

Scottish Environment Protection Agency

RBMP National Advisory Group Meeting Royal Botanical Gardens, Edinburgh

Restoring Scottish Rivers Workshop

Draft Meeting Note 26/05/2015

Attendee	Initials	Organisation
Roy Richardson	RR	Scottish Environment Protection Agency
Richard Jeffries	RJ	Scottish Environment Protection Agency
Jenny Davies	JDa	Scottish Environment Protection Agency
Kat Ball	KB	Scottish Environment Protection Agency
Joyce Carr	JC	Scottish Government
Julie Dewar	JD	Edinburgh City Council
Sarah Hutcheon	SH	Scottish Natural Heritage
Stephen Thomas	ST	Traffic Scotland
Anne Gray	AG	Scottish Land and Estates
Chris Horrill	CH	Rivers and Fisheries Trusts Scotland
Simon McKelvey	SMc	Cromarty District Salmon Fishery Board
Sheila George	SG	Royal Society for the Protection of Birds
Alison Baker	AIB	River Forth Fishery Trust
Julia Garritt	JG	Forestry Commission Scotland
Andrew Bauer	AB	National Farmers Union Scotland
David Gowans	DG	Moray Council
David Summers	DS	Tay District Salmon Fishery Board
Susan Cooksley	SC	James Hutton Institute
John McDonald	JM	Scottish and Southern Energy
Alan Hampson	AH	Scottish Natural Heritage

Summary of the day

NAG members were invited to a workshop about the development of the approach to deliver improvements in the physical condition of Scottish rivers. Also invited were a small number of local authority and fishery representatives who have excellent on the ground experience and knowledge of this work. This high level summary provides the main points of the day with further information from the discussion provided in the meeting minutes below.

The first 2 presentations covered the extent of the problem across Scotland, progress to date and what we have learned in the first cycle of river basin management planning. The group also heard about the feedback SEPA had received through the consultation and engagement with stakeholders.

The foundations of an approach to deliver improvements for morphology were described to the group. The approach involves working across catchments to find opportunities for river restoration within the constraints of existing land-uses. This would be done working in partnership with other groups and public bodies to achieve, where possible, multiple benefits. The result, where constraints allow, would be a functioning river with ecological and physical benefits.

Within identified catchments, engagement and scoping will take place to identify sections of river to focus on. We anticipate avoiding areas of highly productive

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agricultural land, urban rivers that don't have green-space immediately adjacent to them, and key infrastructure such as roads or railways. Exceptions to this would occur where there are urban redevelopment opportunities or other reasons to work such as reducing flood risk.

This approach is based on the understanding that river restoration can provide real benefits to wildlife, people and the economy, but that these benefits come at a cost, in terms of space, lost productivity and in some cases reduced hydraulic efficiency for land drainage and flood risk management. The key to achieving large scale improvements in the physical condition of rivers will be identifying places where the benefits outweigh the costs.

On a given river this is likely to lead to a mixture of sites that overall it is hoped will achieve good ecosystem health. These sites will include existing healthy sections, plus improvements made by projects that provide the best quality habitats; stepping stones of improved, but not fully restored river to allow organisms such as fish and insects to move through the network and finally stretches of poor altered habitat, where work won't be feasible due to land use constraints.

The group discussed this approach and the following themes arose:

- partnership working would be needed to be sure we don't miss potential opportunities, this includes sharing our information with land managers at planning stages e.g. urban redevelopment, upgrading roads etc
- ecological driver is key, diversity in habitats should help enhance wildlife and also provide wider social and recreational benefits
- site by site assessment and sharing information to build confidence with land managers to gain support for the projects.

Finally we discussed what makes successful partnerships at a catchment scale. The partnerships to deliver this work will vary depending on the type of catchment and the scale and complexity of the task. Success will be dependent on our ability to work collaboratively to fund and deliver projects. The following themes arose from the discussion:

- groups will be catchment specific and highly variable between catchments and across the country
- opportunities to use existing groups who are already well established and experienced should be used – setting up and managing groups is time consuming so this approach could save resources
- flexibility within the group will be needed as different partners will have different opinions about objectives, motivations and constraints
- examples of projects at varying scales would provide useful tools to secure buy in.

