# CLOSING SUBMISSIONS ON BEHALF OF NATURAL RESOURCES WALES

# A. INTRODUCTION

- This Inquiry is into The Wales Rod and Line (Salmon and Sea Trout) Byelaws 2017 and The Wales Net Fishing (Salmon and Sea Trout) Byelaws 2017 (hereafter referred to collectively as the All Wales Byelaws).
- On 8th August 2018 the Cabinet Secretary to the Welsh Government wrote to NRW<sup>1</sup> notifying that:

"Given the level of response to the consultation, the number of outstanding objections to the byelaw proposals and the nature of the correspondence I have received, I have decided the most appropriate course of action will be to conduct a local inquiry into these byelaw proposals.

A local inquiry will allow independent scrutiny of the proposed Byelaws, the objections which have been made and the evidence presented by all parties and enable me to reach a conclusion as to how best to proceed."

3. Procedurally, the Inquiry has been conducted by the Planning Inspectorate Wales under the procedures laid out in the Water Resources Act 1991, and in the spirit of the Town and Country Planning (Referred Application and Appeals Procedure) (Wales) Regulations 2017. This means that deadlines have been imposed for the submission of written evidence to enable all parties a fair chance to consider the opposing case and then all such evidence has been properly tested in open inquiry. Where these deadlines have not been met NRW has done its best to accommodate late evidence in the

<sup>&</sup>lt;sup>1</sup> NRW/INQ/18.

interests of the smooth and time-efficient running of the Inquiry.

- 4. NRW has engaged seriously and diligently in this process throughout, conscious as it is that the All Wales Byelaws it promotes would result in a temporary change in the law for approximately 15%<sup>2</sup> of Welsh anglers and a change in practice for that proportion of these anglers not already engaged in voluntary Catch & Release ("C&R") with associated method restrictions (estimated, on the basis of objector evidence to be somewhere in the region of 86% for the return of salmon in 2017).<sup>3</sup> Netsmen have also already indicated a willingness to engage in voluntary C&R. In 2017, coracle netsmen returned all salmon caught (a 100% voluntary rate).<sup>4</sup>
- 5. The versions of the All Wales Byelaws before this Inquiry have been comprehensively tested. During their development, NRW engaged with the angling community by attending over 50 local place based meetings with Local Fisheries Groups.<sup>5</sup> NRW has also held a three month long public consultation period, during which it held 10 local meetings<sup>6</sup>. NRW reviewed and analyzed the large volume of consultation responses it received, and responded to each representation. NRW made a number of substantive

<sup>&</sup>lt;sup>2</sup> See PG RPoE (NRW/1R/2.22) which, at Figure 3 relies on a figure of 15%. See also the Tech Case (APP/4/44, Table 3) which adopts a figure of 10% for 2016. In any event it is a small minority of Welsh anglers and netsmen who would be affected by the Proposed Byelaws.

<sup>&</sup>lt;sup>3</sup> For example, this figure is quoted in CPWF/2, p 4 and AT/1, p 2. It does not solely reflect the voluntary rate as it includes mandatory elements (the Spring Salmon Byelaws and mandatory catch and release on the Wye and Taff & Ely, see APP/4, p 113).

<sup>&</sup>lt;sup>4</sup> IH/INQ/1. It is noted however that Mr Ian Harries explains in his written evidence that feeling the announcement of the proposed season changes prescribed by the byelaws was 'unfair', the coracle fishermen on the Teifi decided to keep some of the salmon caught in 2018. He clarified in XX (Day 12) that he agreed with the All Wales Byelaws, expected them to come into force and reverted to catch and kill salmon fishing on the assumption that 2017-18 would likely be his last opportunity to do so for a decade.

<sup>&</sup>lt;sup>5</sup> APP/8.1-9, 12.1-12.47, 41-43.9.

<sup>&</sup>lt;sup>6</sup> Somewhat surprisingly several of the objectors who appeared at the Inquiry and raised alternatives to the All Wales Byelaws, did not engage in this consultation process or otherwise with NRW. Reverend Cawthorne, Mr Andrew Davies and Mr Len Walters are examples of such objectors (see XX of each on Day 12).

amendments to the All Wales Byelaws as a result.7

- 6. The All Wales Byelaws have also been comprehensively scrutinized by external experts. The Technical Case, which included alternatives considered by NRW, was assessed by Mr Ian Russell,<sup>8</sup> and its underlying statistical methodology analyzed by Dr Jon Barry,<sup>9</sup> of the Centre for Environment, Fisheries and Aquaculture Science ("Cefas"). Both experts are independent from NRW. And both endorsed the All Wales Byelaws without reservation.
- 7. Finally as a result of this Inquiry process the All Wales Byelaws have now been subject to comprehensive testing through cross-examination ("XX").<sup>10</sup> Furthermore, the Inquiry has also heard and seen evidence from interested parties who broadly expressed support for the All Wales Byelaws, such as fishery scientist Dr Guy Mawle, experienced angler Mr Creighton Harvey, Dŵr Cymru Welsh Water and other organizations such as Salmon and Trout Conservation Cymru ("STC") and Afonydd

<sup>&</sup>lt;sup>7</sup> NRW/1, para 7.5. E.g. the draft byelaws were amended so as to permit shrimp and prawn fishing with barbless or de-barbed hooks (including trebles <7mm gape) from 1<sup>st</sup> September. This change was made following advice received on typical hooking in the mouth, and in order to address issues raised concerning disabled and elderly anglers. Further changes were also made to hook controls. E.g., the use of artificial lures is restricted to one single hook only to a maximum gape of 13 millimetres. A list of the amendments made to the All Wales Byelaws following consultation is set out in an Appendix to the January 2018 Board Paper: APP/25-27.

<sup>&</sup>lt;sup>8</sup> NRW/4. APP/4, p 90. During XX, Mr Karl Humphries acknowledged, contrary to assertions made in X-in-Chief, that the Technical Case had included an analysis of alternatives (including voluntary measures), which had been assessed by Mr Ian Russell (Day 11). <sup>9</sup> NRW/3.

<sup>&</sup>lt;sup>10</sup> Some objectors have repeatedly alleged an inequality of arms as between themselves and NRW. As noted by the Inspector (Day 12), this is not a matter which is relevant to the issues for determination. In any event, there is nothing to suggest that objectors could not have equipped themselves with professional representation had they (or those they claimed to speak for, which according to Mr Nicholson and Mr White's closings, include '*businesses, private syndicates and numerous individuals*' and '*21 angling clubs*' respectively) chosen such a course. It is worth noting in this regard that many of the objectors are members of the Angling Trust and could presumably therefore have availed themselves of the legal arm of that organization, Fish Legal. Mr Mark Lloyd, CEO of the Angling Trust and Fish Legal (see GM/4) appeared without the assistance of his legal team and without making it available to others but nonetheless felt able to join in the chorus of cries of a tilted playing field (X-in-Chief, Day 7). Besides, objectors could, had they chosen to, have sought professional representation through other means, just as they instructed and paid for two statisticians.

Cymru.<sup>11</sup>

- 8. It was common ground between NRW and objectors that salmon and sea trout stocks in Wales have been generally suffering an ongoing decline. It is therefore generally agreed that there is a problem.<sup>12</sup>
- 9. Many objectors also accept, as a matter of principle, that it is important that stock levels do not fall to unsafe levels, and that declines are reversed. During XX, Mr Reuben Woodford (Afon Ogwen Anglers/Campaign for the Protection of Welsh Fisheries "CPWF") when asked whether the outcomes that NRW and CPWF seek are the same (i.e. the reversal of sock decline) replied:

...there is a divergence there in intent in relation to the outcomes, but in relation to increasing the number of salmon, essentially we are one and the same.<sup>13</sup>

- 10. And Mr Chris White commented during XX that 'all the objectors want to reverse the decline.'<sup>14</sup>
- 11. During the course of this Inquiry, the scope of the disagreement between NRW and the parties objecting to the All Wales Byelaws has become clearer. Essentially, notwithstanding some parties' distrust of the stock assessment and river classification processes, there is nothing between NRW and the majority of angling objectors (including CPWF and the Angling Trust) except for the mandatory nature of the measures. There was even less between NRW and the netsmen, who generally (and

<sup>&</sup>lt;sup>11</sup> The support of Dr Mawle and Afonydd Cymru is caveated.

<sup>&</sup>lt;sup>12</sup> For example Mr Chris White (CPWF) observed (in Examination-in-Chief ("X-in-Ch") that 'on the receiving end, we have seen the steady decline in numbers of fish we catch.' (Day 5). Even Mr Andrew Nicholson accepted in XX that the overall trend in stocks was downward, and despite his original claim that 'many, many rivers' were seeing an increase in stocks could not name any river other than the Dyfi (Day 11). It is acknowledged that not all anglers accept the extent of the decline presented in NRW's evidence. During XX, Mr Peter Gerald John was asked as follows 'Q. Do you accept there has been a decline in fish stocks? A. Yes, a lot of anglers think there has been a decline in fish stocks. Every angler will tell you the current season is the worst there has been ever been. Saying this since 1974, and it's their belief that there has been a decline .....'

<sup>&</sup>lt;sup>13</sup> Day 7.

<sup>&</sup>lt;sup>14</sup> Day 6.

very reasonably) acknowledged the urgent need for the proposed measures but sought to preserve the month of April for their fishing activities<sup>15</sup>.

- 12. It was generally accepted that C&R is a reasonable, necessary and proportionate response where stocks are vulnerable. However, it was not accepted that C&R (and accompanying method restrictions to maximise the survival of caught and released fish) should be implemented through mandatory regulation. This, essentially philosophical argument, is the crux of the objection to the All Wales Byelaws put forward by members of the angling community who have submitted evidence to this Inquiry.<sup>16</sup> Given the importance of what is at stake, it is submitted that this is a consideration which deserves little if any weight.
- 13. NRW have submitted to this Inquiry considerable detailed evidence in support of the All Wales Byelaws. Key documents include its Technical Case, its various main, rebuttal and supplementary proofs of evidence ("PoE", "RPoE" and "SRPoE") and relevant peer-reviewed academic papers. However, a significant number of objectors (the vast majority in fact) acknowledged, during their oral evidence, that they had not read NRW's Technical Case or its submitted written evidence, let alone the supporting third party documentation, even in instances where such material was expressly produced in order to address individual objector concerns.<sup>17</sup>

<sup>&</sup>lt;sup>15</sup> XX of various netsmen, Day 12. It is notable that the general approach of the netsmen's engagement with NRW's evidence, and the Inquiry process, was and promises to continue to be more cooperative with NRW, despite the commercial nature of their craft and the different impacts the All Wales Byelaws would have on some of them.

<sup>&</sup>lt;sup>16</sup> On Day 7 Mr Lloyd (Angling Trust) (in X-in-Ch) summarised this as follows: '*it*'s about the right to take a fish even if you choose not to.' Similarly, on Days 4 and 5, Mr White referred to this being a 'fundamental right... we have a right to remove fish for the table to eat.' Similarly, in his X-in-Ch on Day 6, John Eardley explained this as follows '*it*'s a strange one, *it*'s difficult to explain, *it* is complex. But the reality is that, for whatever reason, you start to question your own motives...there are many anglers who, when you take away the option of [taking] one fish, stop fishing. I'm not saying it's right, not saying it's wrong.'

<sup>&</sup>lt;sup>17</sup> A particularly egregious example occurred on Day 10, during XX Mr Andrew Renwick acknowledged that he had not read Mr Davidson's RPoE (NRW/2R) which specifically addressed an issue only he had raised in his written evidence relating to the Welsh Dee. Further, on Day 7, Mr Woodford made criticisms relating to the enforceability of the byelaws, but during XX acknowledged that he had not read Mr Gough's RPoE (NRW/1R) which addressed that very issue. Numerous other witnesses, including Mr Lloyd, referred to the need for action against agricultural pollution but were

- 14. This is regrettable, as the overwhelming majority of concerns raised by objectors are addressed in that documentation and this evidence has been available for a considerable period of time. An unfortunate consequence of the failure of objectors to consider NRW's written evidence in advance was that inquiry time was spent directing individual witnesses to it and to the comprehensive answers provided therein to points they nonetheless raised before the Inspector.<sup>18</sup>
- 15. Further, there has been a sorry dearth of objective scientific evidence put forward by objectors, despite numerous opportunities to provide such evidence.<sup>19</sup> The vast bulk of objectors' cases has been simply the assertion of opinion, and anecdotal evidence. There has been a general reluctance to accept the expert scientific evidence relied upon by NRW, and a great deal of suspicion and skepticism has been expressed toward that evidence by objectors during the course of the Inquiry despite the absence of contrary evidence upon which to base such skepticism.<sup>20</sup> Perhaps the most stark example of this dogged and baseless rejection of sound science was expressed by Mr Andrew Nicholson in his X-in-Ch:

No amount of evidence that is thrust in my hands - it's fundamental this - will deter me away from the fact that these byelaws are wrong.<sup>21</sup>

completely unaware of the content of Mr Robert Vaughan's evidence which expressly deals with this topic and notably in his case nonetheless (for some reason) took no personal action to report incidents. <sup>18</sup> For example, Mr John Eardley (CPWF) acknowledged that he had not read the NASCO guidance on the risks and benefits of stocking and hatchery activities (ACC/39) before giving evidence on the subject to the Inquiry (Day 6). Further, in oral evidence, Mr Lloyd (Angling Trust) made criticisms relating to pollution before the inquiry, but then acknowledged that he had not read the evidence of Mr Vaughan (Day 7).

<sup>&</sup>lt;sup>19</sup> On Day 11, during both X-in-Ch and XX, Mr Nicholson said that he *'could have produced reams and reams'* of scientific evidence, and that it would have been *'very easy'* to do so. However, he did not avail himself of the many opportunities he in fact had to do so. When asked in XX whether he could name any academic article that supported his position, Mr Nicholson stated that he could not.

<sup>&</sup>lt;sup>20</sup> For example, during X-in-Ch and in response to a question from the Inspector noting that NRW had cited a number of studies in support of its position, Mr Nicholson responded simply and unhelpfully that '*I just don't agree with it.*' (Day 11). Similarly, in his closing statement, Mr Nicholson contended that the scientific evidence had been '*tinkered*' in order to suit NRW's case, referring to it pejoratively and without basis as '*supposed fishery science*.' Likewise, when confronted in XX with Mr Davidson's evidence (NRW/2R, para 3.16 onwards) which explains why redd counting is no longer used, Mr Humphries simply stated '*that's just his opinion, we have a different opinion*.' (Day 11)

<sup>&</sup>lt;sup>21</sup> Day 11. This was reiterated by Mr Nicholson in his closing statement. Indeed, Mr Nicholson went even further, by presenting evidence which involved distortions of the truth, and misrepresentations.

- 16. In order to make most efficient use of limited Inquiry time NRW made clear that it would not cross-examine every objector on all topics where such an approach would result in unhelpful repetition or where a particular witness lacked the relevant expertise in order to assist. Moreover, NRW noted that a number of objectors adopted the evidence of CPWF,<sup>22</sup> which was presented by Mr Chris White, Mr Mike Ashwin, Mr John Eardley and Mr Reuben Woodford.<sup>23</sup> In particular, this evidence was supported by Mr Mark Lloyd (Angling Trust), the representative body of anglers in England which is seeking a similar status in Wales. NRW therefore sought to test common arguments made by objectors through XX of the representatives of CPWF, where appropriate.
- 17. And as with XX so too in these Closing Submissions, NRW has sought to avoid repetition and focus instead on identifying the key elements of the evidence as tested, necessary to determination whether the All Wales Byelaws are (to adopt the formulation of issues set out by the Inspector both at the PIM and at the commencement of this Inquiry), "necessary, proportionate and reasonable in view of the unsustainable condition of salmon and sea trout stocks throughout Wales".

## B. SUMMARY OF NRW'S CASE

18. NRW's case, in a nut shell, is that the All Wales Byelaws meet all three of the requirements of necessity, proportionality and reasonableness and that this can be demonstrated by providing, on the basis of all of the evidence before the inquiry,

For example, Mr Nicholson contended (in both his written evidence (AN/1a) and opening statement (Day 1) that 62% of NRW employees did not agree with NRW's proposals. This was completely inaccurate, and a total distortion of the survey he relied upon, which related to internal staffing reorganisation (AN/2). His rendition of the interview he and Mr Eardley conducted with NRW officers, produced at a time when there was no transcript or easy means of verifying his account, provided further numerous examples of inaccurate reporting.

<sup>&</sup>lt;sup>22</sup> CPWF/1-19. For example, Mr Mark Frey stated that he supported CPWF's evidence '*in broad principle*' (on Day 8).

