The measures recommended by the guidelines will minimise the risks to the water environment; however, local problems can still occur where these are not implemented correctly. The potential risks of diffuse pollution from forestry are primarily associated with:

- nutrient (phosphorus) input to sensitive upland lochs, either from fertiliser application during tree planting or release due to the disturbance of soils during clear felling operations (this can result in high levels of algal growth, which reduces light and oxygen levels and damages the aquatic ecosystem);
- the input of suspended solids into the water environment due to soil disturbance associated with road building, cultivation, drainage and clear felling (this may cause smothering of fish spawning beds).

Further information on these issues is available in the draft river basin management plans for Scotland and the Solway Tweed river basin districts:

www.sepa.org.uk/water/river_basin_planning.aspx

What practical steps should I take?

The Forests and Water Guidelines describe a large number of measures to minimise the risk of diffuse pollution. They are tailored to individual forest management practices and give practical advice on how operations should be planned and carried out to protect the freshwater environment. Effective implementation of the guidelines will ensure compliance with the Diffuse Pollution GBRs.

What is SEARS?

SEARS is a partnership delivering rural and environmental services on behalf of the Scottish Government. SEARS provides:

- a streamlined service
- easy access to information and advice
- a consistent and responsive service
- a customer focused service.

Further information

Controlled Activities Regulations: A practical guide Specific regulatory advice about the activities you carry out. www.sepa.org.uk/water/water_publications.aspx

Diffuse Pollution GBRs

More detailed information on the DP GBRs. www.sepa.org.uk/wfd www.sears.scotland.gov.uk

Forests and Water Guidelines

These guidelines provide information on forestry practices and steps to help protect surrounding waters. www.forestry.gov.uk/pdf/FCGL002.pdf/\$FILE/FCGL002.pdf

Forest Research

This website gives information on the role of woodlands in protecting the water environment. www.forestry.gov.uk/fr/HCOU-4U4JAM

NetRegs

Up-to-date advice on environmental regulations for small and medium size businesses.

www.netregs.gov.uk

Prevention of environmental pollution from agricultural activity (PEPFAA) code of good practice

Available from the Scottish Government website. www.scotland.gov.uk/Resource/Doc/37428/0014235.pdf www.scotland.gov.uk/Publications/2002/06/14968/7848

UK Forestry Standard (2004)

This sets out the criteria and standards for the sustainable management of all forests and woodlands in the UK. www.forestry.gov.uk/website/publications.nsf/pubsbycategor ynew?Openview&restricttocategory=UK+Forestry+Standard

Pesticides: Code of Practice for Using Plant Protection Products in Scotland

www.scotland.gov.uk/Publications/2006/12/19110050/0

For further information on the Diffuse Pollution GBRs please get in touch with your local office or contact SEARS:

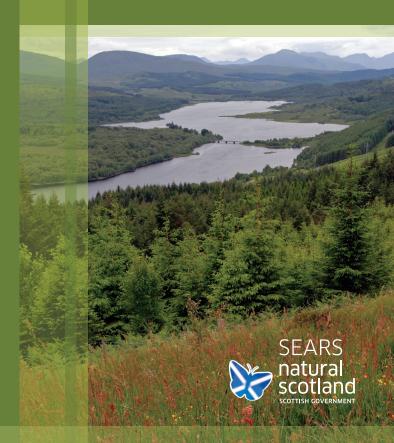
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Reducing the risk of water pollution

Diffuse Pollution General Binding Rules (DP GBRs): forestry



What is diffuse water pollution?

Often driven by rainfall, water pollution from diffuse sources arises from the loss of potential pollutants such as nutrients, chemicals, bacteria and soil, into the local water environment. Individually, losses from land use may be of little risk to water quality, but when combined across a river catchment they can impact on ecology, drinking and bathing water quality.

Managing diffuse pollution

Both what you do on the land and how you manage run-off are key to controlling diffuse pollution. The DP GBRs aim to reduce the risk of diffuse pollution as a result of rural land use and help to protect and improve water quality. They cover all rural land use activities that pose a risk to the water environment and include measures ranging from preventing soil erosion caused by operations on river banks to handling and mixing pesticides. Specific measures relating to the forestry sector include:

Storage of fertiliser

Fertiliser must not be stored:

- within 10 metres of a surface water or wetland (unless stored in a building) or 50 metres of a spring that supplies water for human consumption or any uncapped well or borehole;
- on land that is waterlogged;
- on soils with an average soil depth of less than 30cm that overlies gravel or fissured rock (unless in an impermeable container).

- Application of fertiliser
 - Fertiliser must be applied on land in such a way and at such times that the risk of pollution to the water environment is minimised.

Inorganic fertilisers must not be applied to land:

- within two metres of any surface water or wetland;
- within five metres of any well, spring or borehole that provides water for human consumption or any uncapped well or borehole;
- that is frozen, waterlogged or covered with snow.
- Organic fertilisers must not be applied to land:
 - within two metres of a drainage ditch or five metres of a surface water or wetland;
 - within 50 metres of a well, spring or borehole that provides water for human consumption or any uncapped well or borehole;
 - that has an overall gradient of more than 25°;
 - that is frozen, waterlogged or covered with snow.
- Cultivation of land
 Land should not be cultivated if it:
 - is within two metres of any surface water or wetland;
 - is within five metres of any spring that supplies water for human consumption;
 - risks polluting the water environment.

Moling of land should not be carried out on slopes with an overall gradient of more than 4.5°.

Land must be cultivated in such a way that minimises the risk of polluting the water environment.

- Discharge of surface water run-off
 - Water should be discharged in a way that minimises the risk of polluting the water environment.
 - No discharge from drainage should result in the destabilisation of the banks or bed of the receiving water.

- Construction and maintenance of waterbound roads and tracks
 - No material that results (or is likely to result) in metallic, sulphide rich or strongly acidic polluted water run-off should be used to construct waterbound roads or tracks.
- Application of pesticide
 - The preparation, cleaning and maintenance of pesticide sprayers must be undertaken in conditions that prevent spills, run-off or washings from entering the water environment.
 - Equipment must be kept in a good state of repair.
 - Pesticide sprayers must not be filled with water taken from the water environment, unless a device preventing back siphoning is fitted to the system or the water is first placed in an intermediate container.
 - Pesticide-treated plants should not be soaked in any part of the water environment.

Why are these requirements necessary?

Diffuse pollution is a significant threat to achieving and maintaining good water quality. The *Forests and Water Guidelines* provide best practice guidance on controlling the majority of water quality issues associated with forestry. The DP GBRs are principally based on these guidelines and make certain elements of them statutory. This brings forestry in line with other industries controlled by the Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended).