

### [13 September EDR Notification – personal details removed]

Windermere – Cunsey Beck - Notification – Regulation 29 Environmental Damage (Prevention and Remediation) (England) Regulations 2015

We write formally to put the "enforcing authority", Environment Agency (EA), on notice under regulation 29 of the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 ("EDR"), that the "operator", United Utilities (UU), has caused environmental damage to the waterbody Cunsey Beck. We attach a copy of the report entitled "Cunsey Beck Data Report" and a statement from the CEO of WildFish.

We require an acknowledgement to this notification within 21 days of this letter, and for the EA to set out its plans to investigate and notify United Utilities to ensure that the required remedies of prevention and remediation are put into effect as a matter of urgency.

#### **Timeframe**

The Environmental Damage (Prevention and Remediation) (England) Regulations 2015 (EDR), which replace the earlier Environmental Damage (Prevention and Remediation) (England) Regulations 2009, apply to damage occurring after 2009 (Regulation 8 specifies that they do not apply to damage occurring before this date). However, see *Seiont, Gwyrfai and Llynfi Anglers' Society v NRW [2016] EWCA Civ 797* where the key date is from April 2007, which is the date when the Environmental Liability Directive came into force and had *direct effect.*<sup>1</sup>

The "enforcing authority" and "operator"

<sup>&</sup>lt;sup>1</sup> <u>Seiont, Gwyrfai And Llyfni Anglers' Society v Natural Resources Wales [2016] EWCA Civ 797 (29 July 2016)</u> (bailii.org)

Pursuant to Regulations 1, 4 (2) and 10 of the EDR, the EA is the relevant "enforcing authority" as "the person or body responsible for enforcing these Regulations, in accordance with regulation 10 or 11". Regulation 10 clarifies that the Regulations cover activities that require a permit under the Environmental Permitting (England and Wales) Regulations 2010. Regulation 4 (2) indicates that (in these circumstances), the EA is the responsible enforcing authority.

"Operator", for the purposes of the EDR is "the person who operates or controls an activity, including the holder of a permit or authorisation relating to that activity, or the person registering or notifying an activity for the purposes of any enactment;"

The relevant operator here is United Utilities (UU).

#### **Environmental Damage**

"Environmental damage" (Regulation 4 (1)) is damage to (a) "a protected species or natural habitat, or a site of special scientific interest"; (b) "surface water or groundwater". Under Regulation 4 (2), "Environmental damage" is damage caused to a protected species or natural habitat or a site of special scientific, of a kind "specified in Schedule 1." Paragraph 4 (1) of Schedule 1 explains that damage to a Site of special scientific interest must be to: a) "the species or habitats notified under section 28 of the Wildlife and Countryside Act 1981" or (b) "a protected species or natural habitat". Paragraph 4 (2) of Schedule 1 specifies that "the damage must have an adverse effect on the integrity of the site (that is, the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats or the levels of populations of the species affected)."

Regulation 4 (3) defines damage to surface water as

"damage to a surface water body classified as such pursuant to the Water Framework

Directive such that—

(a) a biological quality element listed in Annex V to that Directive,(b)the level of a chemical listed in the legislation in Annex IX or a chemical listed in Annex X to that Directive, or



(c)a physicochemical quality element listed in Annex V to that Directive, changes sufficiently to lower the status of the water body in accordance with Directive 2000/60/EC (whether or not the water body is in fact reclassified as being of lower status)."

Regulation 5 explains that the EDR apply in relation to environmental damage if the damage is caused by an activity mentioned in Schedule 2 (including at Schedule 2, paragraph 2, the "operation of permitted installations") and that for environmental damage to protected species or natural habitat or a SSSI, the regulations also apply to damage caused by any other activity of the operator "intended to cause environmental damage (reg 5 (2) (a)) or "was negligent as to whether environmental damage would be caused" (reg 5 (2) (b)).

