were taken.

See the map on the back page that shows registered active sites (red stars) and registered vacant sites (yellow circles).

Looking at the Riverfly programme as a whole since it began on the Torridge in 2014,

- 408 samples have been taken
- Only 20 samples have fallen below trigger levels
- 54 sites have been sampled
- 63 have received a Trigger level score from the Environment Agency
- 24 sites are inactive at the end of 2016 but could be taken on by new volunteers (see table on following pages and map on the back page

SITES REGISTERED WITH THE ENVIRONMENT AGENCY BUT NOT IN USE AT END OF 2016 RIVERFLY SAMPLING SEASON

| | Date approved by EA | Catchment | Grid reference | Site name | Original volunteer that registered site with EA | Registered on RF website | Note | Water body | Trigger level |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 17/05/2014 | Torridge | SS 450250 | JENNETTS | Cathy Gleeson | Y | Data from 2014 – not of | Jennets Stream | 4 |
| 2 | 12/07/2014 | Torridge | SS 541 024 | ESSWORTHY | Laurence Fisher | N | Registered and never | Lew | 5 |
| 3 | 17/05/2014 | Torridge | SS 47762 06395 | MUSSEL BROOK | Carron Holmes Paul | Y | Data from 2014 and 15 | Mussel Brook | 6 |
| 4 | 17/05/2014 | Torridge | SS 48597 05739 | SHEEPWASH BRIDGE | Yolanda Clewlow | Y | Data from 2015 | Torridge | 6 |
| 5 | 17/05/2014 | Torridge | SS 49423 18803 | TORRINGTON | Lynne Parkyn | Y | Data from 2014 and 15 | Torridge | 6 |
| 6 | 17/05/2014 | Torridge | SS 347 110 | SUTCOMBE MILL | Chris Hebron | | Registered and never | Waldon | 7 |
| 7 | Apr-2015 | Torridge | SS5301709622 | No name | Steve Martindale | N | Registered and never | Little Mere | 6 |
| 8 | Apr-2015 | Torridge | SS5213717099 | No name | Steve Martindale | N | Registered and never | Woolleigh_Brook | 7 |
| 9 | 17/05/2014 | Torridge | SS 540 041 | HATHERLEIGH CC | Clare Tyson | Y | Data from 2014 and 15 | Lew | 5 |
| 10 | July 2015 | Torridge | SS53392 08008 | Wooladon Stream | Meeth rangers | Y | One data point from | Tributary of Little Mere | 6 |
| 11 | July 2015 | Torridge | SS4075 2272 | Dymsdale Wood Bridge | Abraham Cutajar | Y | Limited data from 2015 | Yeo | 7 |
| 12 | 2014 | Torridge | SS 40800 11989 | Newton St.Petrock | Graeme Jones | Y | Data up to end 2015 | Torridge | 7 |

| | Date approved by EA | Catchment | Grid reference | Site name | Original volunteer that registered site with EA | Registered on RF website | Note | Water body | Trigger level |
|---|---|---|---|---|---|---|---|---|---|
| 13 | 2014 | Torridge | SS 47867 19743 | Rothern Bridge | Lynne Parkyn & Fiona McDiarmid | Y | Data for 2014,15 and 16 | Torridge | 6 |
| 14 | 2014 | Torridge | SS 471 061 | Black Torrington | Janet Lane-Fox | Y | Data for 2014 and 15 | Torridge | 8 |
| 15 | 2014 | Torridge | SS 556 087 | Moles Corner | Ken Dunn | Y | Data for 2014 and 15 | Torridge | 7 |
| 16 | 2015 | Torridge | SS477133 | Upper Ford | Nick Muir | Y | Data for 2015 only | Mere | 6 |
| 17 | 2015 | Torridge | SS485128 | Rest-a-while | Nick Muir | Y | Data for 2015 only | Mere | 6 |
| 18 | 2015 | Torridge | SS490130 | Coombe Bridge | Nick Muir | Y | Data for 2015 only | Mere | 6 |
| 19 | 2014 | Torridge | SS 55217 07364 | Parsonage Farm | Steve Phelps | Y | Data for 2014 | Torridge | 7 |
| 20 | 2015 | Torridge | SS 4789 0699 | DS_Upcott_Barton | Richard Neyton | Y | No data | Mussel Brook | 6 |
| 21 | 2015 | Torridge | SS 4041 1207 | West Hole Bank | Richard Neyton | Y | No data | Torridge | 7 |
| 22 | 2014 | Torridge | SS 541 147 | Beaford | Dave Williams | Y | 2014 | Torridge | 7 |
| 23 | 2014 | Torridge | SS 54777 12086 | Brightley Barton | Les and Della Scarlett | Y | Data for 2014,15 and | Torridge | 7 |
| 22 | 2015 | Torridge | SS 55991 12788 | Broomhill Stream | Simon Tyler | Y | Data for 2015 only | Trib of Dolton Stream | 6 |

Results for sampling sites where data was collected in 2016 are shown in the following pages.

Sites are grouped according to the Environment Agency waterbody in which they are found. Maps show the approximate locations of the sites. Sites that will be active in 2017 are shown as green triangles and sites that are inactive at the end of 2016 are shown in blue.

Graphs show the ARMI score data collected for each site and the trigger level for each site. Where there are more than 6 data points for a site, a linear regression line in shown indicating a trend with the data. Note that a regression scores nearest 1 indicate a strong trend and those furthest away a weaker one.

The classification (good, moderate or poor) is shown for each Environment Agency waterbody and a hyperlink links through to the appropriate pages for that waterbody on the Environment Agency's Catchment Data Explorer website.

Brief summaries by Waterbody.

**TORRIDGE**

- Source to Dipple Water —both of our sites are active and are showing strong positive (improving) trends with their ARMI scores.
- Dipple water to Coombe Lake - both of the sites are active, with the Julian's Farm site showing a strong positive trend with its ARMI score. There is no discernible trend for the Haytown Bridge site.
- Coombe Lake to Lew - There is a mixture of active and inactive sites. The data could be interpreted to show that ARMI scores decrease down stream east of Black Torrington. It would be useful to get some of the inactive sites around Sheepwash back into use.
- Lew to Estuary—Southern Half - once again, some inactive sites that would be good to reactivate, particularly from a strategic point of view, Parsonage Farm and the newly vacated site at Brightly Barton. There data doesn't seem to be flagging concerns about water quality.
- Lew to Estuary—Northern Half - A good mixture of main channel and tributary sites. Getting the Rothern Bridge site active would be useful for 2017.

**DIPPLE WATER**

- One site that is showing a small decrease in ARMI score , but without a strong regression score.

COOKBURY STREAM

- One site showing an increase in ARMI score with time. We could do with a site on the main channel stream as the existing one is on a tributary.

WHITELEIGH WATER

- One site showing a gradual increase in ARMI score though without a strong regression score.

MUSSEL BROOK

- One active site that is showing a slight decline in ARMI score - There is a mixture of active and inactive sites. The data could be interpreted to show that ARMI scores decrease down stream east of Black Torrington. It would be useful to get some of the inactive sites around Sheepwash back into use.

PULLWORTHY BROOK

- One active site on the this waterbody showing a slight decrease in ARMI score but without a strong regression relationship.

LOWER RIVER LEW

- The active site in Hatherleigh has become vacant in 2016 and it is a priority to get it active again as it is the only one on this waterbody. The ARMi data from the site shows an improving trend.

MIDDLE RIVER OKEMENT

- Two active sites that show both show an improving trend in ARMI scores.

HOLE BROOK

- Two actives sites very close together but one above a waste water discharge point, one below it. The data suggests that the discharge point is having a local impact on ARMI scores but we don't know over what distance that small effect persists.

LOWER RIVER OKEMENT

- Two active sites with ARMI scores consistently above trigger level. The trigger level for the Week Mill site, the furthest upstream, might merit examination by the Environment Agency with a view to increasing it.

**UPPER MERE**

- Unfortunately, all three sites on this river were only active for a short time in 2015. It is a priority to get one active again in 2017 especially given the apparent decline in ARMI scores at Merton Mill, lower down the water body.

LOWER RIVER MERE

- One site showing a decline in ARMI scores with quite a strong regression score. A site to look at closely in the future.

WOOLLEIGH BROOK

- Two active sites within the waterbody but on different streams. Owlacombe Woods seems to show a slight positive trend in ARMI scores, Wooleigh Brook itself, the opposite. The ARMI scores for that site often equal or rarely, fall below the trigger level.

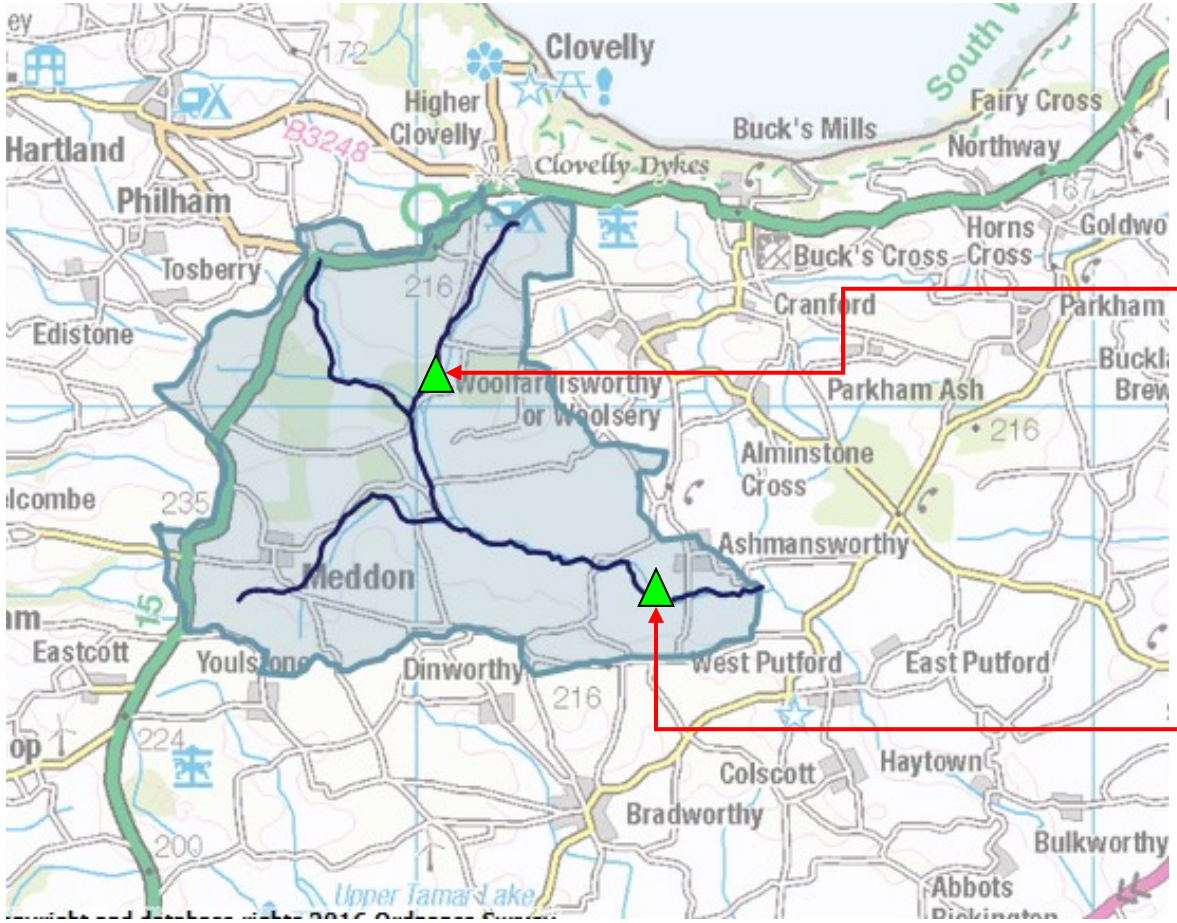
LANGTREE LAKE

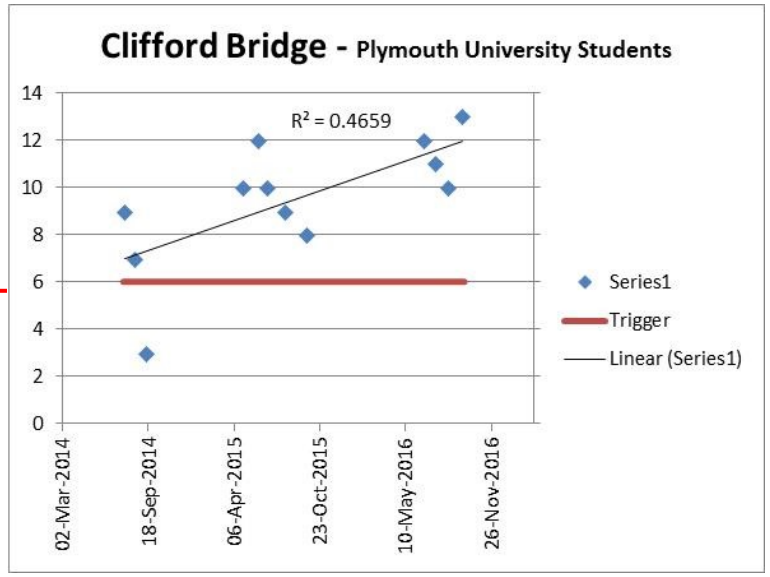
- Only one active site at the end of 2016 but that isn't too much of a problem given how close the sites are to each other.

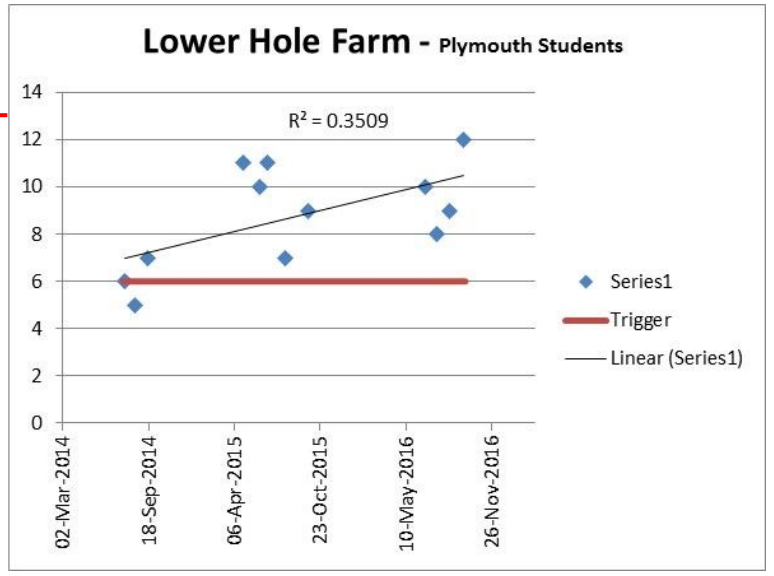
LOWER RIVER YEO

Two active sites that interestingly show opposite, and relatively strong, trends in ARMI score. Another site further up the river (reactivate Dymsdale Wood site) or in the Duntz waterbody would be useful. To give context to these opposing trends.

## Waterbody = TORRIDGE (Source to Dipple Water). Active sites end 2016 = 2. Overall registered sites = 2




TORRIDGE—source to Dipple Water [Environment Agency catchment data]

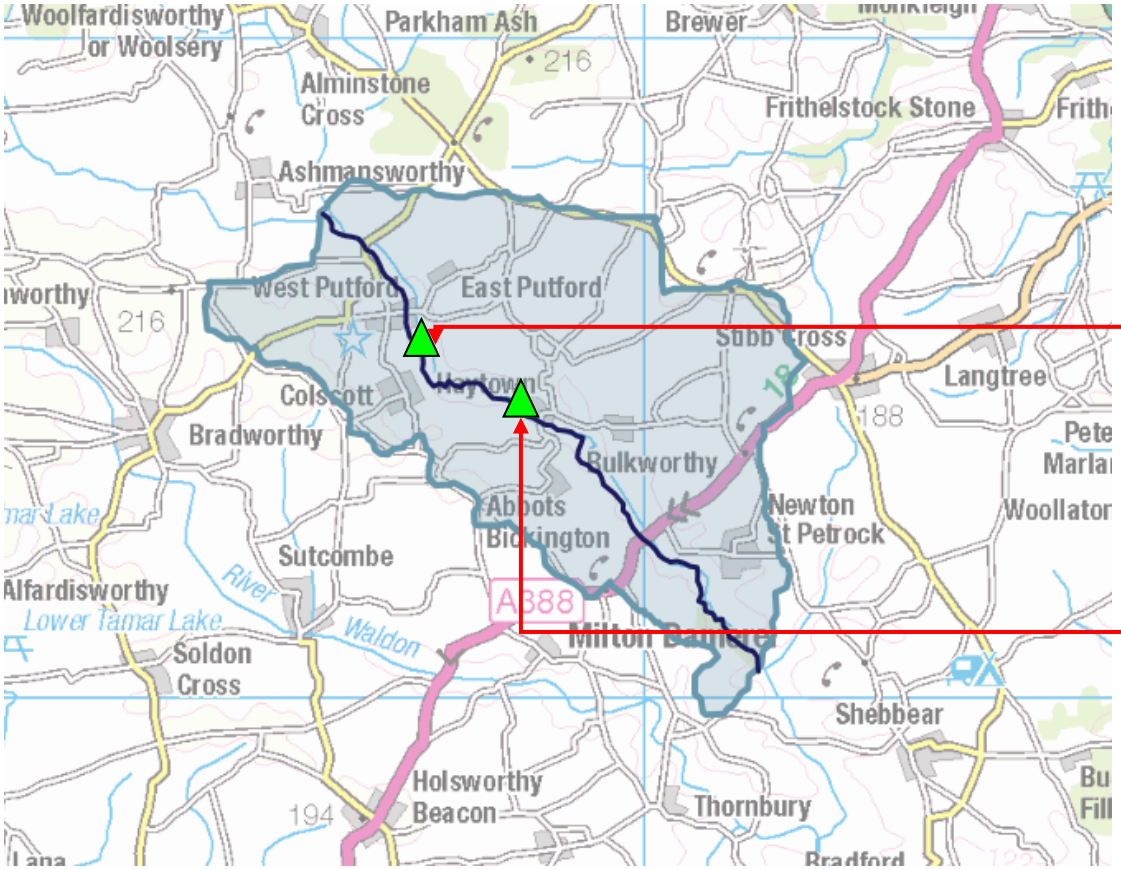
**2015 water body classification**

Overall - Moderate

Ecological –Moderate

Chemical - Good

## Waterbody = TORRIDGE (Dipple water to Coombe Lake). Active sites end 2016 = 2. Overall registered sites = 2



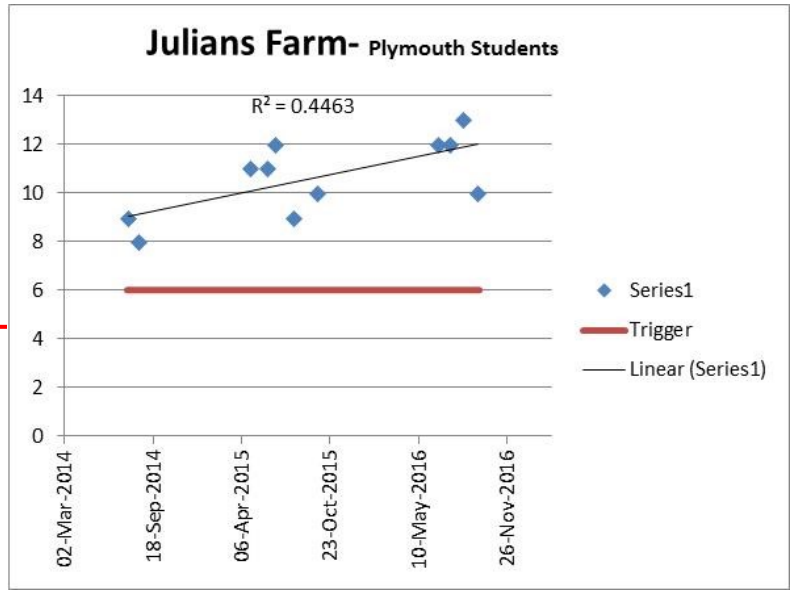

TORRIDGE (Dipple Water to Coombe Lake) – [Environment Agency catchment data]

