



Amanda Campbell,
Corporate and Forestry Support,
Silvan House,
231 Corstorphine Road,
Edinburgh, EH12 7AT

April 9th 2010

Dear Ms Campbell,

Re: UKFS Forests & Water Guidelines: consultation draft

The Salmon & Trout Association (S&TA) welcomes this opportunity to respond to the consultation on the draft 5th edition of the Forests and Water Guidelines. S&TA, which has 60,000 individual and club members, was established in 1903 to address the damage done to our rivers by the polluting effects of the Industrial Revolution. For 107 years, the Association has worked to protect fisheries, fish stocks and the wider aquatic environment on behalf of game angling and fisheries. In 2008 we were granted charitable status, and our charitable objectives empower us to address all issues affecting fish and the aquatic environment, supported by strong scientific evidence from our scientific network. Our charitable status enables us to take the widest possible remit in protecting salmonid fish stocks, and the aquatic environment upon which they depend.

While we welcome attempts at addressing the impacts of poor forestry operations on surrounding aquatic environments and water dependent biodiversity, we believe that the Forests and Water Guidelines fail to offer control of conifer planting on catchments which are poorly buffered and, therefore, susceptible to surface water acidification. Evidence suggests a strong correlation between large commercial areas of dense Sitka spruce, a non native species to the UK, on poorly buffered land, and surface water acidification.

Acidification of water courses has the potential to severely impact salmonid fish stocks by rendering the freshwater environment, upon which they depend, incapable of supporting them. We strongly support the Galloway Fisheries Trust's (GFT)

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representations and work on this matter, and its evidence that the use of the 'Critical Load Analysis' (the sole method described in the Forests and Water Guidelines needed to protect watercourses from acidification) has, to date, had no positive impacts on any forestry replanting in acidified areas. We will not reproduce all the Trust's evidence, but will reiterate the following points:

- Acidification has had a real impact on the fish stocks in Scotland, particularly in Galloway but also Ayrshire, Argyll, Arran and Forth. In Dumfries and Galloway, acidification is a major limiting factor on the fish populations of the River Bladnoch, Cree, Water of Fleet, Kirkcudbrightshire Dee and to a lesser degree the Luce.
- Recent SEPA data (which also incorporates GFT fish data) found a total of 242.4 km of running water in these catchments (only includes the main river and named tributaries on 1:50 000 map) considered to be acidified and where fish populations are severely limited.
- This impact has had a significant cost to Scotland's rural economy
- The Critical Load Analysis (CLA) methodology used in the Guidelines is flawed, as evidenced by the failure of fish stocks to recover in Galloway's water courses affected by conifer afforestation
- We believe that EU legislation, in particular the Water Framework Directive (WFD), which demands good ecological status in rivers and no further deterioration from their present status, and the Habitats Directive (the Bladnoch is a designated Special Area of Conservation under the Directive), is being contravened by allowing the replanting of conifers in areas known to be acidified
- There is a disappointing lack of detail on the 'practical guide' regarding acidification, and we would wish to be involved in its future consultation process
- While points 80 - 83 in the draft Guidelines describe well the process of acidification, there are a few points we would disagree with i.e. point 81 states 'leading to significant improvements in water chemistry across much of the uplands'.
- The process of assessing whether new conifer planting or restocking conifers could cause acidification is once again suggested as being the Critical Load Analysis (CLA) only (point 84) - there is sadly no recognition of the use of biological data. As we know CLA has been a let down for years in regard to controlling conifer planting in sensitive locations.
- Points 86 - 88 suggest management options to improve pH levels which are all useful but very minor and there is no suggestion of changing tree species (e.g. use native tree species instead of sitka), deforestation or delaying the replanting process.
- Page 32 covers 'Guidelines' and gives 7 WG which are again useful and require to be considered if SEPA identify the water body as having an acidification issue. This is good as SEPA use biological data and chemical data to classify whether a water body is acidified. But again if it is considered to be acidified then it is only CLA (as mentioned in WG1/WG2/WG3) which limits tree planting and as stated before we do not feel CLA is fit for purpose at present. Again WG1/WG2 sound

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good but in Galloway even the most acidified waters very rarely ever fail CLA thus replanting always takes place.

S&TA would like to make one further critical point over this issue; the evidence that aluminium absorbed in the gills of juvenile salmon as a result of acidification leads to interference with their ability to adapt to the marine environment on their outward migrations, resulting in significant marine mortality in salmon smolts. This evidence is reported by the peer reviewed paper - Staurnes, M., L.P. Hansen, K. Fugelli & Ø. Haraldstad 1996: Short term exposure to acid water impairs osmoregulation, seawater tolerance and subsequent marine survival of smolts of Atlantic salmon. *Canadian Journal of Fisheries and Aquatic Sciences* **53**: 1695-1704.

Finally, Scotland's native Atlantic salmon are genetically adapted to their natal rivers, thus making each population unique. Any activity which jeopardises an individual population threatens it with extinction, which makes that activity morally flawed, quite apart from its illegality under the WFD and other European and UK legislation.

S&TA therefore strongly objects to these draft Guidelines on the grounds that they do not offer sufficient protection to water courses from acidification due to extensive conifer plantations on poorly buffered land, and that aquatic biodiversity, in particular salmonid fish populations, will continue to suffer significant and illegal impact as a result.

Yours sincerely,



Paul Knight
Chief Executive