



Scoping a new forestry plan for forests and woodland in West Fermanagh

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Contents

Introduction

Forestry Planning
Participation and Engagement
Woodland Development
Forest Plans
Achievements
Scoping Topics

- 1 - Enhancing Landscapes
- 2 - Protecting Rivers and Lakes
- 3 - Enabling Enjoyment of Forests by Local People and Visitors
- 4 - Promoting Afforestation and Sustainable Forestry
- 5 - Supplying Sustainable Wood Products
- 6 - Regenerating Forest Land
- 7 - Growing Trees Sustainably
- 8 - Minimising the use of Pesticides and Fertilisers
- 9 - Targeting Invasive Species
- 10 - Protecting Habitats and Species
- 11 - Restoring Peatland Habitats

Appendices

Appendix I - Composition of Forest Service forests

Appendix II - Environmental Regulation, Designated Areas,
and the Historic Environment

Appendix III - Strategy for Restoring Peatland Habitats

Introduction

This consultation is to enable all stakeholders to participate in the review of the West Fermanagh Forestry Planning Area (FPA) at the earliest possible stage. This scoping consultation is being carried out to find out which of the topics identified in this document are relevant to you as a stakeholder. The consultation gives you the opportunity to say if you would like to engage with the Forestry Planning Team in relation to any opportunities identified in the document.

Forestry Planning

[Forestry planning](#) facilitates the delivery of the many different services our forests and woodlands provide such as sustainable wood production, carbon sequestration, biodiversity, and recreational opportunities. Reviewing forest plans ensures that they are up to date and that forests continue to meet the diverse and sometimes competing needs of people, wildlife and wood processing industries.

West Fermanagh Forestry Planning Area

The West Fermanagh FPA comprises all of County Fermanagh west of the roads connecting Newtownbutler, Lisnaskea, Enniskillen, Ballinamallard, Irvinestown, Kesh and Portinode. The FPA is located within the Fermanagh and Omagh District Council area.

The distribution of forests and woodlands in West Fermanagh FPA is recorded in the [Northern Ireland Woodland Register and Basemap](#), and is shown in Map 1. Forests and woodland are estimated to cover around 19,900 hectares (ha), which is 17.0% of the FPA. Forest Service manages 70% (13,954 ha) of the area of the forest in the FPA. Collectively, Ballintempo, Carrigan, Big Dog, Conagher and Lough Navar forests cover an area of over 8,500 ha and is the largest continuous forest in Northern Ireland.

Map 1: Forests and woodland in West Fermanagh Forestry Planning Area (FPA)

Click map to see larger image



Forests managed by Forest Service within the West Fermanagh FPA are predominantly [coniferous](#) in character, although many include [broadleaved](#) and [mixed plantations](#). Most of these forests are in the north west of the FPA. The areas and composition of forests managed by Forest Service are shown in [Appendix I](#).



Forest Service forests are managed to meet a range of sustainable development objectives in line with the requirements of the [UK Forestry Standard](#), which is the UK Government's statement on sustainable forestry. Through its promotion of [sustainable forestry](#), Forest Service contributes to the Department of Agriculture, Environment and Rural Affairs' (DAERA's) purpose of '*Sustainability at the heart of a living, working, active landscape valued by everyone*'. Sustainable forest management supports the work of the Department for the Economy on energy policy, and the Strategic Investment Board in delivering a public sector energy strategy.

For forest design purposes and to reflect the range of landscape characters in the FPA Forest Service forests are grouped into two forest landscape units: West Fermanagh Uplands and Lough Erne.

Forests and woodlands in west Fermanagh that are not managed by Forest Service are typically fragmented and [broadleaved](#) in character. [The NI Woodland Register and Basemap](#) indicates that these are comprised of more than 12,400 small broadleaved or [mixed woodlands](#) less than 1 ha in size. They are scattered throughout the FPA with a significant proportion of [riparian woodland](#) located on the islands and edges of Lough Erne and tributaries. There are also a large number of mainly small [coniferous](#) plantations, up to 14 ha in area, located throughout the FPA.

There are a few larger areas of broadleaved and mixed woodland, up to 64 ha in area, occurring mainly in the north west of the FPA. Larger areas of broadleaved woodland also occur on the shores and islands of Upper Lough Erne. This includes Reilly Wood that contains oak planted 150 years ago by Crom Estate.

