
30 November 2022

To:

Andy Fraser, as Chair of the SAC Rivers Oversight Group

Eifiona Williams, Better Water Quality Taskforce

Ceri Davies, Executive Director for Evidence, Policy & Permitting

Afonydd Cymru (AC) has become aware that Core Management Plans (CMPs) for Special Area of Conservation (SAC) rivers were updated and published by Natural Resources Wales (NRW) in September 2022. As an organisation, we have been asking for these repeatedly over the last 18 months and we are disappointed therefore that they were published with no announcement or update from NRW to stakeholders. We find this particularly surprising given our presence in a number of Welsh Government (WG) and NRW forums and meetings where reference to lack of these plans has been made.

Our over-arching observation is that there has been no measurable improvement in terms of condition status for all of the SAC river features, with the exception of otters. This reflects poorly on the ability of NRW to drive improvement in the natural environment.

There seems to be two fundamental reasons for this:

Firstly, we suspect that NRW does not have sufficient resource to undertake regular monitoring of the features of the site as recommended by JNCC: <https://data.jncc.gov.uk/data/9b80b827-b44b-4965-be8e-ff3b6cb39c8e/CSM-FreshwaterFauna-2015.pdf>

Secondly, there is no coherent structure to the definition of Management Actions for each SAC, no clear tracking and delivery of actions through a published action plan and no clear governance of delivery. As an example, whilst eradication of invasive species may be difficult with no clear funding structures, delivery of water company schemes is well-defined through the Periodic Review process and the National Environment Programme and therefore should be dealt with promptly.

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Monitoring Data

Afonydd Cymru seeks clarity and confirmation from NRW that the required JNCC Guidance is being met with respect to designation and monitoring of a site's condition. The guidance, as detailed in the Appendices of the published CMPs, suggests a three yearly sampling frequency, but that a six-yearly sampling programme will give rise to difficulties in interpreting apparent changes in population attributes. The CMPs refer to data and assessments dating back to 2004, over eighteen years ago. If the reports have been updated, then clearly these data sets can provide no indication of current condition.

Management Actions

The Conservation of Habitats and Species Regulations 2017 (s9(1)) places a duty upon nature conservation bodies such as NRW to secure compliance with the requirements of the Directives. Article 6 of the Directive requires Member States to *"...establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites."*

The revised CMPs refer to substantial actions which Afonydd Cymru consider are dated and have been delivered. There is no clear structure to the reporting of actions, no demonstration that the actions are being tracked and no delivery date for the actions. Worst still, if those actions referenced are removed to address this update, we are very concerned that some rivers have no Management Actions defined on them. We believe that the lack of action by NRW to implement conservation measures necessary for the protection of the site means that the requirements of the regulations and the Directive are not being met. We would welcome a dialogue with NRW and WG to understand why actions are not being pursued and to seek a means of delivery through collaborative effort. These action plans should reflect on other work programmes and actions being undertaken on our rivers, but they must recognise specific actions to deliver Favourable Condition Status (FCS).

The lack of a clear, owned Action Plan can only contribute towards no improvement at designated sites over the last two cycles.

Afonydd Cymru are currently Technical Advisors on the WG Taskforce for Better Water Quality. As part of this role, we contributed towards the First Minister Summit on Phosphate Compliance and Nutrient Neutrality in Wales in July 2022. CMPs are relied upon by public bodies when undertaking Appropriate Assessments and managing activities for which they are responsible. The new role required of local authorities to manage the nutrient neutrality process in Wales is also reliant on the CMP, which should define the Actions required to deliver FCS. It is imperative as part of this process that mitigation for nutrient neutrality does not impact a site achieving FCS. This leaves public bodies open to challenge of their decisions because NRW has not fulfilled its remit under the regulations.

Afonydd Cymru do not consider the revised CMPs fit-for-purpose. We provide an over-arching summary and detail for each river as an attachment to this letter.