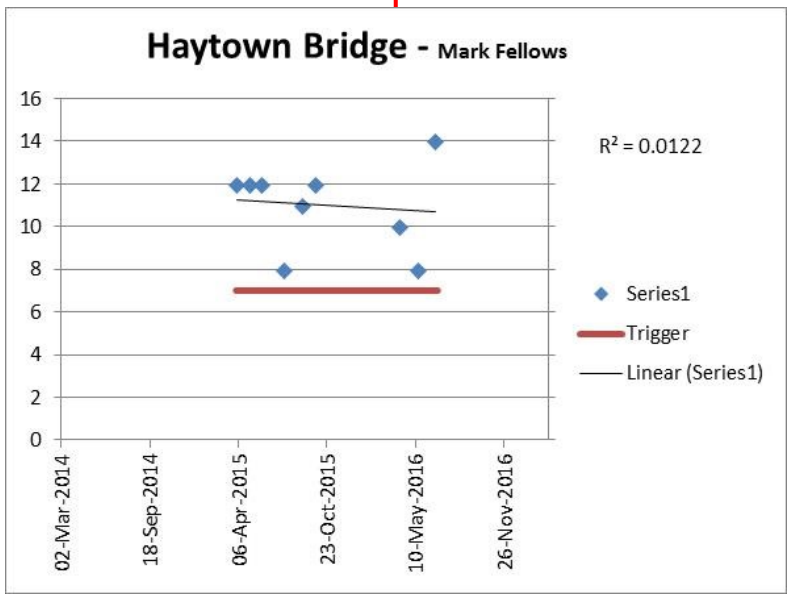
**2015 water body classification**

Overall - Moderate

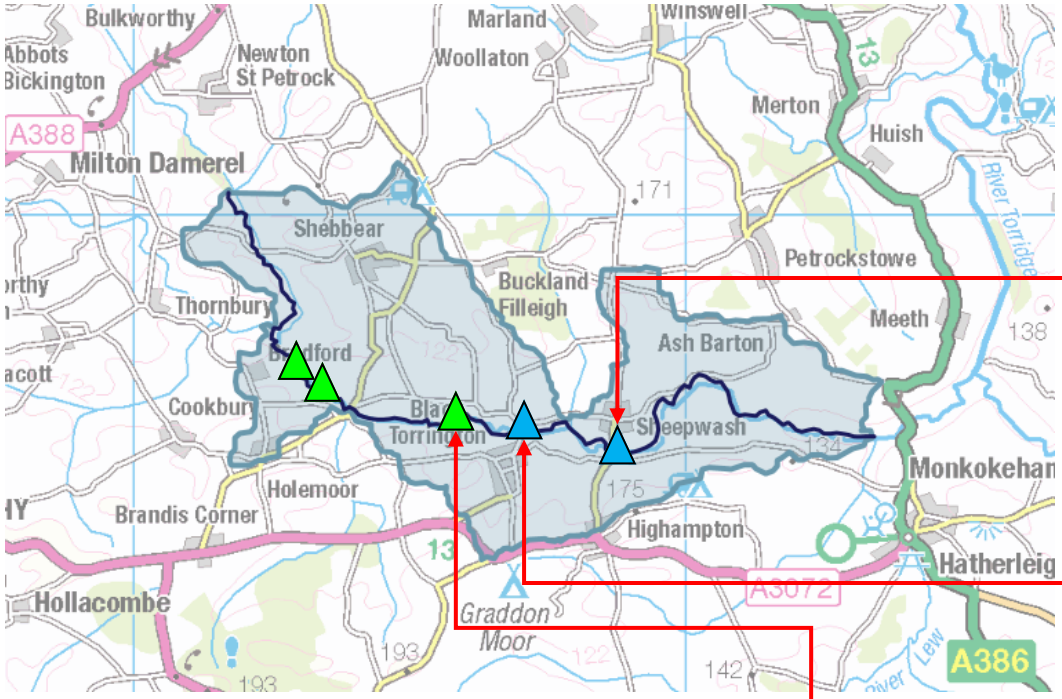
Ecological – Moderate

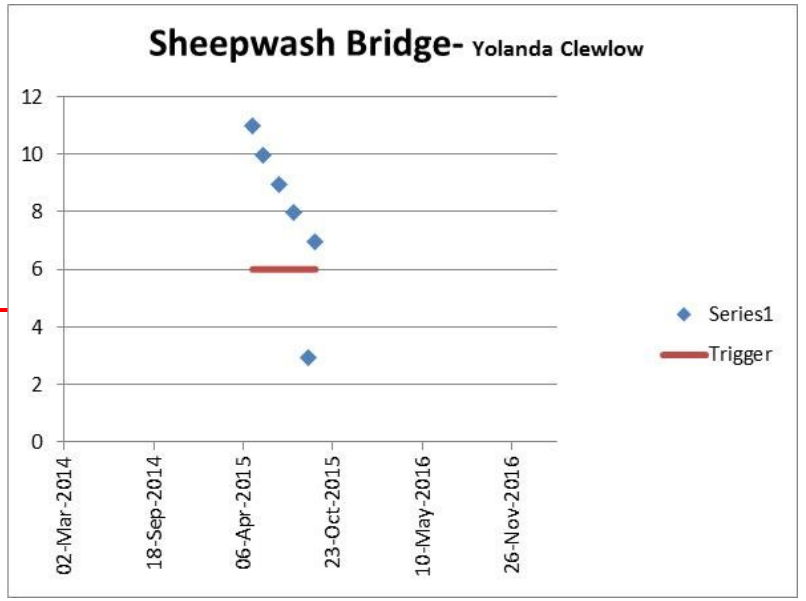
Chemical - Good

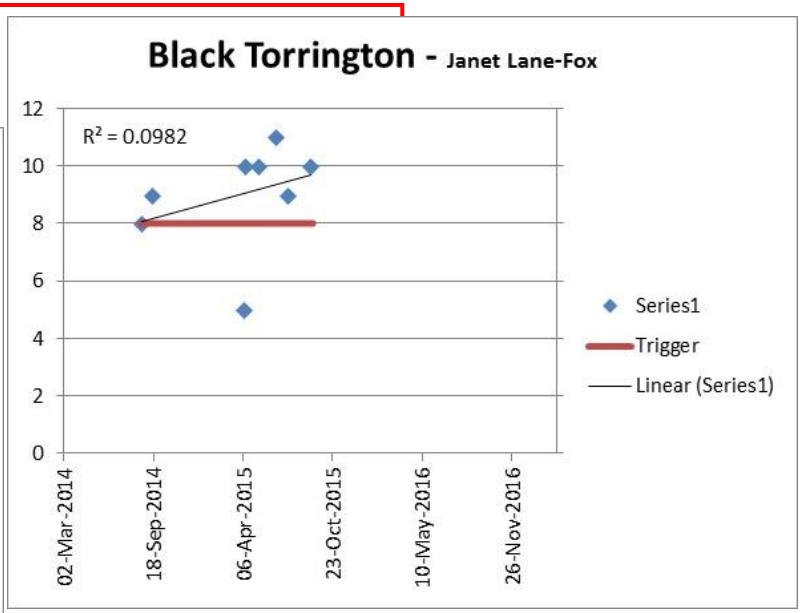


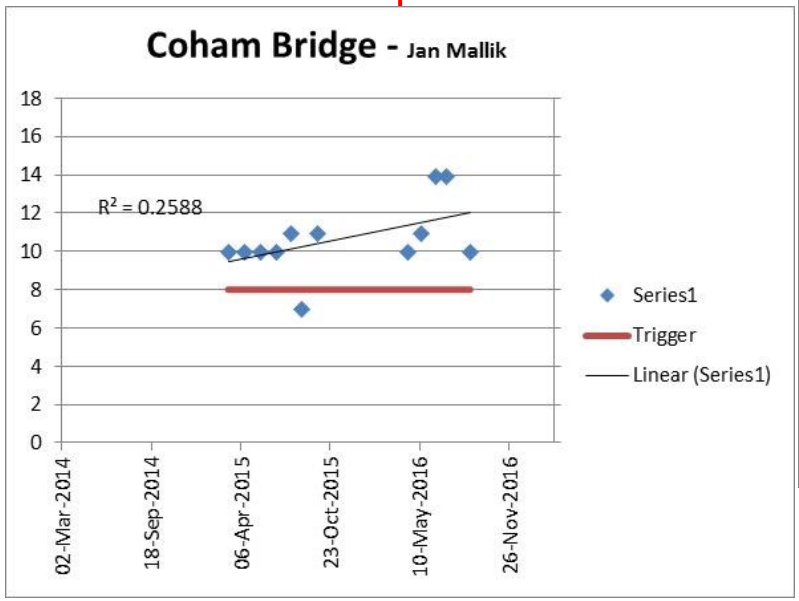



**Waterbody = TORRIDGE (Coombe Lake to Lew). Active sites end 2016 = 3. Overall registered sites = 5**




TORRIDGE (Coombe Lake to Lew) – [Environment Agency catchment data]