<sup>&</sup>lt;sup>23</sup> Representatives from CPWF were present most hearing days of the Inquiry. Mr White, in particular, was present at the Inquiry on every hearing day.

answers to the questions it set out in its Opening Submissions, as follows:

- a. First, the nature and extent of the problem is severe. The majority of salmon and sea trout stocks in Wales are falling below their management targets, and are deemed unsustainable because of the risk of ongoing decline to unsafe stock levels.
- b. Secondly, there is a range of factors that contribute to the decline of salmon and sea trout. It is recognized that anglers are not primarily responsible, but in the current context of the severity of the depletion of the stocks, the killing of fish is unsustainable and contributes to the problem. Anglers and netsmen must therefore be part of the solution.
- c. Thirdly, NRW's solution is its proposed broad range of measures to address the numerous complex causes of this problem, and ensure that land and water are managed sustainably. The All Wales Byelaws are an integral component of this suite of measures as they would preserve vital breeding resources whilst other threats to relevant habitats are addressed. The All Wales Byelaws would be effective because they would reduce the intentional killing of fish, which would maximize the number of fish that survive to spawn each year: (i) even relatively small numbers of fish are crucial in order to recover stocks in as short a time as possible, (ii) there would be accumulated benefits over spawner numbers over time and (iii) there is a further imperative to preserve the fittest fish who have managed to survive natural mortality factors.<sup>24</sup> It is therefore essential that spawning stocks are maximized if populations are to have the best chance of recovery.
- d. Finally, less onerous restrictions would not suffice. NRW recognizes that there is a risk that the proposed measures would lead to a decline in angling and nets fisheries activity, and has therefore sought to ensure that the socioeconomic

<sup>&</sup>lt;sup>24</sup> Elaborated at paras 111 to 120 below.

benefits associated with the angling and nets fisheries are protected, in so far as is commensurate with securing the savings in stocks required to reduce ongoing pressure on them.

- 19. NRW therefore submits that the All Wales Byelaws are necessary, proportionate and reasonable.
- 20. NRW repeats that it is not proposing to prevent or stop fishing. Anglers and netsmen would still be able to fish for salmon and sea trout, as well as (so far as more than 85% of Welsh anglers are concerned) other species wholly unaffected by the All Wales Byelaws.
- 21. However, the 15% of so of anglers who would be affected by the All Wales Byelaws would no longer be able to intentionally kill sea trout or salmon on 'at risk' or 'probably at risk' rivers. This is because allowing anglers the freedom to continue to intentionally kill those fish would further risk the dwindling stock of these species, and would introduce inequality between those who voluntarily practice C&R and those who do not (including so called 'fish mongers' who kill everything they catch).<sup>25</sup> The All Wales Byelaws would require this effort be made by members of the angling community (or at least that small minority who do not already engage in practices which would be compliant with the All Wales Byelaws), as a contribution to the solution of depleted salmonid stocks.
- 22. Angling has been generally in decline over the past few decades. Ultimately, the greatest deterrent to angling is the lack of availability of fish.<sup>26</sup> The All Wales Byelaws would therefore aim to protect and improve the state of fisheries in Wales now and for future generations.

<sup>&</sup>lt;sup>25</sup> Mr White XX, Day 6. Mr Nicholson adopted the same term in XX (Day 11).

<sup>&</sup>lt;sup>26</sup> NRW/1R, para 2.22, figure 3. See also paragraphs 198 to 201 below.

## C. POLICY AND LEGISLATIVE BACKGROUND

#### Natural Resources Wales' role and responsibilities

## Overview

- 23. NRW was formed on 1 April 2013 when it took over the management of the natural resources of Wales. It resulted from the amalgamation of the Countryside Council for Wales, Environment Agency Wales and the Forestry Commission Wales and also assumes certain other functions formerly undertaken by Welsh Government.<sup>27</sup>. NRW uses powers provided through Welsh, UK and European legislation to achieve the right outcomes for the protection of the environment in Wales and sustainable management of natural resources.
- 24. The legislation and policy background are set out in the evidence of Ms Ruth Jenkins.<sup>28</sup> The following section seeks to avoid repetition of that evidence which is not in any event understood to be in dispute. Objectors did however raise two issues that bear on the policy and legislative framework and which require clarification:
  - a. First, it has been suggested by some objectors that the implementation of legislation is a choice that has been unnecessarily preferred over leaving anglers to regulate themselves voluntarily. For example, Mr Woodford stated in X-in-Ch that *'the Byelaws are engineered, they are a choice'*.<sup>29</sup>
  - b. Secondly, the Angling Trust and CWPF (in particular) have referred to the approach taken by the Environment Agency ("EA") in England, and inferred that it should be adopted in Wales by NRW.<sup>30</sup>

<sup>&</sup>lt;sup>27</sup> The Natural Resources Body for Wales (Establishment) Order 2012; The Natural Resources Body for Wales (Functions) Order 2013.

<sup>&</sup>lt;sup>28</sup> NRW/5; NRW/5R.

<sup>&</sup>lt;sup>29</sup> Day 7. The contention that the byelaws are 'engineered' was repeated by Mr Woodford in his closing statement. See also the evidence of Mr White (Days 5-6); CPWF/6.

<sup>&</sup>lt;sup>30</sup> See, for example, the X-in-Ch of Mr Lloyd (Day 7). See also AT/1, para 3; AC/1, paras 11-13; AR/1, paras 7-12, 54, AN/a, paras 1b and 1e.

25. These two issues are addressed in turn.

#### NRW's duties to act

26. NRW is under both general duties that require it to take action to conserve natural resources, and specific duties in relation to the protection of fisheries. The All Wales Byelaws are therefore not an engineered choice as labelled by Mr Woodford, but rather, are necessary in order for NRW to comply with its legislative duties. Indeed, if it fails to take the appropriate action then it would be in breach of these duties.

#### General statutory duties

27. NRW has general conservation duties under recent Welsh legislation (Environment Wales Act 2016 and Well-being of Future Generations (Wales) Act 2015), as well as under EU directives and international obligations under conventions.<sup>31</sup>

#### Sustainable Management of Natural Resources

28. In her PoE, Ms Jenkins has observed that the introduction of the Environment Wales Act 2016, which requires NRW to pursue sustainable management of natural resources ("SMNR") represents a shift towards a more integrated approach to addressing the pressures and drivers of ecosystem change, rather than just its effects.<sup>32</sup> Ensuring that natural resources are sustainably managed is a complex task, which requires NRW to apply the full range of its relevant powers.<sup>33</sup>

#### The Well-being Goals

29. Further, the Well-being of Future Generations (Wales) Act 2015 ("the 2015 Act") imposes further duties on NRW.<sup>34</sup> In particular, section 3 imposes a 'well-being duty' on all public bodies in Wales. NRW has set well-being objectives in accordance with

<sup>&</sup>lt;sup>31</sup> APP/4, pp 20-25; NRW/5 (the PoE of Ms Ruth Jenkins provides further background as to the role and responsibilities of NRW).

<sup>&</sup>lt;sup>32</sup> NRW/5, para 4.1.

<sup>&</sup>lt;sup>33</sup> Mr Robert Vaughan, X-in-Ch (Day 5).

<sup>&</sup>lt;sup>34</sup> LEG/23.

this duty, which are presented in the evidence of Ms Jenkins.<sup>35</sup>

- 30. NRW now seek to comply with these policies through the implementation of the All Wales Byelaws. Although recreational fishing can support individual well-being, the adherence to 'catch and kill' at the expense of the pursuit of a resilient ecosystem would not deliver SMNR. Moreover, in accordance with the objective of not compromising future generations' ability to meet their own needs, it is necessary to strike a balance between protecting well-being in the short term, and securing and enhancing well-being in the longer term.<sup>36</sup>
- 31. As explained by Ms Jenkins in response to questions from the Inspector during XX by Woodford, in exercising its duty and delivering its general purpose, NRW doesn't have to try and deliver every single well-being goal. Critically, all these points of wellbeing are underpinned by healthy and resilient natural resources. Different weight is attached to these goals, but ultimately, if resource of salmon and sea trout is not protected, all goals could be detrimentally impacted.<sup>37</sup>

#### Fisheries-specific statutory duties

- 32. NRW has statutory fisheries duties under the Salmon and Freshwater Fisheries Act 1975. Moreover, pursuant to section 6(1) of the Environment Act 1995 NRW is required to promote the conservation and enhancement of the natural beauty and amenity of inland waters and of land associated with such waters; the conservation of flora and fauna which are dependent on an aquatic environment; and the use of such waters and land for recreational purposes.
- 33. In particular, section 6(6) of the Environment Act 1995, requires NRW 'to maintain, improve and develop fisheries of salmon, trout, eels, lampreys, smelt and freshwater fish'. NRW have made the All Wales Byelaws also in order to comply with this duty.

<sup>&</sup>lt;sup>35</sup> NRW/5, para 4.8. These objectives are set out in NRW's State of Natural Resources Report ("SoNaRR"), POL/19.

<sup>&</sup>lt;sup>36</sup> NRW/5R, para 4.3; POL/18.

<sup>&</sup>lt;sup>37</sup> Day 4 (22.01.19), X-in-Ch of Ms Ruth Jenkins.

#### The 1998 Ministerial Direction

34. Principal Salmon Rivers, of which there are 23, were designated under a Ministerial Direction in 1998 ("the Direction"), which also obliges NRW to assess and set targets for the conservation of stocks.<sup>38</sup> This is set out in the evidence of Mr Gough.<sup>39</sup> The Direction continues to apply to NRW, and its current procedures follow it.

#### The Precautionary Principle

- 35. There are other high-level principles which guide NRW's work. For example, the need to apply a Precautionary Principle arises from Article 191 of the Treaty of the European Union, ("the TEU")<sup>40</sup>. This principle informs the manner in which decisions should be made where there is uncertainty about the (environmental) consequences. Generally, the requirement to prove no harm overrides the requirement to prove harm. In other words to the extent that a public authority, such as NRW, may err, when the environment is at stake, it should err on the side of caution.<sup>41</sup>
- 36. The Precautionary Principle applies to NRW's approach to the conservation, management and exploitation of natural resources, and has in turn informed its proposed All Wales Byelaws.<sup>42</sup> The importance of the precautionary principle is not in dispute. For example, during Mr White's presentation on behalf of CWPF, he acknowledged that *'we do not deny that under the precautionary principle that actions must be taken'*.<sup>43</sup>

#### The use of byelaws to pursue conservation duties

37. NRW's aim is to ensure that it has sustainable stocks to protect, through the

<sup>&</sup>lt;sup>38</sup> LEG/13.

<sup>&</sup>lt;sup>39</sup> NRW/1, paras 3.1-3.2

<sup>40</sup> LEG/7.

<sup>&</sup>lt;sup>41</sup> This principle is reflected also in guidance relating to the conservation, management and exploitation of salmon as adopted by the North Atlantic Salmon Conservation Organisation ("NASCO") [POL/13] and its Contracting Parties and that relating to the management of salmon fisheries [POL/14]. See also POL/12.

<sup>&</sup>lt;sup>42</sup> NRW/5, paras 6.1-6.2.

<sup>&</sup>lt;sup>43</sup> Day 5.

application of best-practice science and management, the sustainability of our natural resource of wild salmon and sea trout stocks in Wales.

- 38. Pursuant to section 210, and paragraph 6 of schedule 25 to the Water Resources Act 1991, NRW have the power to make byelaws generally for the purposes of the better protection, preservation and improvement of salmon and sea trout (among other species).44 It is in the exercise of these powers that NRW seeks to make the proposed 'All Wales Byelaws'<sup>45</sup> on the basis of its detailed technical case,<sup>46</sup> the results of its comprehensive consultation process <sup>47</sup> and evidence seen and heard at this Inquiry.
- 39. Many objectors accept, as a matter of principle, that it is important that stock levels do not fall to unsafe levels, and that declines are reversed. Therefore, a point arrives at which meaningful action must be taken by NRW to prevent ongoing decline to biologically unsafe levels. Based on the available evidence, NRW submits that this point is now. To fail to act would be a dereliction of duty. The requirement of necessity is therefore forcibly met.

#### **Differences between Wales and England**

- 40. The second issue can be dealt with very briefly. NRW operates under specific legislation that is distinct from the Environment Agency ("EA") in England, where there is no directly equivalent body with so broad a range of duties and functions. This is addressed in detail in the RPoE of Ms Ruth Jenkins, and so is not repeated here.<sup>48</sup> Of course, both the 2016 Act and 2015 Act, referred to above, apply to Wales only.
- 41. The Angling Trust, in both its oral and written evidence, has referred to the measures being introduced in England, and inferred that the same approach should be taken in

<sup>&</sup>lt;sup>44</sup> LEG/6: Pursuant to these provisions, NRW also have power to make byelaws for the better execution of the Salmon and Freshwater Fisheries Act 1975, and for the purposes of better protection, preservation and improvement of other species, including eels, lampreys, smelt, shad and freshwater fish. 45 APP/32-33.

<sup>&</sup>lt;sup>46</sup> APP/3. 47 APP/2.

Wales.<sup>49</sup> When asked whether he had read NRW's response to this argument in Ms Ruth Jenkin's RPoE in XX, Mr Lloyd stated that he *'could not recall'*, but gave the impression that he was unfamiliar with it. Moreover, when probed further, he accepted that the situation in Wales is different to England.<sup>50</sup>

## D. THE NATURE AND EXTENT OF THE PROBLEM

42. It is NRW's case that the All Wales Byelaws are necessary to address the poor state of salmon and sea trout stocks.

#### Identification of a problem

- 43. As indicated, it is common ground between NRW and many objectors that salmon and some sea trout stocks in Wales have been suffering an ongoing decline.
- 44. There has, however, been a degree of cynicism expressed (principally by the CPWF, which is shared by others, including the Angling Trust) as to the reliability of the data sources NRW relies upon for assessing salmon and some sea trout stocks. Notably this cynicism has not been substantiated by any expert evidence but instead appears to be based on personal observations and beliefs or anecdotal evidence.
- 45. This cynicism was exemplified by the evidence of Mr Andrew Nicholson, who rejected wholesale the expertise and scientific evidence relied upon by NRW. In his PoE, Mr Nicholson repeatedly misquoted his interview with Mr Gough to suggest that NRW considered that stakeholders were better placed to make decisions in relation to salmon and sea trout stocks, and the riverine environment more generally, than NRW (despite Mr Gough's express statement that he *'did not want to be misquoted on this'*).<sup>51</sup> When challenged in XX, Mr Nicholson implausibly contended that the anecdotal experience of some objectors was more reliable than the expertise of NRW fisheries scientists:

<sup>&</sup>lt;sup>49</sup> AT/1; Day 7.

<sup>50</sup> Day 7.

<sup>&</sup>lt;sup>51</sup> AN/1a, p 4; AN/INQ/1, para

[the objectors] know a vast amount of science. John Eardley has forgotten more than NRW know...the stakeholders know those river systems – the scientific aspect – better than NRW, and that is a fact.<sup>52</sup>

46. This assertion was repeated in Mr Nicholson's closing statement, but applied even more widely and even more implausibly to all objectors.<sup>53</sup>

## Reliability of evidence in relation to fish populations, trends and catch statistics

- 47. There is no simple solution to estimating the total return of adult salmon and/or sea trout to our rivers. A degree of uncertainty is unavoidable. However, rod statistics, combined with the use of fish traps and counter data, as well as juvenile data from electrofishing surveys, provide a sufficiently robust evidence base upon which to estimate the state of fish populations and certainly no party has demonstrated the existence of a superior method. In any event these methods of stock assessment provide a reliable means of tracking trends in stock availability. This is comprehensively addressed in the PoE's of Mr Davidson and Mr Russell<sup>54</sup>.
- 48. During his XX of Mr Davidson, Mr Ashwin referred to an academic paper written by Mr Ivor Llewellyn (Atlantic Salmon Trust), and asked Mr Davidson to comment upon it '*as regards accuracy for NRW rivers*'<sup>55</sup>. However, Mr Llewellyn's conclusion is that any inaccuracies identified should not affect the outcomes:

while we need to acknowledge that there are weaknesses in current methods for assessing stock levels, it is also important to emphasise that these need not affect the conclusions drawn from these assessments.<sup>56</sup>

<sup>&</sup>lt;sup>52</sup> Day 11.

<sup>&</sup>lt;sup>53</sup> AN Closing REF

<sup>&</sup>lt;sup>54</sup> NRW/2 and NRW/4.

<sup>&</sup>lt;sup>55</sup> Day 3. This paper was also referred to in Mr Ashwin's closing statement. Mr Llewellyn's paper was also referred to by Mr Eardley in the interview he conducted with Mr Nicholson (AN/INQ/1). Despite the reliance both objectors sought to place on Mr Llewellyn's work it is noteworthy that he, on behalf of the Atlantic Salmon Trust, has lent unequivocal support to the All Wales Byelaws (NRW/INQ/20). <sup>56</sup> CPWF/1A, SD/6.