As such, we request an urgent meeting with both WG and NRW to resolve how the issues outlined in the attached can be resolved.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Gail Davies-Walsh'. The signature is written in a cursive style with some loops and flourishes.

Gail Davies-Walsh

CEO, Afonydd Cymru

Current Position of SAC Designated Rivers in Wales

Based on the revised CMPs, we conclude the following:

- There are nine SAC rivers in Wales: the Wye, Usk, Tywi, Cleddau, Teifi, Gwyrfai, Glaslyn, Eden and Dee. (Glaslyn has not been assessed by AC due to the nature of its designation and no revised plan by NRW).
- Of the eight rivers, all of them are currently reported to be in Unfavourable Status for all features except for otters (which are in a favourable status across Wales).
- Since the publication of the last CMPs, all rivers have had NO improvement in condition status on all features (with the exception of otters)
- Data used throughout all the SAC CMPs is outdated, dating back to 2004 on most rivers. We do not believe the current application and use of data meets standards set out by the JNCC.
- Recent compliance assessments on phosphates have not been used in all CMPs
- Latest classification on some rivers is 2012, ten years out of date
- The 2015 WFD classifications have been used on some rivers rather than the more recent 2021 classifications.

River Specific Comments – focus on fish features only

Tywi

The outline description for the Afon Tywi makes no reference to water quality impacting designated features.

It states *'achieving conservation objectives requires appropriate management and control of factors'*. It is for this primary reason that Afonydd Cymru would expect to see detailed actions in place for each SAC.

There is no mention at all within the CMP of any forestry impacts to the SAC status. This is despite significant records of acidification in the catchment and agreed programme of liming.

Feature 1: Twaite shad *Alosa fallax* and Allis shad *Alosa alosa* Unfavourable Unclassified

'The report by Garrett et al (2012) reported the spawning distribution of shad as being favourable, based on kick sampling carried out between 2007 and 2012. This represents a change from the previous spawning assessment in 2007 (Noble et al, 2007), which reported this attribute as unfavourable' - these data are therefore out of date. We would expect NRW to be actively monitoring SAC designated features to achieve improvement and that reports, research and conclusions should be based upon a recent dataset.

The Llangadog Creamery is confirmed as a significant barrier to migration on the Tywi. Yet, under this feature it states *'Llangadog weir has become broken down enabling easier passage by all fish species'* – improvement seems to have been delivered by lack of maintenance rather than action.

The report outlines other outcomes from Review of Consents (RoC) including diurnal variation impacts from Welsh Water abstractions on the Tywi and issues with screening at the sites. We believe Welsh Water has delivered all actions from RoC.

It states that temperature impacts from regulation releases from Llyn Brianne to the Afon Tywi are also an issue, whilst later on in the report confirming that this is not the case. The outcome of the RoC concluded that Llyn Brianne does not impact the temperature due to natural limitations in the catchment. We are concerned that this could prevent important solutions in the catchment and more importantly, necessary releases from Brianne particularly to support fish migration during periods of low flow.

'Anglers occasionally fish for shad' – it is illegal to fish for both Allis and Twaite Shad. If NRW are aware of illegal angling, why has this activity not been prevented?

'Exploitation of shad is currently unregulated and controls are being considered through the review of freshwater fisheries legislation' – outdated, prohibited under Byelaws

'Commercial fishermen also take shad as a by-catch, with whitebait and shrimp fishing being of particular concern. Changes in fishing methods need to be promoted to minimize captures, while

both anglers and trawler men should be encouraged to return alive any individuals caught’ – we would suggest this has been copied from a different CMP with no understanding of the fishing type on the Tywi. The bycatch is by seine and coracle nets. Short of banning Seine and coracle fishing (a separate issue) it is difficult to envisage what changes to fishing methods might minimise the catch.