#### Preventing environmental damage or further environmental damage

The operator must take all practicable steps to prevent damage and notify the enforcing authority unless the threat has been eliminated under Regulation 13 (1). By 13 (2), the enforcing authority may (whether or not notification has been given under sub-paragraph (1)) serve a notice on an operator that damage has been caused and to specify measures to prevent damage. Failure to comply is an offence (13 (3)).

The same process applies to "preventing further environmental damage" pursuant to regulation 14.

Duties arising to prevent environmental damage, under regulation 15, may be carried out by the enforcing authority instead of the operator where, for instance, the operator fails to comply with a notice under regulation 13(2) or 14(2) following instructions from the enforcing authority (15 c)).



Under Regulation 18, where damage is established, the enforcing authority

"must notify the responsible operator—

(a)that the damage is environmental damage;

(b)that the responsible operator's activity was a cause of the environmental damage;

(c)that the responsible operator must submit proposals, within a time specified by the

enforcing authority, for measures that will achieve the remediation of the

environmental damage in accordance with Schedule 3; and

(d)that the responsible operator has a right to appeal.

. . . . . . . .

Notification and consultation

Most importantly for the purposes of this letter, under regulation 29, an interested party who has a sufficient interest "may notify the appropriate enforcing authority of any environmental damage which is being, or has been, caused, or for which there is an imminent threat."

Under 29 (3) "the enforcing authority must consider the notification and inform the notifier as to the action, if any, that it intends to take."

Under Regulation 20, the enforcing authority must consult the person notifying the enforcement authority where it receives proposals from the operator for dealing with the environmental damage or where the proposal is not received. Following consultation, the enforcing authority must serve a notice on the responsible operator that specifies the damage, the measures necessary for remediation, the timeframe for compliance; and additional monitoring or investigative measures that the responsible operator must carry out during remediation, and so on. A failure to comply is an offence.

Status and Deterioration for WFD purposes

Crucial to the notification here is the WFD status of the waterbody involved, the deterioration caused by recent pollution and what is required by law for the EA to do in monitoring for WFD purposes.

In summary, there are several assessments to establish status of surface waters: ecological and chemical. Ecological status of surface waters assesses overall ecosystem health as expressed by biological quality elements including benthic invertebrate fauna.

Achieving good status implies that all parameters must be in at least good status. This is also referred to as the "one out all out principle."

Annex V of the WFD (referred to in, for instance, regulation x of the EDR) contains a detailed list of elements and other parameters as well as discussing the means and purpose of monitoring for the purpose of establishing status.

With regard to surface water status, the classification elements for ecological status include for both rivers and lakes, "<u>Composition</u> and <u>abundance</u> of benthic invertebrate fauna". That is of importance here as the work done by the notifier (WildFish) centres on the use of invertebrate species and abundance in order to determine the health of a river in its own right – but also as a marker of particular forms of pollution including, for instance, phosphate levels (phosphorous being an element of the physicochemical status of the waterbody).

Invertebrate fauna is doubly important as, although it is not clear from the notification of the higher end of Cunsey SSSI whether invertebrates are a feature, there is historical evidence that white clawed crayfish were present up to 2008 which is in its own right a protected species under both the Habitats Directive, Annex II and Annex V and schedule 5 to the Wildlife and Countryside Act 1981.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Consolidated TEXT: 31992L0043 — EN — 01.07.2013 (europa.eu); Wildlife and Countryside Act 1981 (legislation.gov.uk)

At paragraph 1.2.1. of Annex V WFD, definitions are provided for high, good and moderate ecological status in rivers.

There is no definition given for poor or bad invertebrate element status in Annex V. For the element of benthic invertebrates at "*Moderate*", the following description is provided at Annex V, 1.21:

"The composition and abundance of invertebrate taxa differ moderately from the type-specific communities. Major taxonomic groups of the type-specific community are absent. The ratio of disturbance-sensitive taxa to insensitive taxa, and the level of diversity, are substantially lower than the type-specific level and significantly lower than for good status".