Rod and net catch statistics

49. Some objectors (such as CPWF) have contended that angler catch returns are too inaccurate to be relied upon for the purpose of assessing stock levels. This was perhaps put most bluntly by Mr Nicholson, who claimed, again without basis, that NRW *'actually don't know'* what the stock levels are, as though this was a reason to do nothing. Catch data serve as indicators of stock abundance as well as providing information on the size/age composition of returning fish. NASCO advises that the following information be collected:

catch statistics (e.g. number, size, age and river of origin of fish caught (both retained and released)); and – estimates of the level of unreported catches and other mortalities associated with the fishery.<sup>57</sup>

- 50. Moreover, the long time-series of catch records available are un-matched in the length of time they cover compared to other sources of fisheries data, and so catches also provide invaluable insight into long-term patterns and trends in abundance.<sup>58</sup> As Mr Davidson observed in his evidence *'there is quite strong evidence of these long-term cycles.'*<sup>59</sup>
- 51. For rod fisheries, correction factors (a national raising factor of c. x1.5) have been applied to declared catches in order to account for under-reporting of catches. In his X-in-Ch, Mr Davidson explained how the correction factor has been determined:

Catch data is corrected as best we can to address under reporting. It's done in practice for rod catchers, as there is evidence from research of what proportion of license holders return fish in their declaration, some of this is based on NRW's reminder system. You can estimate what proportion of fish the license holders are declaring. The remainder to report will account for a very small proportion of the catch...The number of licence holders that have made a return is 60%. There is a requirement to report nil catch. The proportion of the catch is much higher, nearer 90% based on previous studies.<sup>60</sup>

<sup>57</sup> POL/14.

<sup>&</sup>lt;sup>58</sup> NRW/2, para 3.2(a).

<sup>&</sup>lt;sup>59</sup> Day 2.

<sup>60</sup> Day 2.

#### Data sources: conclusion

- 52. Dr Mawle, an interested party with great relevant experience and expertise, considers that rod catch statistics, combined with information from the Welsh Dee as an index river, provides a practical method of assessing annual runs of salmon, estimating subsequent egg deposition and stock status. Dr Mawle observes that the only alternatives would be to develop a counter or trap, which would nonetheless contain errors and would be very expensive.<sup>61</sup>
- 53. As Mr Russell explained in his X-in-Ch:

There will always be uncertainty in whatever assessment process. That's the way of the natural world. You can't distil everything to perfection. Fish numbers are highly variable and subject to complex environmental factors we can't understand in entirety. The point is that we have an approach that is objective and robust, and whilst it is not perfect, it is what we have. Conclusions are in the state we describe. On that basis we need to act. The absence of perfection doesn't stop us acting in a precautionary way.<sup>62</sup>

- 54. In any event, the data that NRW collates and analyses enables it to assess trends of an abundance, even if it does not accurately reflect numbers of fish in absolute terms. It is the past, present and future trajectory of these trends which form the primary driver in its decision-making process.
- 55. Further, the precautionary principle means that even though the evidence may not be perfect, it is necessary to exercise caution in the measures taken to protect the environment. Mr White fairly expressed the principle thus:

*I'm* well aware of the precautionary principle. If there are indications that a system is about to fail, you take actions immediately, you don't wait for failure to occur.<sup>63</sup>

<sup>&</sup>lt;sup>61</sup> GM/1.

<sup>62</sup> Day 3.

<sup>63</sup> XX Day 6.

- 56. Even Mr Nicholson, when asked if he agreed with Mr White's summary in XX, stated that he did, subject to the caveat that '*each river has to be looked under its own merits, and dealt with accordingly.*' This is, of course, precisely the approach that NRW has taken.<sup>64</sup>
- 57. Mr White also agreed with the application of the precautionary principle in this context:

Q. Even if the evidence is not clear, wouldn't the precautionary principle militate in favour of Byelaws intervention in any event? We take it at an early stage if we are dealing with a risk? A. I agree with that...<sup>65</sup>

58. A number of objectors and interested parties agreed (sensibly) that imperfections in stock data were not a reason for inaction. For example, during XX, Mr Andrew Renwick was asked as follows:

Q. You don't disagree, I don't understand you to, where there is a problem of stock depletion, it's not satisfactory to say we don't have perfect data? A. It's no good to anyone to write academic articles.<sup>66</sup>

#### The nature and extent of the problem

59. The setting of, and assessment of compliance with, conservation limits involves complex statistical analysis.<sup>67</sup> Set against objectors' expressed lack of trust in this analysis, NRW adduced evidence from three experts. In particular, statistics expert Dr Barry (Cefas) has deemed the methodology *'fit for purpose'*.<sup>68</sup> In his oral evidence, Mr Russell noted that *'there are very broadly similar approaches in jurisdictions across the North Atlantic*.'<sup>69</sup> And in his written evidence he lends unequivocal support to the NRW

<sup>&</sup>lt;sup>64</sup> NRW/1R, paras 4.2-4.8; APP/4, p 86. See also para 182 below.

<sup>&</sup>lt;sup>65</sup> Day 6. Indeed, Mr White seemed to contend essentially that NRW had not been precautionary enough, stating that 'we are in this situation because of the failure to reverse the decline over a considerable number of years.'

<sup>&</sup>lt;sup>66</sup> Day 10.

<sup>&</sup>lt;sup>67</sup> This is explained in the evidence of Dr Jon Barry (NRW/3), Mr Russell (NRW/4) and Mr Ian Davidson (NRW/2).

<sup>68</sup> Day 4, Dr Jon Barry.

<sup>69</sup> Day 3.

approach<sup>70</sup>.

- 60. The only statistical expertise that has been relied upon by objectors has come from witnesses that neither appeared at this Inquiry nor took up the invitation by NRW to attend a meeting between experts to narrow and/or resolve issues, namely Dr O'Hagan and Dr Fop of the University of Dublin ("the Dublin Statisticians").
- 61. Whilst the scope of the instructions these two statisticians received from Mr Ashwin was never revealed to the Inquiry, despite repeated requests for them to be so,<sup>71</sup> what was beyond any doubt was that they undertook their review of NRW's methodology on the basis of a fundamental misunderstanding of the Bayesian methodology employed.<sup>72</sup> This, as Dr Jon Barry explained, rendered many of their criticisms totally invalid.<sup>73</sup> Their evidence, and NRW's response to it, is considered further below at paragraphs 78 to 86.
- 62. Almost all objectors (including Mr White of CPWF and Mr Lloyd of the Angling Trust) acknowledged they didn't have the requisite expertise to challenge the methodology. During XX by NRW, Mr Ashwin conceded that the reason the statisticians were instructed was because 'we needed independent statistical analysis. I can't undertake that. It involves Bayesian linear regression. I'm not equipped to do that.'<sup>74</sup>

<sup>&</sup>lt;sup>70</sup> See e.g. paras 5.8-5.9 of his MPoE, NRW4.

<sup>&</sup>lt;sup>71</sup> Representatives of CPWF did refer to there being a letter and emails regarding the instruction of the Dublin Statisticians. On Day 3, Mr Ashwin stated that '*is very clear from the brief, and letter I provided to them, the report refers to the model being a Bayesian regression model.*' On Day 6, when asked in XX whether he saw any instructions in writing, Mr White responded that '*I saw copies of emails between Mr Ashwin and Dublin, but I was not aware of what the brief was.*' Despite multiple requests, including from the Inspector himself, no such brief or letter was ever provided. On Day 6 (in XX) Mr Ashwin tried to shut the matter down by contradicting himself '*As I said, there was no instruction as regards the brief, no.*'

<sup>&</sup>lt;sup>72</sup> Day 4, Dr Jon Barry referred to their use of the terms 'confidence' rather than 'credible' interval which indicated that they considered the methodology was frequentist rather than Bayesian. Moreover, at CPWF/2, page 58, the Dublin Statisticians' themselves acknowledged '*nowhere were we able to find evidence in the documentation of the Bayesian approach available*.'

<sup>73</sup> X-in-Chief, Day 4.

<sup>&</sup>lt;sup>74</sup> Day 6, xx of Mr Ashwin.

- 63. Those who disagreed with the NRW statistical case did so on the basis of impressions or beliefs, rather than solid evidence. Mr Benutto, for example, explicitly expressed his critical view of the technical evidence as being a *'hunch'*, acknowledging that he had no expert evidence on which to base his challenge to the evidence, but nonetheless stated that he just wasn't convinced.
- 64. Mr Nicholson claimed in his written evidence that *'leading fisheries scientists'* were opposed to the byelaws,<sup>75</sup> but when asked in XX to name any such scientists, he was incapable of doing so:

Q. There are some scientists who don't want to be named because they don't want to be associated?
A. Yes...
Q. Do you expect the inspector to place weight on scientific evidence from unnamed individuals which is not before the inquiry?
A. I'm hoping you'll look at the whole thing as a whole.<sup>76</sup>

65. Mr Llewellyn, in the paper relied upon by CPWF and referred to above at paragraph48, explains that the system is complex and distrust is regrettably commonplace:

There is no doubt that the current system is difficult to explain to fishermen, or indeed anyone without a reasonable grasp of statistical theory. It is regrettable that 20 years after the introduction of CLs, many people still question their value, and do not understand how they work, particularly as the principles underlying them are relatively simple. More needs to be done to explain the system in straightforward terms.<sup>77</sup>

- 66. Most objectors were fair in recognizing their limitations. For example:
  - a. Mr White stated in his evidence in chief: '*I'm not a statistician. I don't intend to challenge the statisticians.*'<sup>78</sup>

<sup>&</sup>lt;sup>75</sup> AN/1a, page 28.

<sup>&</sup>lt;sup>76</sup> XX, Day 12.

<sup>&</sup>lt;sup>77</sup> CPWF/1A, SD/6.

<sup>78</sup> Day 5.

- b. During XX, Mr Hulmston acknowledged that he purposefully stayed away from statistics because he was '*certainly not*' a statistician.<sup>79</sup>
- c. During XX, Mr Gerald John responded to a question about the lack of statistical expertise as follows:

Q. No matter how long, or frequently you angle, it's not going to be a substitute for the national agency charged with safeguarding the welfare of natural resources, performing its assessment, with assistance of statisticians. A. All I can tell you is opinion based on my personal experience, I can't make

d. Finally, Mr Malcolm Rees observed, with commendable candour and good sense that:

I'm not a statistician. I'm not a scientist. I think NRW's evidence is compelling. In my experience, the deterioration is clear.<sup>81</sup>

## Derivation and use of Conservation Limits

any [further] comment.<sup>80</sup>

67. Conservation Limits ("CLs") indicate the minimum desirable spawning stock levels below which stocks should not be allowed to fall. This is explained and considered in further detail in the PoE's of Mr Davidson, Mr Russell and Dr Barry.<sup>82</sup>

#### **Conservation Limits**

68. A criticism made of the use of CLs is that the 'bar has been set too high', and these limits were unattainable. However Mr Davidson explained that the limits were not overly stringent in comparison with other jurisdictions. Indeed, he noted that '*using* 

<sup>&</sup>lt;sup>79</sup> Day 7.

<sup>&</sup>lt;sup>80</sup> Day 8.

<sup>&</sup>lt;sup>81</sup> X-in-Chief, Day 12. This reflected an overall more reasonable approach taken by the netsmen, who like some anglers recognised that killing fish does contribute to stock problems (albeit not the primary cause) and so they should contribute to the solution.

<sup>&</sup>lt;sup>82</sup> NRW/2; NRW/3 and NRW/4.

the Irish method, you'd use higher conservation methods than the English [and Welsh] method...if we applied an Irish approach, we'd set the bar even higher.'<sup>83</sup>

69. Moreover, Dr Barry's independent and expert judgment was that 'fair and sensible' decisions had properly been made in setting those limits and targets, on the basis of a precautionary approach.<sup>84</sup>

#### Management Objective and Management Targets

- 70. The Management Objective ("MO") is an over-arching requirement that a river's stock should be meeting or exceeding its conservation limit in at least four years out of five (i.e. >80% of the time). A Management Target ("MT") is set for each river, representing a spawning stock level for managers to aim at in order to meet this objective.<sup>85</sup>
- 71. Mr Ashwin queried the meaning of the phrase 'four years out of five <u>on average</u>.' During his evidence, Dr Barry made clear that the phrase 'on average' means that the MO was assessed whether or not a river met its CL four out of years in the long run:

*if you had loads of batches – thousand batches of 5 years, on average you get 4 above. This is a long run thing – in any 5 years, you might 4, you might 3, you might 5...*<sup>86</sup>

#### Compliance with Conservation Limits

72. Compliance with the CL is tested each year using a statistical procedure. This is addressed in detail in the written evidence of Dr Barry and Mr Russell.<sup>87</sup>

#### **River classification**

73. The status of individual river stocks in Wales is evaluated annually. The majority of salmon and sea trout stocks in Wales are falling below their MTs, and are deemed unsustainable because of the risk of ongoing decline to unsafe stock levels. This is

<sup>&</sup>lt;sup>83</sup> X-in-Chief, Day 3; CPWF/1A.

<sup>&</sup>lt;sup>84</sup> X-in-Chief, Day 3.

<sup>&</sup>lt;sup>85</sup> This is set out in detail in NRW/2, NRW/3 and NRW/4.

<sup>&</sup>lt;sup>86</sup> X-in-Chief, Day 3.

<sup>&</sup>lt;sup>87</sup> NRW/3 and NRW/4.

explained in the evidence of Mr Gough, and is set out in detail in the Technical Case<sup>88</sup> which demonstrates the very antithesis of a blanket approach, as alleged, unfairly, by numerous objectors.

- 74. A further allegation levelled by objectors against the NRW case relates to the accuracy of the projected risk classification status of rivers.<sup>89</sup> During his XX of Dr Jon Barry, Mr Ashwin alleged, without basis, that NRW are '*only right 20-30% of time on average*.'<sup>90</sup>
- 75. However, NRW's predictions are consistently under, rather than over, precautionary. As such, inaccuracies tend to mean that the actual results were worse than predicted. Mr White was cross-examined on one such example:

Q. In 2009, it was predicted that there would be 9 rivers not at risk, in fact there were 0 rivers not at risk?
A. yes
Q. So the reality was graver than the prediction?
A. In those instances.<sup>91</sup>

76. The fact that such inaccuracies tend to have been as a result of over-optimism, rather than pessimism<sup>92</sup> reinforces the need for a precautionary approach.

## New assessment process for sea trout

77. Whilst this described process has been used for salmon, there was no an equivalent established method for assessing sea trout. As explained in Mr Davidson's PoE, NRW have therefore developed a new approach<sup>93</sup> which was not challenged in the course of the Inquiry.

## Challenges to the statistical methodology

<sup>&</sup>lt;sup>88</sup> NRW/1, para 4.13; APP/4, Annex 3. See also table at p 86.

<sup>&</sup>lt;sup>89</sup> CPWF/2. This was repeated in Mr White's closing statement, paras 6-7.

<sup>&</sup>lt;sup>90</sup> Day 3.

<sup>&</sup>lt;sup>91</sup> Day 5.

<sup>&</sup>lt;sup>92</sup> CPWF/INQ/7, slide 31. See also CPWF/2, Appendix C, Table 6. This point was also made by Mr Ivor Llewellyn (Atlantic Salmon Trust) in his consultation response: NRW/INQ/20.

<sup>93</sup> NRW/2.

- 78. Mr Ashwin, on behalf of CPWF instructed the Dublin Statisticians to critique the methodology employed by NRW in determining whether a particular stock is at risk or not.<sup>94</sup>.
- 79. Furthermore, it appears that neither of the Dublin Statisticians has experience in environmental statistics. In his oral evidence, Dr Barry explained that the 'precautionary principle is very important in [the environment context], but is not a factor in other disciplines. I think they've missed that.'<sup>95</sup>
- 80. Moreover, for whatever reason the Dublin Statisticians conducted their critique on an incorrect basis. They laboured under a fundamental misunderstanding as to the Bayesian methodology, and as such, as Dr Barry explained in his X-in-Ch that 'some of their criticism failed'.<sup>96</sup>
- 81. In their response to the Cefas reply to their report, the Dublin Statisticians explained that '[n]o where were we able to find evidence in the documentation of the Bayesian approach mentioned.'<sup>97</sup> Further, in XX, Dr Barry noted that the Dublin Statisticians had been describing parts of the methodology using incorrect terms, which indicated to him that they had misunderstood that Bayesian statistics were being employed. And in X-in-Ch, he referred to the Dublin Statisticians' use of the terms 'confidence interval' rather than 'credible interval', which he explained indicated that they considered the methodology was frequentist rather than Bayesian. This is because a 'confidence interval' is a frequentist, and not a Bayesian, concept.<sup>98</sup>
- 82. The significance of this is set out in the Cefas report, replying to the Dublin Statisticians, which explains why the misunderstanding of the fundamental methodology undermines specific criticism, as well as the general reliability of the

<sup>&</sup>lt;sup>94</sup> As mentioned above, it is unclear what their written (or even oral) instructions were as, despite repeated requests, no written evidence of either has been provided.

<sup>95</sup> X-in-Ch Day 3.

<sup>96</sup> Day 3.

<sup>&</sup>lt;sup>97</sup> NRW/3d, p 3.