‘Artificially enhanced densities of other fish may introduce unacceptable competition or predation pressure and the aim should be to minimise these risks in considering any proposals for stocking’ – please clarify what fish species they are, how they are being introduced and what controls are in place.

Feature 2: Sea lamprey *Petromyzon marinus* Unfavourable Unclassified

‘Data on lamprey distribution were collected by Environment Agency Wales (EAW) during National Fisheries Monitoring Programme electrofishing surveys conducted from 2007-2010 in the Afon Tywi’ – data so old cannot be considered appropriate

‘Sea lamprey therefore fail the population attribute based on Common Standards Monitoring (CSM) and can be considered as being in unfavourable condition. However, this result should taken in the light of limitations to the survey technique and the fact that sea lamprey ammocoetes may be residing in parts of the riverbed that are currently inaccessible for survey. More work is required to investigate sea lamprey survey methodologies, in the future. DIDSON results hint to sea lamprey using the Tywi to an as yet unknown degree’ – we agree, which is why we would expect condition status to be determined on recent data and the CMP to be updated accordingly.

Feature 3: Brook lamprey *Lampetra planeri* and river lamprey *Lampetra fluviatilis* Unfavourable

‘However the distribution of larvae within the catchment failed the performance indicator and it is for this reason together with the impacts from flow depletion (see below) that their status was recorded as unfavourable in 2004 (APEM, 2005)’ – data too old on which to base condition status

Feature 4: Bullhead *Cottus gobio* - Unfavourable

‘Data for the Afon Tywi has been collected from the EAW National Fisheries Monitoring Programme in 2007-2011.’ - has NRW undertaken no monitoring of bullhead? How have WFD fish classifications been undertaken?

Feature 5: European otter *Lutra lutra* Favourable

‘Otter are currently in favourable condition (Morgan, 2005) based on distribution’ – does not reflect the National Wales Otter Survey undertaken in 2021?

Management Actions for the SAC

The management section for Lamprey states *‘presence of artificially high densities of salmonids results in unacceptably high levels of predation’*. We would ask NRW to qualify this statement in a catchment that is at risk of extinction for populations of salmonids. We believe the use of the

word '*artificial*' makes reference to historical stocking of the catchment. If this is the case, we would expect NRW to update and revise data within the report to reflect changes in management. This should be a matter of course with any CMP revision and update.

It states that the FCS is hindered by '*escapes from fish farms*'. We are unclear as to which fish farms this references or the detail of the impact. However, our understanding is that this fish farm is closed and that the CMP is not up to date.

There is frequent reference to measures at Welsh Water assets. We believe these to be complete and therefore not contributing towards meeting FCS. If they have not been delivered, then given the Periodic Review process with Welsh Water and the National Environment programme obligations we question why this has not yet been delivered.

Teifi

'In the past, invertebrate depletion due to sheep dip pollution and acidification from forestry had significant impacts' – Afonydd Cymru disagree that these issues and impacts are historical. In fact, the CMP also notes *'Upland coniferous forestry plantations in parts of the upper catchment, including the Groes, Berwyn and Brefi catchments, adversely affect the run-off and sediment characteristics and water quality of the river. In a few locations there are also problems with toxic run-off from abandoned metal mines. Measures should be taken to restore the hydrological characteristics of headwater areas including wetland functions'*. NRW own significant forestry in Wales and should be ensuring that no water quality and sediment issues are as a result of their own operations. Where identified, actions should be detailed and delivered within the CMP.

Feature 1: Petromyzon marinus Status of Feature: Unfavourable, Unclassified (2005)

'Sea lamprey monitoring undertaken in 2004' – data over 18 years out of date

'Entrainment in water abstractions directly impacts on population dynamics through reduced recruitment and survival rates' – entrainment was part of the RoC process and Welsh Water delivered this through the NEP.