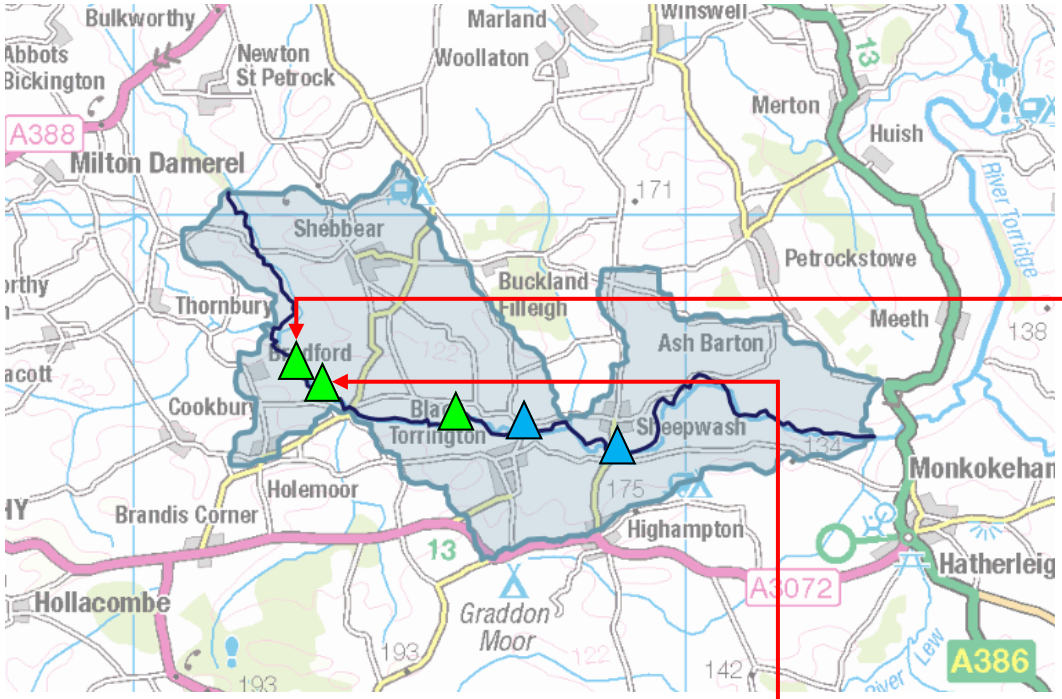
**2015 water body classification**

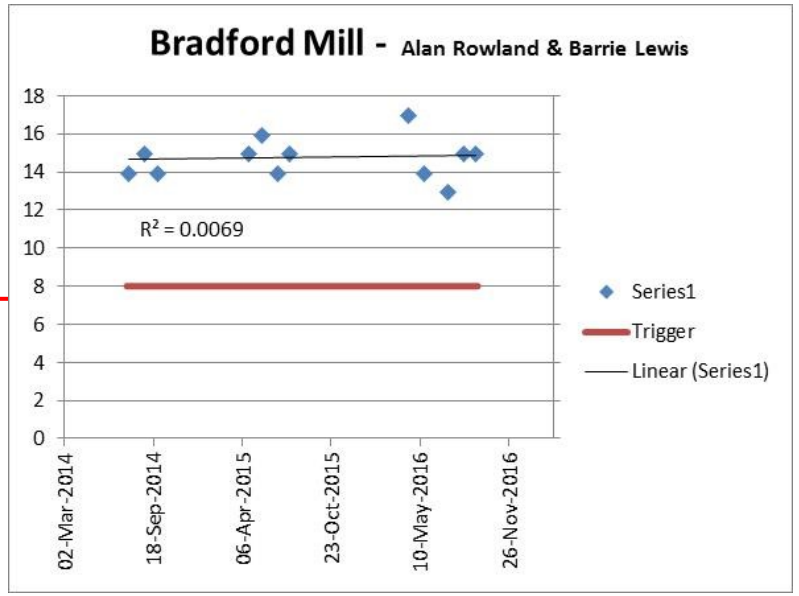
Overall - Poor

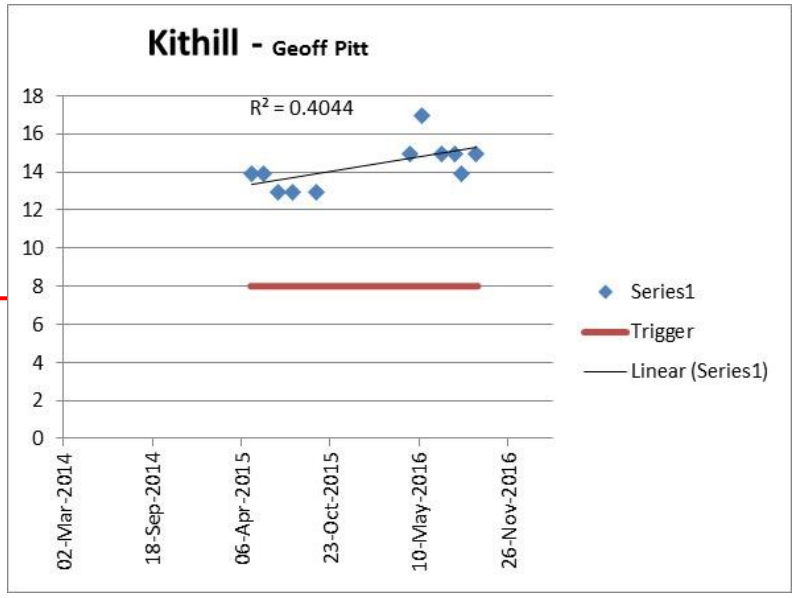
Ecological – Poor

Chemical - Good

## Waterbody = TORRIDGE (Coombe Lake to Lew). Active sites end 2016 = 3. Overall registered sites = 5




TORRIDGE (Coombe Lake to Lew) – Environment Agency catchment data

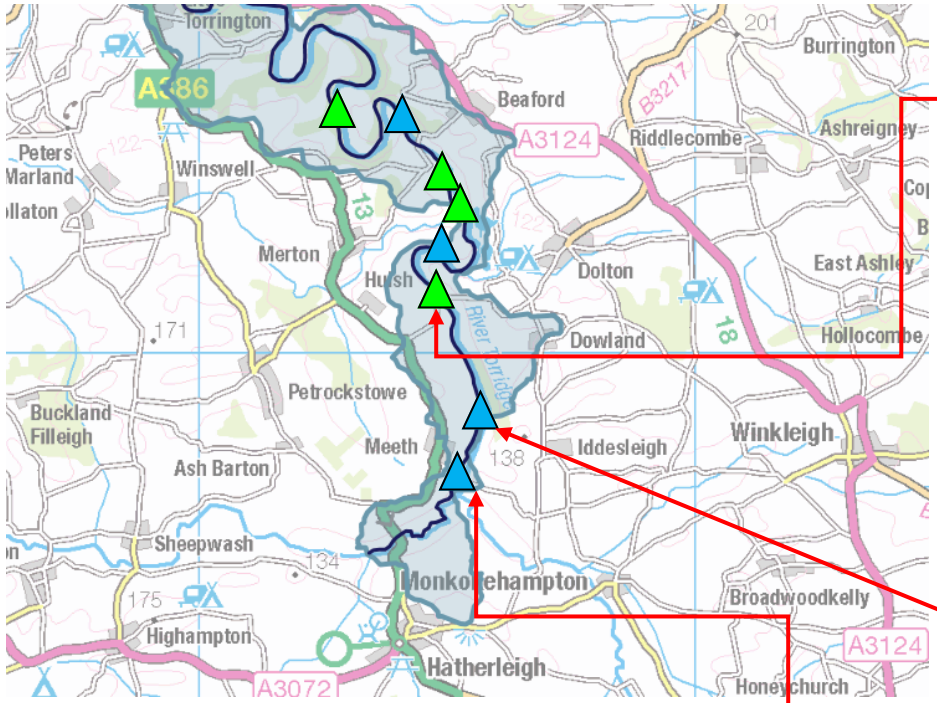
**2015 water body classification**

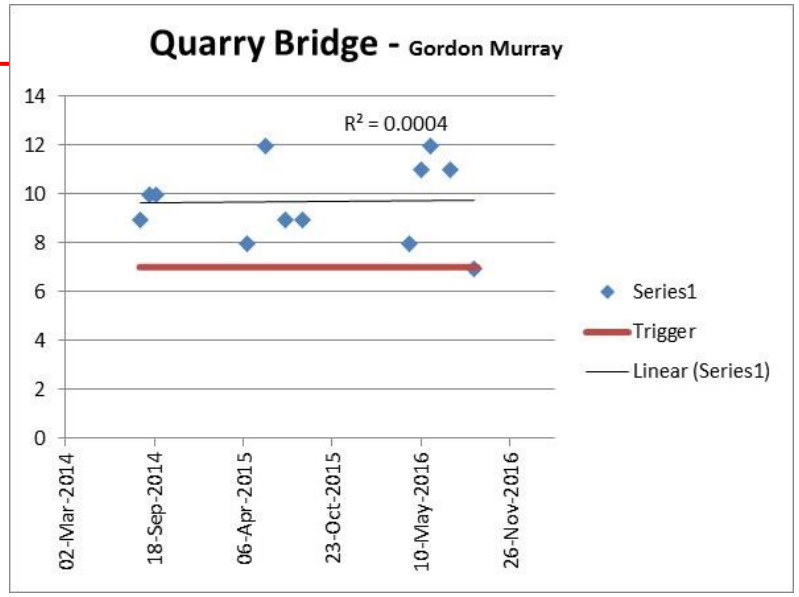
Overall - Poor

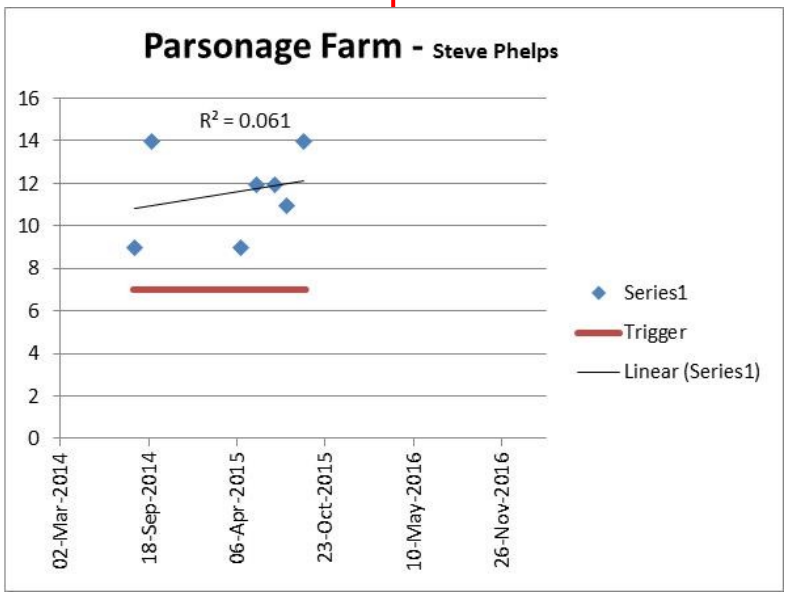
Ecological – Poor

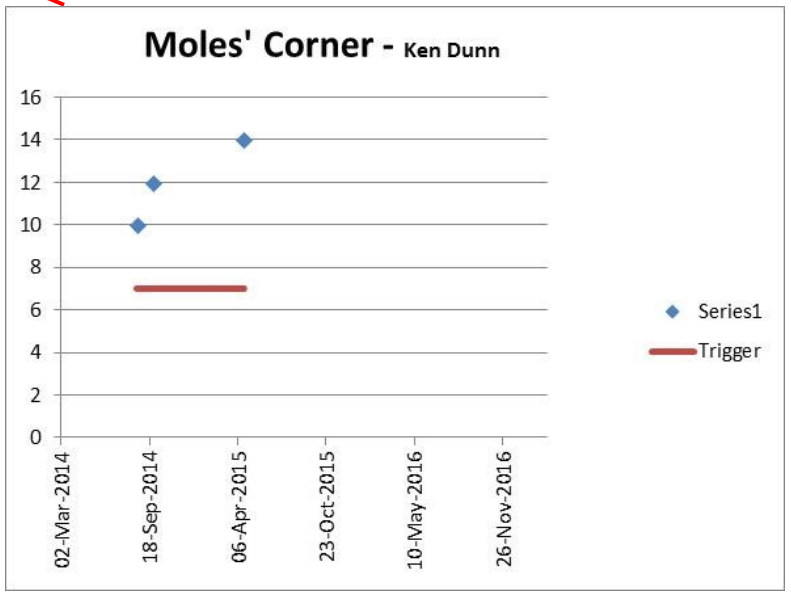
Chemical - Good

## Waterbody = TORRIDGE (Lew to Estuary—Southern Half). Active sites end 2016 = 4. Overall registered sites = 8




TORRIDGE (Lew to estuary—Southern Half) – Environment Agency catchment data

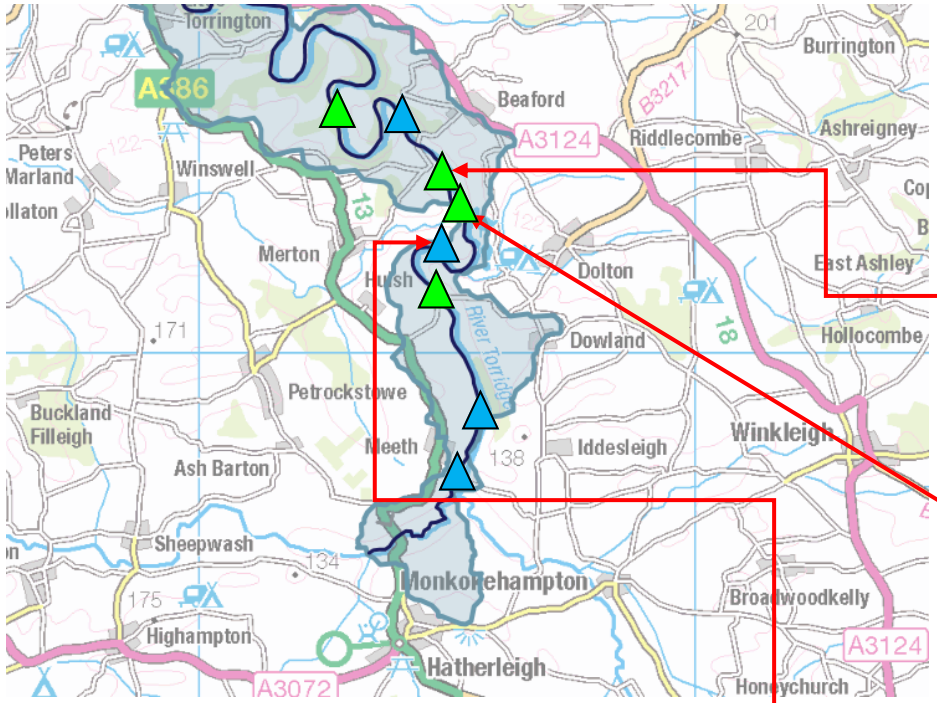
**2015 water body classification**

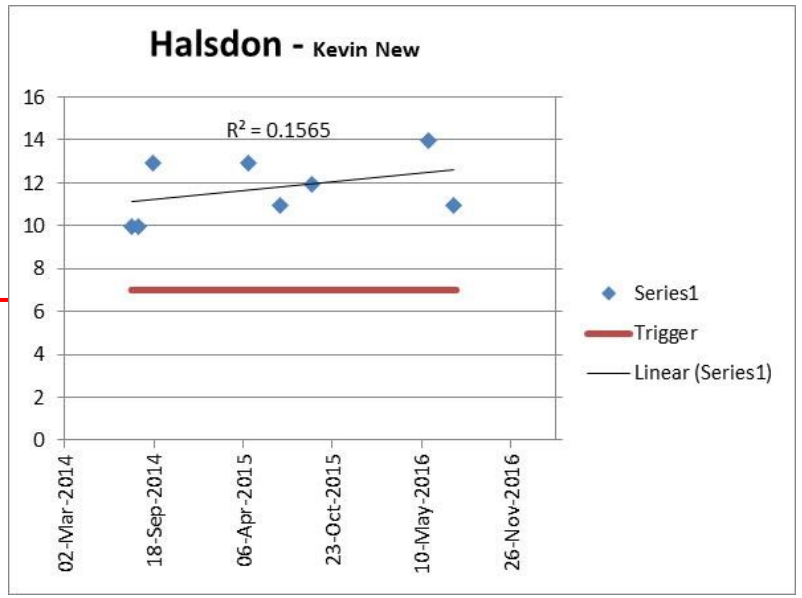
Overall - Moderate

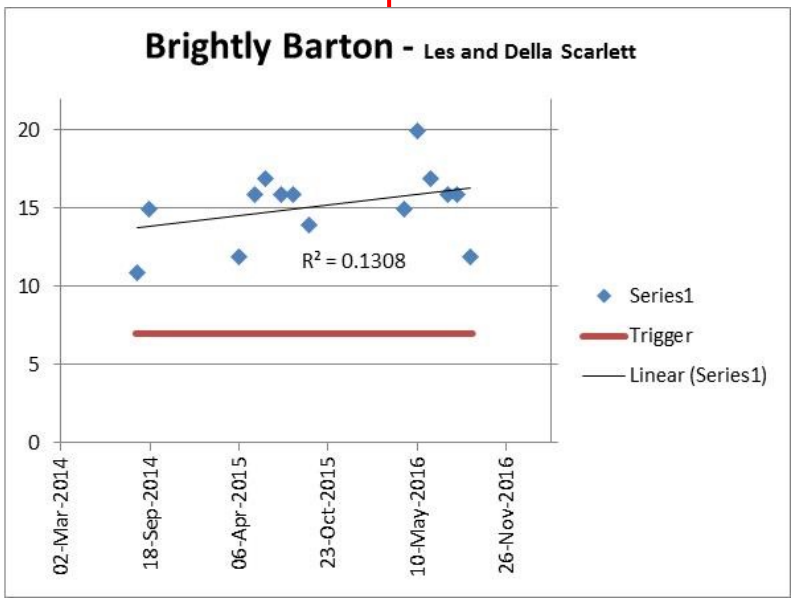
Ecological – Moderate

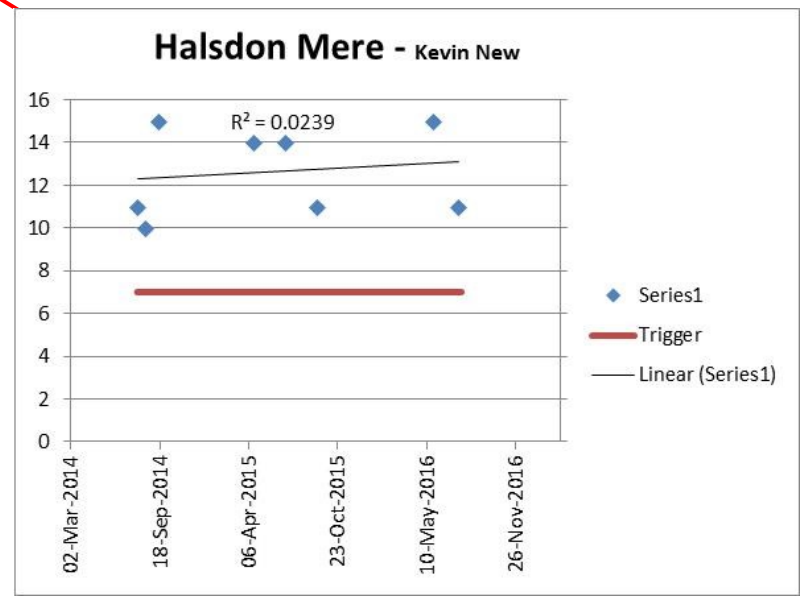
Chemical - Good

## Waterbody = TORRIDGE (Lew to Estuary—Southern Half). Active sites end 2016 = 4. Overall registered sites = 8




TORRIDGE (Lew to estuary—Southern Half) – [Environment Agency catchment data]

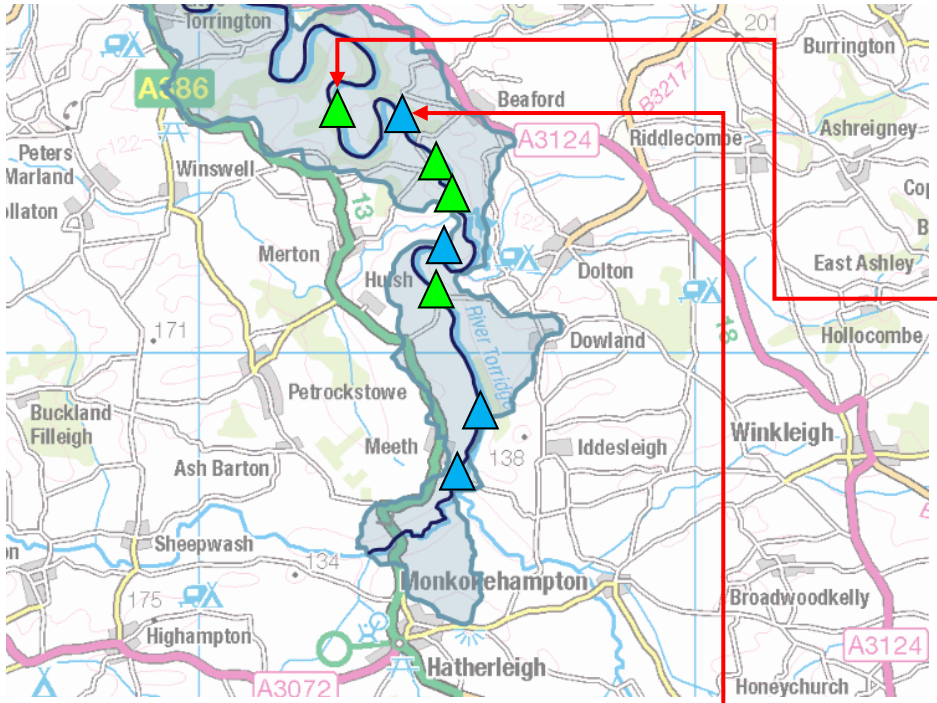
**2015 water body classification**

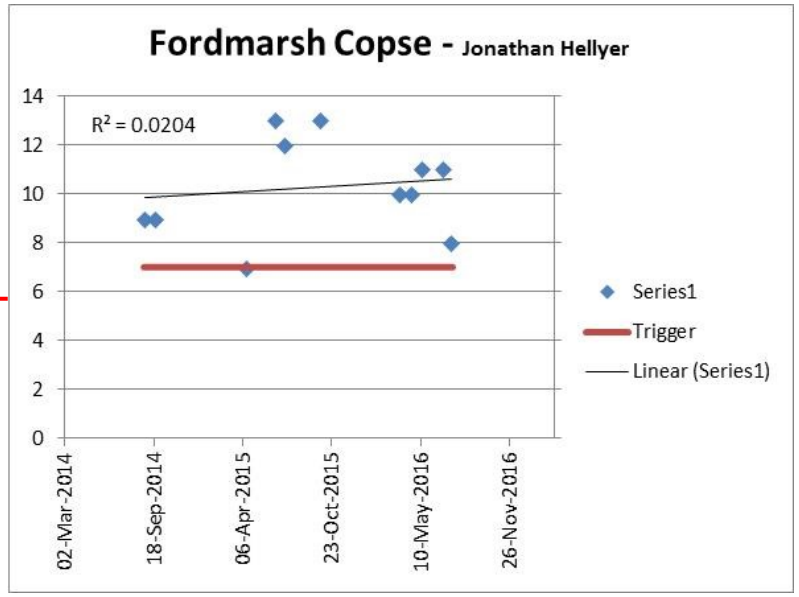
Overall - Moderate

Ecological – Moderate

Chemical - Good

## Waterbody = TORRIDGE (Lew to Estuary—Southern Half). Active sites end 2016 = 4. Overall registered sites = 8




TORRIDGE (Lew to estuary—Southern Half) – [Environment Agency catchment data]

**2015 water body classification**

Overall - Moderate

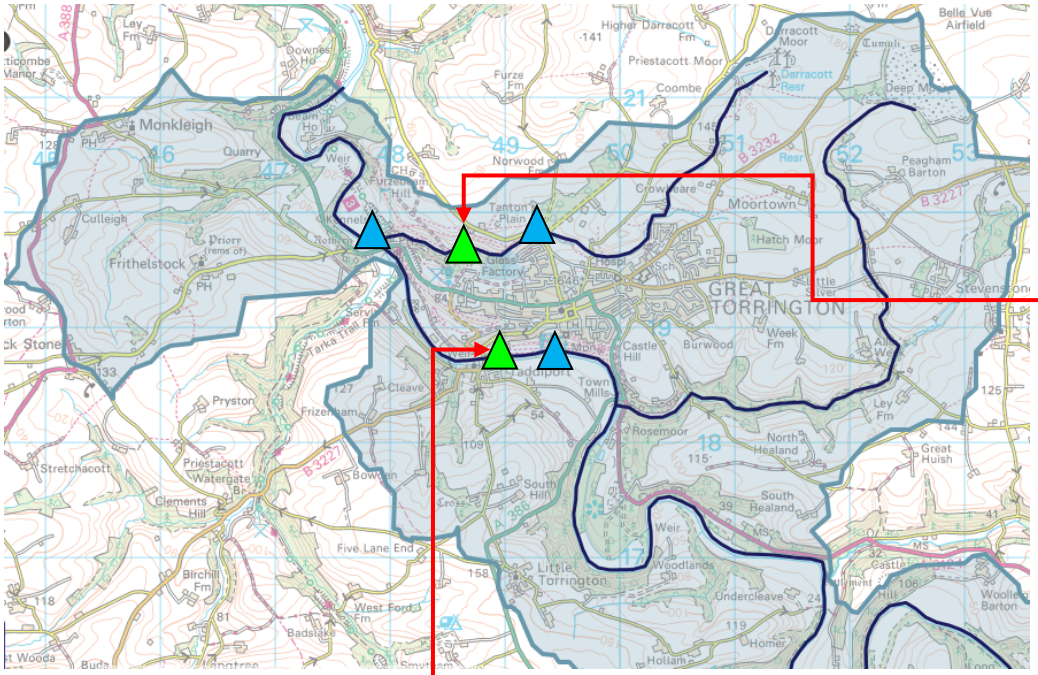
Ecological – Moderate

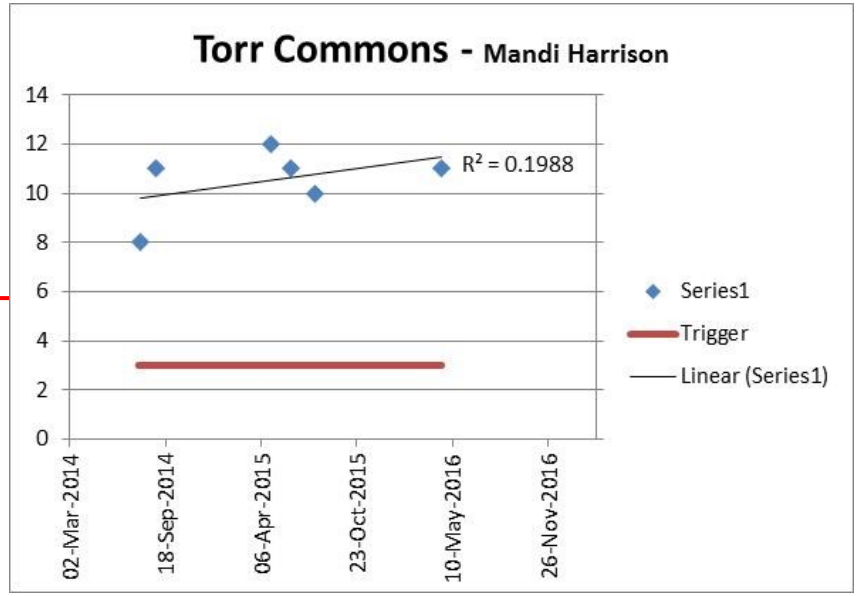
Chemical - Good

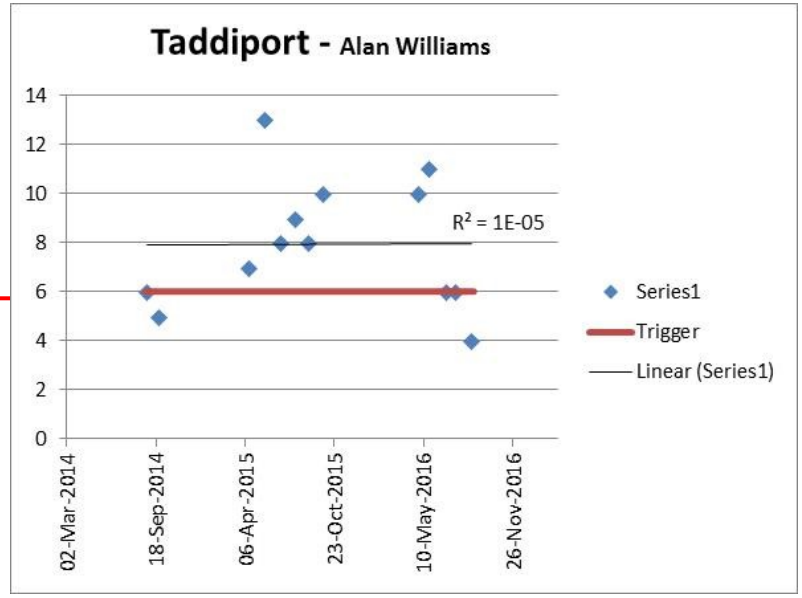
**Beaford** —**Dave Williams**

Site registered and 2 data points in 2014. No data since. Trigger level 7

**Waterbody = TORRIDGE (Lew to Estuary—Northern Half). Active sites end 2016 = 3. Overall registered sites = 5**




TORRIDGE (Lew to estuary—Northern Half) – [Environment Agency catchment data]

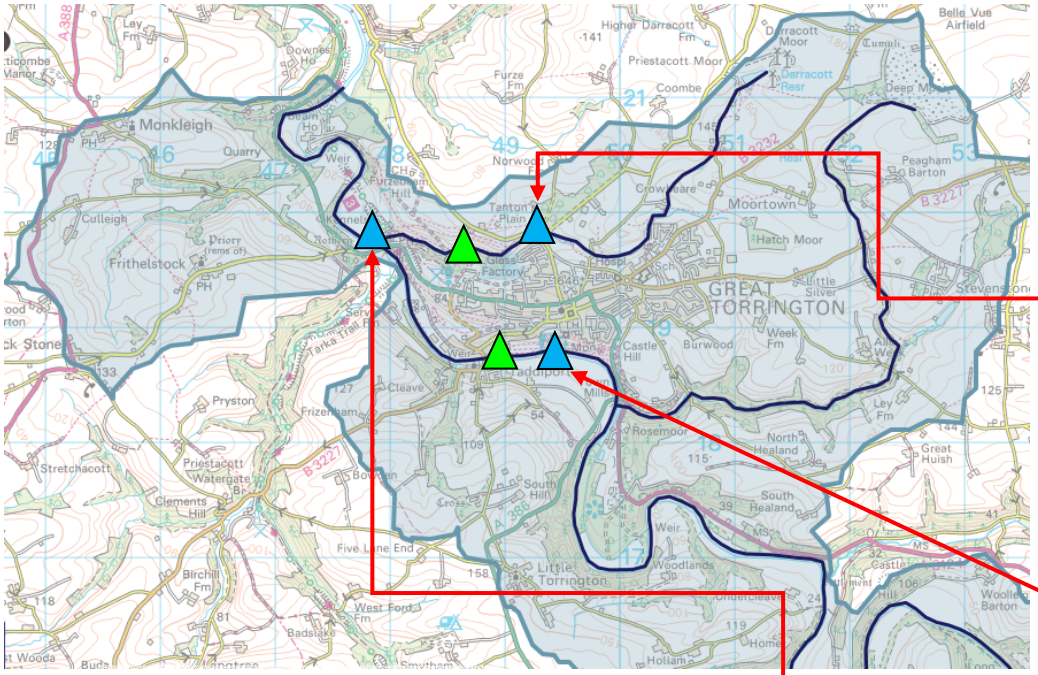
**2015 water body classification**

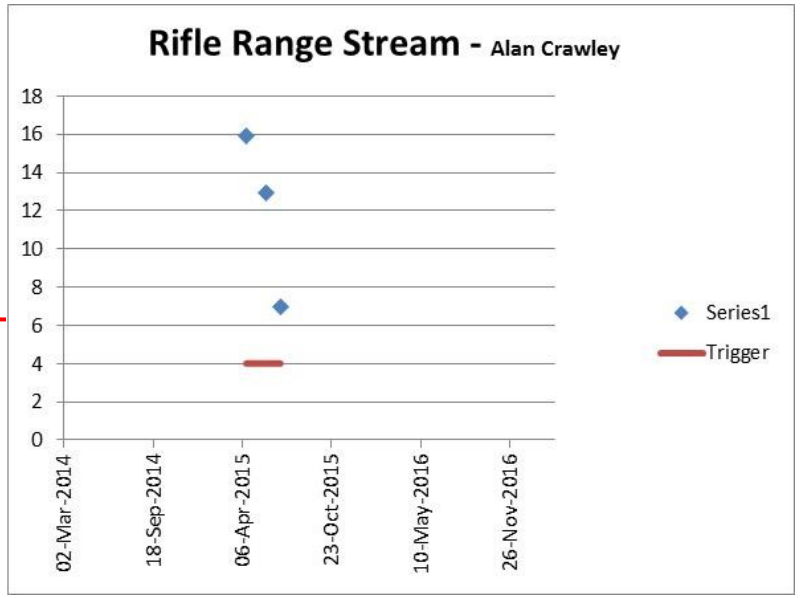
Overall - Moderate

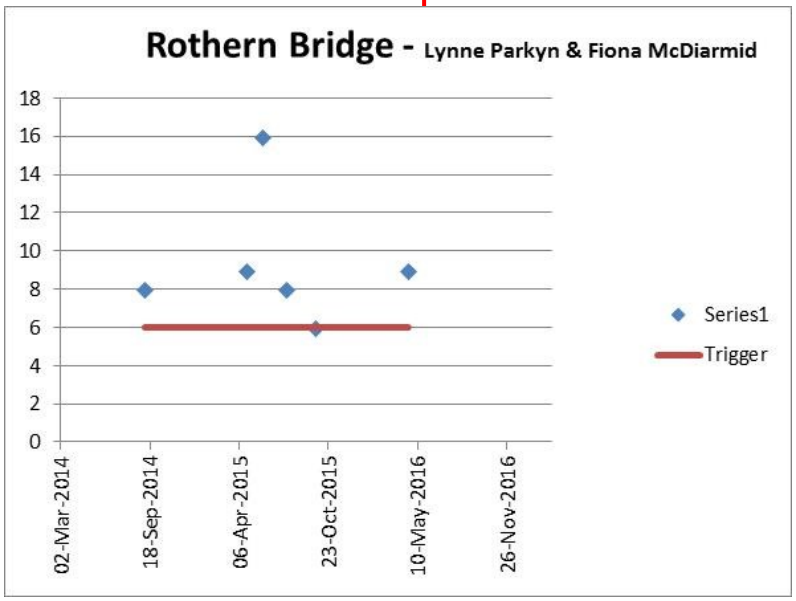
Ecological – Moderate

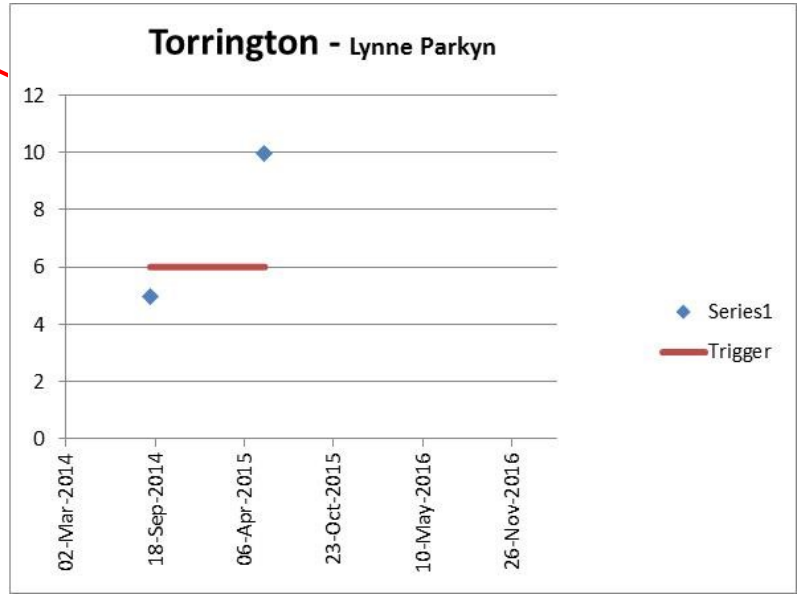
Chemical - Good

**Waterbody = TORRIDGE (Lew to Estuary—Northern Half). Active sites end 2016 = 3. Overall registered sites = 5**




TORRIDGE (Lew to estuary—Northern Half) – [Environment Agency catchment data]

**2015 water body classification**

Overall - Moderate

Ecological – Moderate

Chemical - Good

## TORRIDGE RIVERFLY FAILURE

Following a breach of trigger level at Taddiport, Torridge (NIRS 01466214) an investigation was carried out into the biological quality of the Torridge in Taddiport, Great Torrington.