Meeting Minutes

Welcome and introduction.

RR welcomed the group and introduced himself as the River Basin Planning Unit Manager. RR gave apologies for David Harley who was presenting at a conference and explained, in this instance, he would chair the session.

Guest attendees had been invited for the day who had experience and knowledge relevant to the workshop topic so brief introductions were made.

RR went on to explain the purpose of the meeting that we are trying to develop our approach to improving rivers physical condition and the various drivers for this. RR stated that our aim was not an idealistic approach to restore rivers to their original condition but to seek improvements within the confines of the existing land use.

2. Restoring Scottish rivers Presentation 1: Approach to restoring Scottish rivers. Roy Richardson, Unit Manager

RR delivered the first presentation in which he outlined the benefits of good physical condition, the extent of the problem across Scotland and the progress and lessons learned from the first cycle. He went on to outline our approach to strengthen the delivery framework for cycle 2 and 3 building on the experience and successes to date, creating delivery partnerships, focusing on where the most benefits can be achieved and working on a voluntary basis with private land managers.

Q - What work is underway to assess the cost: benefit ratio? **RR** – Work is on-going to assess the costs of doing works and the benefits of the changes associated with ecological indicators and the biological response, which is challenging to quantify. Flood risk management work has demonstrated the contributions that slowing water within catchments can have on enhanced ecology as well as social and economic benefits in reducing flood impacts. **Q** - Are you accounting for incentives to land managers? **RR** - Compensation payments were outlined in the Scottish Government consultation, the decision regarding these payments will be determined following the analysis of those responses. The costs of restoration work include the costs associated with taking land out of agricultural production. **Q** - Given the benefits of this work are poorly understood we need to make case by case assessments to justify delivering work to inform our future work. **RR** - Yes, we need to develop our understanding of the ecological recovery of morphological alterations **JC** We're working with CREW and JHI to build the case for improvements for ecology resulting from delivery. **Q** - What work has been done by SEPA to assess the costs to achieve this work? **RR** - A lot of work was done for the development of the estimated costs associated with the scenarios outlined in the consultation. Costs will vary case by case and until the extent of the work is agreed we won't be able to make accurate predictions. **JM** - pointed out the costs to landowners would be more long term through permanent loss of land.

3. Consultation and engagement Presentation 2 – Feedback from stakeholders Jenny Davies RBMP Co-ordinator

JDa delivered a presentation to the group about the consultation responses and feedback received from our engagement work that focused on improving physical condition. Overall the feedback was that stakeholders are keen to see a step change in the delivery of improvements. This step change should be developed in

partnership using a prioritised approach to ensure resource is targeted where it is needed most. Respondents suggested that this would take some time to integrate this into planning and projects and to allocate resources.

Q - Which respondents supported what scenario? **JDa** - Wasn't sure exactly and didn't have the figures to hand responses still be analysed, but generally nature conservation interest groups and responsible authorities supported step-changes, whereas regulated sector and some local authorities were concerned about costs did not?. **JDa ACTION** to follow up with a breakdown of which respondents chose different scenarios. **Completed**

4. Delivering River Restoration on the ground.

Presentation 3 – Proposals to implement the approach across Scotland at a catchment scale

RJ delivered a presentation outlining our proposals for delivering the improvements. We will be looking locally at rivers within the catchment and opportunities for delivery assessed at site by site basis, accounting for, and designing around, land productivity, local issues and opportunities.

The aim is a functioning river with ecological and physical benefits. To do this there are two concepts we think are important:

- The river should be a network so that water, and sediment, and plants and animals move with minimum restriction.
- The river should have enough space to operate with minimum maintenance.

Once a river has been identified, it will then be necessary to identify sections to focus on. We anticipate avoiding areas of high constraint such as:

- Areas of highly productive agricultural land;
- Urban areas or key infrastructure such as roads or railways, unless there are development opportunities or other reasons to work such as reducing flood risk.