Feature 2 and 3: Lampetra planeri and Lampetra fluviatilis Status of Features: Unfavourable, Unclassified (2005)

'Brook/river lamprey monitoring undertaken in 2004' data over 18 years out of date

Feature 4: Salmo salar Status of Feature: Unfavourable, Unclassified (2007)

'This has led to the Teifi being classed as "at Risk" in 2019 and is predicted to remain "at Risk" in 2024 (ICES, 2020)' – we welcome updates being reflected on the Teifi CMP. We are not clear why the condition status indicates it is still based on 2007?

It states *'current consents for discharges likely to impact site should be monitored, reviewed and altered'*. We would ask NRW why, if consents are in place which are known to be impacting the SAC FCS, actions have not been undertaken to modify or remove the consent, for the protection of the SAC river? We can trigger a new RoC process if necessary.

In Unit NRW 1, it details that FCS cannot be met due to *'unsustainable exploitation'*. NRW action is that this is 'kept under review'. Kept under review is also written as an action next to increased boat activity. Why are direct actions on exploitation and boat activity not being implemented if they are recorded as impacting the SAC?

In Unit NRW 2, the plan indicates that Llechrhyd entrainment impacts FCS. Welsh Water have delivered this action as part of the NEP.

NRW Unit 4 details that sheep dip is a significant impact to the waterbody, but states no action needed.

Cleddau

Sea, River and Brook Lamprey – *‘A low level of confidence is reported for the water quality attributes as over half the units in the sites do not have any monitoring survey sites’* – this is the responsibility of NRW

‘Pollution events in the catchment are thought to be an issue’ – can NRW therefore please demonstrate what additional actions have been undertaken on the Cleddau to prevent this?

‘The impacts of barriers to migration have been largely overcome since installation of the fish passes at Haverfordwest and Canaston Bridge’ – a fish pass has **not** been installed at Canaston. It is an identified future action on the 4 Rivers for LIFE programme.

‘The impact of flow depletion downstream of a number of abstractions was assessed in the Review of Consents process. Abstractions which may have an impact on the features of the SAC have passed to stage 4 for options appraisal’. The outcome of these assessments is in progress’ – as above, we believe this to be completed and if not, why not given the timescales since the review took place?

Lamprey habitat assessments seems to be solely based upon a 2005 APEM report.

‘If appropriate, land bordering the SAC can be entered into a Living Rivers Agreement for improvements such as stock exclusion and buffer strips, especially on reaches adjacent to intensively managed livestock grazing or arable land’ – Afonydd Cymru welcome this commitment. This action is not referenced in any other river CMP, and in fact on some rivers it is detailed that NRW has no regulatory ability to take such action. Can NRW please detail how many Living Rivers Agreement are in existence in Wales?

‘A project looking at Catchment Sensitive Farming on the Deepford brook began in 2006/07 running through until the end of the 07/08 financial years’ – this project is sixteen years out of date. Have no other actions been undertaken?

‘More recently projects targeting all farms in the catchments of the Cartlett, Anghof and Syfywry tributaries have been undertaken’– please clarify what these projects are and who delivered them?

Bullhead – *‘In the first reporting cycle bullhead feature failed to meet the target for flow but river morphology, population density and age structure were not assessed. In the second reporting cycle water quality attributes passed but the flow attribute failed. The population attribute and river morphology were not assessed. Hence the overall assessment was Unfavourable – unclassified. A low level of confidence is reported for the water quality attributes as over half the units in the sites do not have any monitoring survey sites. In addition, there are concerns regarding the water quality of the Eastern and Western Cleddau. Pollution events in the catchment is thought to be an issue.’* This details that in two cycles, NRW have failed to assess all necessary attributes to fully classify the conservation status of bullhead. Data and pollution incidents text is consistent with comments made by Afonydd Cymru for Lamprey.

Management Actions

These have not been updated since 2021.