RMI scores of 3 and 4 were reported, with samples containing fewer than 10 invertebrates, by Alan Williams (27/08/2016) who took both samples. The RMI site, indicated by a bench next to the river, was wide and shallow, and mid-morning on 30/8/16 occupied by a number of children 'cooling off' in the water. A site nearer Taddiport Bridge (approx 100m upstream from the bridge) was instead selected for follow-up sampling. The water here was deeper, averaging about 40cm, and the habitat comprised of predominantly 'run'. Flows seemed low even for the time of year, with no significant rain in recent weeks. There was no noticeable odour, colour or turbidity to the water at the time of sampling.
See Fig 1 for the taxa recorded, abundances in the right hand column.

The follow up sample would give an RMI score of 7, based on abundances of cased caddis (10-100), caseless caddis (1-10), Ephemerid mayflies (10-100), stoneflies (1-10), Baetidae (Olives) (1-10).

I would recommend moving the RMI site at Taddiport away from possible disturbance from bathers / paddlers to nearer the bridge – there was at least one reasonably accessible reach about 100m from the bridge – although during higher flows this might not be possible. There was a good amount of silt in the margin, which is probably where the Ephemeridae were found, and a small patch of Ranunculus in the middle of the channel. Sampling effort must always take account of habitat structure and diversity, and those two features, and possibly the lack of disturbance, likely accounted for the difference between the samples taken by Mr Williams on the 27th, yesterday's sample.

The scores (BMWP and ASPT) are low for the Torridge at this point, but this probably reflects the natural low flows, and seasonality of invertebrate data.

Seasonality does not explain the absence of Gammarus however, and this is quite surprising. Gammarus (and their relatives, Crangonyx) were also absent from the sample taken at Rothern Bridge in response to concerns raised there in July 2016. Gammarus numbers are very variable in the Torridge, and this does not appear to be seasonal. On 15 sampling occasions since 1999 at the nearest routine monitoring point, 200m U/S Viaduct Great Torrington, SS 48160 19350, Gammarids have been absent on five occasions, and present in numbers fewer than 10 on the remaining sampling occasions. Downstream at Beam Bridge, SS 473102 0890, we see similar Gammarus numbers, whereas upstream at Coham Bridge SS 46100 06320 and Gidcott SS 42200 09410, Gammarus numbers are more often than not in three figures. There is no obvious explanation for this variation, but I think it unlikely to be related simply to water quality... a future project perhaps.

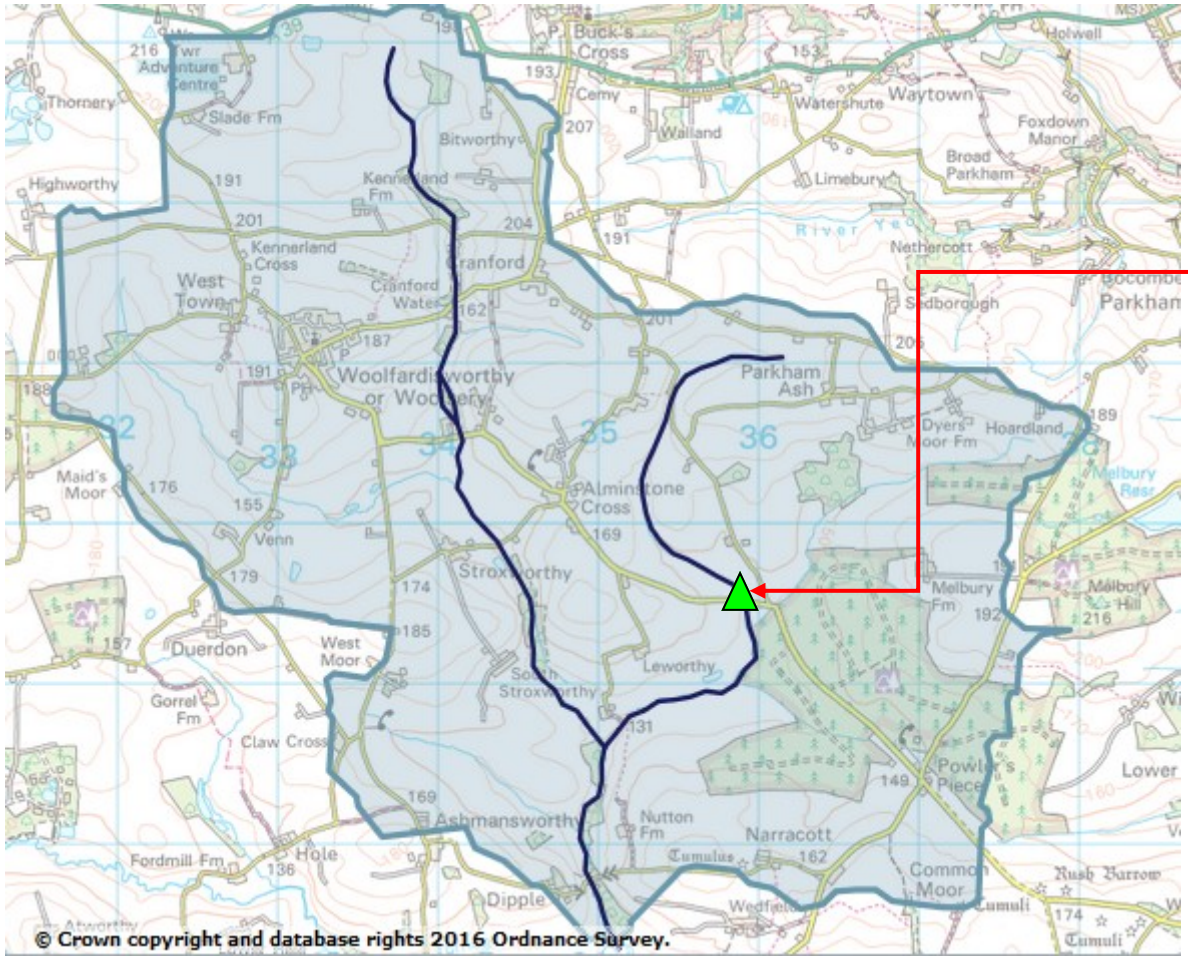
I hope this is helpful.

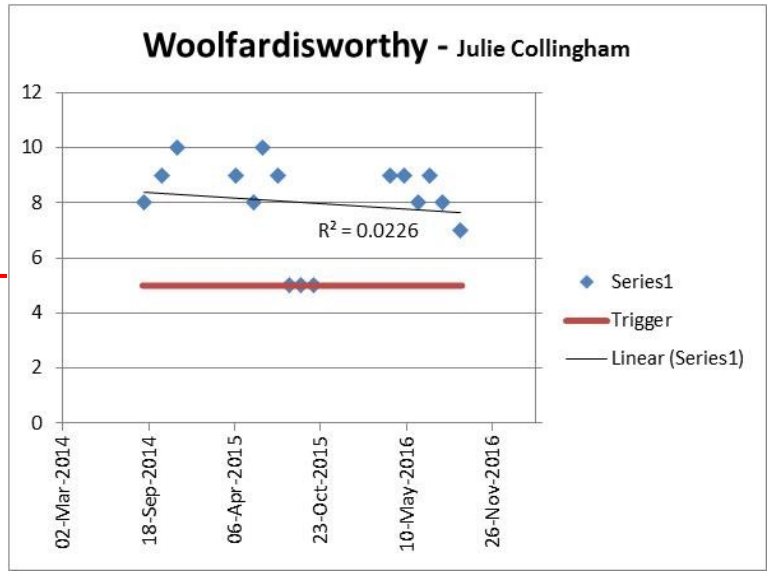
Michael Thomas
Senior Environmental Monitoring Officer
Analysis and Reporting

Fig 1

| | | |
|---|---|---|
| Water Body | TORRIDGE | |
| Site/Station Name | 100M U/S TADDIPORT BRIDGE | |
| Site/Station ID | | 185305 |
| Site/Station Location | SS-48919-18747 | |
| Sample Date | | 30-Aug-16 |
| Sample ID | | 744313 |
| Analysis Type | BANKSIDE | |
| TAXA | | |
| Bithyniidae | | 2 |
| Lymnaeidae | | 25 |
| Oligochaeta | | 8 |
| Baetidae | | 9 |
| Leptophlebiidae | | 1 |
| Ephemeridae | | 12 |
| Caenidae | | 2 |
| Leuctridae | | 5 |
| Calopteryx | | 5 |
| Dytiscidae | | 2 |
| Polycentropodidae | | 3 |
| Hydropsyche | | 2 |
| Limnephilidae | | 5 |
| Sericostomatidae | | 3 |
| Leptoceridae | | 3 |
| Chironomidae | | 5 |
| Phoxinus phoxinus | | 5 |
| BMWP | | 102 |
| ASPT | | 6.38 |
| No Of Taxa | | 16 |

## Waterbody = DIPPLE WATER . Active sites end 2016 = 1. Overall registered sites = 1




DIPPLE WATER Environment Agency catchment data

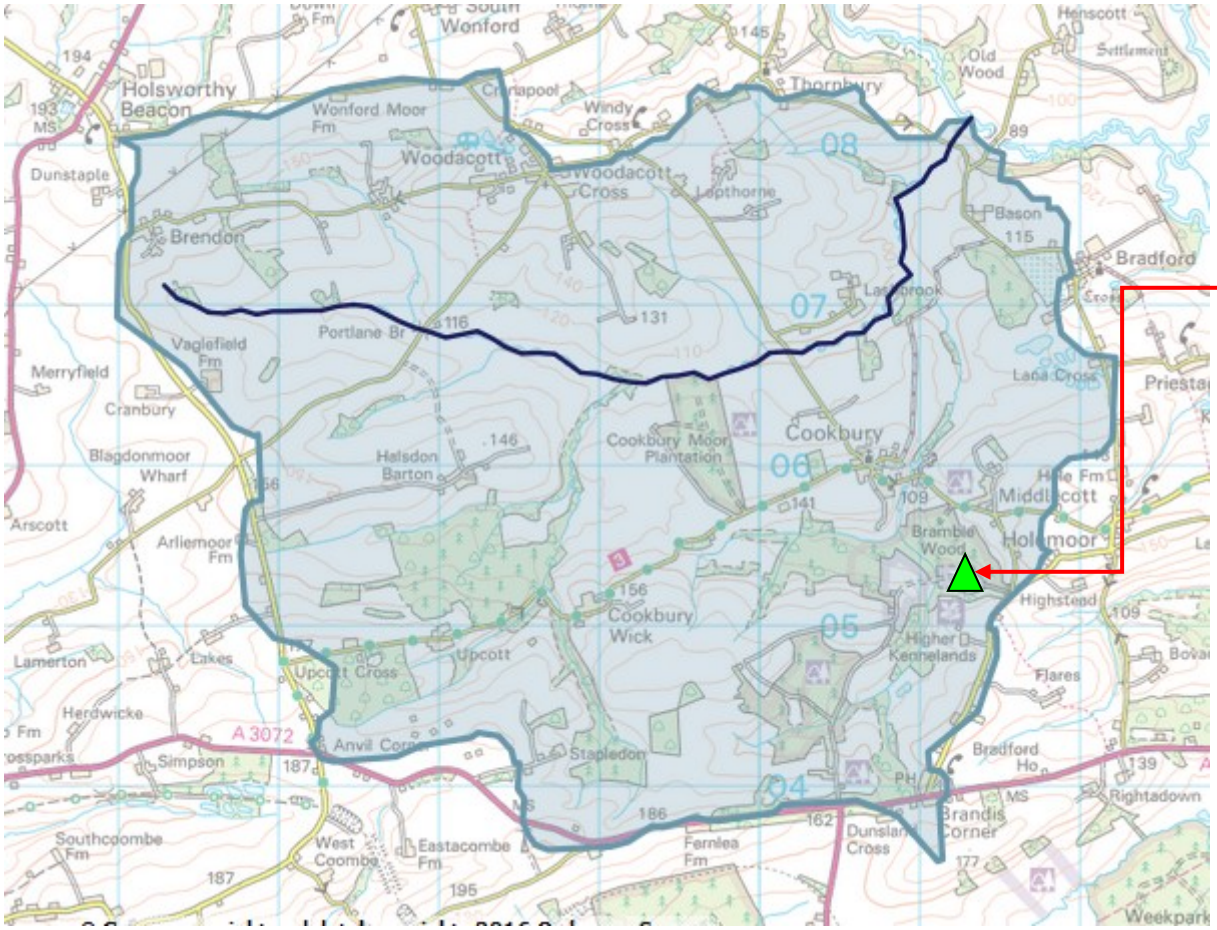
**2015 water body classification**

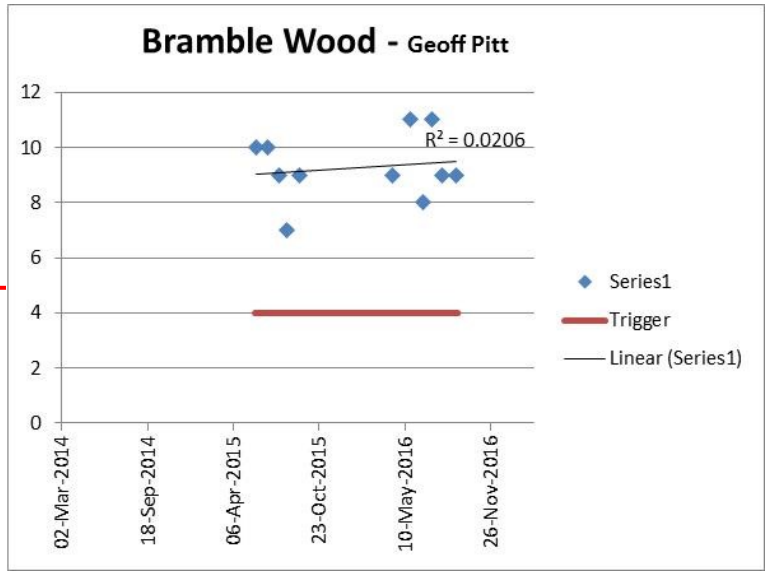
Overall - Moderate

Ecological –Moderate

Chemical - Good

**Waterbody = COOKBURY STREAM including the tributary of Cookbury Stream. Active sites end 2016 = 1. Overall registered sites = 1**




