

Background information about barriers to fish migration

In Scotland, man-made barriers to fish migration cut-off access to over 4,000km of rivers. This affects all fish species, but has a particular impact on salmon, sea trout, lampreys and eels. Removing these barriers is a priority for the second river basin management plans.

Types of fish barriers

For the purposes of management, fish barriers such as weirs, dams, culverts and bridge reinforcements fall into three categories:

- **Active barrier** – an impoundment, weir or dam that is a barrier to fish movement and is being operated or maintained (or is planned to be operated or maintained); or, it is a mothballed weir, impoundment or dam (i.e. it is not currently operated or maintained, but the owners operate/maintain similar structures for the purposes of their business).
- **Historic barrier** - an impoundment, weir or dam constructed prior to 1 April 2006 that is a barrier to fish movement and is not operated or maintained. Nor is it owned by a business who operates or maintains similar structures for the purposes of their business.
- **Asset barrier** – a culvert or bridge apron built prior to 1 April 2006 that is a barrier to fish movement.

Fish barrier projects follow a step-wise process. SEPAs aim to scope all fish barriers during the second cycle to have a better understanding of the scale of the measure and what we can do to improve passage.



Following scoping the mechanism used to progress fish barrier improvements varies depending on the category of barrier:

- Active barriers – will be dealt with by Controlled Activities Regulations licence review. Where the improvement is deemed to be proportionate from a cost:benefit perspective then the operator will be expected to secure fish passage.
- Historic barriers – will be progressed using the Water Environment Fund, supplemented by additional funding sources wherever possible. Unlicensed barriers will require a licence before any engineering works can take place. The Scottish Government will provide grants of up to 75% of the engineering costs to improve fish passage at redundant weirs owned by local authorities.
- Asset barrier – a remediation notice* will be issued under the Water Environment (Remedial Measures) (Scotland) Regulations 2016. * *The operational framework SEPA requires to start issuing remediation notices is in development.*

Regulatory context

All impoundments, weirs and dams require authorisation under the Controlled Activities (Scotland) Regulations 2011(CAR). All culverts and bridges built after 1 April 2006 require authorisation under CAR. A CAR licence is required before any barrier removal or easement engineering work can take place.

Remedial Measures Regulations

The Water Environment (Remedial Measures)(Scotland) Regulations 2016 give SEPA the power to serve, vary or revoke a remedial measures notice on a responsible authority (RA) who owns (manages, operates, maintains or is responsible for) an artificial structure.

The notice would require that improvement measures are put in place to achieve or contribute to achieving a RBMP objective and would contain only high level detail of the measures required. As most measures would require to be licensed through Controlled Activities Regulations (CAR) the detail of the exact measure to be implemented would be agreed during pre-application discussion; advertising and consultation on the exact activity would also be done through CAR.

It is an offence to fail to comply with the remedial measures notice.

These regulations are set within the expectation that RAs will fulfil their duties under WEWS and river basin planning (RBP) and take improvement action to address pressures identified in the plan for which they have responsibility.

What type of structure would a remedial measures notice apply to?

The regulations refer to 'artificial structures', these would include engineering structures which cause or contribute to a downgrade due to the barrier they pose to migratory fish or the contribution they make to morphology downgrade. It does not include activities which are not structures i.e. footprint changes to a river such as realignments, nor would it include impoundments as CAR can be used to enforce mitigation measures identified for impoundment pressures. The regulations apply to the fresh water, estuarine and marine environment.

Who do the remedial measures notices apply to?

The regulations give SEPA power to serve notices only on Scottish Ministers, Network Rail or responsible authorities (RA) as designated under the Water Environment Water Services (WEWS) Act in 2003. Currently these are:

- Local Authorities
- Scottish Water
- Scottish Natural Heritage
- Forestry Commission Scotland
- British Waterways-Scottish Canals
- National Parks Authority

Working with Responsible Authorities and the role of remedial measures notices

Notices are seen as a formal way for SEPA to communicate to a RA expectations regarding remediation against a particular artificial structure. Therefore once monitoring and partnership working has taken us as far as knowing the exact pressure to be remediated, the owner and the high level measure required, SEPA would serve a notice on the RA. The timing of notices will be unclear until we have further developed partnership working. The remediation measures notice would contain high level detail and the CAR authorisation would sit below this identifying the exact activity to be carried out.

For example it may state that that fish passage must be provided at a certain bridge, but as there are likely to be a number of possible solutions, the notice would not specify the particular solution to be adopted - that would be for the recipient to determine, taking account of costs, feasibility and other considerations. This detail would later be discussed through the CAR authorisation process. CAR enforcement notices could be used if licence is not complied with and the remedial measures notice if no action is taken at all.

There is a requirement in the regulations for SEPA to consult prior to issuing the notice; 'other users of the water environment likely to be affected' and this may provide information to SEPA to help with the detail of remedial measures notice.