'The currently unfavourable condition assessment of river lamprey and seal lamprey suggests'...'
further survey work is required' – there has been no change in designated status on this
waterbody. What surveys

'Diffuse pollution and sediment inputs from agricultural land management have negative
impacts upon water quality - NRW have identified this reach as having particularly poor water
quality with no fish recorded during the latest round of monitoring' – Actions needed states NO
for Unit 1010.

Many management units in the catchment state the same text as above regarding diffuse pollution but no actions are detailed.

'Reductions in flows downstream of Llys y Fran may lead to drying out of lamprey spawning
areas' 'The Abstraction at Walton Mill has the potential to reduce levels and wetted perimeter
within a 250m reach between the points of abstraction and discharge. This may impact upon
lamprey habitat and may also hinder the migration of sea and river lamprey through this section.
there is one further abstraction identified under the RoC process - a fish farm immediately below
the reservoir - this has passed through to a stage 4 options appraisal' -all delivered as part of
RoC outcomes.

Further management actions are also detailed for Pont Hywel and Llys y Fran. Again, all delivered as part of RoC outcomes. Therefore, we do not believe any of the management actions are appropriate and furthermore none of the aforementioned 'issues' can actually be impacting the FCS.

Usk

Feature classifications in the Usk catchment have not been updated since 2012. The management requirements detailed by feature are therefore outdated and irrelevant and Afonydd Cymru sees no point raising specific comment to the text. No part of the CMP for the Usk reflects the current position.

Considerable partnership work has been undertaken by the Usk and Wye Abstraction Group (UWAG), a stakeholder group involving the Wye and Usk Foundation, NRW, Welsh Water and the Canal & Rivers Trust for the Usk. This Group designed new licence proposals for the River Usk to address issues identified in relation to the operation of the reservoir releases, abstraction and the management of the Canal. Afonydd Cymru await patiently finalization of the revised abstraction licences and Operating Agreements that need to be in place.

'Investigations into the extent and impacts of this effect and options for mitigation are ongoing by the Canals and Rivers Trust at the time of writing. This abstraction will be brought within the licensing regime in due course' – this is legally required to have resolution by December 2022. Licences on the river Usk and resolution of reservoir releases has been subject to investigations since 2012. It is ten years since this process commenced.

The dry weather of 2002 underlines the importance of securing licences and agreements in this Group. Regulation releases did not occur in line with the proposals and some times were ceased at times of significant low flow. Abstractions for the canal continued despite the low flow and would be subject to stopping under new proposals.

'Llanfoist and Crickhowell bridges are considered to be the most significant artificial barriers to fish migration in the Usk. Management to reduce or remove the effect of these barriers is therefore a high priority' – these were high priority actions from 2008 RoC process. In 2022, there is still no resolution on the barriers. The Wye and Usk Foundation detailed them for inclusion on the 4 Rivers for LIFE programme and Afonydd Cymru look forward to their resolution finally in the next three years.

'Factors which failed in the relevant site units in 2012 were biological General Quality Assessment for Biology, soluble reactive phosphorus, suspended solids and flow' – it took until 2021 for phosphate compliance failure to be reported by NRW. Between 2012 and 2021, significant further degradation has occurred.

'There are no particular management actions identified for this feature except the achievement of the Conservation Objectives for the watercourse' – we feel this is a primary reason why the Usk conservation objectives have only declined. Every SAC river should have detailed management actions in place.

All management actions are outdated.

Wye

Feature 1 Sea lamprey *Petromyzon marinus* Status of Feature: Unfavourable, Unclassified

'The currently favourable condition assessment suggests that there are no strongly adverse factors influencing this species.' Text on page 45 states that the current status for Lamprey is both Unfavourable and Favourable – which is it?

Features 1, 2 and 3 – *'Entrainment in water abstractions directly impacts on population dynamics'* – we believe this was identified as part of the RoC process and actions were identified for Welsh Water to deliver as part of its statutory obligations under the NEP. We believe therefore that these actions have been delivered. If not, 14 years of entrainment has occurred whilst waiting for action linked to a NEP which is delivered through a five year process.

