

SANA Response to Consultation from SEPA on River Basin Management Planning

Significant Water Management Issues for Scotland

Deadline: 19 June 2020

For the specific details of the consultation, see: https://consultation.sepa.org.uk/rbmp/swmi_scotland/

Unlike other consultation papers that we have handled in recent years, this paper posed a single policy question. All the other questions were about who we are.

“4. Do you think we have identified the most important issues that are impacting on our water environment in Scotland?”

Yes No

If no, please let us know your concerns. “

Members of the MFC and NMFC agreed that we reply “No” – primarily as a means of gaining attention. Interpreting the question literally, our concerns would not be wanted if we were to say “Yes”.

Our comments were:

The scope of the issues being addressed in the consultation paper is admirable. However, SANA has such substantial concerns about individual topics affecting the water environment that we are unable to agree that the most important aspects of the subject have all been addressed. In doing so, we are motivated by fundamental worries about the habitats for fish and the condition of wild fish stocks. We commend the words of the consultation paper’s introduction “Biodiversity is in decline and parts of our freshwater environment and oceans are polluted with waste materials.”

Our comments are arranged in line with the section headings of the consultation paper.

1. Water scarcity

We note what is said in the consultation paper about the uncertainty created by climate change and the adverse effects of low rainfall conditions in 2018. However, in respect of migratory fish it would be wrong to attribute the fall in fish stocks to low rainfall. There is a complex range of pressures acting against salmon and sea trout: predation in freshwater, high mortality at sea, commercial fishing (especially in North East England) and in certain places the impact of fish farming. We comment further on the latter subject below.

We were surprised not to see any reference to groundwater reserves. Historically, Scotland has been almost wholly reliant on surface water. Beer making is a notable exception but was/is primarily used for its calcium carbonate content. Pressure on surface water supplies could be alleviated by more use of groundwater.

More water storage in reservoirs in catchment headwaters could be supplemented by supply from groundwater – both for public water supply and for topping-up rivers under drought conditions.

2. Waste water discharges

From an angling perspective, SEPA appears to have been in denial mode for some time about water quality. We see a general fall in water quality, evidenced in particular by loss of insects.

Any lapse in quality indicators tends to be blamed on "diffuse" sources. These should be addressed and we comment further below. However, in our view, point sources of pollution, viz. Waste Water Treatment (WWT) plants, owned and operated by Scottish Water, are the greater problem. There is a particular issue about eutrophication caused by greater discharge of phosphates. However, the headline issue is that Combined Sewer Overflows (CSOs) are regularly used to discharge untreated sewage to rivers and not only under high rainfall conditions. Because SEPA does not monitor these CSOs, and Scottish Water is not obliged to measure and report their use, SEPA cannot know how much is being discharged, nor can it examine their effects on the water environment. This is a regulation gap of enormous significance and applies to coastal waters as well as inland water bodies.

We have made representation to Scottish Water on the subject. Our understanding is that the central principle of a CSO facility is to enable WWT plants to be bypassed when excessive rain overwhelms storage capacity at treatment sites. Defence of this practice rests on the dilution effect of spate conditions in the receiving waters. This raises two questions: why is there not more storage capacity to cope with such events and why are these consents being used at other times?

The question of extra storage capacity should, in principle, be easy to assess were it not for the lack of monitoring. However, the process of River Basin Catchment Planning (to ensure compliance with the Water Framework Directive) provides a structure for assessment.

There should be no excuse for using CSOs to discharge untreated waste to rivers without the dilution effect of high water conditions in storm events. However, it can be understood that WWT plant failures may from time to time cause emergencies. In dealing with such situations, that brings the subject back to having adequate holding capacity for untreated sewage. Probably, Scottish Water knows where and when such situations can arise. Therefore, an internal review may be enough to determine where to put new storage in place.

This substantial subject is unlikely to be resolved quickly. The best of all possible waste treatment and lots of new storage for raw sewage cannot be expected everywhere on day one of a new policy. But it must start somewhere. Scottish Water itself is best placed to initiate these reforms and, as noted, River Basin Management Planning provides a forum for involving other state institutions. What SANA would like to see is a clear statement of intent with timetabled improvements and budgets for new spending on upgrading WWTs and reducing current dependence on CSOs.