The requirement for lakes for benthic communities at 1.22 is identical; though the subject matter of the survey (i.e. species of invertebrate) would obviously differ from rivers.

Under Annex V and (and also Article 8), the EA needs to be able to identify the status based on the results of monitoring.

At paragraph 1.3.1., there is a description of what monitoring of ecological status and chemical status for surface waters should entail. It should include "a surveillance monitoring programme and an operational monitoring programme" but also

"in some cases. . .programmes of investigative monitoring." And, "In selecting parameters for biological quality elements Member States shall identify the appropriate taxonomic level required to achieve adequate confidence and precision in the classification of the quality elements. . ."[emphasis added]



With regard to "operational monitoring" (1.3.2) which is the basis of the EA's work in establishing the status of a waterbody such as Cunsey Beck,

"monitoring points shall be selected as follows: — for bodies at risk from significant point source pressures, sufficient monitoring points within each body in order to assess the magnitude and impact of the point source." [emphasis added]

#### Deterioration

The case of Bund v Deutschland ("Weser") explains that:

"the concept of 'deterioration of the status' of a body of surface water in

Article 4(1)(a)(i) of Directive 2000/60 must be interpreted as meaning that there is

deterioration as soon as the status of at least one of the quality elements, within the

meaning of Annex V to the directive, falls by one class, even if that fall does not result

in a fall in classification of the body of surface water as a whole. However, if the

quality element concerned, within the meaning of that annex, is already in the lowest

class, any deterioration of that element constitutes a 'deterioration of the status' of a

body of surface water, within the meaning of Article 4(1)(a)(i)." [para 70]

Damage is also defined as deterioration from baseline condition. Baseline condition is discussed by Lord Justice Lindblom in *Seiont Gwyrfai and Llyfni Anglers' Society v Natural Resources Wales* [2016] EWCA Civ 797:

"The "baseline condition" is defined in article 2(14) in perfectly clear terms. The concept applies, explicitly, to "natural resources and services" – both natural resources and natural resource services. It means, without qualification, the "condition" of the natural resource or natural resource service "that would have existed had the environmental damage not occurred". The "baseline" is not set at some arbitrary date in the past, or at some arbitrary date in the future. Nor does it



extend to some arbitrary span of time. It is deliberately fixed at the moment when the "damage" occurs, no matter what the "condition" of the "natural resource" or the "natural resource service" may be at that moment. Thus one sees in the provisions of Annex I for the assessment of the significance of "any damage with adverse effects on reaching or maintaining the favourable conservation status of habitats or species" under article 2(1)(a), the imperative of making that assessment "by reference to the conservation status at the time of the damage" (my emphasis). And in Annex II, the provisions for the remedying of "environmental damage" are consistently set by reference to the restoration of the environment to its "baseline condition" [para 27].

In brief, deterioration for WFD purposes occurs when one element falls by one class or where the waterbody falls from its baseline condition. We argue that the baseline condition was in existence at 2006/2007 of thereabouts; diachronically there is a clear deterioration and there is, too, a step change downwards on each RBMP.

### **Cunsey Beck**

Cunsey Beck is located to the west of Windermere, descending from its source in Esthwaite Water, then flowing southwards into Dubs Tarn from where it flows southeast to Cunsey Wood and then descends into Windermere. Historically, Cunsey Beck, which should be, in its natural baseline condition, an oligotrophic river, has been known for its populations of white clawed crayfish and salmon which migrate upstream from Windermere into the stream to spawn.

Assessments and sampling taken during the first RBMP cycle confirmed that invertebrates were at high ecological condition in the first cycle dropping to "Good" EC in 2014<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Cunsey Beck/Black Beck | Catchment Data Explorer | Catchment Data Explorer;

Esthwaite water and part of Cunsey Beck are designated as a SSSI.

Upstream from Esthwaite is its feeder stream Black Beck. Black Beck, Esthwaite and Cunsey beck are treated as one waterbody for WFD purposes (waterbody reference GB112073071400; classified as a "river"). That means that WFD waterbody assessments undertaken by the EA are skewed and not generally representative of the waterbod(y's/ies') condition.