All work is voluntary and should be as cost-effective as possible. We would seek to identify restoration opportunities that benefit the land manager as well as ecological objectives.

On a given river there are likely to be a mixture of sites:

- Sections that are already healthy enough;
- Sections where large projects may be undertaken for the benefit of the land manager and the ecosystem;
- Sections that remain modified where no changes are possible.

It is likely that in order to achieve good ecosystem health it will be necessary to create a network of sites where:

- Existing 'healthy' sections, plus improvements made by 'large' projects in other sections, provide the best quality habitats;
- Stepping stones of improved, but not fully restored, river are created to allow organisms such as fish and insects to move through the network to reach the healthiest habitats – an example is providing shade, shelter and slightly more varied habitats for fish by planting trees in a reach that is otherwise very uniform in character – the overall shape of the river may not be altered.
- A certain level of altered and ecologically less healthy river remains – but such sections are short and do not cause a major ecological issue.

The output would be a plan, for a catchment, that:

- Optimises benefits for land managers
- Leads to a healthy enough ecosystem within constraints of the site.

Discussion questions

- Is improvements based on constraints the right approach?
- Improvements: where might benefits outweigh costs?
- Constraints: where might costs outweigh benefits?

SC - raised the point that we should be looking at the catchment as a whole and in river works could be avoided. **RR & RJ** - Agree that the catchment was very important but that for the purpose of the workshop today the focus would be river stretches for examples of the kind of work that might be needed following an assessment. **DS** - Suggested reference was made to the SAC Diffuse pollution chain analogy that was a very useful way to describe the work and could assist with engagement. **RJ** - Agreed that a mosaic of approaches would be required across the catchments to improve the physical condition that would link back to benefitting ecology through riparian vegetation etc. **DG** - Need to be opportunistic. Know where there are issues so people can identify opportunities for upstream storage etc. Maybe links more to urban areas with flooding, redevelopment and recreation being big drivers for local authorities as well as WFD. The key is not to miss these opportunities through lack of knowledge so engagement and information sharing is essential. **SH** - When we think about partnerships need to remember that the different members will see different opportunities and constraints. The plan outlines opportunities but where we can actually work will be determined by these partnerships and the motivations within the group. Opportunities and constraints are site specific for land use. **DS** - Expressed surprise at the high number of downgraded waterbodies on agricultural land – curious about the geographic split. **RR** - Reminded that with the use of the constraints model so not looking for improvements on the most productive land, using the agricultural land classes as a guide. **SMc** - Raised concern that the physical condition classification does not account for the ecological status. Riparian vegetation is missing in many waterbodies in the Highlands but the classification is good where the ecology is affected but there is no WFD driver. **RJ** - Explained that we are aware of this issue and are reviewing our approach to morphological classification this year. The role of riparian vegetation will be one factor that is included as part of that review.

AH - What work is being done to reduce the uncertainty around this work and the ecological recovery? As well as looking to build capacity to deliver this work need to look for the numerous benefits associated with delivering this work. **DS** - Ground truthing the catchments and stretches of rivers will need to be done. Restricted assessment using the current tool and there needs to be demonstrable ecological impact before we work. Many rural waterbodies downgraded for morphology and also for diffuse pollution – these ones should be targeted where both can be addressed together. **RR** - The question about the impact on the ecological community is not about the impact caused, that's well understood but in reversing the impacts and the associated time for recovery.

DS - Raised the point that diffuse pollution is often associated with sediment and fines in the system, if we slow the transit of fines in the catchment through restoration works such as re meandering there is a risk that diffuse pollution impacts can be enhanced. **SMc** - Raised the point about habitat diversity being very important for ecology within the river system. **SC** -Agreed with this point reinforcing that diversity of habitat is important for a health invertebrate population. **DG** -Agreed and added that through re-meandering a stretch of river you create the diversity of flow and spreading sediment and depositing it in different areas, including on flood plain

improving and enhancing habitat diversity. **SH** - Added that it's important to consider recovery through natural processes that improve water quality as well as habitats.

JG stated that it is important to link this work to planning processes and integrate it into different processes.