Feature 4 Shad – *'The current unfavourable status results from a precautionary assessment of feature abundance, and from the presence of adverse factors, in particular the potential for damaging flow depletion and entrainment/impingement in water intakes (Maitland and Hatton-Ellis 2003, CCW 2007'* - we believe that all these actions were delivered as part of RoC. If this is the case, the current reported status does not reflect the current status on the river. What are the current impacts to Shad and what is the correct condition status?

'Anglers occasionally fish for shad' – it is illegal to fish for both Allis and Twaite Shad. If NRW are aware of illegal angling, why has this activity not been prevented?

'Exploitation of shad is currently unregulated and controls are being considered through the review of freshwater fisheries legislation' – prohibited under Byelaws

'Commercial fishermen also take shad as a by-catch, with whitebait and shrimp fishing being of particular concern. Changes in fishing methods need to be promoted to minimize captures, while both anglers and trawler men should be encouraged to return alive any individuals caught' – again, under Byelaws

'Artificially enhanced densities of other fish may introduce unacceptable competition or predation pressure and the aim should be to minimise these risks in considering any proposals for stocking.' – could NRW please provide evidence of what 'artificial enhanced densities' there are? If this is the case, noted on Bullhead as well, why have NRW not taken action to cease this operation? We note also that no reference is given to piscivorous birds despite a number of actions having been taken in this respect.

'Measures to address these problems include the establishment of buffer zones on reaches adjacent to intensively managed livestock grazing or arable land' – could NRW please detail and provide maps of where buffer zones have been established?

'The Wye and Usk Foundation through their pHISH project have carried out much of this work in recent years' – the pHISH project was completed in 2006, we hardly call this recent.

'The impact of existing barriers in the Wye should be assessed on a case-by-case basis' – we do not think this reflects well the Fisheries Restoration programme. We would also underline that barriers to migration need to be considered on a catchment, and not a case-by-case basis.

Management Actions

1802 Entrainment of fish may occur in the abstractions at Monmouth. Excessive headroom in abstraction licences has potential to cause flow depletion – concluded under RoC process

7729 Water quality is generally good but there could be some issues with agricultural pollution?- this should not be a question and should be known. The potential impact of increased flow regulation from Elan reservoirs on populations of river jelly lichen on bedrock in this reach should be researched and monitored – this was concluded as part of RoC process.

From 7728 onwards, many management units state *Water quality is generally good but there could be some issues with agricultural pollution?* Many other questions are detailed with unknown data, cause or status. Simply, this makes the CMP not fit for purpose as this information is required in order to ascertain the management actions needed for improvement.

7739 - This catchment has been identified by monitoring as one of particular concern for diffuse pollution impacts, in combination with the point source impact from Talgarth STW. The diffuse pollution is partly associated with a waste management operation and anaerobic digester regulated under an Environmental Permit. Enforcement action is being taken in connection with the latter. Talgarth STW has been upgraded to achieve a proportionate reduction in the phosphate loading to the river.

Given recent discussions between NRW, Fish Legal and the Gwent Anglers we are very surprised to see this recorded as a management action. Have NRW changed their position with regard to the AD plant and the Llynfi?

We welcome repeated acknowledgement by NRW that NRW-managed forestry land is impacting the water quality of the River Wye. This is a priority for resolution and immediate actions should be taken on NRW assets to reverse the impact and decline to the SAC.

7757 onwards – *'Diffuse pollution from agriculture is identified as a particular problem affecting this unit. This is partly due to the spreading of manure from intensive poultry units which are proliferating in the Ithon catchment. Other than through agricultural cross compliance, these operations are currently outside of regulatory control.'*

This management actions somewhat contradicts the following statement in December 2020:

Gavin Bown, NRW mid-Wales operations head, said: "There were concerns that phosphate levels were associated with poultry units, but we have not found a direct connection between the two elements."