As far as the condition of Esthwaite and Cunsey Beck SSSI are concerned, Natural England have classified the site as currently "unfavourable". It is designated for various reasons including lake habitat and species. The feature of "Lowland wetland including basin fen, valley fen, floodplain fen, water fringe fen, spring/flush fen and raised bog lagg" appears to include the upper section of Cunsey beck into which Esthwaite feeds.

The "Comment" from the March 2024 assessment by NE in their " Esthwaite Water SSSI Condition of Features" document for the feature notes that ". ..blue green algae blooms were noted in the north and the south ends of the lake further indicating eutrophication."<sup>4</sup>

The current WFD status of "Cunsey Beck/ Black Beck" – including Esthwaite Water – is "Poor". Invertebrate element is given, surprisingly, as "*Good*" for cycle 3 (the present cycle). However, the last assessment of invertebrates for Cunsey Beck was ten years ago, in 2014 (any assessments subsequent to 2014 have been undertaken on Black Beck). It is important to note that different criteria under WFD should attach to lakes and rivers though here they are taken in combination – not least because three waterbodies with different baseline requirements and targets have been dealt with as one waterbody.

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 $<sup>\</sup>underline{https://designated sites.natural england.org.uk/SiteFeatureCondition.aspx?SiteCode=S1003123\&SiteName=Esthwaite%20Water%20SSSI$ 

The wider history of monitoring and classification is confusing to say the least: in Cycle 1, despite the fact that it begins in 2010, the website "Catchment Data Explorer" for cycle 1 only has data from 2011 in the table provided. The highlight is that it is biologically "Poor" for the first cycle but "High" for invertebrates. Notably, white clawed crayfish were found in 2008 (one year after the EDR came into effect). They have not been found since in the monitoring. In Cycle 2, the biological elements descend to "Bad" but invertebrates are marked at "Good". However, there were *NO* WFD samples taken of invertebrates from Cunsey Beck by the EA since 2014 (the end of cycle 1). Yet, the status of this element is marked as "Good" – and that continues into Cycle 3 – which does not seem to have any foundation in objective monitoring (as no monitoring of invertebrates has taken place).<sup>5</sup>

The analysis provided in the report shows that although the EA data is temporally porous, we can extrapolate from what is known of the assessments since 2006 – and combining with the more detailed data from WildFish – that there has been a notable deterioration which shows a downward trend over time, deteriorated.

The operational monitoring points for Cunsey Beck (as a combined waterbody consisting of two streams and a lake) are at Hawkshead, upstream from the WWTW and pumping station on Black Beck and at the Southern end of Esthwaite and the mouth of Cunsey Beck above the WWTW and at the southern end of Cunsey Beck, 2km downstream from the WWTW, near where the beck enters Windermere.

The operative monitoring point on Black Beck is upstream of the WWTW which means damage is less easy to identify for assessing Black Beck's condition and status.

Much of this means that the EA's assessment for WFD purposes is substantially and objectively unreflective of its condition.

<sup>&</sup>lt;sup>5</sup> See https://environment.data.gov.uk/catchment-planning/WaterBody/GB112073071400

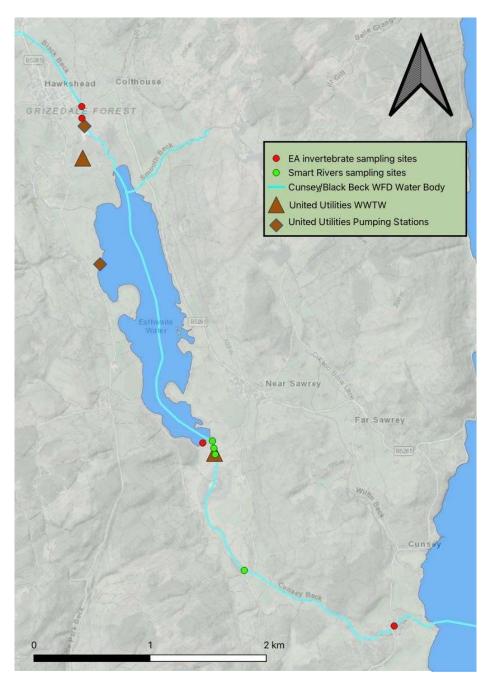


Fig1 shows location of sewage inputs and sampling points for the EA and *Smart Rivers The sewage infrastructure* 