[Regional Landscape Character Assessments](#) (RLCAs) are geographical descriptions of the landscape that reflect the distinctiveness of different parts of Northern Ireland including the extent of forests and woodland. West Fermanagh FPA includes parts of two RLCAs: Fermanagh Caveland RLCA (to the western part of the County) and Lough Erne Lakeland RLCA (which encompasses Upper and Lower Lough Erne).

West Fermanagh FPA includes a number of important areas of [native](#) and [semi-natural woodland](#) designated as [Area of Special Scientific Interest](#) (ASSI).

The [Cliffs of Magho ASSI](#) contains the highest number of woodland species recorded on a single site in Northern Ireland (NI) and is the largest [semi-natural woodland](#) in NI. The [Upper Lough Erne - Crom ASSI](#) includes extensive semi-natural woodland. The woodland types range from largely ungrazed wet woodland along the shoreline to mature woodland dominated by oak with ash and birch. The FPA also includes [Florencecourt ASSI](#) which is a nationally important example of parkland.

Designated areas adjacent to and on land managed by Forest Service are listed in Table 1 of [Appendix II](#).

Participation and Engagement

Forestry planning involves engaging with people whether as individuals or as representatives of stakeholder organisations. The purpose of the engagement is to ensure that a wide range of interests are considered including those of local communities and specialist interest groups.

Woodland Development

Forestry has had a significant impact on the social, environmental and economic development of west Fermanagh for over 100 years.

State forestry began in west Fermanagh with the purchase of Castle Caldwell in 1913. At that time woodland cover was estimated to have been less than 1% of Ireland. Forest expansion continued in the 1940s in traditional demesnes such as Castle Archdale, Ely Lodge, and Riversdale. The 1950s and 1960s saw a significant expansion of forestry particularly in the upland areas including Belmore, Ballintempo and Lough Navar forests. Although the area of new planting has decreased every decade since then small annual increases in forest area occurred until the late 1990s.



The rate of increase in woodland area outside of state forestry since the beginning of the 20th Century is not well documented. Information available from an inventory of private woodland undertaken in 1975-79, and other Forest Service records, indicates that approximately 20% of the current non-Forest Service woodland area in the West Fermanagh FPA is comprised of grant-aided planting since 1970. The remainder is divided between woodland referred to in the private woodland inventory, and woodland derived from scrub and woodland succession (as noted in reports of the [Northern Ireland Countryside Survey 1998 and 2007](#)).

Approximately 3% of forest and woodland in the West Fermanagh FPA is described in the [Ancient Woodland Inventory](#) as woodland on sites which have been continuously wooded since at least 1830. Much of this woodland is easily accessible, including parts of Castlecaldwell, Ely Lodge, and Florencecourt forests, and in Crom, which is managed by the National Trust.

Forestry remains a significant source of employment in the rural economy. The number of people directly employed by Forest Service has decreased significantly since the 1960s and 1970s after forests were established and due to mechanisation however, the forestry sector in Northern Ireland continues to generate around £80 million per annum from timber production and sustains approximately 1,000 rural jobs. Forestry also contributed to social development with the construction of housing for Forest Service employees during the 1950s and 1960s. Examples can be still be seen at most large forests across west Fermanagh.

Facilities for forest based recreation has been provided for many decades and is important to the County's tourism offering. The Lough Navar Forest scenic drive, opened in the 1970s, gives visitors greater access to the now famous panoramic views from the Magho viewpoint. Other examples of recreation facilities include Florencecourt Forest Park which was opened in 1981. The last decade has seen significant investments in forest based recreation in partnership with Fermanagh and Omagh District Council. Increasingly forest based recreation is becoming an important source of employment.

Forest Plans

Forest plans provide the direction for interventions that will affect the future appearance, composition, or design of forests. Forest plans show areas of felling (which are individually referred to as coupes), the regeneration of felled areas, management to retain areas under continuous woodland cover, and changes to the type of trees that grow in the forest.

Forest design aims to ensure that there is continuity of woodland for timber and wood products and the delivery of a range of non-timber benefits. These benefits include landscape improvement, water protection, places for people, and protection of habitats, including [ancient](#) and [native woodland](#).

Forest Service seeks greater involvement of people in the revision of its forest plans, which has taken place on a five yearly cycle for many decades. The forest management plan for west Fermanagh forests was last reviewed in 2016 ([West Fermanagh Management Plan 2016](#)). The Forestry Act (Northern Ireland) 2010 placed a duty on Forest Service to promote [afforestation](#) and [sustainable forestry](#), and therefore, Forest Service plans will in future include references to non-Forest Service forest and woodland.

