Dear Dr Marsh-Smith,

REPRESENTATIONS MADE TO STATUTORY CONSULTATION: NRW PROPOSALS FOR NEW ROD AND NET FISHING BYELAWS IN WALES (EXCLUDING CROSS-BORDER RIVERS)

Thank you for your response to the NRW statutory consultation on proposed new fishing byelaws in Wales. We have liaised with many fisheries stakeholder groups on these difficult matters over the past 2 years prior to this consultation and we value the advice and comments we received. These helped us to formulate the proposals that have been the subject of the recent consultation.

If you wish to respond to this letter, please do so as soon as possible, and by 31st December 2017.

We invite you to withdraw your objection on the basis of the further information in this letter, however if we do not hear from you by the above date we will assume that you wish your objection to remain in place.

This letter refers to your representation on either the net or rod fishing byelaw proposals (or both), i.e. not the cross-border rivers (Dee and Wye) byelaw proposals which are the subject of a consultation currently ongoing until February 5th.

Please note that If you have submitted a representation that you also wish to be considered within the cross-border consultation, we will have already sought your confirmation for that to happen.

The proposals for Wales (excluding the cross-border rivers Dee, Severn and Wye) were published, together with associated documents, on 22nd August and the consultation lasted for 12 weeks before closing on 14th November. We received 549 representations to our proposals and we are now in the process of reviewing and responding to all those who provided contact details. We will also provide a response to representations made anonymously, or without sufficient contact details, through a statement that will be published on our website.
This letter now provides our response to your representation and seeks to cover the points that you have made.

We believe you have raised points relating to

- Stock assessments:
  - Catch returns
  - Exploitation rate

- Proposed netting byelaws

- Proposed rod byelaws

- You also make a series of observations under Section 4

If we have inadvertently omitted any matter you might have raised within your representation, please let us know (contact details are provided at the end of this letter) or alternatively refer to our website where you will be able to find responses to the full range of issues raised.

Our responses to the issues you have raised are as follows.

**Stock assessments**

**Catch returns**

As you know, national systems operate for the collection of catch statistics across England and Wales. These include:-

1. for net fisheries, a logbook and carcass tagging system introduced in 2009 to control the sale of illegally caught fish and
2. for rod fisheries, a single national licence and catch return and reminder system operating in a largely consistent manner since 1994.

Both systems replaced a series of regional and river based systems of variable quality – some of which extend back to the 1900s or even earlier.

When assessing compliance with Conservation Limits, declared rod catches have been raised to estimate total catches on each river. In most years, a (national) catch declaration rate of ~90% (a correction factor of 1.1) has been applied for this purpose, although higher correction factors (~1.3) have been used in the last couple of years to account for reporting issues linked to the on-line catch recording system. These correction factors are a different value to the ~60% of rod licence holders that make a catch return each year - because not all types of licence holder (e.g. full, short-term, junior) carry equal weighting in rod catch reporting.

On this basis, catch statistics are considered to provide good indicators of the numbers of adult salmon and sea trout returning to our rivers. This is further evidenced by:-

1. the common patterns present in sometimes disparate catch records collected over many years, and
ii. the strong relationships that exist between rod catches and fishery-independent estimates of run size obtained on our rivers with traps or counters.

As such catch records can and do provide unique historical insight into the abundance and composition of salmon and sea trout stocks (e.g. required to explore and understand the effects of long-term processes – such as climate change – which may play out over decades). They are also clearly vital to current stock assessment procedures.

It is important however that our catch recording systems are regularly scrutinised and adequately resourced to maintain the quality of the catch statistics we collect. This routinely happens. We recognise a risk that if stocks continue to decline, or if anglers become more reluctant to submit their catch data, the quality of that data (on which our stock assessments are so dependent) would deteriorate. To address this, and to strengthen the evidence base which underpins our assessments and subsequent decision making, we and others (the Environment Agency, Cefas and ICES) are exploring ways to improve our assessment procedures - including making better use of juvenile electrofishing data as a catch-independent source of information.

We note your recommendation that for larger rivers at least catches should be recorded and reported by riparian owners and clubs. This is not without its limitations and problems of course, however we will consider this.

**Exploitation rate**

The exploitation rate for each of the principal salmon rivers is selected by local technical fisheries leads and is that considered most appropriate for local circumstances.

In larger rivers, including the Wye and Usk, the Dee rate is used as it is contemporary, and reflects river size and the typical salmon stock composition. We know this is not perfect, however it is better than for many other rivers. Elsewhere in Wales rates derived from past telemetric work and the current Teifi fish counter are used.