<sup>&</sup>lt;sup>98</sup> Day 3. As noted above in footnote 62.

#### Dublin Statisticians assessment:

We recognise that this may account for some of the apparent differences in interpretation. The current model estimates future egg deposition trajectories in a Bayesian framework that includes an autoregressive term and 20-percentile regression to estimate compliance with the management objective — i.e. meeting conservation limit (CL) in four years out of five. In this instance, we consider fitting a linear trend to the data is appropriate to evaluate temporal trends in egg deposition and the inclusion of "year" as a proxy variable is prudent because it captures the potential influence of multiple explanatory variables at once.<sup>99</sup>

- 83. In any event, in Dr Barry's written and oral evidence, he provided a detailed explanation of why the criticisms made by the Dublin statisticians are not valid<sup>100</sup> and he was not challenged on this critique in XX or otherwise.
- 84. Moreover, not all of the criticisms articulated by the Dublin Statisticians were even pursued here by objectors in this Inquiry. For example, one of their criticisms concerned the part of the statistical methodology which involved the use of the 'year' as a variable. Dr Barry maintained that a year ('time') is a valid and reasonable numerical variable to use in a regression model. Mr Ashwin acknowledged that this criticism was unwarranted and agreed with Dr Barry's view on the point.<sup>101</sup> Mr Ashwin therefore conceded that not all of the criticisms made by the Dublin Statisticians were valid, but nonetheless elected to cherry pick those which suited CPWF's case. In any event the spectacle of a non-expert acting as a conduit for absent and probably misinformed experts on a technical area of evidence outside their specialism was unsatisfactory to say the least.
- 85. The essence of the Dublin Statistician's critique is that the regression-based approach was excessively pessimistic, and does not properly reflect the uncertainty inherent in the actual egg counts, and the trajectory of the future trend. They propose the use of a time-series model, which they suggest would result in a more optimistic (albeit

<sup>&</sup>lt;sup>99</sup> NRW/3c, p 2.

<sup>&</sup>lt;sup>100</sup> NRW/3; NRW/3c and NRW

<sup>&</sup>lt;sup>101</sup> Day 3 XX of JB.

uncertain) projection of stock status.<sup>102</sup>

86. Ultimately, putting aside the scientific merits of each approach, the key point (as made by Dr Barry) is that the adverse consequence of following the (more pessimistic) linear regression model, i.e. potentially unnecessary remedial action, is far less serious than the adverse consequence in the (more optimistic) time series model, i.e. damage to the stock if remedial action is not taken, which is an expression of the Precautionary Principle as good as any.

## E. NRW'S PROPOSED SOLUTION

## Overview

- 87. NRW acknowledges that there is an array of causes which have contributed to the poor state of salmon and sea trout stocks.<sup>103</sup> These include environmental pressures at sea, the degradation of water quality in the riverine environment, avian predation, and climate change.<sup>104</sup> Therefore, a broad range of measures is required to address the numerous complex causes of this situation, and ensure that land and water are managed sustainably.<sup>105</sup> NRW submits that this is a reasonable solution, required to address the urgency of the current stock levels explained above.
- 88. Whilst anglers and netsmen may not be a root cause of the problem of stock depletion, they are a contributory cause and in any event (because their objective and effect is precisely to kill the very species in need of protection) a necessary part of the solution. This was accepted by Mr White during XX<sup>106</sup>:

Q. Just because a cause is not a root cause doesn't mean it shouldn't necessarily be part of the solution, it may be that a particular restriction of an activity is justified even if it forms no part of the cause - angling does contribute to stock depletion? A. Yes...

<sup>102</sup> NRW/3b.

<sup>&</sup>lt;sup>103</sup> Day 2, XX of Mr Davidson by Mr Woodford.

<sup>&</sup>lt;sup>104</sup> NRW/1, paras 6.1-6.17; NRW/1b.

<sup>&</sup>lt;sup>105</sup> These measures are set out in the evidence of Mr Vaughan: NRW/6; NRW/6R; NRW/6R2.

<sup>&</sup>lt;sup>106</sup> Day 6: 'Q. Contributing cause can form part of the solution? A. Yes'

89. Moreover, as Mr Harvey, an experienced angler who submitted evidence on behalf of Carmarthenshire Fishermen's Federation and Swansea Amateur Anglers' Association, explained:

whilst we accept stocks are declining, we don't accept angling or netting is the primary cause. There are bigger issues at play. <u>We do accept that those who catch fish have a role in trying to maintain stocks</u>...We're not representing that it's not our fault so we shouldn't contribute to steps to conserve stocks. Stocks have declined, we may not have been the main reason but in rivers where stocks are very low, anything to conserve stocks is supported by us.<sup>107</sup>

- 90. NRW seek to respond to this problem in three complementary ways:
  - a. First, by proposing the All Wales Byelaws, which would have effect for 10 years (with a 5 year interim review). NRW is also proposing further but separate byelaws in respect of the three cross border rivers.
  - b. Secondly, by implementing a broad suite of land management measures to improve the river environment.<sup>108</sup>
  - c. Thirdly, by implementing remedial action to restore river habitat quality and to address other factors operating in the freshwater environment.<sup>109</sup>
- 91. In essence, the principal objections to these proposed measures are as follows:
  - a. that the measures would not make any difference, or that the difference (which has been referred to as being quantified by CPWF, among others, as being 1-2% of surviving spawning stock) is so negligible as to not be worthwhile.<sup>110</sup>

<sup>&</sup>lt;sup>107</sup> X-in-Chief, Day 9.

<sup>&</sup>lt;sup>108</sup> NRW/6.

<sup>&</sup>lt;sup>109</sup> NRW/1B.

<sup>&</sup>lt;sup>110</sup> See, for example, Mr White's oral X-in-Chas presented on Day 5; CPWF/INQ/5.

- b. that equivalent voluntary measures would be acceptable. However, it is the compulsory nature of the All Wales Byelaws which render them unpalatable. This argument is summarized by Mr White who explains that *'we want the right to take a fish, even if we choose to put it back.'*<sup>111</sup>
- 92. These points are considered in detail below.<sup>112</sup>

#### The All Wales Byelaws

- 93. The All Wales Byelaws are a necessary part of this suite of measures, as reducing the intentional killing of fish would maximize the number of fish that survive to spawn each year. It is essential that spawning stocks are maximized if populations are to have the best chance of recovery. The All Wales Byelaws are intended to preserve vital breeding resources whilst other matters suppressing environmental quality are addressed.
- 94. In summary, the All Wales Byelaws would implement the following:
  - Mandatory C&R for net and rod fisheries on specific rivers classified as 'At Risk' or 'Probably at Risk': there is evidence that C&R will have the desired effect of arresting and reversing population decline.<sup>113</sup>
  - Method restrictions which would ensure that fish have the best chances of survival upon release: First, rod fishing method controls, which include bans on certain types of hooks, and secondly, bait restrictions. These restrictions would reduce the chances of hooks penetrating fish deeply enough to cause fatal injury.<sup>114</sup>

<sup>&</sup>lt;sup>111</sup> Day 6.

<sup>&</sup>lt;sup>112</sup> Paras 98 to 154.

<sup>&</sup>lt;sup>113</sup> APP/4; NRW/1R, 2.9-2.23.

<sup>&</sup>lt;sup>114</sup> APP/4, pp 108-111; NRW/1, paras 8.2-8.45.

- Slot limit for sea trout, in order to protect the fittest fish so as to contribute to spawning.<sup>115</sup>
- iv. Net fishing season changes.<sup>116</sup>
- 95. A description of the measures contained within the All Wales Byelaws is set out in full in the Technical Case, and the evidence of Mr Gough<sup>117</sup>.

#### NRW's collaborative process

- 96. NRW engaged in a formal three-month consultation process (22 August 2017 to 14 November 2017), following the publication of the Technical Case. Amendments were made to the All Wales Byelaws following the consultation process, which are reflective of the collaborative approach that NRW has engaged in.<sup>118</sup> This process has been the subject of criticism by objectors,<sup>119</sup> on the basis that NRW proceeded with the *'broad thrust'* of its proposals despite angler opposition to them.<sup>120</sup>
- 97. Of course, in order to have consulted properly, it is not necessary to have agreed with every opinion<sup>121</sup> but rather to conscientiously take into account the consultation responses received. This is precisely what NRW did. As Mr Gough explained during X-in-Ch:

*PG: Over the course,* 2-3 *years I personally attended probably 30 meetings, across Wales at LFG's meetings. The issues were discussed.* 

RW: Message today is that NRW weren't listening?

*PG*: We listened very carefully. No-one likes to talk about decline, or take bad news to these meetings. The annual assessments painted a consistent picture of decline in stocks. Not a good message to be explaining to people. However a large number of them were so upset, and I don't want to say in denial, many were reluctant to see the news as we interpreted it. Some understood the predicament. Increasingly through the

<sup>&</sup>lt;sup>115</sup> APP/4, p 111; NRW/1, paras 8.46-8.59.

<sup>&</sup>lt;sup>116</sup> NRW/1, section 7.

<sup>&</sup>lt;sup>117</sup> APP/4; NRW/1, section 6.a

<sup>&</sup>lt;sup>118</sup> APP/25; APP/26.

<sup>&</sup>lt;sup>119</sup> Mr Woodford, X-in-Ch Day 7.

<sup>120</sup> Mr Lloyd XX Day 7.

<sup>&</sup>lt;sup>121</sup> This was agreed with Mr Lloyd during xx on day 7, 'I agree, in itself that it doesn't demonstrate that.'

process, I thought there was a growing realization for some kind of action, whatever that might be, to address it. **RW: Part of the meeting was communicating the message that stocks were in decline. Did you hear their views?** PG: Yes, of course, yes.<sup>122</sup>

98. Further, the evidence given by objectors such as Mr Woodford, Mr White and Mr Eardley (CPWF) concerning the alleged lack of engagement is at odds with the fact that they personally attended a number of the key consultation meetings.<sup>123</sup> It seemed that the heart of the objectors' criticism of NRW's community engagement was that NRW had not agreed with what they had told it to do, and that this therefore meant that NRW had not listened. See for example, during XX (and again in closing this morning), Mr Woodford suggested, erroneously, that a public body was under some form of obligation to agree with the majority of responses it received in making its decision (as though consultation were a form of popularity contest):

Q. A public body, charged with making a decision, must agree with the responses, or majority it received?

*A.* ... If you deny common wisdom, that undermines your ability to apply future measures for improvement of fish and local communities.<sup>124</sup>

- 99. In similar vein Mr Nicholson refused to agree with the proposition that there is a distinction between an outcome that is unwelcome and a process that refuses to listen to consultation responses.<sup>125</sup>
- 100. Mr White, however, eventually adopted a more reasonable position and was prepared to acknowledge that there was a distinction between listening and agreeing:

Q. One complaint is that NRW have not sufficiently listened to concerns of angling community?

A. They've listened but they've ignored.

Q. There is a difference between listening to and agreeing with - on occasion, a public authority will hear the views of consultees of those, including yourself, that attending the more than 60 meetings that have taken place, and in some instances will allow what it is heard to influence what way forward is chosen, and in other instances will decide against that - you agree that

<sup>&</sup>lt;sup>122</sup> Day 1.

<sup>&</sup>lt;sup>123</sup> See, for example, APP/12.10; APP/12.18 and APP/43.2.

<sup>124</sup> Day 7.

<sup>&</sup>lt;sup>125</sup> XX, Day 11.

## *doesn't meant that those groups will not be listened to? A. I do...<sup>126</sup>*

## Effectiveness of the All Wales Byelaws

- 101. The All Wales Byelaws would save fish by C&R fishing and thereby increase the numbers of fish that survive to spawn. This would assist in addressing stock depletion. It is obvious and was not in dispute that the fewer the number of fish killed, the better.<sup>127</sup>
- 102. Furthermore, throughout the period of the All Wales Byelaws, NRW would continue to actively address all of those matters within its control (and covered by statutory duties) that adversely affect stocks, as addressed in Section G below.

#### Mandatory catch & release of salmon

- 103. As explained in the evidence of Mr Gough, C&R has become an increasingly common management tool to maintain fish stocks and fisheries following many academic reviews and investigations into its effectiveness and impacts (see, for example, *Arlinghaus et al* 2007<sup>128</sup>; *Olsen et al* 2010<sup>129</sup>; *Gargan et al* 2015<sup>130</sup>; NASCO 2009<sup>131</sup>; EA 2017<sup>132</sup>).
- 104. In *Olsen et al*, for example, it was observed:

Regulatory C&R, particularly of undersized or otherwise protected fish, is presently almost universally accepted as a "good idea" to conserve fish stocks and fishing opportunities.<sup>133</sup>

<sup>&</sup>lt;sup>126</sup> XX, Day 6.

<sup>&</sup>lt;sup>127</sup> See, for example, Mr White XX Day 6: 'We are conservationists. We don't seek to kill fish'.

<sup>&</sup>lt;sup>128</sup> ACC/2.

<sup>&</sup>lt;sup>129</sup> ACC/8.

<sup>&</sup>lt;sup>130</sup> ACC/4.

<sup>&</sup>lt;sup>131</sup> ACC/39.

<sup>&</sup>lt;sup>132</sup> POL/31.

<sup>&</sup>lt;sup>133</sup> ACC/8, p 12.

- 105. A number of fisheries byelaws which control fishing already exist in Wales.<sup>134</sup> The National Salmon Byelaws ("NSB") (which were made in 1999 and renewed in 2008 for a further 10 years) were the first to set C&R fishing for salmon on a statutory basis, and to introduce restrictions on some angling methods.<sup>135</sup> In his RPoE, Mr Gough observes that the NSB coincide with a cessation of the earlier trend of decline in the early running spring salmon stock component and, in some rivers, there is evidence of an increase in abundance.<sup>136</sup>
- 106. During the course of his X-in-Ch, in response to questions from the Inspector, Mr Mark Frey (an experienced angler opposed to the All Wales Byelaws) explained the improvements to the salmon stock in the Wye river, which has 100% C&R, and stated that *'you cannot dispute that* [*C&R*] *can contribute.'*<sup>137</sup>
- 107. As such, in general, most objectors have not contended that mandatory C&R would lead to no change in salmon or sea trout stocks whatsoever. Indeed, in his XX, Mr White explained that his angling club recommended C&R, and could sanction those who took excessive numbers of fish. This, he explained, is because C&R is effective in contributing to the improvement of spawning stocks.<sup>138</sup>
- 108. Instead objectors tended to resort to the argument that mandatory C&R would lead to only minor benefits and in particular that it would only be possible to save 2% of the spawning stock through C&R.<sup>139</sup>
- 109. But Mr Russell explained that 'it's important to note that any additions to the spawning stocks are particularly valuable when stocks are at low levels. Even relatively small numbers of fish are crucial to recover stocks in as short a time as possible.'<sup>140</sup> He offered the

<sup>&</sup>lt;sup>134</sup> LEG/28.

<sup>&</sup>lt;sup>135</sup> LEG/15.

<sup>&</sup>lt;sup>136</sup> NRW/1R, para 2.14.

<sup>137</sup> Day 8, XIC.

<sup>&</sup>lt;sup>138</sup> Day 6, XX.

<sup>&</sup>lt;sup>139</sup> CPWF/2, p 25. See also, e.g., Mr Ashwin's XX of Mr Gough on Day 2.

<sup>140</sup> NRW/4a, para 4.9.

following three primary reasons for this in his oral evidence.<sup>141</sup>

## 'Every spawning fish matters'

- 110. First, whilst the measures would result in relatively modest increases in the short term, 'every little helps' when stocks are at such low levels. Even relatively small numbers of fish are crucial in order to recover stocks in as short a time as possible. These numbers therefore are inherently significant.
- 111. Dr Marsh-Smith (Afonydd Cymru) lent his support to this contention thus:

Its logic - you need Mummy and Daddy fish to get into those areas and produce those generations. The only way to get increased Mummies and Daddies is to put them back... Any C&R effort will definitely bring about an increase in a number whilst we are short of the conservation numbers... we still need every fish we can get. I'm sorry that's just the way it is.<sup>142</sup>

112. And further support is to be found in NRW's Technical Case which provides estimates of the additional salmon and sea trout eggs laid in a single year. For example, mandatory C&R would lead to an additional 2 million salmon eggs being deposited across Wales in year 1 alone.<sup>143</sup>

## 'Compound interest'

- Secondly, there would be accumulated benefits of spawner numbers over time.In other words, added egg deposition would result in increased numbers of adults.
- 114. Dr Mawle referred to this as being akin to 'compound interest' and accepted that even relatively low increases of stock levels year on year may have a significant effect in terms of restoration of fish stocks. He stated that '*undoubtedly* the benefits increase year on year.<sup>144</sup>

<sup>&</sup>lt;sup>141</sup> Day 3, XiC.

<sup>&</sup>lt;sup>142</sup> XiC, Day 7.

<sup>&</sup>lt;sup>143</sup> APP/4, pp 106-107.

<sup>&</sup>lt;sup>144</sup> XX, Day 10.