There are several installations owned and controlled by UU which discharge sewage to the Black Beck, Esthwaite and Cunsey Beck.

They comprise 2 pumping stations (PS) and two (Waste Water Treatment Works) WWTWs. The PSs are Hawkshead PS which has an emergency discharge point; Esthwaite Lodge which also has an emergency overflow. Hawkshead discharges to Black Beck and Esthwaite Lodge surprisingly discharges directly into Esthwaite Lake, a SSSI. The Hawkshead Pumping Station passes flow to Hawkshead WWTW. Both Hawkshead PS and Esthwaite PS regularly spill untreated sewage. The data is sporadic. UU submitted summary spill data of 1,283 hours to the EA for 2018 from Hawkshead PS according to the report from WASP.<sup>6</sup> That report also indicates that the total of spills (from data provided by the EA) was 2,138 hours in 2022 (although the WASP report suggests this figure is too high and that the UU figure is 1,433 is probably correct).

Hawkshead WWTW discharges treated effluent into the Black Beck. Although it does not discharge untreated sewage (i.e. it does not have an emergency discharge arrangement – because the emergency outfall is located at the Hawkshead PS) it has one of the highest P limits in catchment and does not have an ammoniacal nitrogen limit. That matters because, again, this stream, like the Esthwaite lake and Cunsey Beck, should carry little in the way of nutrients (they are naturally oligotrophic) and the influx of phosphorous or nitrogen causes increases in diatoms and the disruption of macrophyte and invertebrate (and therefore fish) life in the streams and the lake. But the stream now has influxes of p and ammonia from untreated and treated sewage from two overlows and WWTWs.

Near Sawrey WWTW, which serves a population which is likely to change in times of the season when there are higher numbers of visitors, discharges both untreated and treated

<sup>6</sup> 

<sup>&</sup>quot;264 days with illegal discharges of untreated sewage by United Utilities to Lake Windermere and catchment watercourses 2018-2022" Peter Hammond , Windrush Against Sewage Pollution (WASP)

sewage into Cunsey Beck at the tail end of the designated SSSI and flows for another 2 miles to Windermere. It is a regular "spiller" even in times when the flow to treatment does not justify the discharges which should only be in storm conditions or where there is an emergency.

WASP in their 2023 report highlight that there are periods where the detailed spill data for Near Sawrey WWTW is inconsistent with sewage treatment (FE) and Cunsey Beck levels (reflecting rainfall) meaning that it is discharging more untreated sewage. Even so, even if this is not correct, in 2020, UU submitted data to WASP which indicated a total of 2,059 spilling hours for 2020.<sup>7</sup>

The WWTW at Near Sawrey is permitted to discharge up to 79m3 per day though we do not yet know the actual amount discharged per year, but the parameters which apply to the works allow for unlimited levels of phosphorous, which is a real driver for eutrophication leading to lowered oxygen levels, algal blooms and drops in the number of invertebrates and damage to the ecology of the river, making it a poor habitat for other species including fish.

Overall, then, there is a picture of four sources of treated and untreated sewage in high volumes reaching the streams and the lake. There are no other possible inputs to which cause may be attributed. These are enormous amounts of untreated and treated sewage (with high levels of nutrients) reaching what should be an oligotrophic watercourse. As explained in the report, such pollution causes environmental damage, evident from the invertebrate community compositions in WildFish's SmartRivers assessments.