COOKBURY STREAM - Environment Agency catchment data

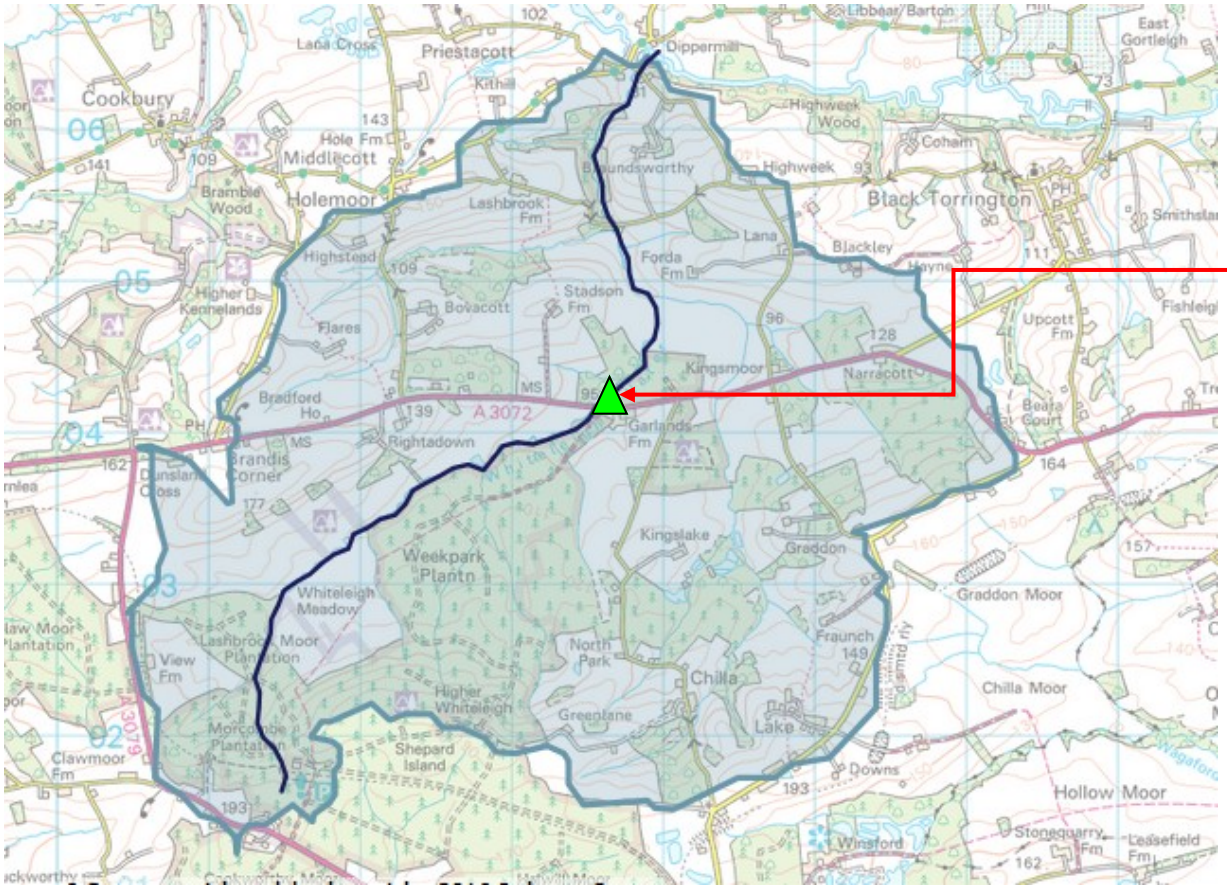
**2015 water body classification**

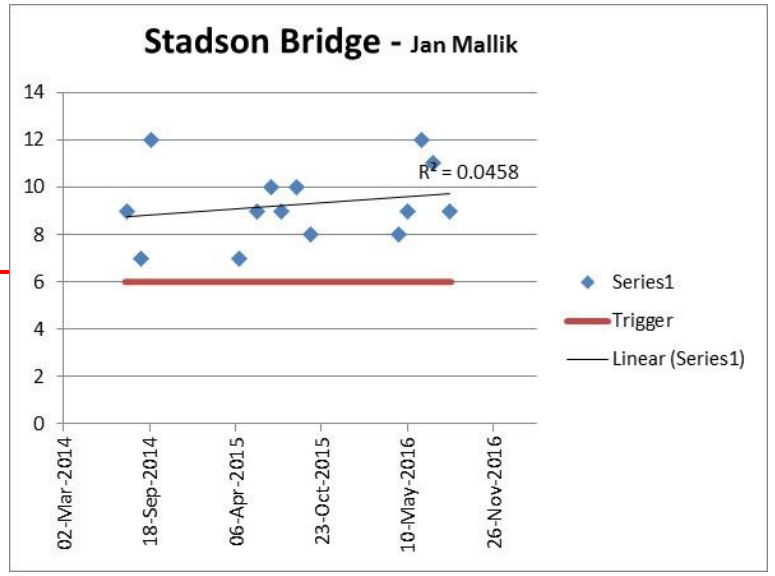
Overall - Moderate

Ecological –Moderate

Chemical - Good

## Waterbody = WHITELEIGH WATER . Active sites end 2016 = 1. Overall registered sites = 1




WHITELEIGH WATER Environment Agency catchment data

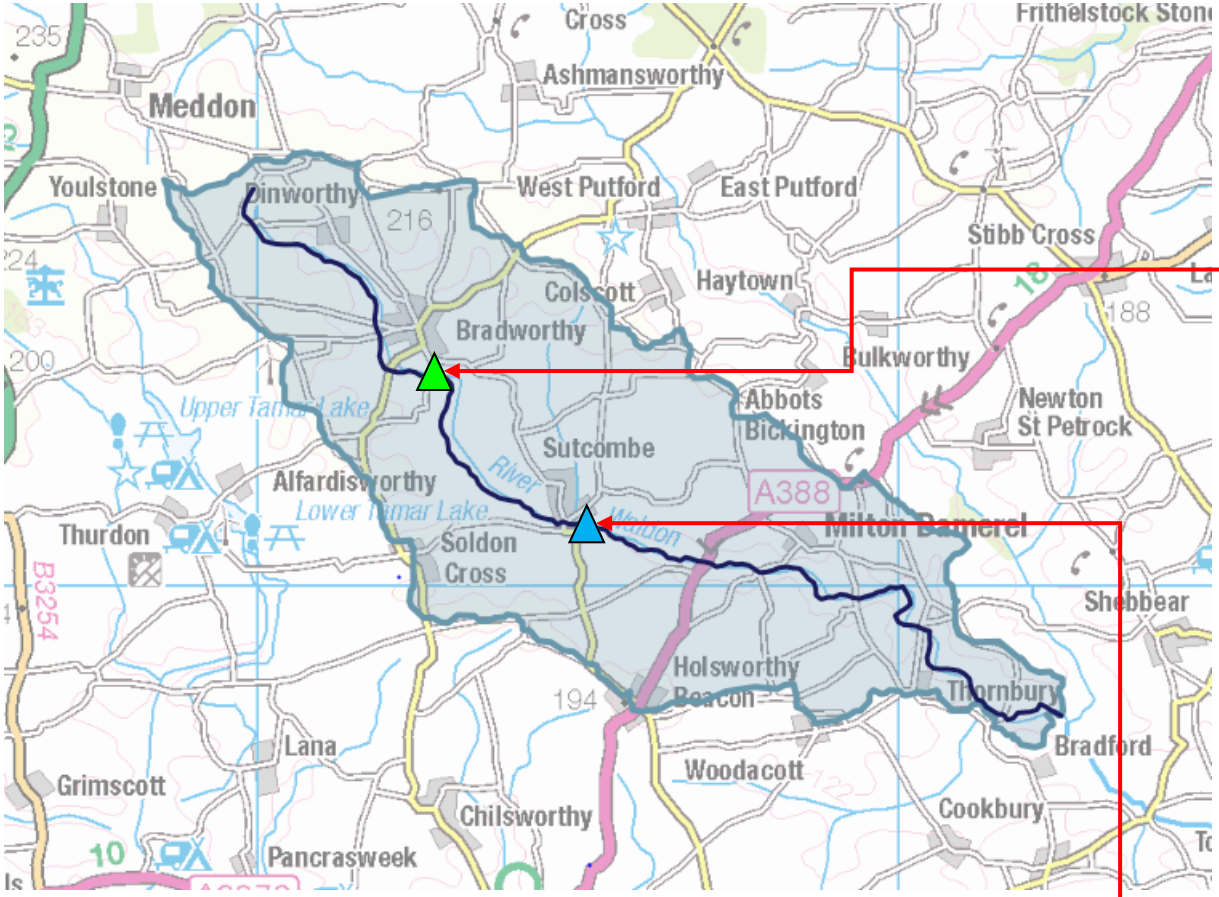
**2015 water body classification**

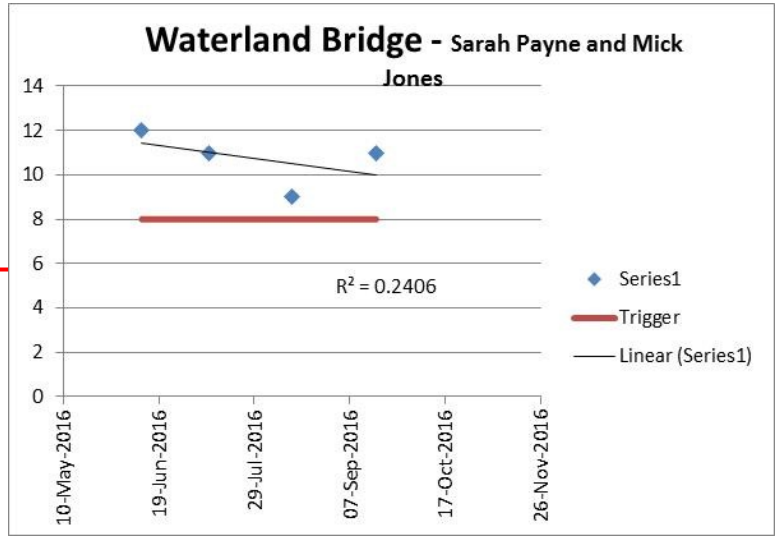
Overall - Poor

Ecological –Poor

Chemical - Good

## Waterbody = RIVER WALDON. Active sites end 2016 = 1. Overall registered sites = 2




MUSSEL BROOK – [Environment Agency catchment data]

**2015 water body classification**

Overall - Moderate

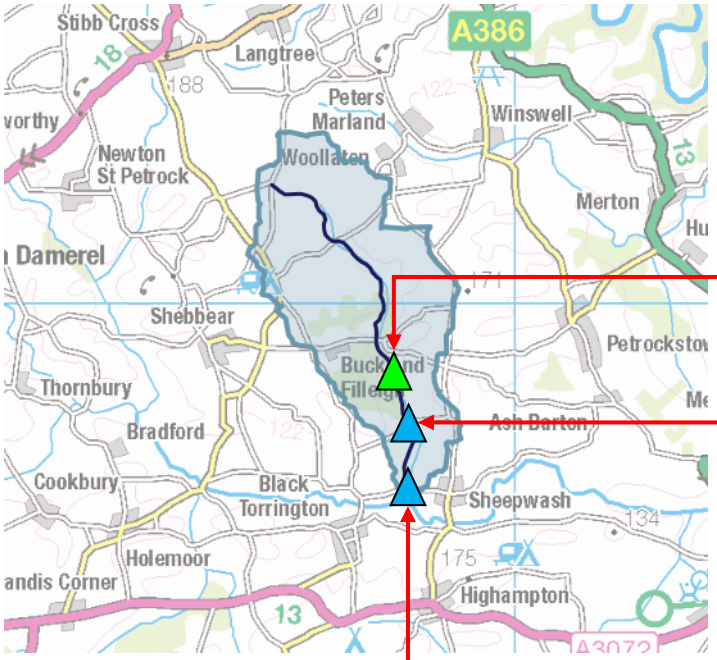
Ecological – Moderate

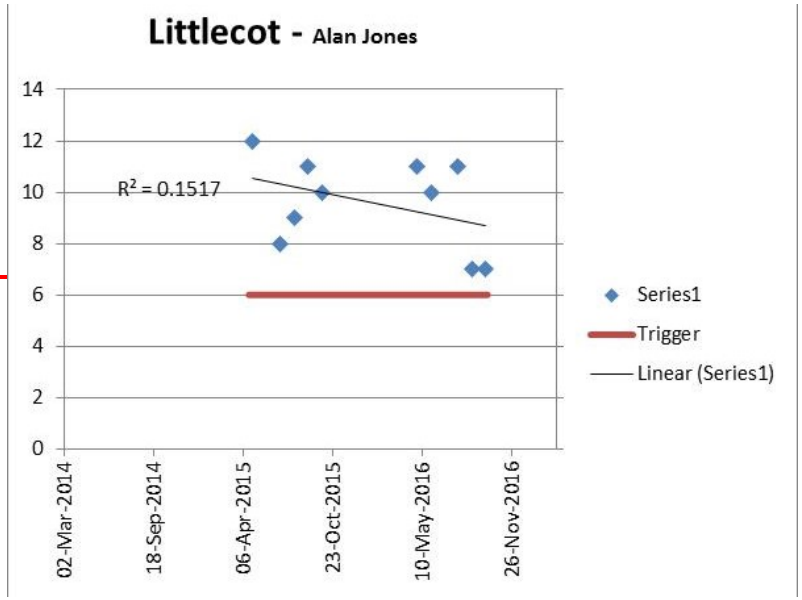
Chemical - Good

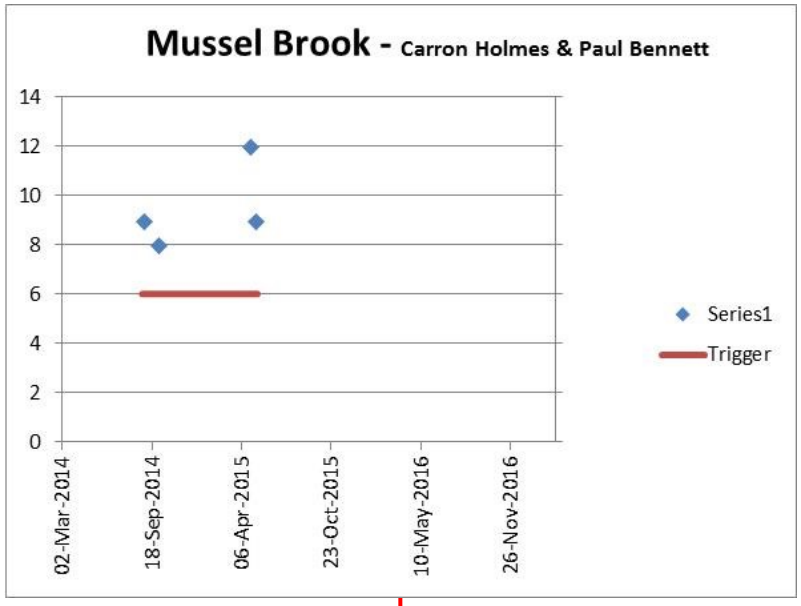
**Sutcombe Mill—Chris Hebron**

Site registered but no data ever collected. Trigger level 7

## Waterbody = MUSSEL BROOK. Active sites end 2016 = 1. Overall registered sites = 3




MUSSEL BROOK – [Environment Agency catchment data]

**2015 water body classification**

Overall - Poor

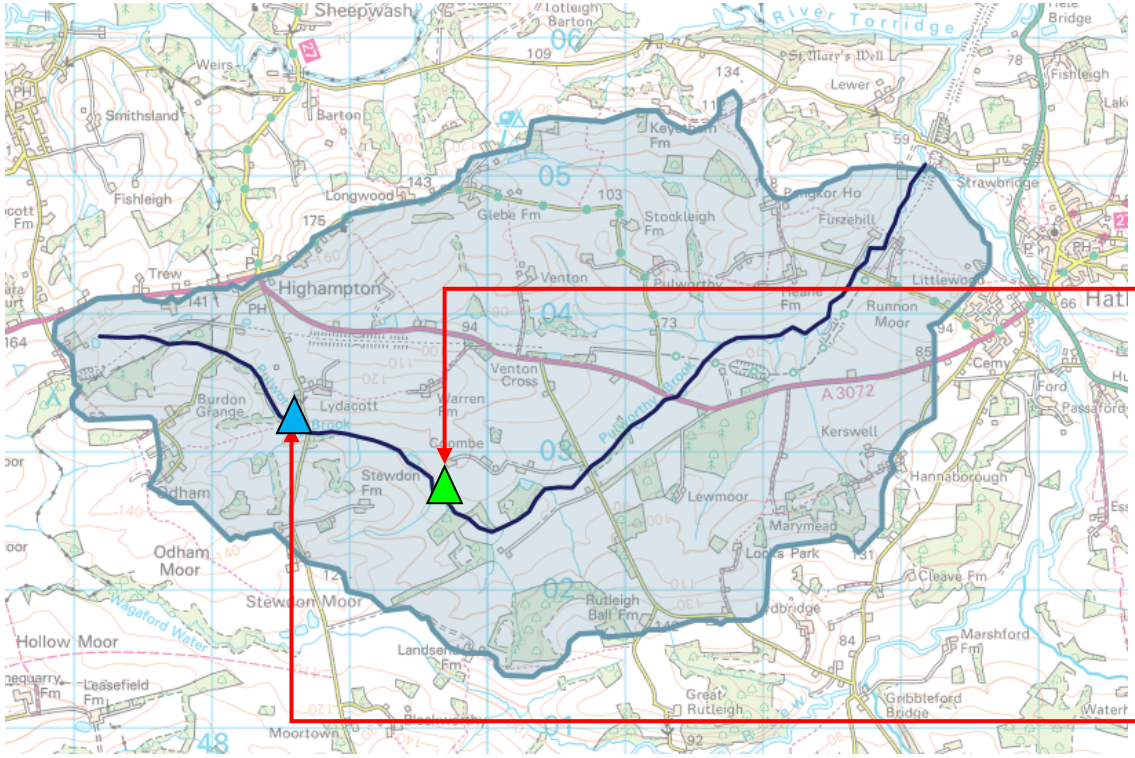
Ecological –Poor

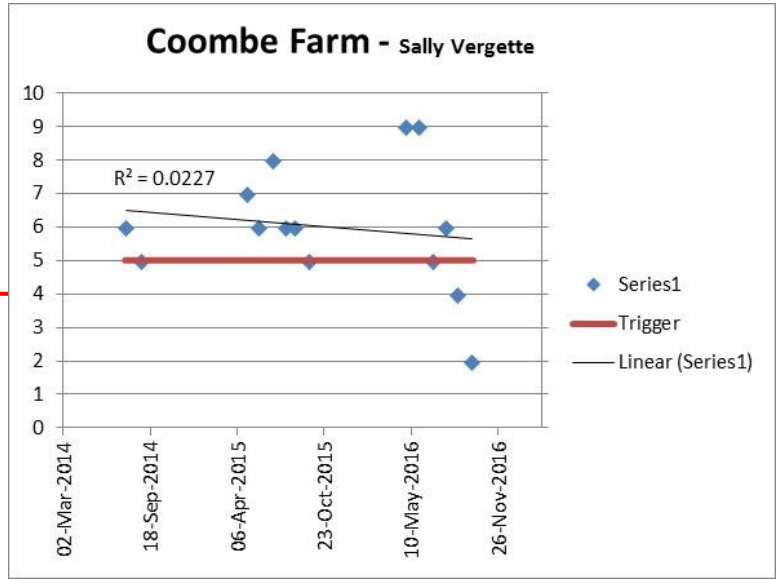
Chemical - Good

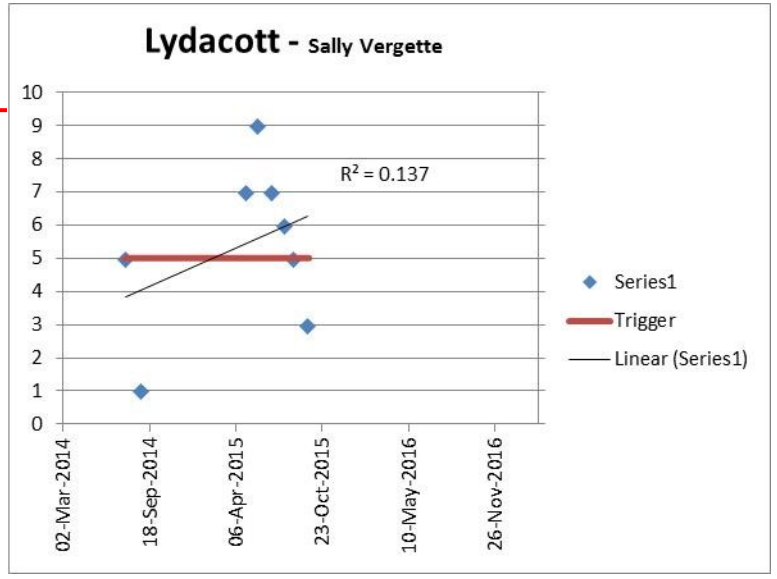
**Upcott Barton—Richard Neyton**

Site registered but no data ever collected. Trigger level 6

# Waterbody = PULWORTHY BROOK. Active sites end 2016 = 1. Overall registered sites = 2




PULWORTHY BROOK Environment Agency catchment data

**2015 water body classification**

Overall - Poor

Ecological –Poor

Chemical - Good

Pullworthy Brook

Following a breach of trigger level at Coombe Farm, on the Pullworthy Brook, Grid Ref SS497025. Trigger level 5. Volunteer is Sally Vergette. Sally@vergette.eclipse.co.uk. 01837810349 Sample 1, 26/08/16. RMI score 2 Repeat sample, 27/08/16. RMI score 4. An investigation into the biological quality was carried out at 20m D/S Lewmoor Bridge, 30/8/16, since this is a routine EA monitoring point only 1km downstream or the reported failure, and historic data would enable comparison with current situation.

Flow at the site was very low, almost imperceptible, and much of the 'run' type habitat was slack and ponded. No riffle was present. There was no odour detected, nor any turbidity that would have been cause for concern given the lack of recent rainfall. The sample was returned to the laboratory and sorted the next morning, 31-Aug-16. The taxa in Fig 1 were recorded, abundances in right hand column.

Biological scores of 103 and 5.72 for BMWP and ASPT respectively (Fig 2) are not particularly low for a headwater stream in late August. Flows are definitely low, and likely dissolved oxygen is too. There is some evidence, however, of a chronic, low level organic impact (elevated abundance of Asellidae – water hoglouse) but nothing to suggest a severe, acute impact.

The abundances of cased caddis (1-10), caseless caddis (1-10), flattened mayfly (1-10), Gammarus (10-100), Stonefly (1-10) would result in and ARMI score of 6, one point higher than that set for Pullworthy Brook.

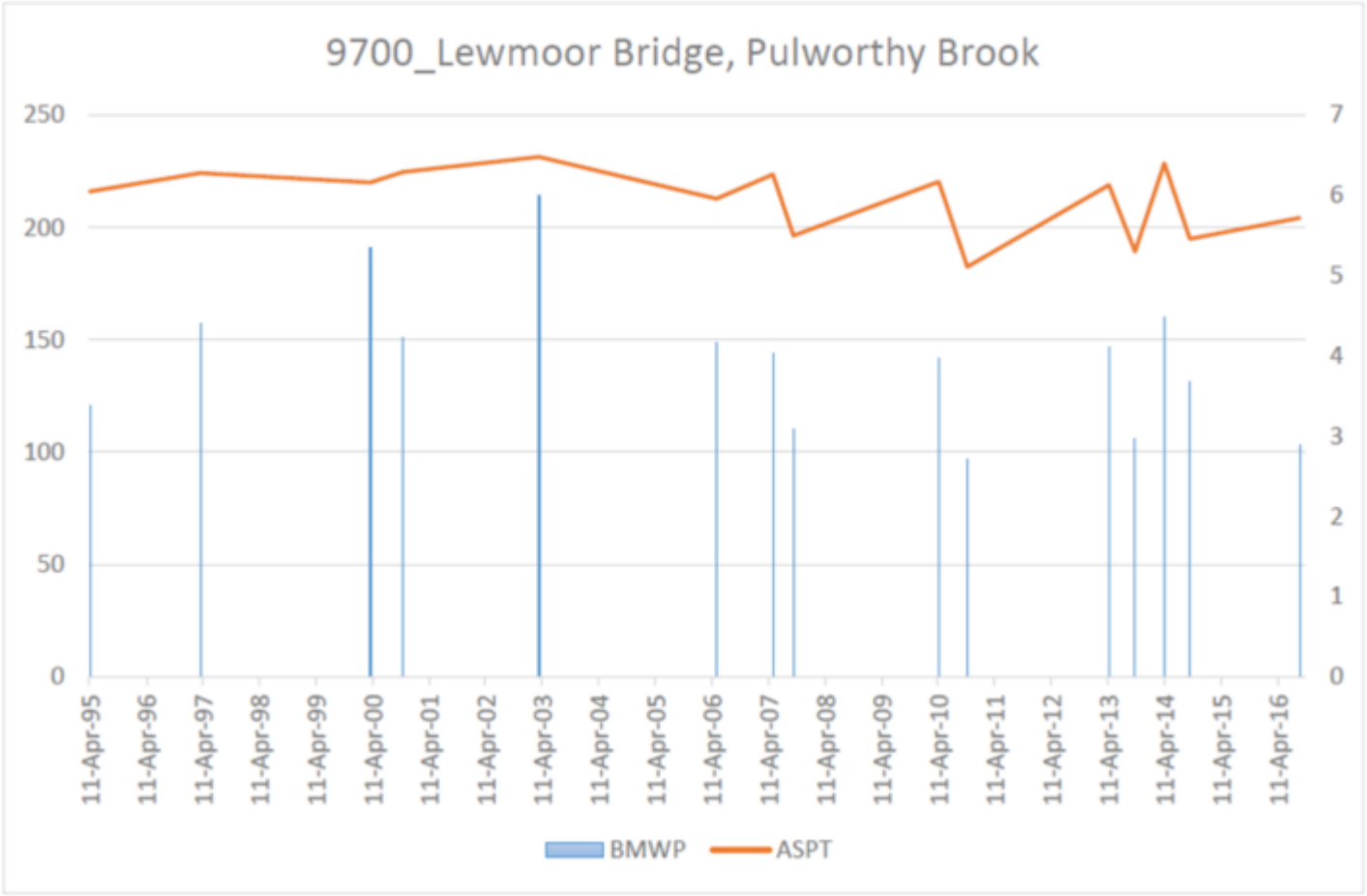
Historic data indicates that the invertebrate fauna is at its least diverse in low flow periods, low BMWP results generally being recorded in early October and September. This is typical for such a headwater. It is also when the river is at its most vulnerable, and riverfly monitoring is particularly valuable.