Survival of the fittest fish

115. Thirdly, and perhaps most importantly, there is a further imperative to preserve the fittest fish who have managed to survive natural mortality factors (both in the marine and riverine environment). For these are the fish which have adapted to maximise life time fitness, and essentially have been naturally selected to spawn. As Mr Russell explained (and Dr Mawle essentially agreed in XX<sup>145</sup>):

Ecology theory suggests that species will often adapt over time to maximise their life time, whilst there have been trends in abundance in Multi-Sea Winter salmon, it's not beyond credibility that changes we're witnessing now – are fish adapting – there will be a trade-off between staying at sea longer and risking mortality, and the opportunity to grow bigger and have more eggs. Encapsulating this, these fish that are returning are the survivors, they have been to the right place, to feed and to adjust to the real challenges out there, the changes in the ocean are occurring at an unprecedented rate, the more we can do to ensure that the stocks retain wide genetic make-up gives them the best ability to adapt for the future. The really important issue about looking after the survivors – giving the stocks the best possible ammunition to face the challenges they're facing.<sup>146</sup>

#### Effectiveness of mandatory C&R: conclusion

116. Consequently, as Mr Russell observed, even if, in absolute numbers, the stock savings were only 1-2%, those savings would nonetheless be:

[h]ighly significant in terms of securing future credibility of overall genetic viability of stock -1 or 2% will vary hugely in different rivers, could represent tens of hundreds of fish - general point, anything we can do to help we ought to be doing.<sup>147</sup>

117. Mr Russell was not alone in holding this view. Afonydd Cymru for example noted (in its PoE) that:

It is difficult for those of us involved with the management of the fisheries to imagine that taking even one fish when stocks are low is anything other than wholly inappropriate. We have the benefit of all the available evidence and an understanding

<sup>145</sup> Day 10.

<sup>&</sup>lt;sup>146</sup> Day 3

<sup>147</sup> X-in-Chief, Day 3

of the biology and science involved.<sup>148</sup>

118. And Dr Mawle states (in his PoE), in respect of the effectiveness of C&R, that:

I agree with NRW that evidence from both scientists and anglers is that, given suitable constraints on angling gear through regulations and adoption of good practice in fish handling, mortality associated with C&R can be very low.<sup>149</sup>

119. With regard to net fisheries, most in Wales have operated under C&R for salmon for the past 20 years. The outcome of studies undertaken by NRW has shown that, if handled correctly, survival of such fish can be high.<sup>150</sup> Mr Peter Gough (in his PoE) states that C&R net fishing is expected to be successful.<sup>151</sup> This accords with the anecdotal experience of net fishermen. For example, Mr Ian Harries explains that:

coracle fishermen understand the need to release all salmon caught. We have been doing this from April to June for the last 20 years. In all that time I have not released one fish in distress let alone dead.<sup>152</sup>

120. And the commercial netsmen who appeared at this Inquiry agreed that C&R from nets was effective. Mr Rees stated that 'a *net caught salmon is very easy to return without damaging the fish.*' Mr Harries stated that he had never lost a fish when practicing C&R. Further Mr Rees and Mr Harries both stated that it was straightforward to distinguish between salmon and sea trout.<sup>153</sup> The netsmen did not dispute the efficacy of C&R in oral evidence. Clearly this evidence is to be preferred to that advanced by Mr Nicholson.

<sup>&</sup>lt;sup>148</sup> AC/1, para 4.

<sup>&</sup>lt;sup>149</sup> GM/1.

<sup>&</sup>lt;sup>150</sup> NRW/1, paras 8.9-8.12.

<sup>&</sup>lt;sup>151</sup> NRW/1, para 8.9

<sup>&</sup>lt;sup>152</sup> IH/INQ/1, p 1.

<sup>&</sup>lt;sup>153</sup> Mr Rees explained that 'a salmon has different fishing habits – when they hit the net you see them splash to the surface, when you pull them in they tend to be loose in the coracle.' Moreover, Mr Harries added that 'the way a salmon hits your net is different. I watched the salmon go in that end and back out the front, they are very gentle. It's a real gentle touch. Whereas sea trout hits it like a train.' (Day 12). This evidence is at odds with and to be preferred to that of Mr Nicholson (X-in-Ch, Day 11) that a netsman would not be able to distinguish a salmon from a sea trout.

- 121. In order to maximize the benefits of C&R fishing, NRW propose to implement rod fishing method restrictions.<sup>154</sup> When appropriate methods are employed, the survival of post-release fish can be very high.
- 122. As Mr White related from his own experience during his oral evidence, during 10 years of frequent fishing in Wales,<sup>155</sup> only 2 fish suffered post-catch mortality.<sup>156</sup> And even Mr Nicholson observed in XX that it was only on 'very, very rare occasions' that a fish would be mortally wounded.<sup>157</sup> Although anecdotal, this accords with the scientific evidence of the effectiveness of practicing fishing methods that minimize post-C&R mortality.

### Hook restrictions

123. The justification for the controls on hook sizes and types is summarized in Mr Gough's PoE, and set out in the Technical Case.<sup>158</sup> The EA has produced a report entitled *Impact of C&R angling practices on survival of salmon* which assesses evidence concerning fishing methods, and their impact on post-release survival.<sup>159</sup> When taken to this report during XX, Mr White did not dispute the efficacy of these practices, but instead expressed opposition to the mandatory nature of the proposed byelaws:

All of these are good practices, and this is something that we have been working with angling groups in terms of getting them to use best practice, doing the majority of this in a voluntary way at the present time.<sup>160</sup>

124. It is noteworthy (and indicative of one of the various balances NRW has had to strike in the context of All Wales Byelaws) that for some objectors these hook restrictions did not go far enough. For example, Mr White suggested that Flying C's ought to be completely banned because of the risk of post-C&R mortality. However,

<sup>&</sup>lt;sup>154</sup> NRW/1, para 8.6

<sup>&</sup>lt;sup>155</sup> He explained in XX that he spends a minimum of 2 days a week fishing: Day 6.

<sup>&</sup>lt;sup>156</sup> Days 5 and 6.

<sup>&</sup>lt;sup>157</sup> Day 11.

<sup>&</sup>lt;sup>158</sup> NRW/1; APP/4.

<sup>159</sup> POL/31.

<sup>&</sup>lt;sup>160</sup> Day 6.

NRW consider that the risk posed by these types of lures can be reduced if the treble hooks are replaced with an appropriate single barbless hook<sup>161</sup> and that there is, in this instance, a method of achieving the desired conservation objectives with less interference with the practices of anglers than that suggested by Mr White on behalf of CPWF.

## Bait restrictions on salmon fishing

- 125. The survival of released salmon is lowest for those fish caught using bait. It is generally less than 50% in the case of worm.<sup>162</sup> This is because worm bait tends to deephook salmon, causing fatal internal injuries. This is noted in the EA's report on the *Impact of C&R angling practices on survival of salmon* (August 2017), which explains that the highest incidences of deep hooking are associated with worm bait, and that it can also result in the catch of juvenile salmon.<sup>163</sup>
- 126. In large part, this was recognized by objectors and interested parties. Indeed, many, including Dr Mawle,<sup>164</sup> Mr White<sup>165</sup> and Dr Marsh-Smith<sup>166</sup> already refrain from bait fishing due to the risk it poses to the mortality of salmon by deep hooking. Mr Harvey observed that stopping worm fishing is a necessary sacrifice, which is already being taken up by many anglers:

*I really enjoy worm fishing, as do a lot of anglers that have stopped worm fishing. I have sacrificed, as have many others.*<sup>167</sup>

127. Therefore, in order to ensure that C&R for salmon is as effective as possible, NRW propose a total ban on fishing for salmon with worm bait.

<sup>&</sup>lt;sup>161</sup> NRW/1, paras 8.33-8.35.

<sup>&</sup>lt;sup>162</sup> ACC/17.

<sup>&</sup>lt;sup>163</sup> POL/31, p 15.

<sup>&</sup>lt;sup>164</sup> Day 10.

<sup>&</sup>lt;sup>165</sup> Day 6.

<sup>166</sup> Day 8.

<sup>&</sup>lt;sup>167</sup> Day 9 XX.

#### Prawn and shrimp bait seasonal exception

- 128. Moreover, following discussions with, and feedback from stakeholders, it is proposed to allow seasonal use of prawn and shrimp bait. NRW acknowledges that 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.
- 129. NRW has therefore proposed that shrimp and prawn may be used, but only after 1st September when water temperatures are cooler and C&R survival using these baits may be expected to be high.<sup>168</sup>

#### Further targeted measures for sea trout

130. Additional measures are proposed to protect sea trout stocks on targeted rivers where these are deemed necessary. These are set out in the evidence of Mr Gough and the Technical Case.<sup>169</sup> The sea trout population is generally in a better state than salmon. A number of sea trout rivers are either 'not at risk' or 'probably not at risk'.<sup>170</sup> As such, worm fishing for sea trout, as well as catch and kill for both netsmen and anglers, would not be prohibited.<sup>171</sup>

#### Slot limit for sea trout

- 131. An upper slot limit for sea trout of 60cm is proposed. A sea trout of 60cm is just under 6lbs, and these are normally fish that have survived to spawn on more than one occasion. They are therefore considered to be fit fish and important contributors to spawning. This has been set out in the evidence of Mr Gough.<sup>172</sup>
- 132. In a further example of objectors seeking more draconian measures than those being promoted by NRW, Salmon and Trout Conservation Cymru would go further than a 60 cm slot limit and argue that the current regional minimum size for taking

<sup>&</sup>lt;sup>168</sup> NRW/1, paras 8.39-8.45.

<sup>&</sup>lt;sup>169</sup> NRW/1, para 7.4; APP/4, pp 111.

<sup>&</sup>lt;sup>170</sup> APP/4, p 86.

<sup>&</sup>lt;sup>171</sup> This is discussed further below at paragraph 191. This is subject to local C&R in rod fisheries in specified rivers where later commencement of net fishing for sea trout is proposed. <sup>172</sup> NRW/1, paras 8.46-8.49.

trout and sea trout should be revised to a single national limit of 30cm (from 23cm). This would result in a smaller number of sea trout being legally taken.

- 133. The current national minimum slot limit for trout is prescribed in the 1995 Byelaws and apply to brown trout (as well as sea trout), and are not before this inquiry. The suggested change would be of considerable concern to a portion of the angling community which has not involved itself in the consultation nor this Inquiry, as it would also affect fishermen who target non-migratory trout. Apart from the lack of supporting evidence for such a proposal, it would therefore be unfair to even countenance such a change without allowing an opportunity for interested parties to engage with the matter.
- 134. In any event, as explained by Mr Gough,<sup>173</sup> this would be unnecessary.

#### Net fishing season changes

- 135. NRW are proposing amendments to net fishing seasons to protect important stock components of sea trout whilst also saving more salmon.
- 136. The proposed measure of delaying the start of the net fishing season (with all net seasons to start on 1st May) to protect early running sea trout would mainly affect the Tywi and Teifi fisheries (26 of the 54 licences available in Wales). There were only 3 other sea trout reported caught in Welsh nets before this date in 2016.<sup>174</sup>
- 137. The majority of net fisheries would be only lightly affected by the proposals. The coracle and seine net fisheries on two principal rivers, the Tywi and Teifi, would be affected to the greatest extent. It should be noted however that the performance of these two fisheries and the status of stocks are amongst those that cause most concern.<sup>175</sup> This is addressed further below.<sup>176</sup>

<sup>&</sup>lt;sup>173</sup> NRW/1, para 8.48.

<sup>&</sup>lt;sup>174</sup> APP/4, p 120.a

<sup>&</sup>lt;sup>175</sup> APP/4, p 120.

<sup>&</sup>lt;sup>176</sup> See paras 214-222.

# 10 year period and 5 year interim assessment

- 138. The All Wales Byelaws are proposed to be in place for 10 years. There will also be a substantive 5 year interim review in order to monitor performance of the 'All Wales' Byelaws.
- 139. The proposed duration of the All Wales Byelaws (10 years) would ensure (depending on the outcome of a mid-term review) protection of 2-3 generations of fish, most of which in Wales have a generation time of 5 years.<sup>177</sup> As such, this period could not sensibly be shorter. Stocks will continue to be assessed annually to meet national and international obligations.

#### Enforcement

- 140. NRW recognizes that that there would be challenges in relation to enforcement, due to ongoing pressure on resources. However, these challenges are not insurmountable. NRW already successfully enforces other similar byelaws and has taken action in recent years for fisheries offences.<sup>178</sup> NRW has provided extensive evidence as to the enforceability of the All Wales Byelaws, which is contained primarily in the PoE and RPoE of Mr Gough.<sup>179</sup>
- 141. NRW carries out intelligence-led enforcement of all fisheries legislation and byelaws and will not hesitate to take appropriate enforcement action in accordance with its Enforcement Policy. NRW's enforcement policy provides a spectrum of measures, with prosecution being an option of last resort.<sup>180</sup> The approach was summarized by Mr Vaughan:

we use the options available to us to deliver a package of measures, where activities are not done to the letter of the law, range of different measures which are proportionate

<sup>&</sup>lt;sup>177</sup> NRW/1, para 9.47. See also for example, XX of Dr Marsh-Smith (Afonydd Cymru) on Day 8: 'of course, you have to remember from an adult fish spawning it's 5 years until the next generation come back.' <sup>178</sup> NRW/1R, section 5.

<sup>&</sup>lt;sup>179</sup> NRW/1, and NRW/1R.

<sup>180</sup> POL/23.

and fit in with impact, allow us to get to an outcome.<sup>181</sup>

142. NRW's enforcement action is publicized, and this has a deterrent effect. Mr Gough explained that:

Any incident which is recognised to be potentially enforceable is reported to a local enforcement panel in NRW and they will consider that under our enforcement policy, and they will follow a process as to whether legal caution or a warning letter, or the evidence is insufficient to warrant further action.<sup>182</sup>

143. Most anglers are fully aware of similar controls such as the National Salmon Byelaws and comply with the requirements. Much of this is as a result of the normal uptake of statutory controls by fishermen and by peer pressure. As rightly observed in the written evidence of Dr Mawle, despite the challenges, the All Wales Byelaws are likely to be adhered to, and *'transgression will be seen and resented, if not reported, by other anglers.'*<sup>183</sup> Dr Mawle is of course right, and given sufficient awareness of the All Wales Byelaws there is no reason to doubt that they, like previous forms of fishing regulation, would attract widespread compliance. Mr Walters explained that he obeys the existing byelaws which applied to his net fishing:

I do it because it's the law, I do my best not to break the law.<sup>184</sup>

144. Awareness of the All Wales Byelaws would be assisted by the planned promotion of education about best practice. As Ms Jenkins explained, the byelaws themselves would not be the end of the process.<sup>185</sup> With the byelaws would come a parallel process of information, guidance and publicity so that as many anglers as possible are made aware of them and how to comply with them. That constitutes part of the enforcement process. Moreover, NRW have committed to train and brief more field staff.

<sup>&</sup>lt;sup>181</sup> X-in-Chief, Day 4.

<sup>&</sup>lt;sup>182</sup> X-in-Chief, Day 1.

<sup>&</sup>lt;sup>183</sup> GM/1, par 6.13.

 <sup>&</sup>lt;sup>184</sup> XX, Day 12. By contrast, Rev Cawthorne acknowledged he breached the civil rules by fishing on rivers for which he had not purchased a ticket.
 <sup>185</sup>X-in-Chief, Day 4.

- 145. And former enforcement officer Mr Lewis accepted that if that process is implemented well, then that would minimize the amount of involvement individual enforcement officers will need to have.<sup>186</sup>
- 146. In any event challenges to effective enforcement are no justification for a failure to act at all. But this is precisely what some objectors sought to suggest. Mr White, drew the following false analogy:

It's a bit like speeding. Everybody does it. The chance of being caught is remote.<sup>187</sup>

- 147. The fallacy of the analogy was easily exposed in XX. When asked whether he considered the fact of occasional breaches to constitute a reason not to bother with legislation, he responded '*no*, *I didn't say that.*'<sup>188</sup> In fact when pressed, objectors more generally acknowledged that despite enforcement imperfections the good sense of legislating for positive change for better conservation is clear. Mr Harvey agreed that concerns about enforcement are never a reason not to legislate.<sup>189</sup> Mr Lewis also agreed, during XX, that such difficulties are not a reason to give up.<sup>190</sup>
- 148. Legislation can, and in this case would, have a preventative and deterrent effect. Legislation would cause a change in the practices of anglers and netsmen, resulting in a level playing field where those who practice voluntary C&R and those who do not are treated alike in the eyes of the law, just as previous legislation has done in the past and continues to do today.

<sup>&</sup>lt;sup>186</sup> XX, Day 9.

<sup>187</sup> X-in-Chief, Day 5.

<sup>&</sup>lt;sup>188</sup> Day 6.

<sup>189</sup> Day 9.

<sup>&</sup>lt;sup>190</sup> Day 9.