Achievements

Achievements of the previous forest plan, 2016 – 2021, are highlighted in the box below.

1. Continued to implement the forest design plan for 13,953 hectares of forest.
2. Created 47 hectares of new riparian woodland to enhance water quality and protect aquatic habitats.
3. Agreed a Memorandum of Understanding with Fermanagh and Omagh District Council in relation to a collaborative partnership.
4. Ongoing license agreement arrangements with Fermanagh and Omagh District Council for the management of trails and associated recreation facilities in Ballintempo, Belmore, Big Dog, Carrigan,



Castlecaldwell, Castle Archdale, Ely Lodge and Lough Navar forests.

5. In partnership with Fermanagh and Omagh District Council new or refurbished recreational facilities have been provided in the following forests:
 - Ballintempo Forest - development of a walking trail at the Brimstone and Aghnaglack dual court grave.
 - Belmore Forest – development of the Pollnagollum Cave Walk and car park.
 - Big Dog Forest - development of Big Dog and Little Dog Walking Trail and trail head.
 - Carrigan Forest - development of Lough Formil Walking Trail and trail head.
 - Castle Archdale Forest - development of the Millennium Wood Walking Trail. Development of Tom's Island Walk and upgrading of existing paths.
 - Ely Lodge Forest – upgrade of walking trails at Lough Shore and Carrickreagh.
 - Lough Navar Forest – development of the Scarps Walking Trail at Lough Achork. Upgrade of the viewpoint car park area. New toilet facilities at the bottom of Magho Cliffs.
 - Tullychurry Forest – improved access to geological formations.
 - Castle Caldwell – Development of the existing trails to include the lime kiln and other historic remnants
6. Agreed a Memorandum of Understanding with the National Trust in relation to a collaborative partnership.
7. Ongoing licence agreement arrangements with the National Trust in relation to Florencecourt Forest.
8. In partnership with Historic Environment Division, Department for Communities, implemented a management plan for the castle at Castle Caldwell Forest.
9. Upgrade of access to lakes in Lough Navar Forest in partnership with DAERA Inland Fisheries.
10. The Northern Ireland Forests Visitor Survey 2019 calculated that there were 44,000 visits to Florencecourt Forest and 40,000 visits to Lough Navar Forest. This contributed to 8.9 million visits to Forest Service forests and woodlands in 2019.
11. Grant aided the creation of 35 hectares of new woodland.
12. Produced an average of 90,000 cubic metres, equivalent to 3,000 lorry loads, of timber each year to supply the timber processing industry.
13. Regenerated 1,029 hectares of Forest Service forest land after clearfelling and planting nearly 2.5 million trees.
14. A programme of work to control invasive species was carried out in Ballintempo, Castle Archdale, Castle Caldwell, Ely Lodge, Florencecourt, Lough Navar, Necarne and Tullychurry forests.
15. Undertook out red squirrel conservation and habitat improvements in partnership with Ulster Wildlife through a licence agreement.
16. In partnership with NI Water 35 hectares of peatland restoration in Tullychurry Forest.

Scoping Topics

Forestry planning opportunities are presented under 11 scoping topics which are intended to reflect the various areas of interest to stakeholders, these are as follows:

- Enhancing Landscapes
- Protecting Rivers and Lakes
- Enabling the Enjoyment of Forests by Local People and Visitors
- Promoting Afforestation and Sustainable Forestry
- Supplying Sustainable Wood Products
- Regenerating Forest Land
- Growing Trees Sustainably
- Minimising the Use of Pesticides and Fertilisers
- Targeting Invasive Species
- Protecting Habitats and Species
- Restoring Peatland Habitats

Appendices

A summary of the composition of Forest Service forests is provided in [Appendix I](#). Details of environmental regulation requirements, designated areas and historic monuments are provided in [Appendix II](#). The Forest Service's strategy for restoring peatland habitats is provided in [Appendix III](#).



1 - Enhancing Landscapes

“Through the appreciation and analysis of landscape context, forests and woodlands can be designed so that they make a positive contribution to the character of a local area, and in some areas create attractive new landscapes.”