Michael Thomas
Senior Environmental Monitoring Officer
Analysis and Reporting
Devon & Cornwall Area

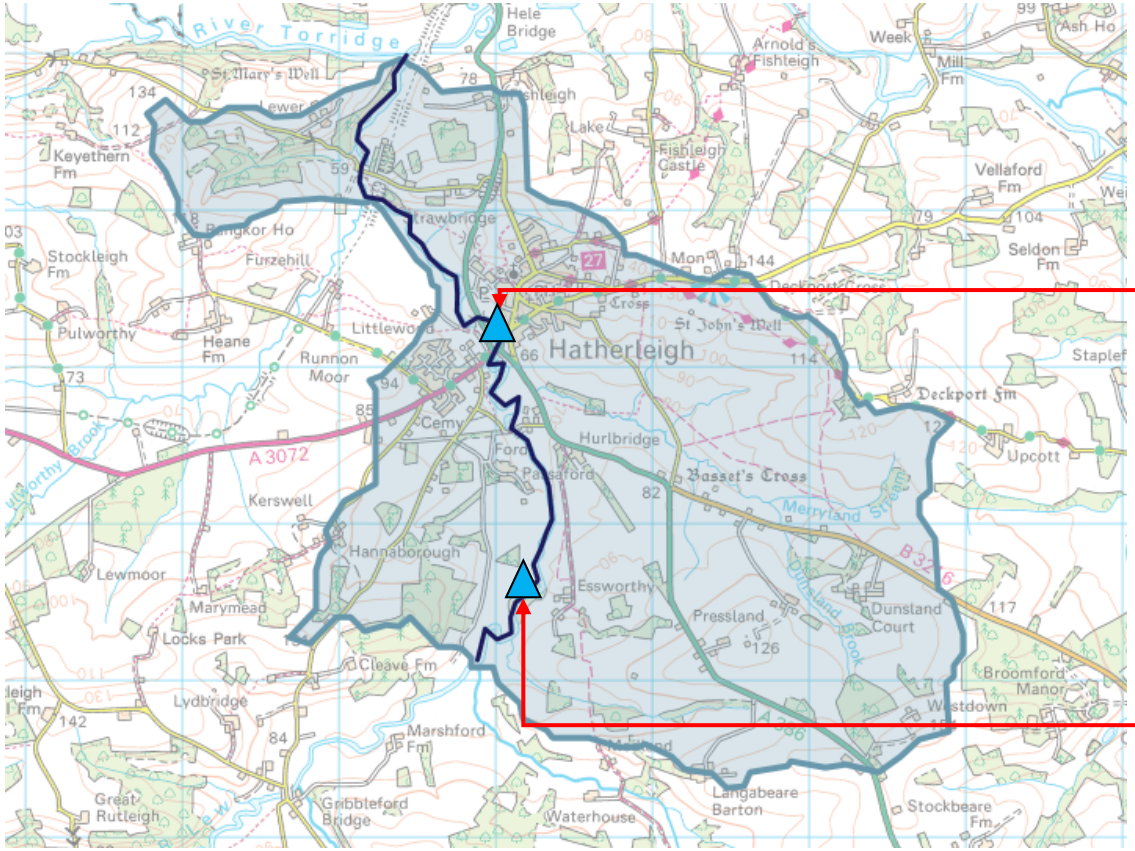
Fig 1

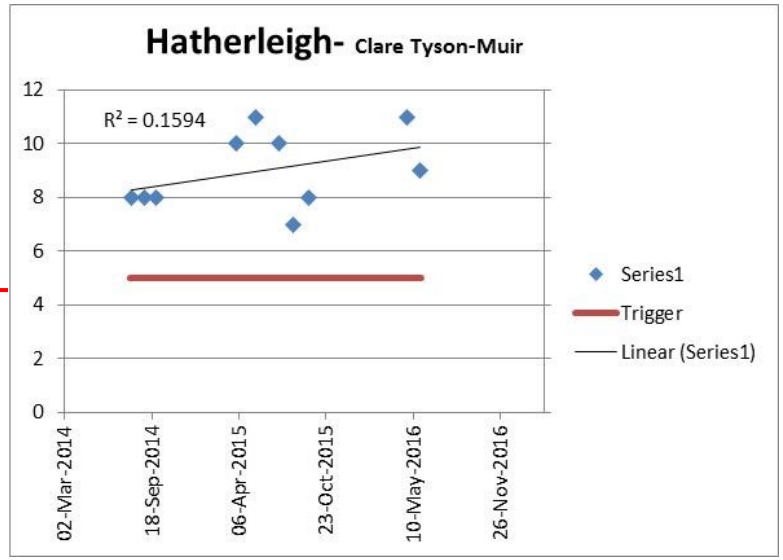
| | |
|---|---|
| Water Body | PULWORTHY BROOK |
| Site/Station Name | 20M D/S LEWMOOR BRIDGE |
| Site/Station ID | 9700 |
| Site/Station Location | SS-50780-02900 |
| Sample Date | 30-Aug-16 |
| Sample ID | 744309 |
| Ancylus fluviatilis | 2 |
| Oligochaeta | 15 |
| Piscicola geometra | 1 |
| Glossiphonia complanata | 1 |
| Asellus aquaticus | 250 |
| Crangonyx pseudogracilis | 12 |
| Gammarus pulex | 15 |
| Ecdyonurus | 5 |
| Paraleptophlebia | 2 |
| Nemoura | 2 |
| Stictotarsus duodecimpustulatus | 1 |
| Elmis aenea | 6 |
| Sialis lutaria | 4 |
| Beraeodes minutus | 4 |
| Sericostoma personatum | 4 |
| Ceratopogonidae | 3 |
| Chironomidae | 40 |
| Potamopyrgus antipodarum | 8 |
| BMWP | 103 |
| ASPT | 5.72 |
| No Of Taxa | 18 |

Fig 2


9700_Lewmoor Bridge, Pulworthy Brook
250
200
150
100
50
0
7
6
5
4
3
2
1
0
11-Apr-95
11-Apr-96
11-Apr-97
11-Apr-98
11-Apr-99
11-Apr-00
11-Apr-01
11-Apr-02
11-Apr-03
11-Apr-04
11-Apr-05
11-Apr-06
11-Apr-07
11-Apr-08
11-Apr-09
11-Apr-10
11-Apr-11
11-Apr-12
11-Apr-13
11-Apr-14
11-Apr-15
11-Apr-16
BMWP
ASPT

## Waterbody = LOWER RIVER LEW. Active sites end 2016 = 0. Overall registered sites = 2




**Essworthy** —**Laurence Fisher**

Site registered in 2014 but no data ever collected.
Trigger level 5

LOWER RIVER LEW [Environment Agency catchment data]

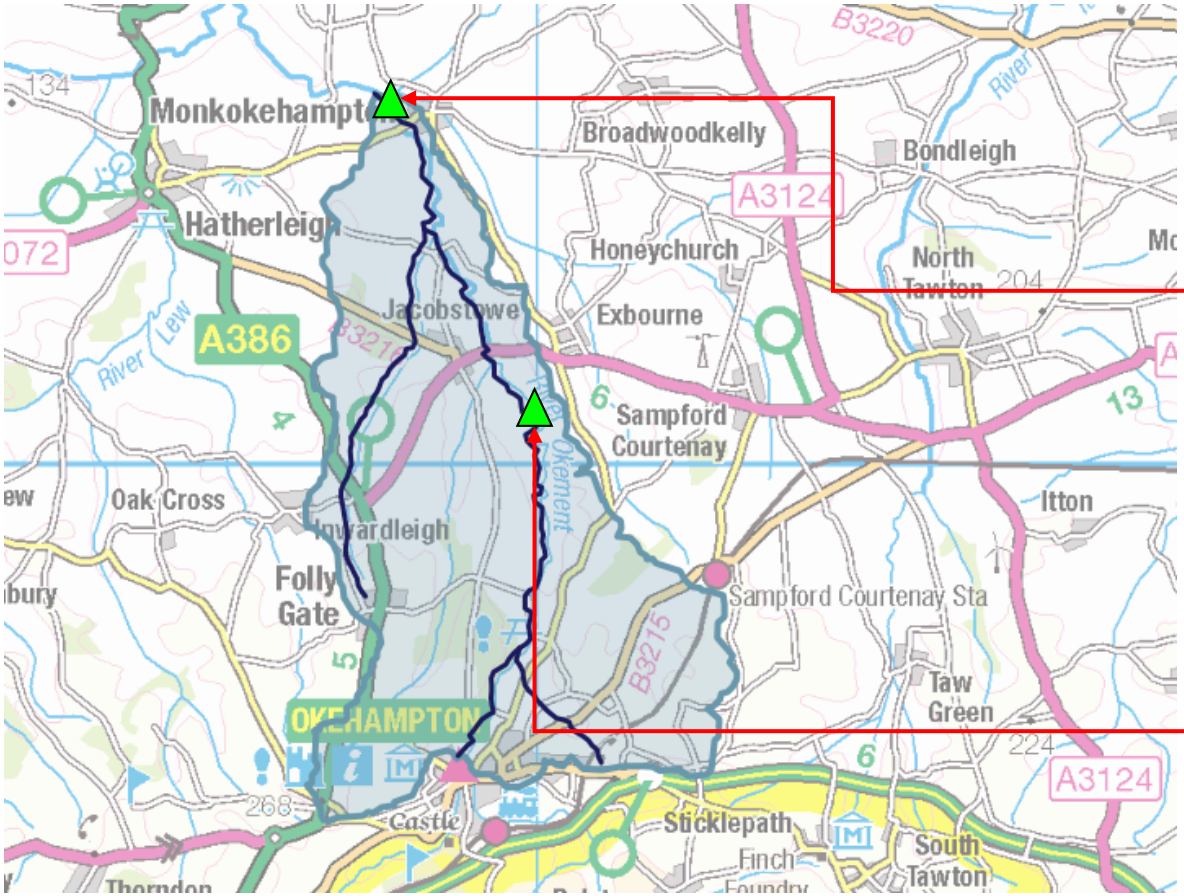
**2015 water body classification**

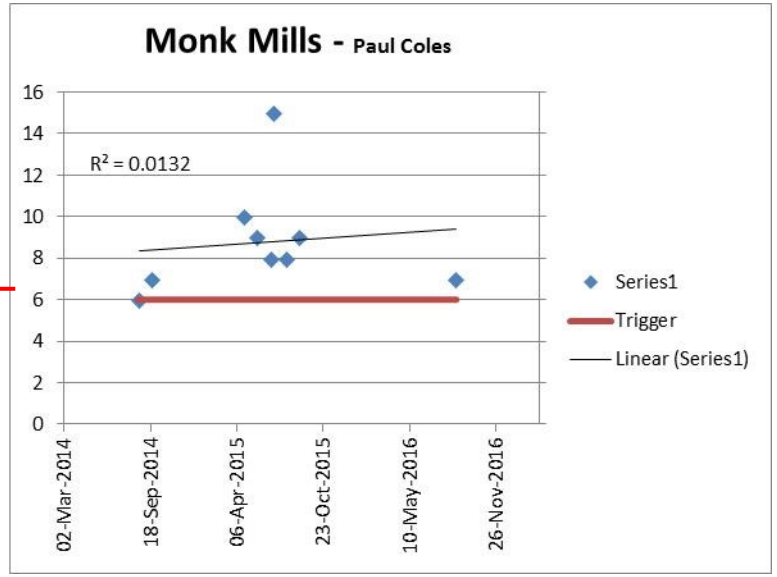
Overall - Moderate

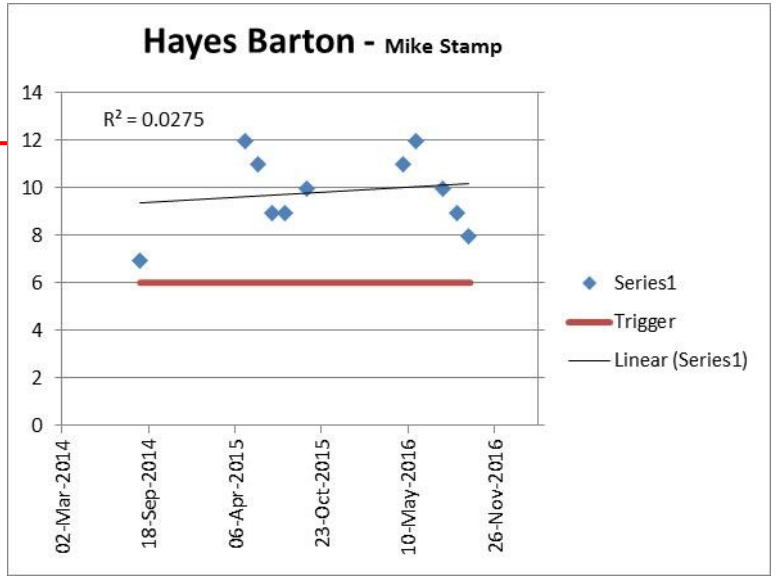
Ecological – Moderate

Chemical - Good

## Waterbody = MIDDLE RIVER OKEMENT. Active sites end 2016 = 2. Overall registered sites = 2




MIDDLE RIVER OKEMENT Environment Agency catchment data

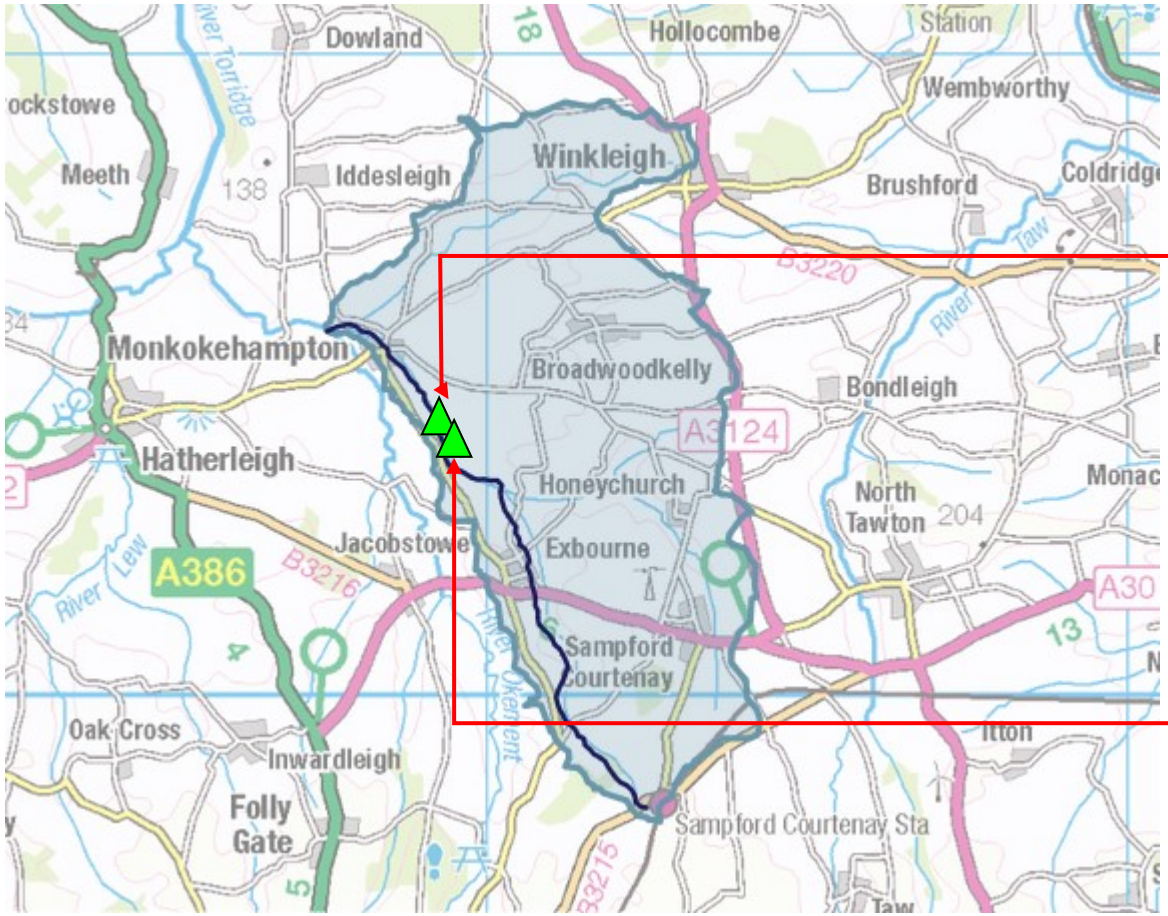
**2015 water body classification**

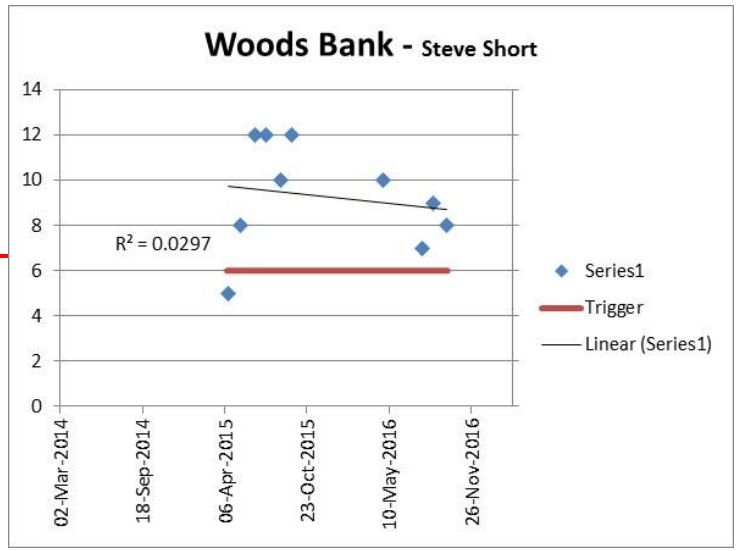
Overall - Moderate

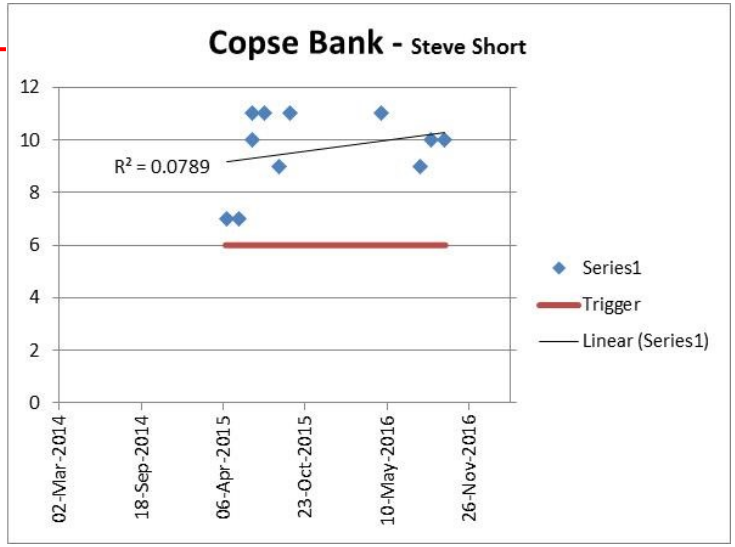
Ecological –Moderate

Chemical - Good

## Waterbody = HOLE BROOK. Active sites end 2016 = 2. Overall registered sites = 2




HOLE BROOK Environment Agency catchment data

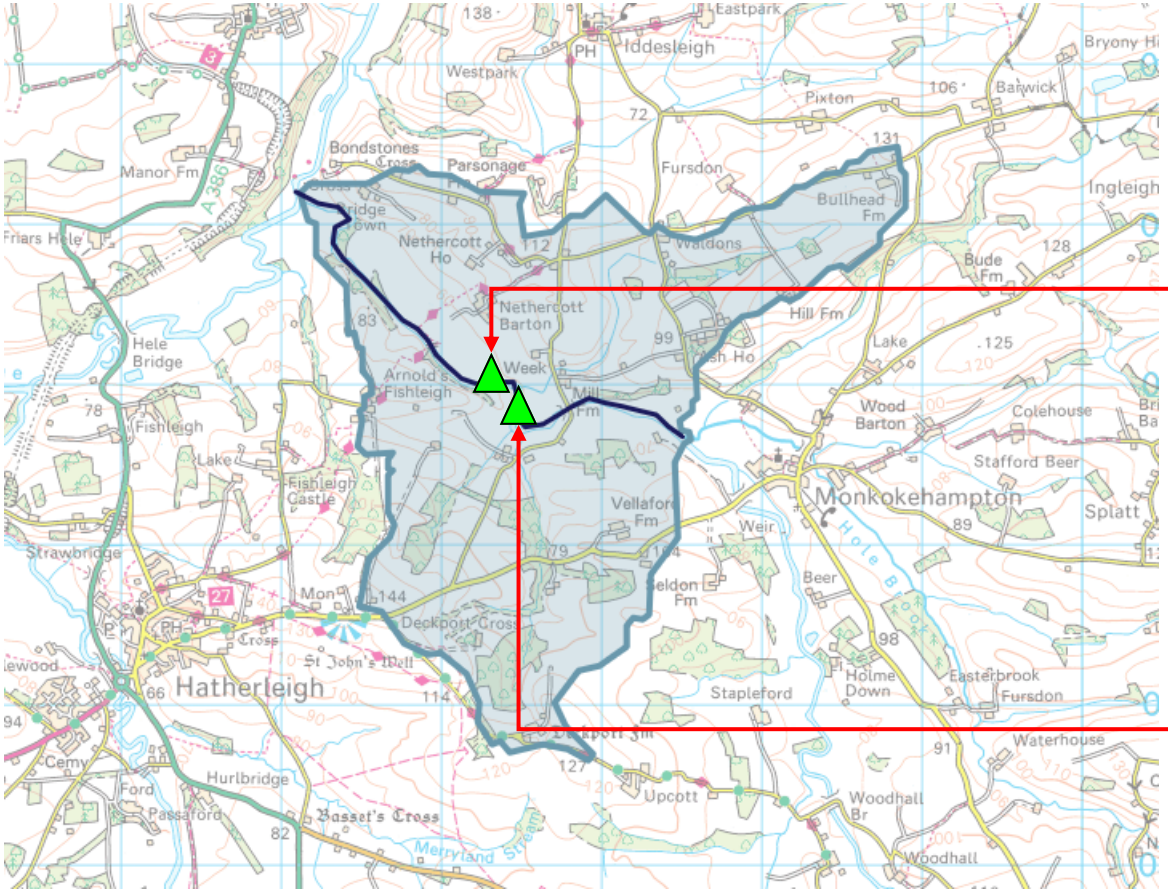
**2015 water body classification**

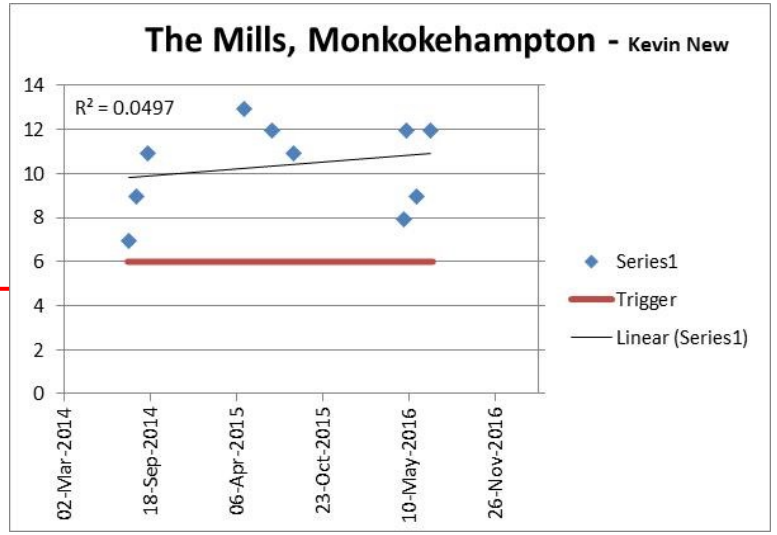
Overall - Moderate

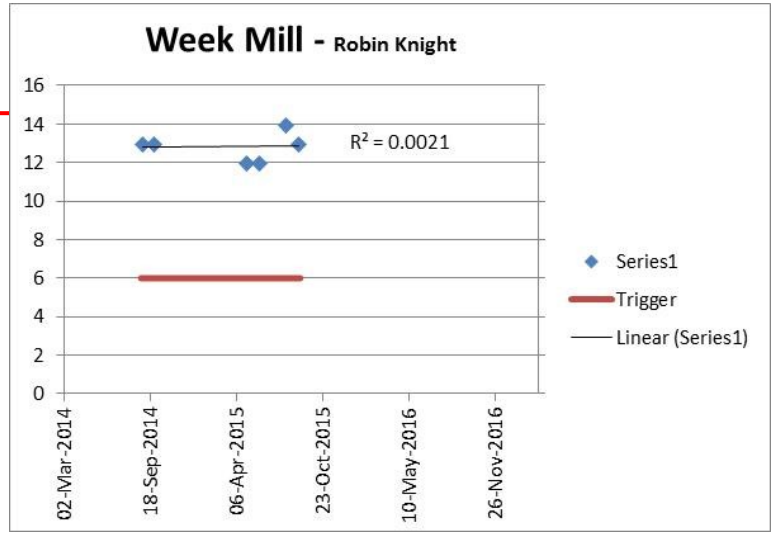
Ecological -Moderate

Chemical - Good

## Waterbody = LOWER RIVER OKEMENT. Active sites end 2016 = 2. Overall registered sites = 2




LOWER RIVER OKEMENT [Environment Agency catchment data]