This is an area of ongoing work and development and we hope to be able to make some advances on this in future. The developments need to take account of increasing habitat access, change in run composition, river flows and the influence on catch etc.

**Proposed netting byelaws**

We thank you for your partial support of our proposals and hope that we can allay any concerns you have to enable you to fully support the measures.

You are correct in your statement of our objectives.

We note that the total catch of salmon by Welsh nets is low, and on average over the last 5 years is less than 200. Some responders are under the impression that the catch is far greater, and have mistaken the combined England Wales catch (sometimes exceeding 20,000) as indicative of the scale of net catch in Wales! Welsh net fisheries mainly target sea trout of which the average catch is around 1,600.

Our overall position is that only sustainable stocks may be fished and management must seek to ensure that they remain sustainable. Our approach is that we urgently need to reduce exploitation to zero for salmon whilst stocks are ‘At Risk’ or ‘Probably At Risk’

Our primary concern is the status of our salmon stocks, all of which give serious cause for concern. Whilst we also have concerns about many of our sea trout stocks they are not presently as vulnerable as those of salmon, and therefore some harvest can take place. However, many need to be restored to sustainability and so some control is required.
In considering our overall approach, we have attempted to treat both rod and net fisheries equitably, in line with past Welsh Government requirements.

We have proposed measures to contribute to a return to sustainability. Under these:

a. all salmon would be released
b. the delay in season opening until 1st May would protect early running generally larger multiple spawning sea trout. Salmon which would have been caught and released will not now be caught at all.
c. all netting would cease on 31st August, after which the catch of salmon has been generally similar to the low number of sea trout caught.

We note your comments about comparisons of C&R survival with the Hampshire Avon draft net fishery (now closed). Most fish were caught a littler later than you suggest, however we note that it may not be directly comparable.

This is not a perfect solution, however we believe that if handled appropriately survival of fish caught in nets can be high. For example salmon and sea trout used in tracking studies on the Tywi and Dee in the 1980’s and 1990s were caught by licenced nets men in the estuary. These fish survived and were tracked throughout the river system to the spawning season commenced. There were similar observations from trammel-net caught salmon in the Wye in a 1980 telemetry study which showed that all fish survived after release.

It has been suggested that coracle fish are ‘gilled’ and won’t survive. However, coracle nets are more similar to trammel or tangle nets designed to tangle around the fish. As such the risk of injuries are less, but there is still a risk of suffocation associated with the operculum being covered, if the fish is not retrieved quickly. Once a fish is in the net, it is retrieved to the coracle, and is not left in the net where it may become meshed and might suffocate.

Note that none of the licenced net fisheries use gill nets.

Recent published studies suggest a mortality rate of 24% for Pacific salmon from tangle net fisheries with reported similar mesh sizes from the Western United States. A 95.4% immediate survival and 80.1% long term.

It is also important to note that some of the coracles and seine nets have been practicing C&R since the introduction of the National Spring Salmon Byelaws in 1999, from which a number of net fisheries were exempted. This is an important precedent, and we have no evidence to suggest that C&R fishing has been unsuccessful. We also have no observations of fish mortalities, either immediately within nets or through fish succumbing to their injuries later in fresh water.

We note your support for the 60cm slot length for rod-caught sea trout. These fish are indeed valuable spawners and are also, as you note, reported to be unsuitable for the table. We have endeavoured to protect these early running sea trout from excessive exploitation by nets through the proposed amendment to the netting season.

We note your recommendations for a further amendment to netting seasons, and that the 60cm slot length should be reduced to 51 cm (20 inches) to save more large females and we will consider this.
Finally on this subject, closing both rod and net fisheries to eliminate C&R mortality in both sectors is an option we have considered; however, we are mindful to maintain the socio economics associated with these fisheries.

**Black Rock**

You refer to the position with the Black Rock lave nets, questioning issues around the presumed mixed stock status, the ability here to practice C&R and the divisive nature of the fishery.

The Black Rock Heritage Lave Net Fishery is one of several net and fixed engine fisheries operating within the Severn Estuary. The fisheries extend from the Black Rock site operating within the Wye Fishery just west of Chepstow, to the lave net, seine net and putcher fisheries operating in the English Severn Estuary and extending east to Gloucestershire. The fisheries in England have been demonstrated to exploit a mixed stock of salmon comprising fish destined to return to the rivers Severn, Wye and Usk. However no such study of fish caught at Black Rock has been done. Although this fishery operates close to the estuary of the Wye, it is feasible and likely that salmon caught there might be from any of the 3 stocks referred to above.