#### F. PROPORTIONALITY OF THE ALL WALES BYELAWS

### Overview

- 149. The All Wales Byelaws are proportionate. It is agreed by all parties that the conservation of salmon and sea trout stocks is a legitimate aim. Given the current poor stock levels of salmon and sea trout, it is necessary and proportionate for anglers to share the burden of conservation in the way that the All Wales Byelaws would require. As Mr Harvey (representing Swansea Amateur Angling Association and Carmarthenshire Fishermen's Federation), a highly experienced angler, observed during his oral evidence; 'everyone is having to make sacrifice in relation to how they carry on this cannot operate unless there is change. Everyone has to change.'<sup>191</sup>
- 150. With regard to rod angling, the essence of objector argument on proportionality is that C&R is necessary, but should be imposed voluntarily, by clubs rather than by NRW, the regulator. Put simply and as noted above, this is an expression of objector reluctance at being told what to do.<sup>192</sup> But put simply again, given the urgent and widely acknowledged need for action, this petulant and philosophical objection should carry little or no weight.<sup>193</sup>
- 151. With regard to net fishing, NRW seeks to achieve equity between rod and net fisheries. Whilst stocks are unsustainable and breeding populations need to be increased, restraint is required by nets fisheries as well as rod anglers. The fact that the All Wales Byelaws would prevent net fishing but not rod fishing in April is no indication of a lack of equity, as Mr Rees and others agreed. But instead, this reflects the commercial nature of the netsmen's craft and the fact that April sees the largest sea trout (Mr Harries XX, Day 12 last word).

152. NRW's case on proportionality is set out in the evidence of Mr Gough, and Ms

<sup>&</sup>lt;sup>191</sup> Day 9.

<sup>&</sup>lt;sup>192</sup> As was recognized by e.g. Chris White (CPWF) (XX, Day 6) and Mark Lloyd (Angling Trust) (XX, Day 7).

<sup>&</sup>lt;sup>193</sup> See paragraph 12 above.

Jenkins.<sup>194</sup> In short, and as set out therein, the proposed measures are proportionate because:

- a. Alternative, or less onerous restrictions would not suffice:
  - i. Without mandatory measures, there would remain a notable proportion of anglers that would not comply with voluntary initiatives, and would continue to kill salmon and sea trout. Further, there would also continue to be so-called 'fish mongers'<sup>195</sup> that killed everything they caught. The All Wales Byelaws will establish a level playing field, and moreover, prevent the numbers of those who do not practice voluntary C&R from increasing.
  - NRW has considered, but not proposed, more restrictive approaches such as closing rivers to salmon fishing to avoid residual post-release mortality as is being done elsewhere.
  - iii. Other alternatives have been suggested by interested parties, which would not be appropriate (and are addressed below):
    - 1. There is a significant body of evidence that stocking is unsuccessful as a strategy, and hatcheries are damaging.<sup>196</sup>
    - 2. Bag limits and carcass tags are not appropriate when fish stocks are not able to sustain any level of exploitation (as is currently the case). When fish stocks are in surplus (above the MT), then sustainable harvesting of fish (through bag limits and carcass tags) may be acceptable.<sup>197</sup>
- b. NRW recognizes the slight risk that these measures may lead to a decline in angling activity, and it has sought to ensure that the socioeconomic benefits

<sup>&</sup>lt;sup>194</sup> NRW/1, paras 9.1-9.49; NRW/5, para 13.2

<sup>&</sup>lt;sup>195</sup> This was the term used by Chris White in his X-in-Chief on Day 5.

<sup>&</sup>lt;sup>196</sup> ST/2; STC/3; STC/4; ACC/39. See paras 188-189 below.

<sup>&</sup>lt;sup>197</sup> APP/4; NRW/1, paras 9.29-9.32.

associated with angling are protected, in so far as is commensurate with securing the savings in stocks required to reduce ongoing pressure on them. In any event, the greater threat to the future of angling is the lack of availability of fish (which is precisely what the All Wales Byelaws seeks to address).<sup>198</sup>

c. NRW has statutory equalities responsibilities, and has carried out an Equalities Impact Assessment.<sup>199</sup> Following a careful consideration of the issues, NRW amended its proposal for a bait ban on the use of shrimp and prawn (as an example). NRW's conclusion is that its proposals are appropriate and proportionate.

### Nature of the right

- 153. It is important to be clear as to the nature of the right in the proportionality balance in respect of these byelaws. At the core of the objection by CPWF, and other objectors, is the perception that the All Wales Byelaws will interfere with their 'fundamental right.' In his oral evidence, Mr White reiterated the misconception that 'we purchase a license which entitles us to take a fish to remove a fish for the table to eat...[the Byelaws would remove] that fundamental right.'<sup>200</sup>
- 154. Indeed, the further nuance that became clear during the Inquiry was that some of the objectors' cases did not ultimately argue that they necessarily wished to exercise this right, rather than they ought to be able to *choose not to exercise it*. This is a manifestation of the principled objection to the byelaws mentioned above, that some of the objectors reject the mandatory measures because they do not wish to be told what to do. This was also framed in the evidence of Mr Lloyd as being about *'about the right to take a fish even if you choose not to.'*<sup>201</sup>

155. However, in reality there is no fundamental right to take a fish. The statutory

<sup>&</sup>lt;sup>198</sup> NRW/1R, paras 2.20-2.38.

<sup>&</sup>lt;sup>199</sup> APP/30.

<sup>&</sup>lt;sup>200</sup> XX of Mr White, Day 6, Thursday 24 January 2019.

<sup>&</sup>lt;sup>201</sup> Day 7.

right conferred to a fishing licence holder is set out in section 25(2) of the Salmon and Freshwater Fisheries Act 1975 ("the 1975 Act"):

2) Subject to the following provisions of this section, a licence granted for the purposes of this section (hereafter in this Act referred to as a "fishing licence") shall entitle the person to whom it was granted and no others to use the means of fishing specified in the licence to fish for any fish of such a description, in such area or areas (or in waters of such description or descriptions) and for such period as is so specified.

156. This right is the right to fish, not to take fish.<sup>202</sup> The All Wales Byelaws will not interfere with that right. It will place proportionate restrictions on how that right may be exercised.

# Voluntary measures would be inadequate

157. The crux of many of the objectors' cases was summarized by Mr White as follows, during XX:

Voluntary measures would provide equal or better results. The basis of the objection is that there are equal measures that can be taken without legislation which would provide similar results.<sup>203</sup>

- 158. In its written evidence, the Angling Trust claims that it 'has opposed the imposition of mandatory C&R and most method restriction regulations on anglers in England and Wales since they were first mooted by the Environment Agency and Natural Resources Wales respectively in 2014/15.'<sup>204</sup>
- 159. However, in July 2014, the Angling Trust co-signed a letter to the Welsh

<sup>&</sup>lt;sup>202</sup> The 1975 Act distinguishes between 'fishing' and 'taking' fish, see for example section 27B Unauthorised fishing etc (1) A person is guilty of an offence if, by any means other than a licensable means of fishing, he fishes for or takes any fish in circumstances where — (a) the <u>fishing or taking</u> may be authorised under section 27A above, but (b) he is not authorised to <u>fish for or take the fish</u> under that section (or is so authorized but the fishing or taking is in breach of any condition of his authorisation).

<sup>&</sup>lt;sup>203</sup> Day 6.

<sup>&</sup>lt;sup>204</sup> AT/1.

Government urging it to consider, on vulnerable rivers, *'making C&R <u>compulsory</u> for anglers, as well as introducing constraints on those fishing techniques that reduce a salmon's chances of survival when released.'<sup>205</sup> This letter was signed by Mr Lloyd, the Chief Executive of the Angling Trust who presented its evidence before this inquiry. The letter is obviously supportive of mandatory C&R measures. It was also co-signed by Angling Cymru, Afonydd Cymru,<sup>206</sup> the Rivers Trust, Salmon and Trout Conservation Cymru<sup>207</sup> and the Atlantic Salmon Trust.<sup>208</sup>* 

- 160. During XX, Mr Lloyd was unable to properly explain why the Angling Trust were not still supportive of mandatory C&R. He contended that the Angling Trust's support expressed in the letter was not incompatible with the position as set out in its written evidence before the inquiry, stating that '*I can see how that is compatible...I don't think it trips me up.*'<sup>209</sup>
- 161. After further questioning, he also stated that he could not remember signing the letter, and said that he was '*most uncomfortable with the letter*.' However, he gave no compelling explanation as to why the position set out in the letter of 23 July 2014 was wrong, nor did he properly set out what differences (if any) existed between the Angling Trust's position now, compared with then.<sup>210</sup>
- 162. Mr Lloyd did finally agree that there were circumstances in which mandatory C&R would be appropriate, albeit *'with certain conditions'*. He further accepted that if popular support could not be attained, then it may nonetheless be acceptable if it was part of a suite of measures, which included sorting out environmental threats.<sup>211</sup>
- 163. Mr Lloyd had not read the evidence of Mr Vaughan, on behalf of NRW, and so

<sup>&</sup>lt;sup>205</sup> GM/4, p 3. Emphasis added.

<sup>&</sup>lt;sup>206</sup> AC/1.

<sup>&</sup>lt;sup>207</sup> STC/1.

<sup>&</sup>lt;sup>208</sup> Other co-signatories, Atlantic Salmon Trust and STC, have not changed their minds.

<sup>&</sup>lt;sup>209</sup> Day 7.

<sup>&</sup>lt;sup>210</sup> Day 7.

<sup>&</sup>lt;sup>211</sup> Day 7.

was seemingly unaware that the All Wales Byelaws were one part of a broad suite of measures that are intended to address the wider environmental issues affecting the health of salmon and sea trout stocks. One was left with the impression that the Angling Trust's current purported opposition to the mandatory nature of NRW's measures was not fully informed, or consistent with its previously held views.<sup>212</sup>

- 164. Mr White set out CPWF's position during the course of his evidence. He was one of many objectors who stated they already practice C&R fishing, and argued that voluntary C&R should be pursued instead. Indeed, it was accepted during Mr White's XX that C&R is desirable in principle, stating that *'we are conservationists. We don't seek to kill fish.'*<sup>213</sup>
- 165. Whilst the majority of anglers may respond to voluntary initiatives, there would remain a group of anglers that would not comply with them, and would continue to kill fish. In his evidence, Mr White explained that there were '*fish mongers*' who kill everything they catch. This is not an insignificant minority. In 2016, 16.7% of anglers killed all salmon they caught on Welsh rivers.<sup>214</sup>
- 166. When asked by the Inspector whether he was applying good practice for catch and release, Mr White responded:

Yes, not just my club – in any community angling club – but there are fishers who will kill every thing they catch.<sup>215</sup>

- 167. The burden of conservation angling is therefore not currently shared equitably. The All Wales Byelaws are the fairest means of levelling the playing field, so as to guarantee that the spawning reserves of salmon and sea trout are maximized.
- 168. The lack of a level playing field was experienced in 2017 by the coracle netsmen

<sup>&</sup>lt;sup>212</sup> XX Day 7.

<sup>&</sup>lt;sup>213</sup> Days 5-6.

<sup>&</sup>lt;sup>214</sup> CPWF/INQ/5: Mr White's Updated Presentation, slide 5.

<sup>&</sup>lt;sup>215</sup> Day 5. This was echoed by Mr Nicholson's evidence (Day 11).

who voluntarily decided to release 100% of their salmon catch. During XX, Mr Walters stated as follows:

Q. One of the problems with voluntary measures is that it places at a disadvantage those who are conservation minded, you refrained because you felt that it was your responsibility to contribute to the restoration of a dwindling stock?
A. Yes, we decided to make an effort.
Q. You noticed others weren't making the same effort?
A. Yes
Q. One of the advantages of byelaws is that it does not place at a disadvantage those who are publicly minded such as yourself – it creates a level playing field?

A. Yes I can see that.<sup>216</sup>

- 169. NRW have strongly promoted voluntary C&R for a number of years.<sup>217</sup> The figure of 86% voluntary C&R compliance for 2016 has been referred to a number of objectors (including CPWF), but this percentage includes a statutory compulsory component.<sup>218</sup> As such, the actual voluntary figure is not 86%, it is lower.
- 170. Although current levels of voluntary C&R are encouraging, there is variation river by river and year by year.<sup>219</sup> In any event, the release rate is not 100%, which is sought through the All Wales Byelaws.
- 171. Further, in absolute terms, the numbers of salmon killed are significant. On average, an adult salmon female will deposit 5,000 eggs (although, as Mr White said in XX, this can be a much higher figure for MSW). As such, and as put to him in XX, saving 40 female adult salmon will add the capacity of 250,000 potential eggs to the

<sup>&</sup>lt;sup>216</sup> Day 12.

<sup>&</sup>lt;sup>217</sup> See, for example, NRW press releases encouraging voluntary C&R 2017, 2016, 2015, and 2014: APP/13.

<sup>&</sup>lt;sup>218</sup> Due to the Spring Salmon Byelaws, and the mandatory river-specific measures on the Wye and Taff & Ely.

<sup>&</sup>lt;sup>219</sup> APP/4, p 113. For example, in relation to voluntary release rates of salmon in 2015 (which are set out in the Technical Case) a number of rivers were significantly below the average; the Ogwen river was 53%, the Tywi was 55% and the E Cleddau was 50%.

stock.<sup>220</sup> In 2016, 527 salmon were killed by anglers.<sup>221</sup>

- 172. Moreover, in XX, Mr White explained that angling clubs (including his own) already have a system of sanctions. Mr White explained that it was common for clubs to impose sanctions against their members in order to deter non-compliance (such as the threat of being banned, which Mr White noted was a severe sanction).<sup>222</sup>
- 173. Therefore, whilst CPWF (and others) advocate voluntary measures, the practices that they encourage amongst their co-anglers on a day to day basis are in fact backed by a threat of sanctions. Strictly speaking, that is not a voluntary measure at all it is akin to a mandatory measure.
- 174. Ultimately, this objection appears to boil down, in substance, to an objection to being regulated by the state at all, other than in circumstances where that regulation has been deemed acceptable and agreed by the angling community. As Mr Lloyd explained in XX:

I am opposed to regulation of anglers using rules which have not been agreed in consensus with anglers, that are acceptable to anglers and I think the angling community is best placed to regulate itself. In large part, it should come up with its own regulations.<sup>223</sup>

175. Mr Lloyd was further asked the following question:

*Q.* The objection derives from a resistance of being told to do that? [An angler] should be able to take [a fish] whether or not he or she chooses to do so? *A.* That is one major part of it.

176. This is essentially a philosophical objection to being told what to do.<sup>224</sup> During

<sup>&</sup>lt;sup>220</sup> Day 6.

<sup>&</sup>lt;sup>221</sup> CPWF/INQ/5: Mr White's Updated Presentation, slide 5.

<sup>&</sup>lt;sup>222</sup> Day 6.

<sup>&</sup>lt;sup>223</sup> Day 7.

<sup>&</sup>lt;sup>224</sup> For example, this was also accepted by Mr Eardley in XX on Day 6; Mr Lloyd in XX on Day 7; Mr Gerald John in XX on Day 8. In his closing statement, Mr Frey observed that some anglers don't retain

XX, Mr Renwick was forthright about this:

Q. you advocate the same practices that are mandated but are uncomfortable with the notion it should be compulsory, it undermines the experience to have someone tell you what to do? A. I agree<sup>225</sup>

- 177. NRW is tasked with a statutory duty to regulate fisheries.<sup>226</sup> To fail to act would be a dereliction of that duty. Further, it is not uncommon for new legislation to, at first, generate objection (such as the introduction of mandatory seat belts, or even the Spring or Wye Byelaws, for example). Such unpopularity is certainly not a reason not to regulate.
- 178. A further argument against mandatory C&R was that it would necessarily involve the release of mortally wounded fish. This is likely to be a rare event. By way of anecdotal evidence, in Mr White's extensive angling experience, two fish were accidentally killed by deep hooking in 10 years.<sup>227</sup> Moreover, when this does unfortunately occur, it is necessary to return the fish in order to maintain the level playing field imposed by the Byelaws. As Mr Harvey observed during his oral evidence, '*It's a pity that one would not be able to kill a fish that was unlikely to survive but we understand that there are good reasons why that should be in place.*'<sup>228</sup>
- 179. Finally, it is noted that not all objectors (such as Mr Gerald John) agree with C&R as a matter of principle, even as a voluntary measure.<sup>229</sup> However, the objective evidence of stock status does require NRW to act, in accordance with its duties, to arrest and reverse the decline.

fish they catch, nor fish with worms, but nonetheless object to the byelaws on the basis of the way that they were proposed, the consultation process, and the notion that anglers were a 'soft target'. This is simply a formulation of this same argument.

<sup>&</sup>lt;sup>225</sup> Day 10.

<sup>&</sup>lt;sup>226</sup> Environment Act 1995, section 6(6).

<sup>&</sup>lt;sup>227</sup> Days 5-6. Mr White related that he fished in Wales at least 2 days a week.