2022 Pollution	
<sup>7</sup> Ibid	



In the summer of 2022, Cunsey Beck suffered a serious pollution incident that the EA described in their response to the SEPA assessment report as having resulted in a 100% mortality of both fish and invertebrates. The EA said they were unable to identify the source of the pollution but suggested the most likely cause was algae.<sup>8</sup>

Wildfish, which undertakes sampling of invertebrate diversity and abundance as part of its "SmartRivers" programme, was able to investigate and report on the impact.

Insufficient samples were taken by the EA (one upstream of the works and one about 1km downstream) three hours after the incident which was attributed by the EA to an algal bloom in Esthwaite, without proper assessment. No samples of water were taken downstream of the works and no dead fish samples were removed for testing.

Two days after the incident, the EA conducted a biological investigation but no samples were taken within 1km downstream of the works although impact was discovered at the furthest sampling site. Much information was withheld until formal FoI requests were made by WildFish which revealed that SEPA had peer-reviewed the EA's performance which showed serious failings in the investigation and a surprising adherence to not investigating the sewage works. Much of this is discussed in the Panorama documentary *The Water Pollution Cover-up*.9

<sup>&</sup>lt;sup>8</sup> See "EA Investigation NIRS2071050 – SEPA review" – copy with comments from EA and estimate of total fish and invertebrate kill is undated; see also <a href="https://www.savewindermere.com/news/inquiry-into-the-failure-of-water-industry-regulation">https://www.savewindermere.com/news/inquiry-into-the-failure-of-water-industry-regulation</a>; BBC One - Panorama, The Water Pollution Cover-Up

<sup>&</sup>lt;sup>9</sup> See also the Save Windermere link for details <a href="https://www.savewindermere.com/news/inquiry-into-the-failure-of-water-industry-regulation">https://www.savewindermere.com/news/inquiry-into-the-failure-of-water-industry-regulation</a>. This also has a link to the SEPA report on the EA's performance



In Spring and Autumn 2023, working with Save Windermere, WildFish's invertebrate monitoring programme (SmartRivers) gathered water quality data above and below the works on Cunsey Beck. SmartRivers identified that the abundance of pollution-sensitive species (riverflies) dropped by an average of 76% directly below the works compared with appropriate upstream habitat. In addition, the monitoring site below the works had the lowest total number of invertebrates present.

It is clear that in combination with years of pollution to this beck and the upstream waterbodies, this event had caused the stream to deteriorate further.

### Putting it all together

Despite the temporal sparsity of EA data, we are able to show that there has been deterioration in Cunsey Beck using recent SmartRivers data as a proxy for the lack of monitoring by the Envionment Agency since 2014. As indicated in the report, all four SmartRivers sites show a deterioration in the invertebrate community from 'good' status (2014) to 'bad/poor' (2023). The spatial data from SmartRivers monitoring clearly shows the worst impacts to be immediately downstream of the sewage works and highlights how it is essential, and achievable, to prevent these impacts to bolster the ecological resilience of Cunsey Beck. We are not aware of any other sources of pollution or alternative causes. Even if the EA could point to other sources, it is obvious that the largest contributor to the Cunsey Beck of nutrients must be sewage, whether untreated or treated, from the UU sites.

### What we require the EA to do

The Environment Agency must now:

- 1. Investigate the notification and the further evidence provided by WF;
- 2. Notify UU that damage has been caused;
- 3. Set out steps UU must take to prevent further damage from occurring;
- 4. Review all data from UU and not just that supplied on a need-to-know basis by UU
- 5. Set out what UU must do to remediate the damage caused.

We look forward to receiving your substantive response within 21 days, setting out answers to the above. Please acknowledge receipt.

Due to the seriousness of the issue and the local EA's failures in the handling of pollution investigations, we require a direct response from the EA at a national level.

Yours faithfully,

Justin Neal Solicitor For, and on behalf of, WildFish

cc. Secretary of State for the Environment, Food and Rural Affairs