[UK Forestry Standard, 4th Edition \(2017\)](#)

West Fermanagh Forestry Planning Area (FPA) contains a varied range of landscapes. The north and west of the FPA features forested limestone uplands and the valleys between them. To the north the Magho Cliffs overlook Lower Lough Erne, and form the northern end of a dramatic scarp which continues southward to Belmore Mountain and Benaughlin. To the west of the scarp is an upland plateau which comprises an extensive mosaic of [coniferous](#) forests that includes Ballintempo, Big Dog, Carrigan, Conagher and Lough Navar forests. These areas are intersected by moorland and small loughs. The remainder of the landscape is dominated by Upper and Lower Lough Erne as well as the lowlands and drumlins associated with the River Erne valley. The lough fringes are well wooded with [ancient woodlands](#) surviving on many islands.

Most (65%) of West Fermanagh FPA is in the Lough Erne Lakeland [Regional Landscape Character Area \(RLCA\)](#) with the remainder in Fermanagh Caveland RLCA. These RLCAs are themselves comprised of smaller [Landscape Character Areas](#). Forest Landscape Units reflect landscape similarities between existing Forest Service forests and are not always closely related to RLCAs or LCAs.

The majority (80%) of Forest Service managed forests within the FPA are located in the uplands of Fermanagh Caveland RLCA where they account for 28% of the area of the RCLA. The forests within this RCLA include Ballintempo, Belmore, Big Dog, Carrigan, Conagher, Garrison, Lough Navar and Marbank, which collectively account for 15 % of the Forest Service estate in NI. Forest Service managed forests located in Lough Erne Lakeland RLCA include Castle Archdale, Castlecaldwell, Derrylin & Naan Island, Ely Lodge, Necarne, Riversdale, Sillees and Tullychurry forests.

Non-Forest Service forests and woodlands include the many fragmented small [broadleaved](#) and [mixed woods](#) scattered throughout the FPA. The broadleaved woodlands on the edges and islands of Lough Erne are distinctive features of the west Fermanagh landscape. There are a number of larger, mainly broadleaved, plantations around Crom Estate and on the islands and edges of Upper Lough Erne. Examples include [Reilly and Gole Woods Nature Reserve](#).

Forests and woodlands, therefore, contribute to the various features of the west Fermanagh landscape, and can enhance the experience of visitors to the area. Foresters acknowledge that the visual impacts of forests are important and these can be improved by modifying the design of a forest to compliment the local landscape. Harsh visual impacts can be minimised by removing straight lines or softening hard edges, and by encouraging more tree planting.

Opportunity: Identify where the appearance of forests in the landscape can be improved by modifying the shape of felling boundaries and carefully designed regeneration of felled areas.

Opportunity: Consider the potential for softening ‘hard’ forest edges by encouraging the afforestation of neighbouring agricultural land subject to the landowners’ long-term intentions.

Activity: Undertake visual assessments of Forest Service forests from key viewpoints in the surrounding countryside to determine the potential influence forest management decisions could have on the landscape.

Activity: Apply [UK Forestry Standard](#) requirements and forest landscape design guidelines using Geographic Information Systems tools to undertake assessments and present options.



Outcomes	Benefits
<ul style="list-style-type: none">- Increased potential to demonstrate landscape improvements using the regeneration and design plans.- Illustrate forests' positive contribution to tourism in the West Fermanagh FPA.- Stakeholders can contribute to forest design planning.	<ul style="list-style-type: none">- Illustrate forests' positive contribution to tourism in the West Fermanagh FPA.

Click the image for a larger version

Click the image for a larger version



2 - Protecting Rivers and Lakes

“Forests and woodlands have a close relationship with our water resources, and forest management and water quality are closely linked. Sustainable forest management is essential to ensure the supply of good-quality fresh water, provide protection from natural hazards such as flooding or soil erosion and to protect the needs of aquatic species.”

[UK Forestry Standard, 4th Edition \(2017\)](#)

Lough Erne is one of the finest coarse fishing waters in Europe and is a popular competition venue for anglers. Within the West Fermanagh Forestry Planning Area (FPA) Forest Service forests lie within the Arney, Bradoge, Ballinmallard, Roogagh, Sillees, Swanlinbar, Lower Erne and Upper Erne catchments.

There are a number of forested catchments of lakes and rivers within the Department of Agriculture, Environment and Rural Affairs (DAERA), Public Angling estate. These water bodies include Lower Lough Erne, Upper Lough Erne, Lough Scolban and Upper Lough MacNean. The Public Angling estate also includes the Navar Lakes, (Achork, Glencreawan and Meenameen), which are within Lough Navar Forest.