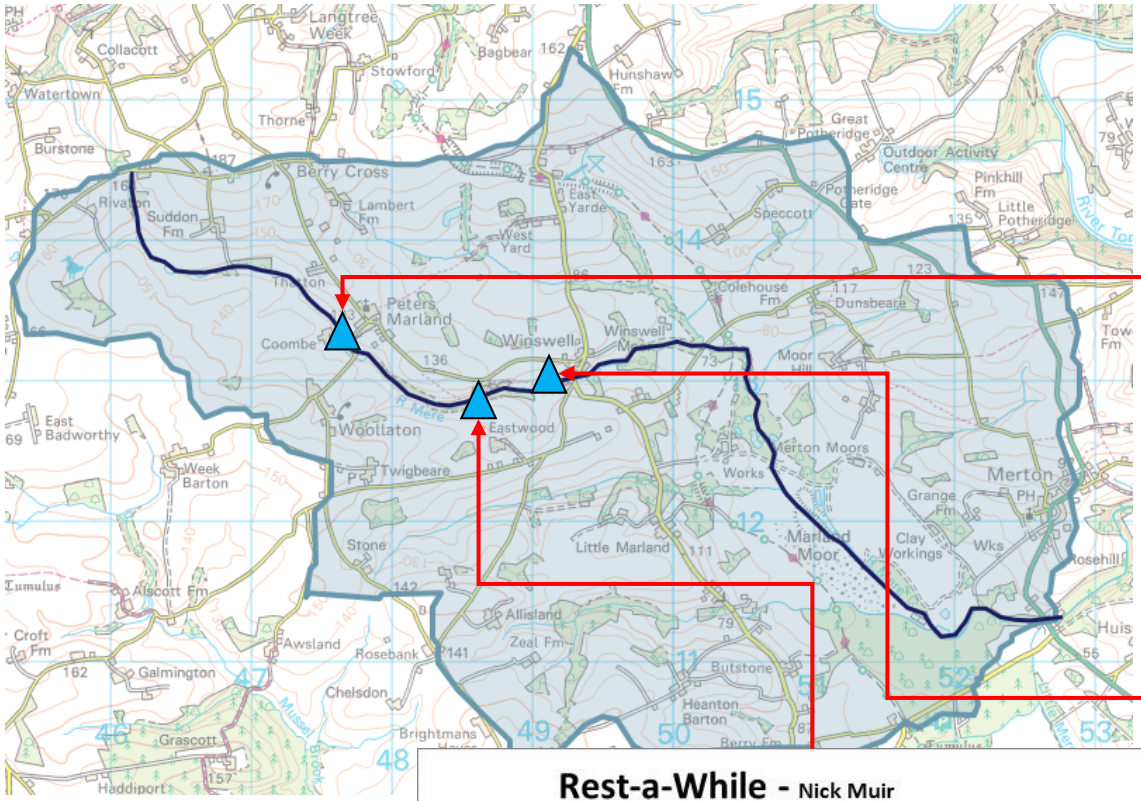
**2015 water body classification**

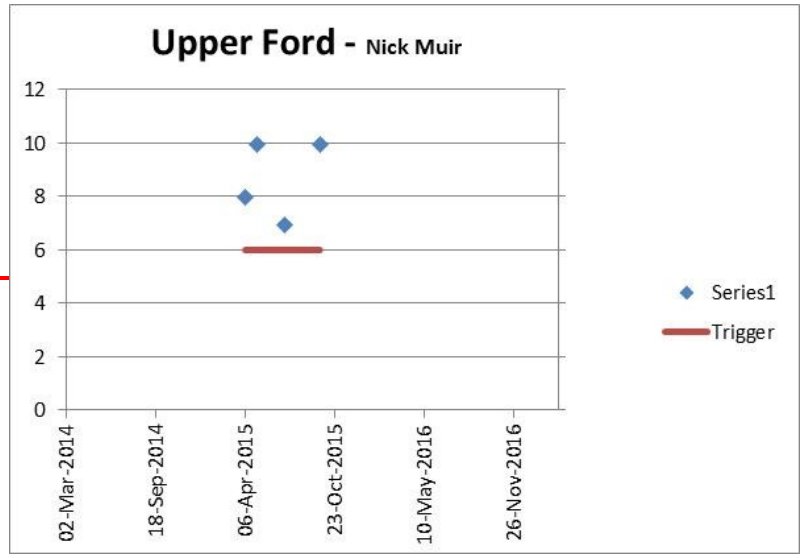
Overall - Moderate

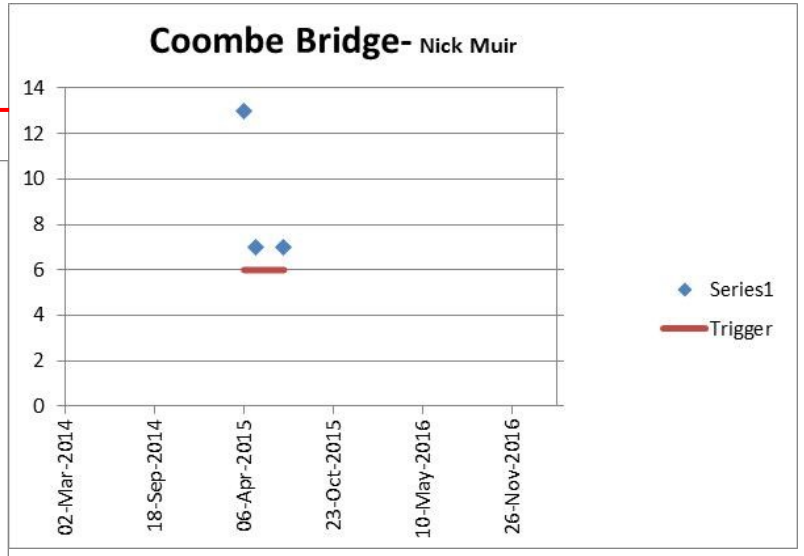
Ecological –Moderate

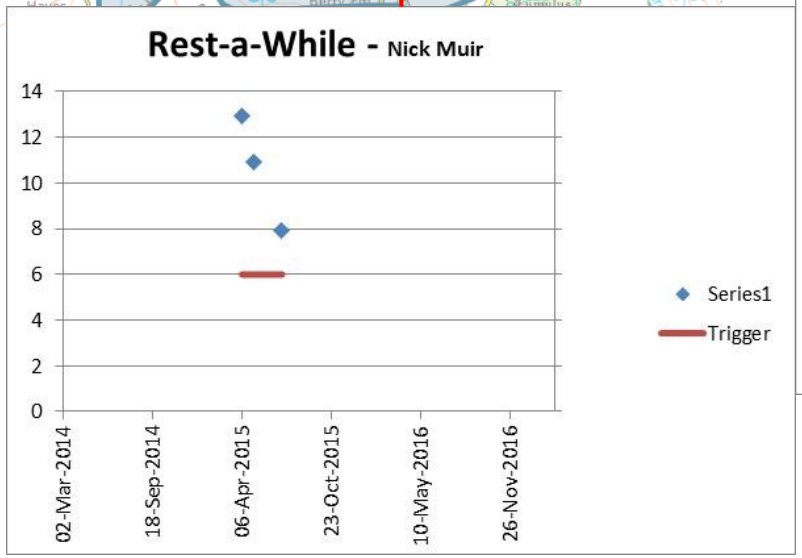
Chemical - Good

## Waterbody = UPPER RIVER MERE. Active sites end 2016 = 0. Overall registered sites = 3




UPPER RIVER MERE – [Environment Agency catchment data]

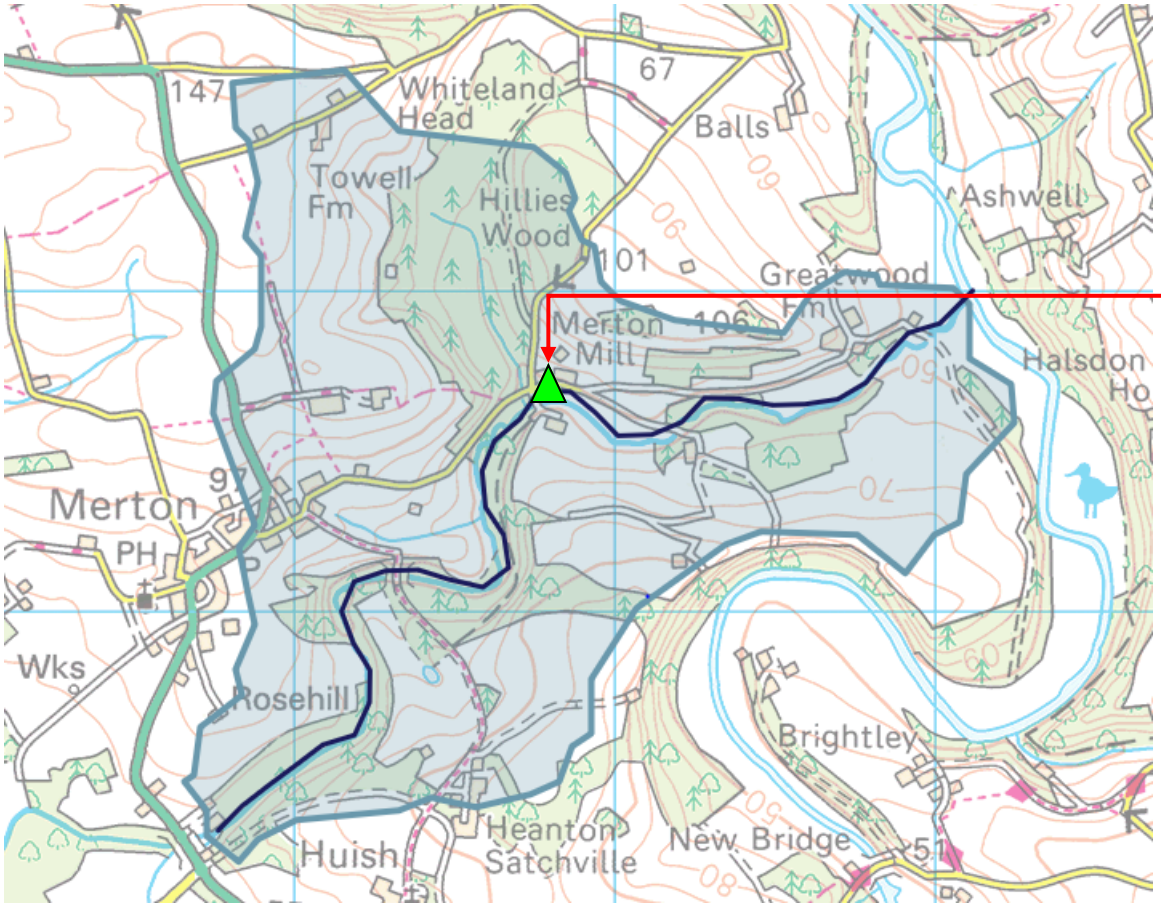
**2015 water body classification**

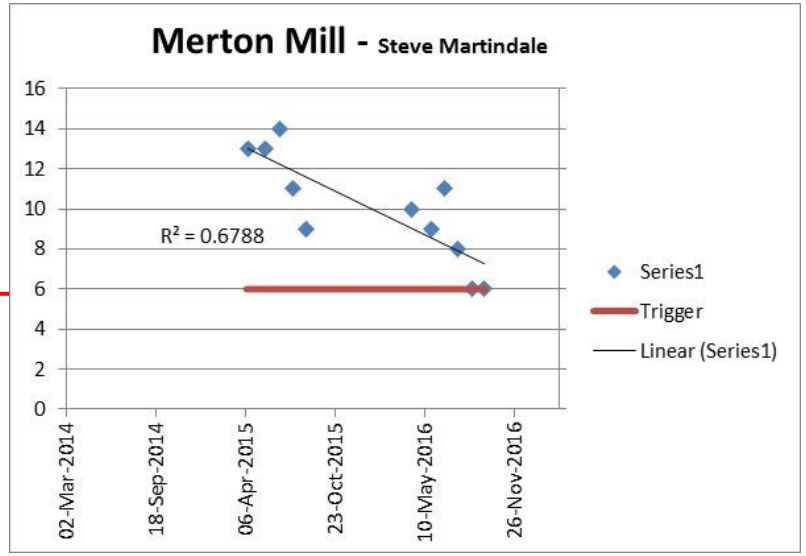
Overall - Moderate

Ecological –Moderate

Chemical - Good

## Waterbody = LOWER RIVER MERE. Active sites  end 2016 = 1. Overall registered sites = 3




LOWER RIVER MERE – Environment Agency catchment data

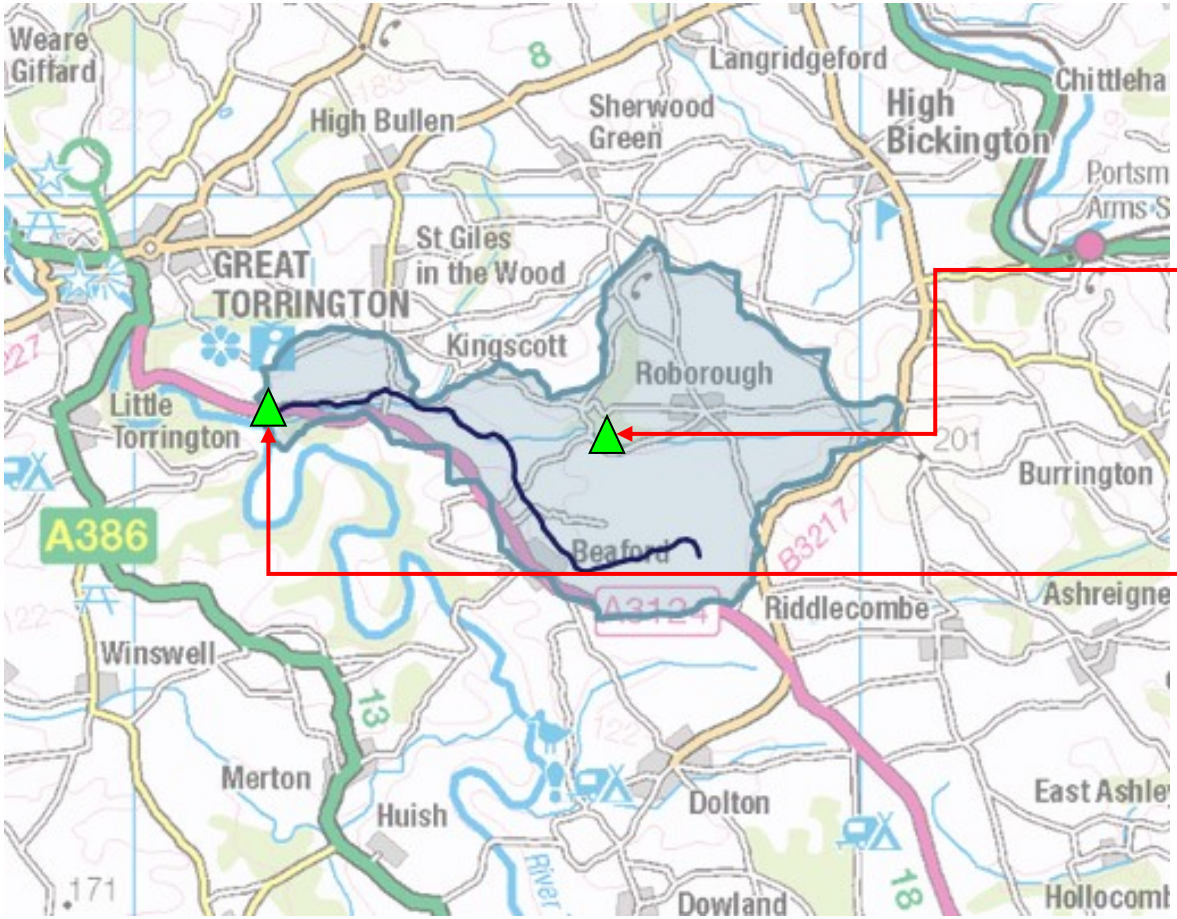
**2015 water body classification**

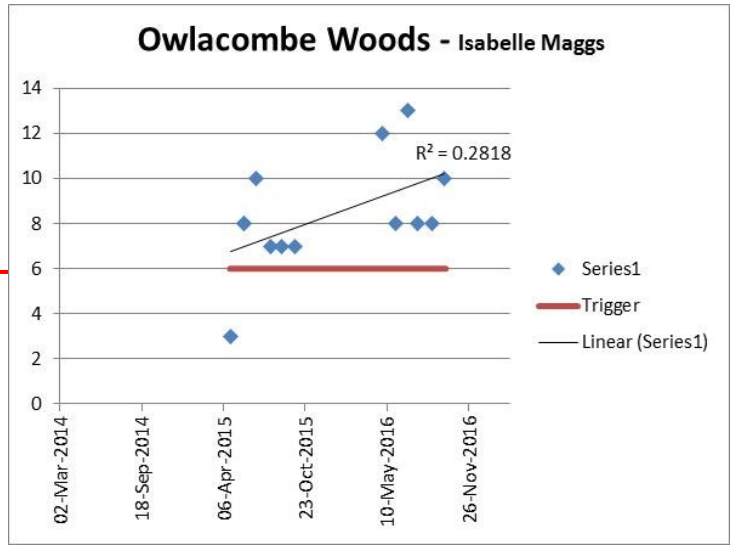
Overall - Moderate

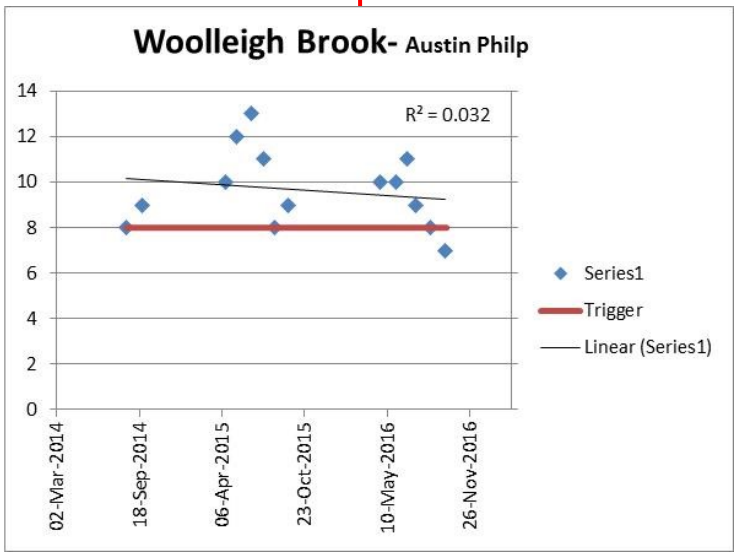
Ecological –Moderate

Chemical - Good

**Waterbody = WOOLLEIGH BROOK including tributary of Beaford Brook. Active sites end 2016 = 2. Overall registered sites = 2**




