

Northern Ireland  
Environment Agency

River Basin Management Plans (2015 - 2021)

# Programme of Measures

**Key Sectors:** Forestry

**Pressure Type:** Diffuse and Point Source Pollution

*Pressure Type – Diffuse and point source pollution*

## **Forestry**

Forestry is a significant land use within Northern Ireland. The main forests are managed by DARD Forest Service and the aim is to contribute to the economic development of the entire forestry sector in Northern Ireland while promoting the sustainable management of forests for multiple uses and conserving and enhancing the rural environment.

### **Why is this a significant issue?**

Forests and their management can affect the quantity and quality of water moving through catchments. Although providing many positive benefits, forests have the potential to negatively impact on the environment. Impacts are largely related to poor management or to planting on unsuitable soils, and many of the current water problems associated with afforestation are a legacy of old practices, which have been subsequently amended.

The main potential water problems are related to:-

- nutrient enrichment: for example, when a forest is established, site cultivation and drainage may give rise to nutrient loss which, in naturally nutrient-poor areas, can lead to problems such as algal growth;
- sedimentation: harvesting or other operations, such as establishment of forest roads, can cause erosion and sedimentation;
- flow pattern changes: the amount of water reaching the soil surface is reduced by evaporation of water intercepted by the canopy. Clear-felling of forests may lead to a change in flow patterns;
- pesticide contamination: incorrect application of pesticides may result in contamination of waters;
- phosphates within the soil may become mobile as a result of timber harvesting on peat soils and may enter nearby drains and watercourses; and
- acidification: forest canopies can capture sulphur and nitrogen compounds from the atmosphere. Rain becomes more acidic as it passes through the canopy to the ground below, and may alter the chemical balance of the receiving water.

### **What are we already doing about this?**

The Forest Service continues to use the Forest and Water Guidelines to reduce and prevent diffuse pollution impacts from forestry on the water environment. Five new forestry measures have been completed in the first river basin planning cycle. Forest Service Management Plans are now in place for all Forest Service Woodlands. The plans provide the basis for sustainable forest management, and cover the whole range of major forest operations including harvesting, planting, aerial fertilising and road making. Clear proposals for the management of riparian areas are an integral part of all the plans. The planting of private woodlands is being encouraged through forestry grant schemes. Maps have also been produced in co-operation with other agencies to indicate where forests should be developed while taking account of sensitive and protected areas.

For a full list of measures already in place in the first cycle please see our website.

**What further actions will deliver environmental improvements?**

RBMP 1 (2009-2015)

Table 1 summarises the progress we have made against the existing and planned measures.

RBMP 2 (2015-2021)

The new measures which we will take forward in the second cycle are summarised in Table 2.

These are measures which will improve our understanding of the pressures, enable us to improve the evidence base to target actions, and build on actions already complete.

In the current economic climate there is no certainty at this stage around future funding and budgets that will be available throughout the lifetime of this plan. However DOE will in collaboration with other departments and agencies continue to make a strong case for additional funding through the standard government bidding processes.

**Key Sector: Forestry**

**Pressure Type:** Diffuse and point source pollution

**Table 1 Summary of existing and planned measures 2009-2015**

<b>Improvement Required</b>	<b>Actions</b>	<b>Delivery mechanism</b>	<b>Lead Department / Agency</b>	<b>Support Provider</b>	<b>Deadline for delivery of action (year end)</b>
<b>Reduce nutrient loading in sensitive areas</b>	Introduce more stringent actions for the most sensitive areas, when scientific evaluation establishes a need. E.g. phased felling of smaller harvesting coup rather than felling a large forest block all at once	Statutory Regulations	Forest Service	NIEA	In Place
		Forest & Water Guidelines			
		Codes of practice			
<b>Ensure appropriate future development and reduce impacts on water quality</b>	Promote the establishment of new native riparian woodland adjustment to existing waterways using low intensity techniques	UK Forestry Standard	Forest Service	NIEA	In Place
		Improve maps indicating where forests should be developed taking account of sensitive and protected areas	Forest Service	NIEA	In Place
		Assessment of operations on a catchment basis	Forest Service	NIEA	In Place

**Table 2 Summary of supplementary measures for 2015 to 2021.**

<b>Improvement Required</b>	<b>Actions</b>	<b>Delivery mechanism</b>	<b>Lead Department / Agency</b>	<b>Support Provider</b>	<b>Deadline for delivery of action (year end)</b>
<b>Restoration of rivers and lakes</b>	Consider the inclusion of new woodlands, wet woodlands and floodplain forests as part of catchment wide pilot projects to protect and improve water quality and quantity	Partnership working with stakeholders, NGOs and other Government Agencies	All partners and stakeholders	NIEA	2021
<b>Promote the environmental and water protection benefits of woodland</b>	Forest Service to provide woodland management advice and promote wider expansion of afforestation taking account of forestry best practice and sustainable forest management standards	Approval processes compliant with UK Forestry Standard	DARD Forest Service	NIEA	2021
<b>Minimise risks of forests in acid sensitive catchments</b>	Implement measures in the Forestry Commission Practice Guide 'Managing Forests in Acid Sensitive Water Catchments'	Approval processes compliant with UK Forestry Standard	DARD Forest Service	NIEA	2021
<b>Protection of Freshwater Pearl Mussel sites</b>	Implement measures developed through the INTERREG IVA funded project (Practical Implementation of Freshwater Pearl Mussel Measures) to minimise the impact of forests on fresh water pearl mussels	Approval processes compliant with UK Forestry Standard	DARD Forest Service	NIEA	2021



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