<sup>&</sup>lt;sup>228</sup> Day 9.

<sup>&</sup>lt;sup>229</sup> Day 8.

## A targeted approach

- 180. An objection that was repeated by several objectors was that NRW had taken a 'blanket' approach in making the All Wales Byelaws. However, NRW have undertaken a bespoke river by river assessment, and the All Wales Byelaws have been made on that basis.
- 181. This is clearly set out in Table 12 of the Technical Case, which lists the salmon and sea trout stock status respectively, for each individual principal river in Wales.<sup>230</sup> In XX, Mr Woodford (Afon Ogwen Anglers/CPWF) was shown this table in the following exchange:

*Q:* There depicted visually is NRW's exercise of assessing rivers individually and in a non-blanket method – would you agree with that? A: It is a table that indicates levels of risk for individual rivers on the basis of your stock assessment, yes.<sup>231</sup>

182. Moreover, in his oral evidence, Mr Davidson explained how the individual physical nature of each river fed into NRW's assessments during his X-in-Ch:

'Effectively, we looked at the physical nature of each river from a computer-based mapping network, type of river in each catchment, altitude, stream order, size of different stream...'<sup>232</sup>

- 183. As a result of this river-by-river approach, there were practical differences in the approach to the regulation of each river. For example, not all rivers are included within the scope of the All Wales Byelaws in respect of sea trout. Any sea trout caught on the Ogwen river, for example, could still be caught and killed under the byelaw regime, as it is not classified as being 'at risk' nor 'probably at risk'.<sup>233</sup>
- 184. This did not seem to be fully understood by all objectors who levelled the

<sup>&</sup>lt;sup>230</sup> APP/4, p 86.

<sup>&</sup>lt;sup>231</sup> Day 7.

<sup>&</sup>lt;sup>232</sup> Day 2.

<sup>&</sup>lt;sup>233</sup> This is clear on the face of the byelaws: APP/33.1.

'blanket regime' criticism against the Byelaws. For example, during XX it was put to Mr Renwick that NRW has tailored the measures it seeks to introduce in relation to condition of rivers. He responded as follows:

I see that they've analyzed the rivers, used the statistics available. When I read the byelaws, whilst I used the term blanket – changes in methodology that can be used – then unless the NRW can revise the byelaws and say it doesn't apply to this river, an element of consistency does apply.<sup>234</sup>

185. However, the Byelaws do not apply to all rivers in respect of sea trout as certain rivers are assessed as having a sustainable stock. So on Mr Renwick's own criteria, the Byelaws are not 'blanket' in any detrimental sense. Regrettably, salmon stocks are assessed as being consistently poor, and as such, are prescribed a consistent solution. This is not evidence of a so-called 'blanket approach', but rather, it is demonstrative of how serious and widespread the current depletion of salmon stock is.<sup>235</sup>

## **Equity between stakeholders**

- 186. The necessity of both sets of Byelaws would ensure that there is a degree of equity between the fisheries in meeting these conservation requirements.
- 187. The two sets of byelaws for nets and rods, though independent, are designed to be complementary, balancing the interests of both net and rod fishery sectors while addressing the underlying need to restore stocks to sustainable levels. The socio-economic benefits, for example, of favouring rod fisheries over net fisheries do not form part of this judgement. In terms of measures to protect vulnerable salmon stocks the byelaw proposals seek a no kill policy on both fisheries.<sup>236</sup>

# Stocking not an appropriate alternative

188. Much time was spent at this Inquiry revisiting the well-studied topic of hatcheries as a means of stocking in lieu of, or complementing, the All Wales Byelaws.

<sup>&</sup>lt;sup>234</sup> Day 9.

<sup>&</sup>lt;sup>235</sup> NRW/1R, 4.2-4.8.

<sup>&</sup>lt;sup>236</sup> NRW/1, para 9.46.

The unchallenged views of relevant experts is that where viable wild stocks exist (as in this case) hatcheries should be avoided. NRW's approach, concluded following a public consultation in 2014, accords with the views of NASCO and the International Union for the Conservation of Nature.<sup>237</sup> The problems associated with stocking were addressed in the evidence of Mr Gough, and in that of Salmon and Trout Conservation Cymru ("STC").<sup>238</sup> There is of course also extensive academic evidence which is consistent with NRW's position.<sup>239</sup>

189. No comparable scientific evidence has been elicited in support of stocking. Mr Geoff Rothwell, a former hatchery manager, who presented a case for stocking, had seemingly not read the evidence of Mr Gough, nor the relevant academic evidence included within the Inquiry core documents.<sup>240</sup> Others, such as Mr Nicholson, who contended that stocking was appropriate did not even avail themselves of the opportunity of challenging Mr Gough's evidence through cross examination. Mr Nicholson, who acknowledged he had not engaged in the 2014 consultation, also claimed to be able to produce scientific evidence, but again, he did not do so despite the ample opportunity he had to produce such evidence.<sup>241</sup> There is no real case in support of stocking for NRW to answer.

#### Other (more restrictive) options

- 190. The proportionality of the All Wales Byelaws is further demonstrated by the alternative, more restrictive approaches that NRW has considered.<sup>242</sup> It has rejected the following, more draconian, alternatives:
  - a. Closing rivers completely to salmon fishing to avoid residual post-release mortality. This has been a policy decision made on certain rivers in Ireland.<sup>243</sup>

<sup>&</sup>lt;sup>237</sup> APP/4, p 84.

<sup>&</sup>lt;sup>238</sup> NRW/1, paras 9.33-9.40; STC/1.

<sup>&</sup>lt;sup>239</sup> ST/2; STC/3; STC/4; ACC/39.

<sup>&</sup>lt;sup>240</sup> Day 10.

<sup>&</sup>lt;sup>241</sup> In XX on Day 11.

<sup>&</sup>lt;sup>242</sup> ACC/23-30; NRW/1, section 9.

<sup>&</sup>lt;sup>243</sup> Ian Russell, X-in-Ch, Day 3.

This would obviously have an enormous impact on anglers and netsmen, and NRW have sought to implement measures that would enable fishing to continue.

- b. Salmon and Trout Conservation Cymru had urged NRW to change the minimum slot size for sea trout from 23cm to 30cm, which would protect a greater proportion of the whitling stock.<sup>244</sup> NRW do not consider that this measure is currently warranted and would make a limited difference to any spawning stock.<sup>245</sup>
- c. Moreover, a number of interested parties (including Afonydd Cymru,<sup>246</sup> STC and Mr Harvey) suggested that there should be a full ban on worm bait. In NRW's analysis of consultation responses, it concluded that a full ban would be excessive where there are sustainable sea trout stocks and accepted the use of worm for brown trout in most rivers.<sup>247</sup> Further, as explained in the Equality Impact Assessment, a full bait ban might have a differential impact on anglers who may be elderly or disabled and potentially less able to practice other fishing techniques.<sup>248</sup>
- 191. NRW has the difficult task of balancing competing interests<sup>249</sup>. That it is has received some criticism from all sides is an indication, it is submitted, that it has struck the balance correctly.<sup>250</sup>

## Impact on angling

Will there be a decline in angling activity?

<sup>&</sup>lt;sup>244</sup> STC/1.

<sup>&</sup>lt;sup>245</sup> NRW/1, para 8.48. See paragraphs 129-132 above.

<sup>&</sup>lt;sup>246</sup> Afonydd Cymru seek a full bait ban.

<sup>&</sup>lt;sup>247</sup> NRW/1, para 8.36-8.38; See also the amended form of the All Wales Byelaws provided to the Inquiry on Day 11 NRW/INQ/17 after Dr Mawle pointed out a drafting error re this.

<sup>&</sup>lt;sup>248</sup> APP/30.

<sup>&</sup>lt;sup>249</sup> A phrase with which Reverend Cawthorne appeared to struggle, at least so far as it applies to humans (XX, Day 11)

<sup>&</sup>lt;sup>250</sup> This was agreed by Creighton Harvey during XX on Day 9.

- 192. NRW recognizes that there is a risk that the measures could lead to a decline in angling activity, and is has sought to ensure that the socioeconomic benefits associated with angling are protected, in so far as is commensurate with securing the savings in stocks required to reduce ongoing pressure on them.<sup>251</sup> The decline in licence sales for salmon and sea trout started several years ago, before the All Wales Byelaws were contemplated, and that there is a direct correlation between this decline in licenses and the reduced availability of fish.<sup>252</sup>
- 193. During the course of the evidence provided to this inquiry, it seemed to be recognized that the deterrent effect of the All Wales Byelaws to angling activity would be relatively minimal. As Mr Renwick explained in his oral evidence those committed to angling are not going to leave the banks. Rather, it is only the casual fishermen who are at risk of being deterred:

I would not give up fishing but I am unfortunately an addict, I've fished since I was 5, I own 40 odd fishing rods. What I'm saying is those discretionary, not the season rods or local rods but the discretion rods, those casual anglers – those are the anglers who will go away.<sup>253</sup>

- 194. The season rods and local rods represent the majority of salmon and sea trout anglers. Further, Mr Renwick's observation accords with the written evidence of Dr Mawle, who explained that, given the majority of anglers already voluntarily release the majority of their catch, he expected that *'the impact will be small.'* Notably, Rev Cawthorne considered that this was *'a kind of absurdity to'* this analysis, and seemed to find it amusing without any explanation as to why.<sup>254</sup>
- 195. During XX, Mr Eardley was questioned as to the byelaws alleged deterrent impact on angling activity, as claimed by CPWF. Mr Eardley was unable to explain why anglers would be deterred, other than reiterating that it was simply what he

<sup>&</sup>lt;sup>251</sup> NRW/1R, paras 2.20-2.38.

<sup>&</sup>lt;sup>252</sup> NRW/1R, Figure 4.

<sup>&</sup>lt;sup>253</sup> Day 10.

<sup>&</sup>lt;sup>254</sup> Day 12.

considered would happen, and that it what motivated anglers to fish was '*complex*'.<sup>255</sup> With respect, the lack of a clear response or substantiation in relation to this issue is illustrative of the hollow nature of this claim.

196. Previous examples of byelaws further indicate this. When asked by the Inspector whether the Wye byelaws had had a disproportionate impact on the numbers of anglers, Dr Marsh-Smith (Afonydd Cymru) responded as follows:

*I tend to look at anglers falling into two groups: (1) Sports fisherman and (2) hunter gatherers – it will have an effect on hunter gatherers, but is positive for sports fisherman.*<sup>256</sup>

- 197. In any event, as noted above, the greater threat to the future of angling is the lack of availability of fish (which is precisely what the All Wales Byelaws seeks to address). Mr White observed in his evidence, that in the old days of plenty when stocks were not as depleted, *'every fish was being killed it didn't matter. It does matter now.'*<sup>257</sup>
- 198. Not all objectors were prepared to acknowledge this. During X-in-Ch, Mr Karl Humphries hazarded a number of guesses as to what influenced the '*substantial decline*' in angling activity. However, when asked in XX whether the decline in applications for licences might in some way be connected to the decline in fish stock, Mr Humphries somewhat implausibly replied that he did not have a view.<sup>258</sup>
- 199. By contrast, a significant number of objectors and interested parties observed that a lack of availability of fish was the most significant deterrent against angling:
  - a. Afonydd Cymru noted in X-in-Ch that the biggest factor on angling activity was the availability of fish.<sup>259</sup>

<sup>&</sup>lt;sup>255</sup> Day 6.

<sup>&</sup>lt;sup>256</sup> Day 8.

<sup>&</sup>lt;sup>257</sup> Day 7.

<sup>&</sup>lt;sup>258</sup> Day 11.

<sup>&</sup>lt;sup>259</sup> Day 8.

- b. Mr Harvey stated, in X-in-Ch, that 'But we are aware that I know from my own children that I can take them fishing the chances of them catching a fish are less and less and less the chances aren't there they will be less likely to take up the sport, simple as that. People will be less likely to travel to the area, if they are spending serious money, to fish for fish that are no longer there.'<sup>260</sup>
- c. Similarly, Mr Gerald John observed in XX that a lot of anglers do give up regularly because of their perception of lower fish stocks.<sup>261</sup>
- d. Mr Renwick stated in XX that 'our worst ever environment would be to go and fish a river where there are no fish in it. It is fundamental.'
- e. Dr Mawle explained, in his PoE, that 'what is likely to reduce angling activity, and associated socio-economic benefits, is poor catches as in 2018, or the expectation of them. Indeed, the average annual rod catch is usually taken as a key factor determining the demand for fishing opportunities, and hence the value of salmon fishing rights...'<sup>262</sup>
- 200. In any event, it has been recognized by the Angling Trust (in its co-signed letter of 23 July 2014) that 'even with C&R, the salmon fisheries of Wales will, with good marketing, attract visiting anglers, as has been shown on the Wye.'<sup>263</sup> This accords with Dr Marsh-Smith (Afonydd Cymru)'s evidence, who also noted in X-in-Ch, in relation to the example of the Wye byelaws: 'At the time, there was serious protest. But a year on, our anglers seemed very happy about it. Many of them took up fly fishing, and had better enjoyment as a result.'<sup>264</sup>

<sup>&</sup>lt;sup>260</sup> Day 9.

<sup>&</sup>lt;sup>261</sup> Day 8.

<sup>&</sup>lt;sup>262</sup> GM/1.

<sup>&</sup>lt;sup>263</sup> GM/4.

<sup>&</sup>lt;sup>264</sup> Day 8.

#### Socioeconomic impact

- 201. NASCO guidelines prescribe that the socioeconomic impact of fisheries controls needs to be taken into consideration.<sup>265</sup> In general terms, objectors have relied upon anecdotal evidence that they claim shows that there will be a significant impact on the local economy, particularly with regard to the closure of angling clubs and tourism, that they contend has not been taken into account.<sup>266</sup>
- 202. In XX, Mr Woodford expressed his view that '[NRW] have not considered the socioeconomic impact.' Similarly, during Mr Gerald John's XX, the following was stated:

Q. You don't dispute that NRW in considering these byelaws, in promoting them and in consulting on them took account of socioeconomic factors?
A. They said they did.
Q. Do you have a reason to doubt they actually did? What's your reason?
A. They might have considered it but I don't think that they were aware that the Byelaws would impact upon socioeconomic effects.<sup>267</sup>

- 203. However, this is simply incorrect. Again, there seems to be a perception that a failure to agree with a particular view of the socioeconomic impact, means that no assessment has been carried out. NRW, however, did carry out a comprehensive consideration of the socioeconomic impact of the byelaws in respect of both the rod and net fisheries. NRW's Technical Case sets out this consideration of the socioeconomic impacts of the All Wales Byelaws in great detail.<sup>268</sup>
- 204. Overall, NRW has sought to ensure that the socioeconomic benefits associated with rod and net fisheries are protected, in so far as is commensurate with securing the savings in stocks required to reduce ongoing pressure on them.<sup>269</sup> Further, as explained above, it is anticipated that any reduction in angling activity will be relatively minor and transient.

<sup>&</sup>lt;sup>265</sup> POL/11.

<sup>&</sup>lt;sup>266</sup> See, for example, the presentation of John Eardley: CPWF/INQ/6.

<sup>&</sup>lt;sup>267</sup> Day 8.

<sup>&</sup>lt;sup>268</sup> APP/4, pp 120-129.

<sup>&</sup>lt;sup>269</sup> See the PoE of Peter Gough: NRW/1, para 9.41.

- 205. NRW has had to undertake a balancing exercise, which includes having to protect the broader inherent socioeconomic benefits of the salmon and sea trout stocks themselves for the future. NRW has sought to have the least detrimental socioeconomic impact as possible, in particular, by striving not to close any rivers to fishing.
- 206. Further, and as explained during Mr Gough in XX by Mr Woodford, the biggest determining factor affecting the socioeconomic benefits of angling into the future is the availability of fish.<sup>270</sup> Mr Gough explained as follows:

There is a risk that some people will respond in the short term, yes there is a risk. However, over the last 10 years or so there has been significant decline in uptake in angling, which mirrors decline in stock availability. If we took no action at all, the ongoing decline may continue anyway. So our action is intended, in contrast to what people say, its intended to increase angling activity on an appropriate time scale. If we don't take action – then the decline will continue...socioeconomic benefits are declining. Both will decline if nothing changes.<sup>271</sup>

207. Ultimately, therefore, the All Wales Byelaws are seeking to protect the natural resource, so that in future, the human activities of rod and net fishing will be able to continue. As stated in the Technical Case:

Our actions are intended to improve the stock so that fishing uptake will increase in the future.<sup>272</sup>

## Impact on rod fisheries

- 208. A number of specific contentions have been made about the socioeconomic impact of the byelaws on rod fisheries.
- 209. The overarching value of rod fisheries to the Welsh economy has been referred to by objectors, including CPWF. It has been overstated in a number of different ways.<sup>273</sup> In particular, the figure of £150m has been cited as the quantification of that

<sup>&</sup>lt;sup>270</sup> Day 1.

