



WTT Response to EA Hydro Flows Consultation March 2013.

Question 1

Please indicate which option you prefer:

Preamble: the Wild Trout Trust is a not-for-profit conservation charity, working with voluntary groups, NGOs and regulatory agencies across the British Isles to protect and enhance aquatic habitat for wild brown trout, a UK BAP species. This response is informed by a range of the Trust's stakeholders, including its staff, three of whom have previously and recently worked for the Environment Agency in England and were closely connected to the hydropower consenting process.

It is the opinion of the Wild Trout Trust that the vast majority of small scale hydro developments are incompatible with good ecological status in our rivers and should not be given tax-payer funded subsidies, the only reason they are ever likely to be economically viable. Small scale hydro developments produce a minimal amount of renewable energy in return for a large and long-term detriment to river habitats, not least simply by preserving the existence of currently redundant weirs and impoundments where the priority should be removal, in pursuance of Good Ecological Status under the Water Framework Directive.

Very few, if any, hydro schemes can be confidently described as having minimal impact upon fish and fisheries. In practice, there are few resources to police the safeguards and standards written into licences for hydro schemes, nor to monitor their effects; indeed, the draft GPG suggest that the hydro operators will police themselves. An example of this is Beeston Weir on the River Trent where large volumes of water are passed through turbines with totally inadequate screening. Further examples exist where sections of river have been completely drained of water for extended periods. Shortfalls in the Salmon and Freshwater Fisheries Act 1975, failing to consider the free passage of anything but migratory salmonids (in the absence of the long awaited trout and coarse fish byelaws) also have to be accounted for within the GPG to mitigate for the currently inadequate levels of protection for trout and coarse fish.

Option 1

This option is flawed by the lack of flexibility and protection afforded in the original GPG.

The idea that the requirement for flow variation should be limited to High Sensitivity sites, without detailed environmental assessment, is utterly flawed and contravenes EA's obligations on environmental protection. EA consenting officers are very rarely allowed even to put monitoring conditions on a hydro scheme as they are considered to be an unacceptable burden on the industry. This rationale is compounded by the

fact that most schemes, certainly in England are barely, if at all, viable from the offset, and also one of the primary reasons that so little data exist on the impacts of hydropower.

If all else fails, and all of the other negative impacts of hydropower are to be overlooked, schemes should not impact on the flow variability of a river as these natural fluctuations perform vital functions both as environmental cues and in maintenance of river geomorphology.

Option 2

Option 2 is too open to misinterpretation and inconsistency; it is over complicated and fails to consider river geomorphology. This option is unacceptable as the scoring may minimise the scope for flow splitting. The level of protection would be limited by the existing ecological quality, potentially prohibiting improvements required under much legislation, including the Water Framework Directive.

Eels, potentially one of the most critically endangered fish species in the country, generate the lowest score in this assessment. Eels may have lower water quality requirements than many other fish species, but surely their presence within an area of a watercourse should highlight the requirement to protect the existing ecological conditions within that reach.

Option 3

There are concerns regarding the CAMs protocol, when over abstracted rivers across the country still appear as having “water available” under the classification, and the system has already failed to protect many groundwater sources. This could be a fundamental flaw in the whole plan of licensing hydropower through the same methodology.

Option 3 appears to represent the least damaging scenario of those offered, though there is no evidence presented to support this or any other of the options.

The Wild Trout Trust echoes the view of the fisheries representatives on the National Working Group that this (Option 3) is the preferred option on the basis of the science available on the impact of flows on fish and ecology – none of the others comes close to meeting the required level of fisheries and ecological protection.

Of the four options presented in the review, Option 3 potentially provides the greatest protection for river flows and flow variability, including within depleted reaches. It allows provision of a less impacted river downstream of a hydropower scheme with some semblance of natural flows. Fluctuations in flow are vital in enabling fish migration, natural fish recruitment, good angling and good river ecology, along with fundamental geomorphological processes.

However, there should always be a provision for applying higher standards of protection, should the species and site conditions require it and the GPG should be the instrument empowering EA consenting officers rightly to exercise this protection. Additional protection should not be reliant upon the presence of a designated site or particular species.

It should be noted that any change to the flow regime is likely to have a negative impact on all of the above factors, in particular the geomorphology, which is likely to be heavily impacted, as vital erosional and depositional processes within the depleted reach rely upon flow duration and volume of natural events that have naturally sculpted the channel.

This approach at least starts from a more precautionary position than the others, and puts the onus on the developer to provide evidence to deviate from the standards, rather than the burden of proof lying with an under-resourced Environment Agency/Natural Resources Wales.

Option 4

Unacceptable, as it increases the potential for ecological damage. Unfavourable rivers should be part of a continual improvement programme, and their potential protected, rather than being limited by their current status.

Question 2

Would you like to make any suggestions for improving or amending any of the options? If yes, please describe your proposals.

In many cases the feed-in tariffs are being used to subsidise hydro developments that would otherwise be unviable, with no regard to longer term electricity generation. If Environment Agency consenting officers are not allowed to take this into account, the information should at least be compiled and made public as part of the process. Tax payers' money is being used to subsidise the schemes and the public deserves to know the truth. At least people could then have the opportunity to comment via the planning process or to their MP on value for money of the scheme.

Where schemes fail, or at least fail to make money, the cases should be better publicised. Currently, developers and the Environment Agency publicise the success of new hydropower schemes, with little or no follow up on the long term implications of running the schemes and their overall viability. The general public currently receive an unrealistic, positive view of hydropower, without the reality that in many cases the schemes fail to be profitable, require a significantly longer term for a return on investment and very often produce ecological harm to the supplying river. In some cases, the actual period for return on investment is longer than the predicted or realistic life of the installation.

On many rivers, especially those with many weirs, weirpools are exceptionally valuable habitats providing great diversity and the totality of some vital habitat types within a reach. The statement 'if a weirpool is of high importance...a more protective allocation or flow distribution would be required' will tend to be ignored and the default of 1.3X Q Mean applied in every case. The standards outlined for Option 3, but with a maximum abstraction of Q Mean should be the default and any deviation only licensed if supported by robust evidence that no damage to ecological status (or fisheries, and fishing) will occur.

Hydropower should be green energy, and the potential (and often now realised) environmental impacts should be given more weighting in allowing destructive or non-contributory schemes to be rejected. The economic viability of a scheme is not

considered in the consent determination, but this should be a major consideration when there is the potential for much environmental harm.

Where hydropower is proposed on a weir that has otherwise become redundant and would therefore be prime for removal, the consideration of whether to consent the scheme and retain the structure should follow the same protocol as currently exists for creation of a new barrier, since effectively there is a change of use of the structure and its life will be renewed. It stands therefore, that full WFD, environmental impact and fish passage assessments should be taken into consideration, as all are likely to be negatively impacted by retention of the structure.

Question 3

To help the Environment Agency and Natural Resources Wales to analyse the responses to this consultation, are you primarily interested in hydropower development in England, in Wales or both England and Wales?

Both.

Question 4

We will publish revised standards 12 weeks before they come into effect. Do you have any comments on this approach?

EA has already significantly delayed this GPG revision and the hydropower industry is well aware of the probability of change. Throughout this extended period of consultation and revision of the GPG, EA have indefensibly continued to apply the old GPG which they themselves regard as not fit for purpose. Thus, no more licence applications should be determined until publication of the revised GPG and then their implementation should be immediate, as was the case with the Supplementary Advice issued in December 2012 on Screening, Fish Passage, Weirs and Competing Schemes.