Turning to diffuse pollution, the sources vary and should be addressed according to how the polluting material (both chemical and particle pollution) can be technically contained and/or

avoided. The common factor is the lack of barriers between the sources and water courses. We appreciate that the solutions to these problems will have to be type and site specific –as revealed by the consultation paper’s comments on agriculture in respect of such practices as manure spreading and crop spraying.

3. Rural land use

This topic is closely allied to the first topic, water scarcity. A recurring aspect of policy discussion about changing land use is disregard for the possible impacts on water bodies and on the amount of water within them. Forestry expansion is a case in point. In the rush to find ways of ameliorating climate change, especially in the context of tradeable offsets, forestry is an obvious target. However, on grounds of sustainability, this should not proceed where a proposal creates unacceptable environmental damage to water bodies.

How new woodlands are designed and managed are also important. In order to protect juvenile salmon and sea trout, River Trusts are currently planting trees along streams in some catchments to shade water courses from future increases in drought conditions. Water consumption by trees, including transpiration from their canopies, can exacerbate droughts, and forest drainage can lead to increased erosion and deposition of silt in watercourses, so contour ploughing should be the norm rather than “vertical” ploughing which leads to faster run-off. In general, mixed-species deciduous woodlands, which protect water quality, limit bank and bed erosion and minimise siltation problems in water courses, should be planted in preference to blanket conifers. As far as fisheries are concerned, conservation of water resources can be as, or more, important than moderating water temperatures, so forest design and management should take into account local fishery management objectives.

4. Restoring resilience in physically modified rivers

We agree with what is in the text of the consultation paper. Making the structure of watercourses more natural is good for fish, e.g. the excellent work already undertaken at the River Avon at Slamannan, Rottal Burn in Angus, River Garry rewatering in Perthshire

5. Manmade barriers to fish migration

The objectives set out in the paper are excellent. However, it should be noted that removing barriers is also relevant to maintaining and enhancing stocks of trout, grayling, eels and lamprey. Salmon and sea trout are not the only fish that migrate within freshwater systems.

6. Hydropower

We are encouraged by the proposed process of investigation and action.

7. Fish farming and wild fish interactions

This topic has been reviewed thoroughly by two committees of the Scottish Parliament. Thus far, the only formal response from Ministers has been to refer to the deliberations of the Salmon Interactions Working Group. We assume that when that has been completed, ministerial direction will be given to SEPA.

In summary, SANA's position is that the salmon farming industry can, and should be, reformed. This is in marked contrast to some bodies which have chosen the unrealistic path of calling for the industry to be closed down.

Slow but steady progress is being made and we were heartened during last year by the two reports of the Scottish Parliament which had the effect of saying that the industry must change and that the status quo is not a viable option. However, much depends on what changes are instigated, regulated, monitored and policed.

Our recent focus has been on Crown Estate Scotland (CES). This is the new devolved body, now responsible to Scottish Ministers, which provides all the seabed leases for marine fish farms in Scotland. SANA is a member organisation of the CES Stakeholder Advisory Group.

Both Scottish Ministers and CES itself have been considering the way forward for the organisation. CES published a draft corporate plan which recognised the environmental problems that the salmon farming industry has created and contains proposals for reforms.

However, the central issue is now radical long-term reform – changing the technology of how fish are grown on to marketable size. The biggest change that has happened is that more and more fish in open cages in the sea are just not surviving to maturity. The industry was initially very successful in adopting floating cage systems to benefit from relatively benign marine environmental conditions in sheltered sea lochs. Now, increasing attention has been focussed on well-publicised, large-scale fish farm deaths from sea lice proliferation, gill and other diseases and periodic blooms of toxic marine algae. Escape events are another constant threat, not only to fish farm profitability, but to wild salmon and sea trout populations.

Change seems inevitable. It is already happening in other parts of the world. SANA is strongly in favour of closed containment – seeing this as vital for the prevention of negative impacts on the marine environment, on wild fish and on other fauna.

8. Invasive non-native species (INNS)

Attention to INNS is most welcome. Of particular interest to conservation of game fish are American signal crayfish. These non-native invaders carry a plague fatal to native crayfish. They damage river banks and prey on fish eggs, young fish, and aquatic invertebrates.

Various species of non-native shrimps are also a threat, preying on invertebrates and native shrimps. To help combat their spread, SANA supports the Check, Clean, Dry campaign. "