<sup>&</sup>lt;sup>271</sup> Day 1.

<sup>&</sup>lt;sup>272</sup> APP/4, p 120.

<sup>&</sup>lt;sup>273</sup> Mr Hulmston's opening statement, for example, referred to this figure (Day 1).

value. Moreover, during his opening statement, Mr Gerald John stated that fishing has a similar value to the rural economy of Wales to the export of lamb to the continent.<sup>274</sup>

210. However, Mr Gough debunked these myths, and explained during his X-in-Ch:

> someone mentioned the figure of £150m, it's a mysterious figure that reflects inland and coastal fishing...The estimate there was that fishing in rivers generates about £20m per year gross value added, and sustains about 700 full time employees. It does not exceed or match lamb exports. It's a substantial figure. It could be more, because it has been more the past. We want to protect our stocks for the future sustainability so that socioeconomic value can be improved and maximised.<sup>275</sup>

- 211. Further, an academic assessment of the socioeconomic and social benefits of angling for migratory salmonids was undertaken as part of the Celtic Sea Trout Project, and NRW analyzed its report, 'Fishing for Answers' (Substance 2012) in the Technical Case. In particular, the report listed six complex and interrelated benefits:
  - 1) Sports participation,
  - 2) Health and Wellbeing,
  - 3) The Natural Environment
  - 4) Community Development,
  - 5) Rural Communities and Angling Tourism
  - 6) Young People.<sup>276</sup>
- 212. These issues have all been taken into account in NRW's balancing exercise.

# Impact on net fisheries

213. The socioeconomic impact on net fisheries was also taken into account, and analysed in the Technical Case. NRW calculated that the All Wales Byelaws would have had, in 2016, the effect of reducing first sale value from £46,032 to £30,901, a

<sup>&</sup>lt;sup>274</sup> Day 1.

<sup>&</sup>lt;sup>275</sup> Day 1. 211. Fishing in rivers generates about £20m per year gross value added. This figure is based on a report that NRW commissioned into socioeconomics of angling by Dr Mawle in 2018: ACC/142, p 10.

<sup>&</sup>lt;sup>276</sup> ACC/9; APP/4, pp 118-119.

reduction of 19% across Wales. Moreover, it further acknowledged that loss in income would not be shared equally across net fisheries or indeed within the fisheries themselves, with highly variable levels of participation and fishing effort between different netsmen. However, the majority of net fisheries would be only lightly affected by the proposals.<sup>277</sup>

214. Moreover, NRW analysed, and took into account, the heritage value of the Welsh coracle fisheries, and referred to an economic assessment undertaken by the EA in 2004. NRW's conclusion was as follows:

NRW does not, therefore, believe that the combination of measures proposed (i.e. no change in the number of licences available, controls prohibiting the take of salmon, changes to the fishing seasons, while still allowing fishing for sea trout during May, June and July) poses a threat to the heritage value of the coracle fisheries. We do not believe the heritage values and social benefits are dependent on the continued targeting of early run sea trout or the take of salmon.<sup>278</sup>

- 215. It is common ground between coracle netsmen and NRW that the heritage value is important, and that coracle fishing should be preserved for future generations. During XX, it was acknowledged by Mr Rees that a rejuvenation of the stock would be necessary in order for this to happen.<sup>279</sup>
- 216. Moreover, it was also common ground that the heritage values and social benefits would continue even if the Byelaws were introduced.<sup>280</sup>
- 217. During the course of their oral evidence, the commercial netsmen made clear that there is a single point of dispute in respect of the Wales Net Fishing (Salmon and Sea Trout) Byelaws 2017. They object to the loss of April as a month to fish for sea trout, as a result of the proposed shortening of the nets season. However, the majority of the netsmen (with the exception of Mr Davies and Mr Dalton) would otherwise be

<sup>&</sup>lt;sup>277</sup> APP/4, p 120. Mr Randles stated that the All Wales Byelaws would reduce his annual income by 3%: TR/INQ/1.

<sup>&</sup>lt;sup>278</sup> APP/4, p 121.

<sup>&</sup>lt;sup>279</sup> Day 12.

<sup>&</sup>lt;sup>280</sup> Day 12.

supportive of the byelaws.<sup>281</sup>

- 218. The basis of this proposal is set out in the evidence of Mr Gough, and in the Technical Case.<sup>282</sup> In short, the sea trout returning to rivers in April are the largest, and most fecund fish.<sup>283</sup>
- 219. The crux of the netsmen's objection is that the number of fish saved in April would be relatively insignificant to the stock, but are financially valuable to them. As Mr Rees observed they are *'the prize fish.'*<sup>284</sup>
- 220. However, during XX, Mr Rees was taken to the Technical Case, which set out the estimated additional eggs laid as a result of the closure of the net fisheries during April. For example, on the Twyi, 604,328 additional eggs would be laid in the first year:<sup>285</sup>

Q. there is a very significant number of additional eggs laid as a result, precisely because the prize fish to you is genetically very valuable? A. yes...I can't argue with the fact, I've got no defence, or statistical information to counter.<sup>286</sup>

221. Ultimately, NRW have to strike a balance between the financial value of the April fish to nets fishermen, and the genetic value of the fish to the stock. Mr Rees accepted during XX that the 10 year period during which the byelaws would restrict net fishing in April is a price worth paying for the objective of rejuvenating stocks, in turn, preserving the heritage of coracle fishing for future generations.<sup>287</sup> This is a proportionate measure. NRW have avoided the closure of the net fisheries altogether, as is the case in England and Scotland.

<sup>&</sup>lt;sup>281</sup> Day 12. Mr Rees, Mr Harries, Mr Walters and Mr Dalton expressed conditional support (subject to the loss of April).

<sup>&</sup>lt;sup>282</sup> APP/4, pp 103-107.

<sup>&</sup>lt;sup>283</sup> Day 12.

<sup>&</sup>lt;sup>284</sup> XX, Day 12.

<sup>&</sup>lt;sup>285</sup> APP/4, p 107.

<sup>&</sup>lt;sup>286</sup> Day 12.

<sup>&</sup>lt;sup>287</sup> Day 12.

### The socioeconomic benefits of the salmon and sea trout

- 222. Salmon and sea trout are a significantly valuable natural resource. It is important to bear in mind that salmon and sea trout are not simply a natural resource for fishermen, but are more widely appreciated. For example, in his evidence, Mr White explained that the salmon at Conwy Falls are a great tourist attraction. The future of these stocks hang in the balance.<sup>288</sup>
- 223. As observed in the Technical Case, 'it is difficult to avoid the conclusion that the conservation of valuable stocks far outweighs any transitory impact on economic activity.'<sup>289</sup> Moreover, Mr Gough summarized NRW's view in X-in-Ch as follows: 'catch and release will be effective, and will maintain socioeconomic benefits.'<sup>290</sup>

### **Equalities** issues

- 224. NRW has statutory equalities responsibilities, and has discharged them. It carried out an Equalities Impact Assessment.<sup>291</sup> Criticisms of the All Wales Byelaws have been made, in respect to their equalities impact, by Mr Meyrick in written submissions.<sup>292</sup> These criticism are addressed in detail in the written evidence of Mr Gough.<sup>293</sup>
- 225. In essence, NRW's conclusion is that its proposals are proportionate to the legitimate aim of conserving seriously depleted stocks. Following a careful consideration of the issues before and during consultation, NRW amended its proposal for a bait ban on the use of shrimp and prawn on equalities grounds. Further, concerns about the participation of disabled and elderly anglers also militated against a full worm ban. The overall effect is to maintain opportunities for anglers who can only fish with bait. In NRW's view this makes the impacts of the All Wales Byelaws

 $<sup>^{\</sup>rm 288}$  Days 5 and 6.a

<sup>&</sup>lt;sup>289</sup> APP/4, p 118.

<sup>&</sup>lt;sup>290</sup> Day 1.

<sup>&</sup>lt;sup>291</sup> APP/30.

<sup>&</sup>lt;sup>292</sup> DM/1.

<sup>&</sup>lt;sup>293</sup> NRW/1R2, paras 2.1-2.8.

on less physically able anglers proportionate and objectively justified.<sup>294</sup> Moreover, and in any event, less physically able anglers (in common with young starting out as anglers) will be able to continue to coarse fish with worm, which will be completely unaffected by the All Wales Byelaws. They will not be deprived of the opportunity to angle.

## G. OTHER MEASURES UNDERTAKEN BY NRW

- 226. The All Wales Byelaws are a complementary component of a broad suite of measures. It is acknowledged that it necessary for the byelaws to be implemented incombination with land management and habitat restoration proposals. These measures are addressed in detail in the evidence of Mr Vaughan.<sup>295</sup> These measures include, for example:
  - Using its water resource powers to control abstractions to ensure water is conserved, augmented, redistributed and the proper use of water is secured; whilst balancing legitimate needs against environmental in-river needs;
  - ii. Through the Water Framework Directive (the WFD)<sup>296</sup> identifying flow and level concerns in water bodies in Wales and developing and delivering solutions;
  - iii. Adopting and promoting sustainable drainage approaches, both in urban and rural locations and in new and existing developments. This moves away from end-of-pipe solutions and tackles runoff where it starts so that water is retained in catchments and slowly released to benefit fish and rivers;
  - iv. Promoting the Restoring Sustainable Abstractions programme to rectify historic abstractions that may be damaging the environment. This includes

<sup>&</sup>lt;sup>294</sup> NRW/1, paras 4.41-4.3; NRW/1R2, paras 2.1-2.8.

<sup>&</sup>lt;sup>295</sup> NRW/6.

<sup>&</sup>lt;sup>296</sup> LEG/16.

installing screens on intakes to prevent fish ingress;

- v. Using its hydro-power guidance which is specifically designed to protect fish;
- vi. Using the UK Forest and Water guidelines to deliver best practice forestry operations on the Welsh Government Woodland Estate and influencing the private sector to do likewise.<sup>297</sup>
- 227. In X-in-Ch, Mr Vaughan explained how NRW approach tackling multi-layered and complex environmental issues. NRW's focus is to consider and implement multiple measures, where appropriate, to target and tackle different elements of a particular problem at different stages in one fell swoop. As Mr Vaughan stated in his X-in-Ch:

You have to tackle the issue where it starts, rather than where it ends up. You can then introduce a whole series of interventions. We call is substrate – we look at issues downstream, and tackle the problem as close to source as possible. We look at the options, work out the options that are practical. That solution would produce a whole range of benefits...rule the whole lot in.<sup>298</sup>

228. Further, during X-in-Ch, the following was explained:

Q. Bearing in mind that the proposed Byelaws target net and rod fishing, and mandate certain changes in relation to both of those, how do those proposals tie in with your own assessment of the need to consider closely root cause and tailor a situation to whatever that or those causes might be?

A. It's part of that group of solutions that we're looking at. When we've identified that there is an issue – we've looked at all the options that are part of that mix. We look at them, we see which of those we can implement, and then we implement all of those that are applicable...in combination how they can deliver more than an individual solution... We have to look at every tool in the tool box. In the past we've done it in dribs and drabs and as a consequence we haven't had the impact. Stepping back and looking at the problem in its totality, and options we have to solve the problem wherever they may lie, we can provide a quicker way of solving the problem<sup>299</sup>. (emphasis

<sup>&</sup>lt;sup>297</sup> NRW/6a.

<sup>&</sup>lt;sup>298</sup> Day 4.

<sup>&</sup>lt;sup>299</sup> Day 4. See also Ms Jenkins' evidence on the relatively recent acquisition of a wider range of statutory powers of NRW: NRW/5; Day 4.

added)

- 229. It is regrettable that criticism was levelled at NRW as to a perceived lack of intention to address such issues by objectors, including the Angling Trust, who acknowledged that they had not read Mr Vaughan's evidence.<sup>300</sup> In written evidence, a number of objectors referred to the All Wales Byelaws being the only measure pursued.<sup>301</sup> Objectors and interested parties were and still are urged to read this evidence.
- 230. Once brought to their attention, some objectors acknowledged that the suite of measures would have a positive impact. Mr Mark Frey, for example, accepted that if these measures were implemented *'with gusto'* as is NRW's intention, they would absolutely make a difference.<sup>302</sup>
- 231. During XX, and in closing, Dr Mawle expressed some cynicism about the suite of measures, but stated as follows:

There may be some things going on – there is a difference between activity and achievement - such actions are going on but I'm not convinced that these other things are being addressed – if you can get the reassurance, then yes, I'll support the Byelaws.<sup>303</sup>

232. In his SRPoE, Mr Vaughan provided this reassurance, with particular reference to Dr Mawle's presentation:

Throughout my evidence I have shown that there are many issues that affect our catchments, their rivers and fish. Dr Mawle identifies in his final slide six factors requiring prompt effective action, one of which applies to the Anglers themselves. I believe there are many more factors at work and have shown how NRW has identified these root causes and what it has done to develop approaches that will help mitigate the problems and issues identified. It is clear that the most effective way to protect fisheries is for all of these issues to be addressed. There is an urgent need both to implement measures and allow nature the time to recover as soon as it is able. NRW needs all

<sup>&</sup>lt;sup>300</sup> Day 7.

<sup>&</sup>lt;sup>301</sup> CPWF/2, para 12, AOA/1 para 84, AR/1 para 18 and 21, AN/1a para 32.

<sup>&</sup>lt;sup>302</sup> XX, Day 8.

<sup>&</sup>lt;sup>303</sup> Day 10.

stakeholders to play their part in delivering the actions to the maximum effect. NRW intends to play its full part in this work and to work and encourage others to do the same.<sup>304</sup>

- 233. It is indeed important that all stakeholders support NRW to address these wide-ranging environmental issues. During the course of his evidence, Mr Lloyd observed that he had seen pollution incidents '*so often that there's no point in reporting it.*'<sup>305</sup> However, the frequency of such incidents makes it all the important that they are reported to NRW. In his XX of Mr Vaughan, Mr White related that he always reported pollution incidents and explained that they were '*dealt with promptly.*'<sup>306</sup>
- 234. NRW's will continue to pursue these measures to address the wider environmental problems that are having a detrimental impact on fish stocks. Mr Vaughan explained, in X-in-Ch that:

we are clear we have to put in a lot of effort. A lot of effort is required to put the environment right. The measures here are seeking to address the fact that we are still using that resource in a way and at a rate that we consider to be unsustainable, and methods of fishing are continued beyond a voluntary approach is to optimize the impact of all those measures that in combination effect is absolutely critical.<sup>307</sup>

# H. CONCLUSION

235. The decision to seek enactment of the All Wales Byelaws has not been taken lightly by NRW. It followed a collaborative approach with stakeholders and the exercise of expert judgment following careful consideration of relevant evidence. NRW makes no apology for the fact that it has approached the process of considering and promoting the proposed legislative change with care and diligence, including through the appointment of its legal team.

236. But it is important to maintain a degree of perspective about what is being

<sup>&</sup>lt;sup>304</sup> NRW/6R2, para 7.2.

<sup>&</sup>lt;sup>305</sup> Day 7.

<sup>&</sup>lt;sup>306</sup> Day 4.

<sup>&</sup>lt;sup>307</sup> Day 4.

proposed. After all the practical consequences of the All Wales Byelaws would, for many if not most, be relatively modest. NRW are not proposing to stop fishing. NRW are not proposing to close any Welsh river to angling. Anglers would still be able to fish for salmon and sea trout, as well as other species wholly unaffected by the All Wales Byelaws. The All Wales Byelaws are proposed for a limited period of 10 years only, with a review after 5 of those years. And for the overwhelming majority of anglers and netsmen (who already practice voluntary C&R with associated method restrictions) the All Wales Byelaws will, in any event, result in no practical change whatsoever. For the dwindling stock of Welsh salmon and sea trout, the All Wales Byelaws would, however, make a vital difference at a time when measures to stem and reverse stock depletion are urgently needed. NRW is therefore in no doubt that despite the impact of the All Wales Byelaws on a small minority who will be affected, they are necessary, proportionate and reasonable, given the current state of sea trout and salmon stocks in Wales. This, in essence, is because where populations of these species are vulnerable, as they are now, then even the intentional killing of a single sea trout or salmon is unacceptable and places at further risk their dwindling stocks.

- 237. It is vital to protect the important spawning resource of salmon and sea trout in the rivers targeted by the All Wales Byelaws, not just for the sake of those species but ultimately for the sake of those who wish to continue to fish them into future. But NRW has always made clear that the legislative measures it proposes must be accompanied a range of initiatives and practices to improve the environmental quality of the rivers in which these species live. NRW considers that the All Wales Byelaws, in combination with the other measures it has outlined, are an essential, necessary, reasonable and proportionate means of addressing the urgent and severe problem of salmon and trout stock depletion in Wales.
- 238. NRW therefore respectfully submits that the All Wales Byelaws<sup>308</sup> should be recommended to the Cabinet Secretary to the Welsh Government.

<sup>&</sup>lt;sup>308</sup> In the amended form provided to the Inquiry on Day 11 NRW/INQ/17.

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