For monitoring purposes, under regulations incorporating the [Water Framework Directive](#), the West Fermanagh FPA lies in the North Western River Basin District. Monitoring undertaken by the Northern Ireland Environment Agency as part of the second cycle of the Water Framework Directive has indicated no waterbodies are at risk of acidification in the West Fermanagh FPA.

The key forest design activity to protect water in forests has been the creation of [buffer areas](#), comprising of open ground or [riparian woodland](#), between forestry land and water bodies. As the benefits of creating native [broadleaved](#) adjacent to aquatic habitats have become more widely recognised the focus of forestry planning has shifted towards enabling the establishment of riparian woodland. An action to create [riparian woodland](#) in Forest Service forests is included in the cross-Departmental strategy '[Sustainable Water - A Long-Term Water Strategy for Northern Ireland](#)' (2016).

[Afforestation schemes](#), including the Forest Expansion Scheme, the Small Woodland Grant Scheme, and the 'Establishment of Native Woodland under 5 ha' option of the Environmental Farming Scheme (EFS), provide opportunities to create new riparian woodland. There is also a 'Creation of riparian buffer - 10 metre width - planted with native trees' option under EFS which is also targeted at improving water protection.

Forestry planning can avail of newly available datasets which use topographical and rainfall information to highlight areas most at risk of contributing to erosion and diffuse pollution. The mapping of these risk areas enables better positioning of water protection measures such as riparian woodland or other mechanisms to intercept and trap pollutants.

Opportunity: Identify the potential to increase the extent of riparian woodland by colonisation or planting.


Opportunity: Use new sources of information to review the internal design of forests.



Activity: Identify **water buffer areas** that have become colonised by **native woodland** and where **riparian woodland** establishment by planting is appropriate.

Activity: Use data to improve forestry planning, including the revision of planned **felling coupes**, forest design plans and **forest regeneration** plans.

Outcomes	Benefits
<ul style="list-style-type: none">- Assurance that risk to the ecological condition of features due to forest operations will be appropriately managed.- Establishment of new native riparian woodland contributing to the Northern Ireland Long-Term Water Strategy target.	<ul style="list-style-type: none">- Significant contribution to biodiversity and to angling, arising from the promotion and practice of sustainable forestry.- Long-term protection of water quality resulting from increased extent of riparian woodland.



3 - Enabling Enjoyment of Forests by Local People and Visitors

“Access to woodlands is a public benefit that can improve people’s health and well-being.”

“Woodland visits help build an understanding and appreciation of the forest environment. Access to woodlands can be particularly beneficial for people from urban areas, people from disadvantaged social backgrounds, and people with disabilities...”

[UK Forestry Standard, 4th Edition \(2017\)](#)

The [Forestry Act \(Northern Ireland\) 2010](#) promotes and encourages the enjoyment and recreational use of Forest Service land by the public, including a right of pedestrian access, and promotes the social benefits of other woodland. Partnership arrangements between Forest Service and councils have been developed in keeping with the implementation of the Forest Service’s strategy to [Develop the Recreational and Social Use of Our Forests](#).

Forest Service continues to work closely with a number of partner organisations to provide recreation facilities in its forests. Information regarding recreation facilities within Forest Service managed forests is available on the [NI Direct](#) website.

Fermanagh and Omagh District Council and the National Trust continue to develop and manage visitor facilities in a number of Forest Service forests and woodlands. These projects deliver benefits both in terms of the well-being of local communities and by attracting visitors from further afield.

Fermanagh and Omagh District Council and Cavan County Council jointly manage Cuilcagh Lakelands Geopark, formerly known as the Marble Arch Caves UNESCO Global Geopark. It is one of four transnational Geoparks in the world and extends to almost 20,000 hectares of public land that includes Ballintempo, Belmore, Big Dog, Carrigan and Conagher forests.

Fermanagh and Omagh District Council in partnership, with Forest Service, manage waymarked walking trails, car parking and picnic areas in Ballintempo, Belmore, Carrigan, Castlecaldwell, Conagher, Ely Lodge, Lough Navar and Marlbank forests. Fermanagh and Omagh District Council also manage the popular Cuilcagh boardwalk adjacent to Florencecourt Forest. Sections of the Ulster Way pass through Ballintempo, Big Dog, Carrigan, Conagher, Florencecourt, Lough Navar and Marlbank forests.