WOOLLEIGH BROOK [Environment Agency catchment data]

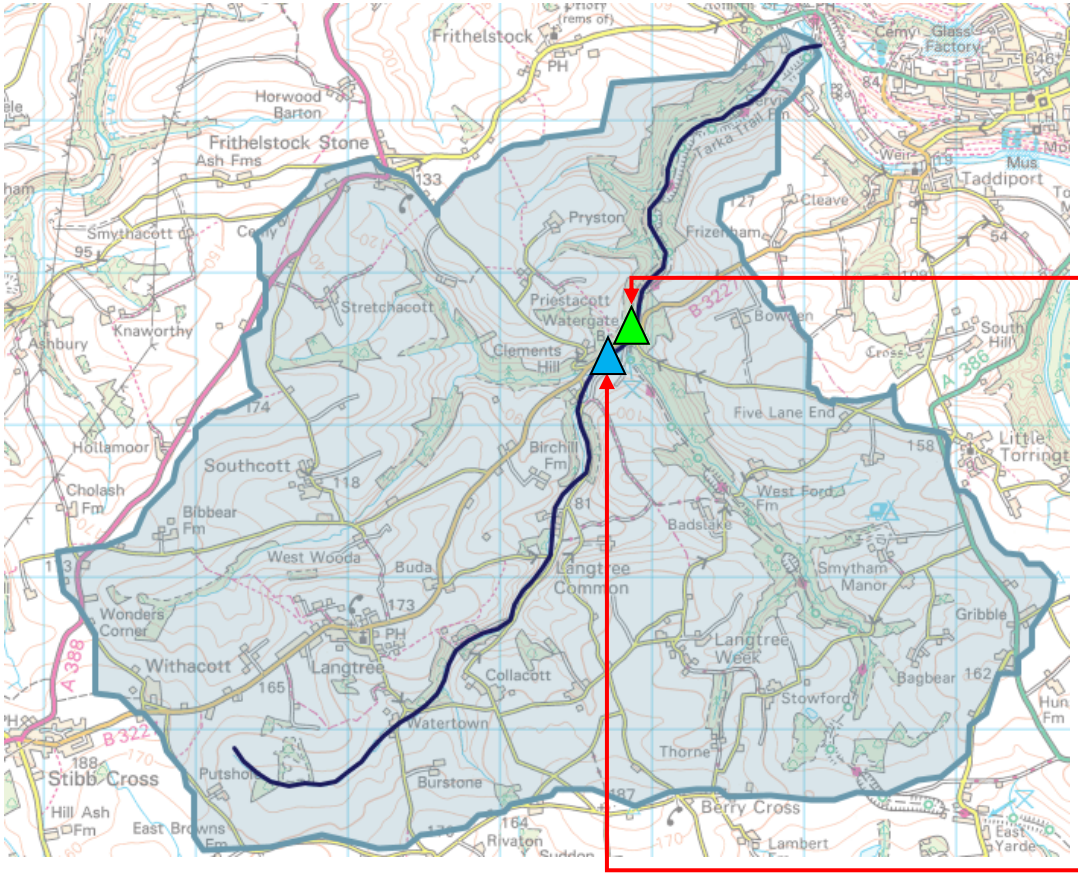
**2015 water body classification**

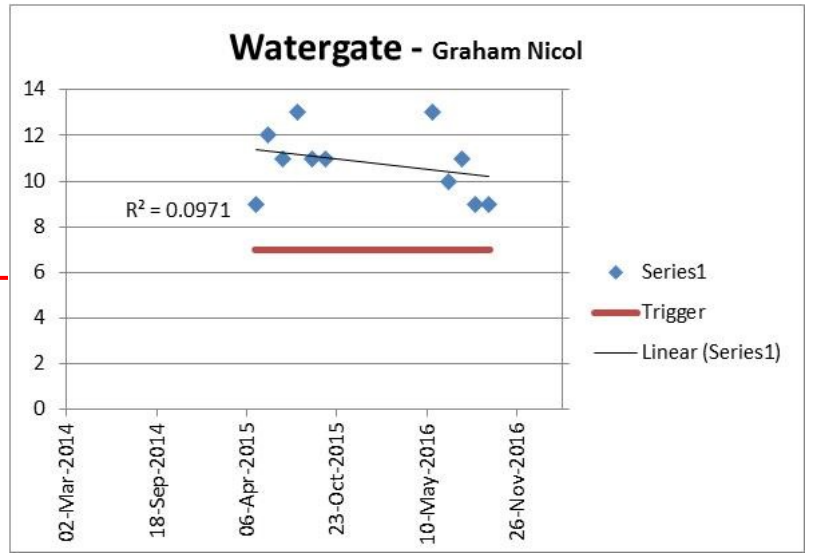
Overall - Moderate

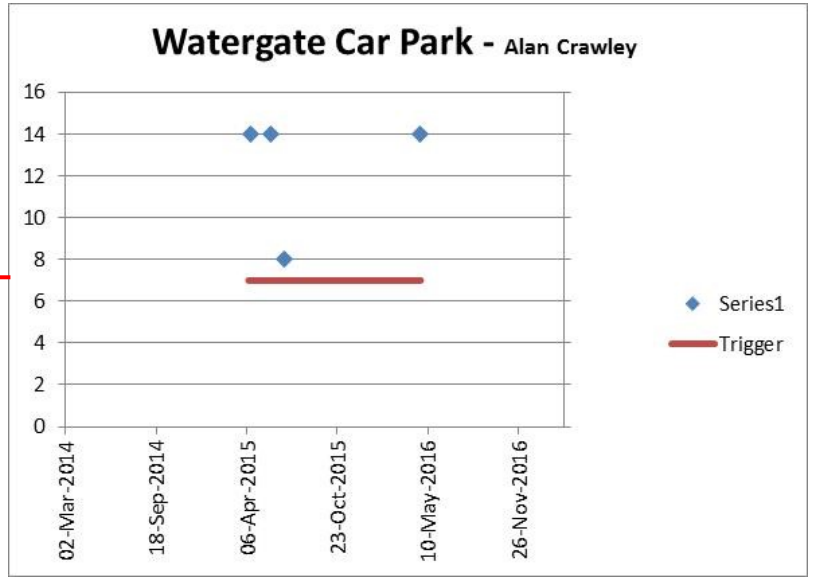
Ecological -Moderate

Chemical - Good

## Waterbody = LANGTREE LAKE. Active sites end 2016 = 2. Overall registered sites = 2




LANGTREE LAKE – [Environment Agency catchment data]

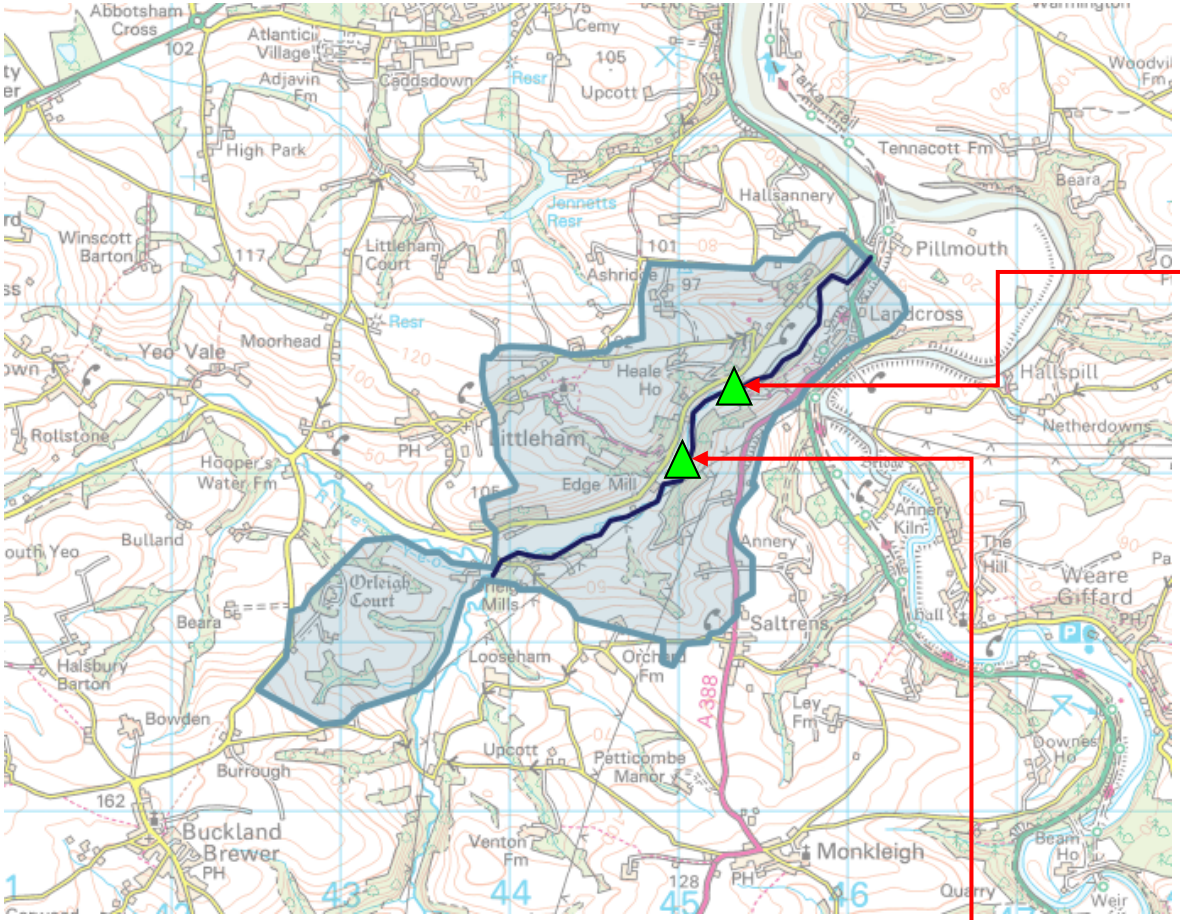
**2015 water body classification**

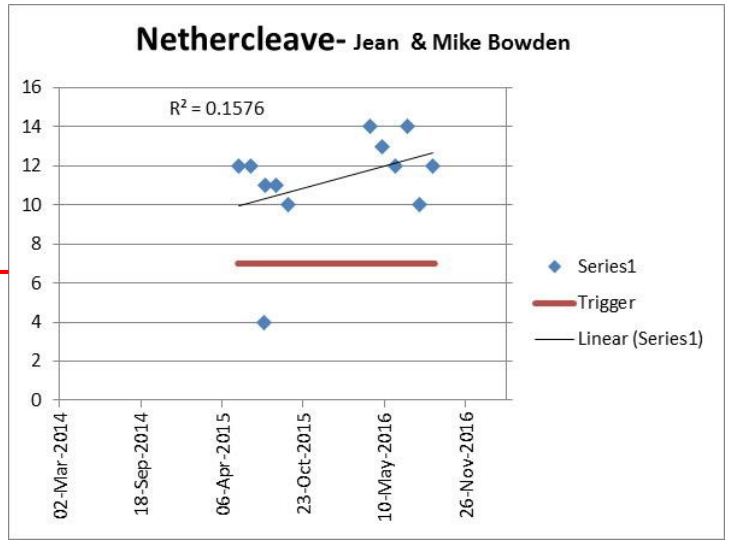
Overall - Moderate

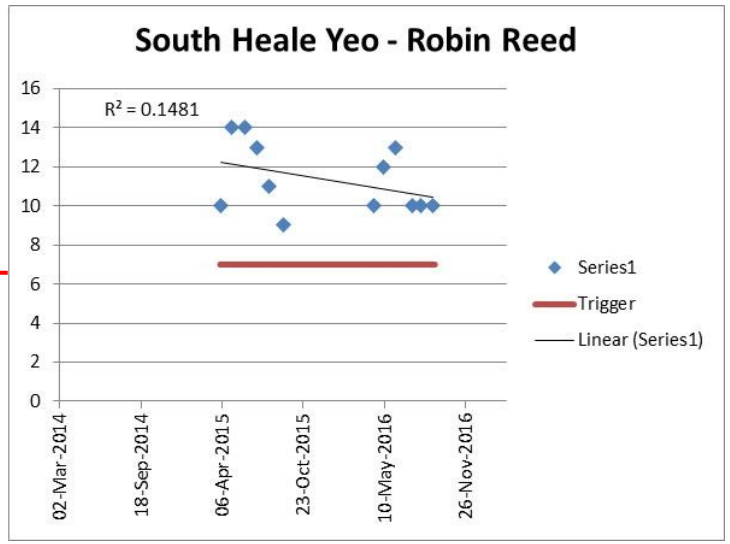
Ecological –Moderate

Chemical - Good

## Waterbody = LOWER  RIVER YEO (BIDEFORD) . Active sites end 2016 = 2. Overall registered sites = 2




LOWER RIVER YEO (BIDEFORD) - [Environment Agency catchment data]

**2015 water body classification**

Overall - Moderate

Ecological -Moderate

Chemical - Good

# Riverfly Monitoring: The Volunteer Experience

*Plymouth University placement students, Harry and Amber are currently working alongside the North Devon Nature Improvement Area (NIA) team at the Devon Wildlife Trust. Here they discuss their experience of becoming Riverfly Monitoring volunteers…*

As part of our placement with the Devon Wildlife Trust we were invited to take part in the Riverfly Partnership monitoring scheme. The Riverfly Partnership is a national scheme which monitors water quality through sampling riverflies; a group very sensitive to environmental changes in the river. The scheme uses citizen science to conduct a wide range monitoring across the UK, with nearly 50 volunteers across the Torridge catchment alone!

We began our riverfly volunteering with a training day based in Hatherleigh, along with a group of other new volunteers in the Torridge catchment. Our group coordinator, Matt Edworthy, along with Devon Wildlife Trust's Freshwater Pearl Mussel Officer Izzy Moser, led the event. The day started with a presentation covering the ecology and importance of riverflies and a detailed background to the Riverfly Partnership. We were then shown the survey methods used by the scheme and finished up by heading down to the local river to practice gathering and recording of riverfly data. Once we had practiced the kick sampling technique we were given our sites and off we went on our monthly surveying until September!

Photo taken by Harry (Plymouth University) Amber kick sampling to collect river invertebrates.

WITH PLYMOUTH UNIVERSITY

Taking part in the riverfly project has shown us a whole world of creatures we never knew about before as well as their major importance in highlighting water quality. We have gained a wealth of information about the project and how volunteers across the country are keen to make a difference with a survey that is simple yet great fun!

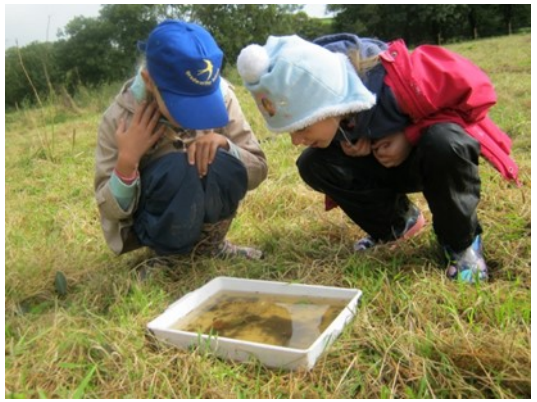
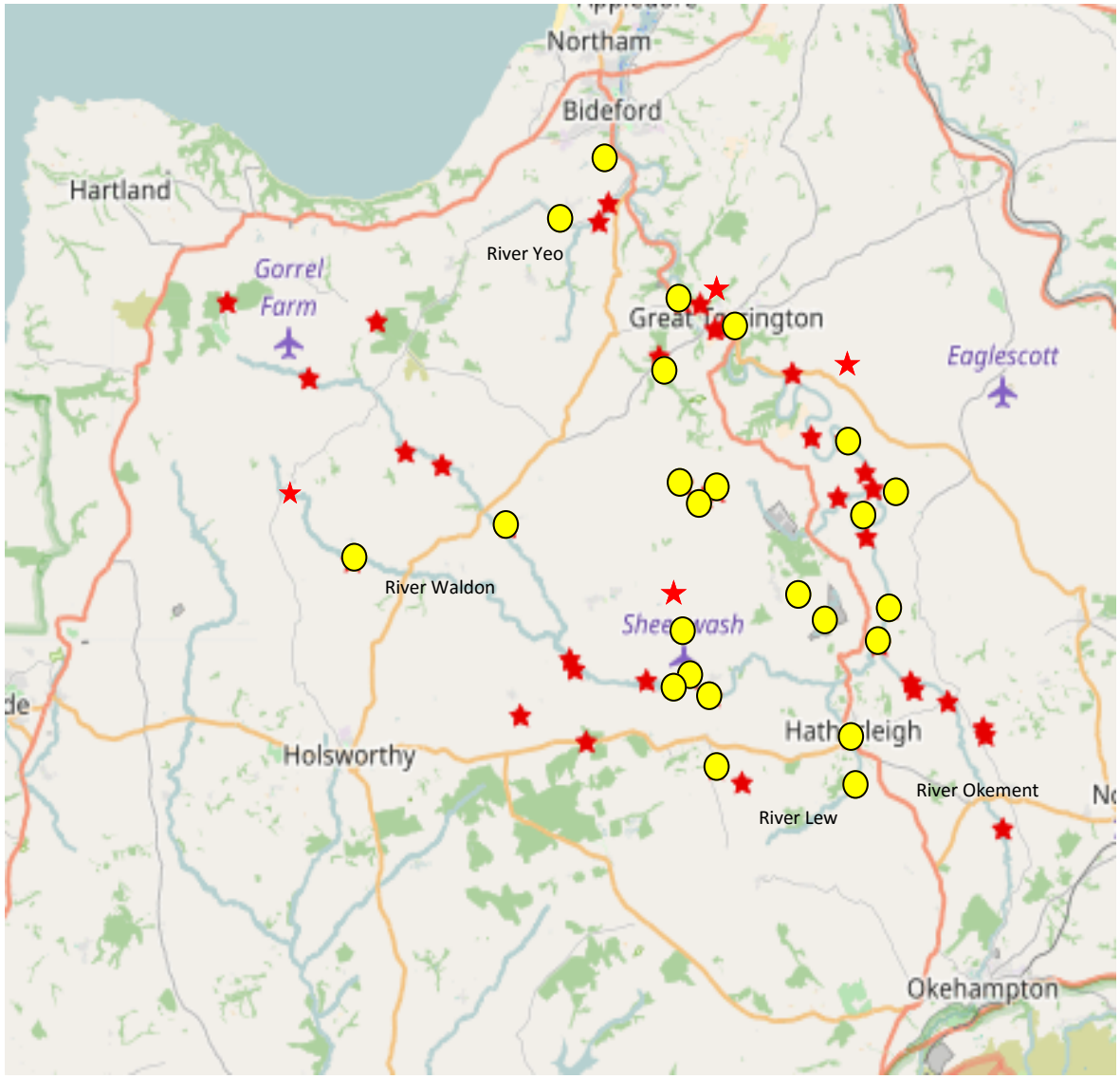


Photo taken by Imogen Musson (teacher) Children from Bradworthy school identifying river invertebrates.

The surveys we conducted really showed us what one small section of river could hide under the water! During our season we found many different groups including stoneflies, cased and caseless caddis and mayflies. Thankfully, our sites never hit the set trigger level which would indicate a pollution event upstream.

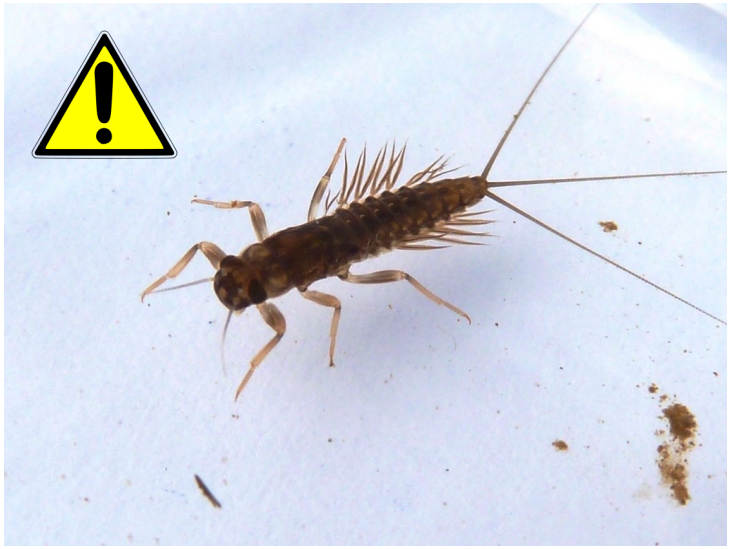
Not only did we get the opportunity to join a nationwide monitoring programme, we also got to pass on the knowledge we learned by taking out two school groups from Appledore and Bradworthy primary schools. The groups joined us at one of our registered sites on the Torridge which regularly hosts school groups and gets them out in their local environment. Equipped with nets and pipettes, the children did their own kick samples, identified the species of riverfly and then counted the number of each. Throughout the day the children learned about the identification and ecology of riverflies as well as their importance in determining river health – all whilst having fun splashing around in the river!




## Map Key

Active sites—red stars

Registered vacant sites—yellow circles



*Leptophlebid* upwing fly species—one of the groups **NOT** counted as part of the Riverfly methodology. Note the strap-like gills on the side of the abdomen

The Riverfly Partnership · Northern Devon NIA Nature Improvement Area · FLAG Northern Devon Fisheries Local Action Group · Marine Management Organisation · EFF: European Fisheries Fund—Investing in Sustainable Fisheries · Environment Agency · fba Freshwater Biological Association · Biffa Award Building communities. Transforming lives.