AIB described some of the work that has been taken forward by the Forth Fisheries Trust to date, some funded by WEF. She stated that projects should be brave and ambitious and many of the constraints they have faced have been perceived and not real. Their work is driven by fisheries interests but that is just the starting point, as you work with interested parties to form a delivery partnership you often find benefits for all parties and progress builds momentum. Finished by saying strive for big projects, be brave and be dynamic to achieve goals.

SG stated that with all the discussion about multiple benefits are we not losing sight of the main WFD driver? And how are we going to achieve "Good" and "Good ecological potential"? **RR** - Responded that we need to be realistic within the constraints of land use and that we cannot have a significant impact on that use. The scenarios in the consultation outlined what we believe can be achieved. Experience to date has shown that people are very supportive of this kind of work but progress will be case by case and will need to start with engagement to assess buy in.

JD - Stated that it is important that we don't miss opportunities through not knowing where the problems lie. Also how quickly can we respond to these? And how can we make sure that land managers and asset owners have enough understanding of what needs to be done? Speed is really important to catch these opportunities and we must engage and inform. **ST** - Added that developments relating to roads are years in the planning. It is important to capture these at this first stage with the key information. Where can people find this information? Is it sharable in a GIS system so they can be mapped against the development plans.

AB - Stated that the compensation outlined in the Scottish Government consultation was very low and so to achieve buy in from land managers who would be sacrificing land we would have to win the hearts and minds to get agreement for the long term land use change.

SC - Requested a briefing document outlining the strategy for these improvements in the second and third cycle. **JDa ACTION**

Presentation 4 - The catchment approach and partnership working.

RR presented to the group about the benefits of catchment working and developing partnerships. He outlined that partnerships to deliver this work will vary depending on the type of catchment and the scale and complexity of the task and that success will be dependent on our ability to work collaboratively to fund and deliver projects. Question for the group to input to was; What makes a successful partnership work?

SC - Asked if SEPA will be providing funding for existing projects to deliver these improvements. **RR** - Answered yes, under the existing WEF scheme.

SH - Outlined that FRM, SEPA and Local authorities all have clear objectives but partners will have different objectives, for example land managers may want wide buffers for habitat for sporting reasons. Delivery partners, including SEPA, must be flexible regarding these priorities and align WFD objectives with what is important within that catchment and land-use. **DG** - Stated that the logistics will vary significantly based on the local geography and these projects must strike a balance and align with priorities and land use.

SC - Stated with regard to engagement that the AAG network is a good scale but the people that attend are too senior and not delivery partners. She asked that we use the existing partnerships that are already established and trusted by land managers. The review of the fishery organisations was brought to our attention. They could potentially have an increased remit and be working more across the catchment scale.

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She cautioned that maintaining groups was a very large job so we should be cautious about setting up new partnerships and duplicating work where an existing group could deliver. **CH** - Cautioned that the review of fisheries was not complete and there was no guarantee they'll have a broader role. The consultation is still running and the fishery trusts already have a diverse role but this was an opportunity to shape their work. **AH** - Agreed that we should use the existing network of experienced people but that flexibility would be very important with regional approaches.

AIB - Stated that consistency in funding was a big challenge for fishery trusts. The difficulties associated with state aid and also the Water Environment Fund which is very stop start creates problems in staffing etc. **RR** - Stated that we're in a transition from reactive to a more proactive approach to create a plan of work over the next 2 RBMP cycles.

ST - Asked if there was a list of priorities that could be worked to help instil confidence that we know what needs done and where. **RR** - Responded that the plan will have the priorities outlined, informed by the consultation and engagement work but we won't know the extent of the work required until the catchments are ground truthed and scoped. **ST** - Said that there is a need to organise the priorities to present to people to instil confidence. **AB** - agreed and said that working examples would help gain buy in from land managers but they must be at the correct scale to be realistic and useful. **SH** - agreed that examples of a range of types of projects would be useful as some can be small scale and affordable so more achievable for people to understand.

5. Discuss engagement

We ran out of time to cover the final section of the agenda so the group were asked to give the engagement needs to assist delivery some consideration and send their thoughts to JDa.