NRW said in their letter dated 30 May 2022 to Fish Legal: *"In so far as the River Wye is concerned, NRW has not found any evidence of a direct connection between poultry farms and waterbodies failing SAC targets. The overall pattern of failures found through the assessment of routine water quality monitoring data in the River Wye does not support the hypothesis that poultry units are the cause of failures of the JNCC phosphorus targets failures on the River Wye. This is because there is no direct relationship between the location of poultry units and the location of failures."*

Delivery of improvement on the River Wye is wholly dependant upon absolute clarity as to the cause of impact, status of the current condition and management actions to resolve. We disagree entirely that NRW have no regulatory powers to take action. We would suggest that the Wye CMP is compared to other SAC rivers which indicate powers and actions that could be undertaken. We would also suggest that NRW considers its powers under the Environment Act (Wales) 2016 Regulation 16 and Regulation 20 and under S16A of the Conservation of Habitats and Species Regulations, in collaboration with WG.

Ranunculus

“The present unfavourable status of the feature results from reduced water quality in some tributaries of the Wye e.g. parts of the Ithon and Llynfi sub-catchments, due mainly to diffuse pollution from agriculture.”- this implies that the condition status of this feature are intrinsically linked to poultry and land spreading. This is contradictory to the statements above. Whilst this lack of clarity exists, no action is being undertaken on the river and there is no clear plan for SAC improvement.

The River Wye CMP is not consistent with the 2021 Phosphate Compliance Report. The P assessments in 2021 highlights the Trwffyd and Llynfi Dulas (2 x Llynfi tribs) as having very high levels (they are in red). Yet in this CMP, the Llynfi Dulas is described as “...*in comparatively good condition*” and there is no mention of water quality problems in the Trwffyd.

Gwyrfai

Feature 1: Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoteo-Nanojuncetea, Unfavourable: Recovering

'This is due to an historic moderate acidification of Llyn Cwellyn since the 1860s. This trend in acidification may be reverting, but patterns need to be monitored. Some concerns over localised nutrient enrichment, sedimentation and from continued water abstraction, Burgess et al. (2006).' Above concerns raised in 2006 – no evidence of any further investigation detailed.

Reference to diatom analysis spanning 1980-1995 – Has no further analysis been done since then?

'Future condition assessments should examine whether J. bulbosus and Sphagnum spp. continue to increase in abundance as a result of nutrient enrichment and sedimentation or whether they decline in abundance, perhaps as a result of a continuing reversal in the historic acidification trend or a reduction in mineral in-wash.' No evidence of assessments being carried out. If acidification is not being monitored, then a claim of 'continuing reversal' is unsubstantiated.

Feature 2: Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation, Favourable (2007)

'The most recent published vegetation survey was that of Scarlett et al. (2003).' Data on which the assessment is based is almost 20 years out of date.

Water quality monitoring is upstream of Llanfaglan sewage treatment works (STW). *'Therefore additional investigations will be initiated to ascertain potential water quality impacts of the STW discharge on the most downstream stretch of the Gwyrfai.'* Have any investigations been done?

'Invasive non-native plants can have a detrimental impact on this feature. Removal of Impatiens glandulifera and Fallopia japonica is a priority (Scarlett et al 2003, p23).' Invasive species identified in 2003, has any action been taken?

Feature 3: Atlantic Salmon: Unfavourable unclassified

'The current unfavourable status results from a precautionary assessment of feature distribution and abundance, in particular the results of salmon catches and juvenile surveys, and from the presence of adverse factors, in particular flow depletion.' Flow depletion should have formed part of the RoC process. If this is the case, then, given the timeframes, this action should have been completed.

'The relatively demanding water quality and spawning substrate quality requirements of this feature mean that reduction in diffuse pollution and siltation impacts is important.' No management actions for improving water quality and no evidence of anything being done.