NRW acts on the principle that sustainable stocks may be exploited by both rods and nets – we do not seek to end net fishing on principle. We also seek to act consistently and in the respect of Black Rock this means that we need to take account of the regulation of net and trap fisheries operating elsewhere in the estuary.

Implementation of full catch and release fishing on the River Usk, matching it to the existing regime on the Wye, will achieve an increased spawning escapement. However it is important to note that C&R does result in a low level residual mortality of fish. These are fish that may be badly hooked, may have been played for a long time, or may have been caught during environmental conditions that do not support good survival rates, e.g. high water temperatures. We estimate that up to 20% of fish returned might die after release, depending on the quality of the C&R experience.

The estimated angling-related residual mortality of fish has been used to set an allowable catch in the upper Severn Estuary net and putcher fisheries. This principle underpins the arrangements for ongoing operation of the Black Rock fishery, where the catch has been limited under the terms of the lease. This is both consistent with arrangements elsewhere in the estuary, and represents a degree of equity between rods and nets whilst allowing the acknowledged heritage operation to continue. If it was deemed necessary to reduce rod exploitation to zero, for example in a scenario where stock status warranted rod fishery closure, then there would be no such residual mortality and therefore there would be no justification to maintain a net fishery.

**Proposed rod byelaws**

Again, we are grateful for your support of the proposed prohibition on the use of bait for salmon fishing.

We note however your views on the use of worm for sea trout fishing. Listening to the feedback we received from some of our public engagements, we are aware that many fisheries are primarily focused on sea trout. They may be difficult to fish with other methods such as fly and spinning except in high flows, and in several cases the stocks they are fishing for are sustainable. Our proposal is to allow bait fishing to continue, and it is acknowledged that there will be some bycatch of salmon, with an associated potential mortality. It is therefore a compromise to allow these methods to continue.

We believe that introducing measures to restrict the size of hook and to a single worm will help reduce, though not eliminate, the bycatch of salmon. This will allow sea trout fisheries to effectively continue for sea trout whilst reducing the risks to salmon.
Regarding the use of prawn and shrimp we have again listened to feedback with stakeholders and heard evidence gathered. As a result of this we acknowledge the majority of fish caught on shrimp or prawn are hooked in the front of the mouth and therefore have a high probability of survival once released.

However, we are also mindful that shrimp/prawn fishing can be particularly effective in low water conditions during the summer when water temperatures may be above 18 degrees Celsius.

Physical injury caused by hooking is the most important predictor of post-release fisheries mortality, followed closely by water temperature and length of exposure of the fish to the air. We accept that salmon caught during the summer when water temperatures reach or are above 18°C have a significantly reduced probability of surviving C&R.

Proposals for hook patterns

We agree that the issue of hooks, barbs and sizes is not as straightforward as many might think. We are committed to getting the right outcome but at the least cost or inconvenience to fishermen.

We note your suggestions:

- Trebles larger than size 12 should be banned
- Double hooks are permissible on flies
- Certain spinning patterns (notably Flying Cs) should only be permissible with a single hook.
- A move to voluntary use of barbless hooks

The difficulty in a legal-binding definition of a Flying C is a problem, and we are considering defining lures as “rotating vane spinners” – we would be interested in your comment on this.

We will consider your comments carefully.

Your main point here is that the Usk should not be included in the proposed statutory C&R provisions. Although this would make it the only river in Wales without statutory C&R (if indeed that proposal is confirmed), that is not the point in question. As the Usk LFG heard, the reason we are including it is because the exceptionally concerning juvenile data. The apparent failure of the 2015/16 spawning season with very scarce fry observed in 2016 and reiterated by scarce parr in 2017 (noting that WUF appear to have mis-identified fry as parr) means that adult abundance will be severely depressed in 2019 and 2020. It is this that we are addressing in our proposals for the Usk.

We have heard from other responders that the timescale of proposals for the Usk should be re-considered – and we shall do so.

Section 4

We note your comments here, form differential sea survival of the range of salmon stock components to the various pressures acting on fish in freshwater.

We note and are enthused by the performance of the Wye and Usk and note that this reflects the range of initiatives in the rivers which you set out, and which NRW and its predecessors have supported. The end to substantial estuary netting, brought about through regulation and changes to licencing processes followed the temporary cessation that WUF secured and – together with the spring salmon byelaws has probably made a major contribution to the turn-around on the Wye at least. The other initiatives will also have contributed significantly. As you know we cite the result
son the Wye as evidence of what can be achieved. We have had several comments during this consultation that criticise NRW for the comparative dearth of funding on other rivers compared to that on the Wye and we offer the observation that local ambition and action can influence these outcomes.

We agree that more can be achieved on the Wye, and of course this is exemplified by the large egg deficit that still exists there.

Finally for this section, we concur with your view that causative factors adversely affecting fish in freshwater are urgently and rapidly addressed. We hope that over the coming year you will see evidence of how we propose to take action.

Moving on, we agree with your earlier statement that rivers should be managed on a specific whole (integrated) catchment basis.

You will have noted that, taken together with the ongoing consultation on proposed byelaws for the cross-border rivers (Dee and Wye), NRW is proposing statutory C&R fishing for salmon across the whole of Wales (including maintaining existing C&R measures on the Wye). One suggestion made by many is that river-specific measures should have been promoted. However as noted in the Technical Case, 20 of the 23 principal salmon rivers in Wales are assessed as either ‘at risk’ (8 of 23 rivers) or ‘probably at risk’ (12 of the 23 rivers) of failing to achieve their targets until at least 2021. The exceptions to this are the Usk, where serious risk has been identified for juvenile salmon, the Wye (where an existing package of measures is already in place) and the Severn (for which the Environment Agency take the management lead, with proposals from them anticipated in January). We are therefore responding to the broad extent of failing rivers across Wales in arriving at our proposed set of measures. All 21 of our rivers (excluding the Wye and the Severn for reason noted above) are performing poorly. It is also logical to assume that salmon stocks in the smaller non-principal salmon rivers are also performing poorly and we have therefore extended our proposals to these rivers. A river-specific approach has therefore identified the same concerns across Wales and this has resulted in a consistent set of management proposals.

We have demonstrated that we are prepared to consider river-by-river differences in our proposals for sea trout, where 6 rivers are excluded from the early season statutory C&R proposals as their stock vulnerability is considered to be low.

We would like to thank you again for the time and effort you have put into providing your response and to clarifying your points and observations. This is not an easy subject, and we are aware that it is an emotive one for many. We hope that this letter addresses the points you raised and that you have found the content helpful.

If you wish to respond to this letter, please do so as soon as possible, and by 31st December 2017.

We invite you to withdraw your objection (netting byelaws – part; method controls – part) on the basis of the further information in this letter, however if we do not hear from you by the above date we will assume that you wish your objection to remain in place.
Next Steps
We are in the process of responding to all those for whom we have sufficient contact details. We have analysed the issues and points raised and have taken account of all proposals for refinement and change to the proposed measures. This will inform our report on the consultation which we will place on our website.

Once we have a final proposal for new byelaws, which may either be those advertised or an amended version as a result of representations received, we will at the next opportunity seek the approval of the NRW Board to apply to the Welsh Government Cabinet Secretary for confirmation. The Cabinet Secretary may, after due consideration, approve our application or may decide to approve with amendments required by Welsh Government, or may decide not to approve the proposals.

Once we have a decision we will publicise this as soon as practically possible, together with catchment summaries of the implications of the new measures.

I am sure that you will agree that the health and sustainability of our important stocks of salmon and sea trout must be the important focus of our efforts. This is a good example of our statutory roles as set out by Welsh Government in their Natural Resources Policy:

(http://gov.wales/topics/environmentcountryside/consmanagement/natural-resources-management/natural-resources-policy/?lang=en)

Although our consultation has focussed on the protection of adult fish during their migration to spawn and re-populate rivers with their progeny, it is the environmental conditions in the river that must be the focus of our efforts going forwards. Saving fish so that they may spawn only makes sense if the conditions in the river are of sufficient quality for survival of their progeny. Our ambition must be for each river to be optimised for smolt production (thereby securing benefit and the wellbeing of all fish species and other river fauna). NRW takes this extremely seriously and has been greatly dismayed by the well-publicised pollution incidents that have damaged populations of young fish. I hope you will see in our response to the concerns expressed in the consultation process, and in our future action, that NRW is actively addressing these matters using the resources available to us. Anglers will be key partners among those who scrutinise what we do.

The measures we are proposing are a key part of the strategy which is to safeguard and maximise the numbers of fish that survive to spawn. This action will safeguard these iconic species for the benefit of future generations.

Yours sincerely,

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