Feature 4: Floating water-plantain *Luronium natans*

'The habitat is reported as in favourable condition for extent and abundance of peripheral floating water-plantain (2005 SAC Monitoring Report). This status is conditional upon a deeper water survey being undertaken within the next reporting round (2006-2011) to establish the extent and abundance of underwater population(s) of this plant within Llyn Cwellyn.' - Based on 2005 assessment, 17 year out of date. Has deep water survey been done?

'The favourable condition status is also conditional upon the water quality status being maintained as defined in the conservation objectives above.' - therefore, should the conditions status not be unfavourable?

Feature 5: European otter

'The overall status of the otter populations within the SAC is considered to be unfavourable (Liles, 2006).' A National Wales Otter Survey took place in 2021. Why is the condition status not based upon recent data?

Dee

Feature 1: Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation

“During the next monitoring cycle (2007-2012) the feature will be monitored against JNCC guidelines, probably using revised methods. This will provide NRW with an improved condition assessment but will not give a clear indication of the extent of the feature throughout the site. It is therefore likely that there will also be some form of rapid, walk over (or rather next to) survey, to provides an indication of where the feature is likely to be present.” Outdated

Feature 4: Sea lamprey *Petromyzon marinus*

“The low numbers recorded by APEM (2006)....”

*“Currently, we don’t have sufficient information about *Petromyzon marinus* in the Dee SAC to know the size or dynamics of its population”*

It is disappointing given the Dee LIFE project that conservation status and data has not been updated.

Feature 8: European otter *Lutra lutra*

‘The status of “Favourable” is based on the results of a survey by Philip Morgan undertaken in 2003 (Morgan 2004)’ – again, this has not been updated by subsequent surveys

Feature 9: The lake & aquatic / emergent vegetation

‘During the summer the fluctuations are smaller and less frequent because the lake level is maintained between 1.1m and 1.5 m above the sluice gate cill level by EAW’ – should be updated to NRW

Common theme throughout the units:

“In general, for this SAC there is currently insufficient data to identify management requirements specific to individual units.”

Afonydd Cymru cannot find a single feature that has had a recent survey (in the past 15 years) as a summary of Dee CMP

Eden

Feature 1: Freshwater pearl mussel: Unfavourable declining

'The monitoring survey carried out by NRW in 2016 found that: • The adult population density has declined, and the spatial extent has contracted since 2003. • There is no evidence of recruitment to the population. • Availability of suitable habitat continues to be a problem, in particular levels of siltation.' The survey is already 6 years old.

'Continue the work of the Pearls in Peril project to restore the habitat suitability for juvenile pearl mussels,..' Project finished in 2016 – how has it improved the habitat and has led to population increases? New data?

Feature 2 Atlantic Salmon: Unfavourable – no change

'The salmon population was assessed in 2012 (Milner et al,)'

'The barriers to fish migration within the catchment need to be mapped and an assessment made of the impact of removing / mitigating the effects of artificial ones.' – the catchment has been mapped and there is only barrier that we are aware of

Feature 3: Floating water-plantain *Luronium natans* favourable

'Luronium natans has been recorded at only one location on the Afon Eden; along a stretch of river from Pont y Grible (SH708304) for a distance of approximately 650m upstream.' Date of survey?

Feature 4: Otter Unfavourable

'This assessment was made by consultant Geoff Liles in 2006 for the whole Mawddach catchment of which the Afon Eden is a sub-component.' Out of date – does not account for the 2021 Wales Otter Survey

Feature 5: Active raised bog: Unfavourable

'The active raised bog was assessed as “unfavourable” after a site monitoring survey in July 2003.'

'A repeat vegetation and hydrological monitoring survey would be valuable to assist with restoration advice measures to restore the hydrology of the raised bog habitat and to manage it sympathetically.'

Potential measures outlined, but no evidence of further surveys or action taken.

Action plan summary provides an extensive list of issues, some of which very generic with few concrete actions.