Forest based cycling continues to be popular. The Scarplands Cycle Trail links a number of forests including Ballintempo, Big Dog, Carrigan, Conagher and Lough Navar forests. Parts of the Sustrans National Cycle Network passes close to Ballintempo, Garrison and Marlbank forests and through Florencecourt and Castle Archdale forests. Family cycle trails are available at Castle Archdale Country Park.

Water based recreation is an important feature within the West Fermanagh FPA. Waterways Ireland provide fixed jetties for people using the Erne-Shannon waterway at Castlecaldwell, Castle Archdale, Ely Lodge, Lough Navar and Naan Island forests. Angling opportunities are available at Navar Lakes (Achork, Glencreawan and Meenameen) which are managed by DAERA Inland Fisheries.

Non-Forest Service woodlands in the West Fermanagh FPA also provide a wide range of recreational opportunities. Castle Archdale Country Park, which is managed by the Northern Ireland Environment Agency (NIEA), includes a number of woodland walks, family cycle trails and other visitor attractions. Davy’s Island with its old church ruins and informal paths can be accessed by boat from Castle Archdale Forest.



The Woodland Trust manages [Hillview Community Woodland](#), a small wet woodland, to the north west of Racecourse Lough just north of Enniskillen. Crom and Florencecourt, both managed by the National Trust, provide woodland walks. The Florencecourt yew discovered by George Willis in 1767 is known as the mother of all Irish yew trees. Irish yew trees are now grown around the world for their ornamental properties.

Opportunity: Continue to discuss options for maintaining the existing provision of facilities, improving access to forests with councils and other partners and potential partners.

Activity: Liaise with Councils to increase the recreational use of forests.

Activity: Liaise with public bodies and neighbours to discourage activities presenting a risk to pedestrian users of forests.

Outcomes	Benefits
<ul style="list-style-type: none"> - Local people are able to make greater use of forests in their area. - Promoting recreational use of forests. - Delivering sustainable development in partnership with others. 	<ul style="list-style-type: none"> - Health and well-being. - Development of local businesses.



4 - Promoting Afforestation and Sustainable Forestry

“The General Duty placed on the Department of promoting afforestation and sustainable forestry by the Forestry Act refers to all forests in Northern Ireland, not only the Department’s forest land. The Department recognises the valuable contribution that forestry makes in achieving its vision of a thriving sustainable rural community. Through the Forest Service, it aims to ensure the sustainability of forests as an invaluable heritage, expansion of tree cover, management of forests in a way that increases biodiversity, enhances the landscape and assists in improving water quality”.

[A Delivery Plan for the Implementation of the Forestry Act \(Northern Ireland\) 2010](#)

“the most popular reason to support forestry in Northern Ireland with public money was ‘to provide places for wildlife to live’ with 70% of respondents in 2019 selecting this as a benefit. ‘To provide places for recreation’ (58%), ‘to provide places for families to play’ (56%) and ‘to provide places for relaxation and stress relief’ (56%) were also seen as important reasons to support forestry with public money.”

[Public Opinion of Forestry 2019, Northern Ireland](#)

It is Government policy to promote forest expansion. The importance of creating more forests is recognised by the NI Executive with ‘Forests for Our Future’ being one of the foundation programmes in its ‘Green Growth’ Strategy. The aim to plant 18 million trees over the next decade will help Northern Ireland to meet the UK Governments’ net-zero carbon target by 2050. Tree planting can also help contribute to a strong economy, a thriving environment and healthy, active communities.

The operation of forestry grant schemes and [Felling Regulations](#) provide opportunities for Forest Service to promote the delivery of [ecosystem services](#) from new and regenerated woodland, through the use of appropriate forest design and tree establishment techniques. During the past 5 years 35 hectares of new woodland have been grant aided by the Department within the West Fermanagh Forestry Planning Area.

Research commissioned by Forest Service and prepared by Forest Research demonstrates how [afforestation](#) can contribute to flood alleviation by identifying priority areas for woodland creation to benefit flood risk management and mitigation. ([Opportunity mapping for woodland creation to reduce flood risk in Northern Ireland](#)).

Forestry planning will seek to identify opportunities for woodland expansion to deliver benefits that are complementary to those provided by Forest Service forests. These benefits can include contributing to the local landscape character and increasing connectivity between forests and woodlands in the landscape.

Information on the potential contribution of woodland to community development, and its capacity to deliver [ecosystem services](#), is integral to understanding the contribution of [sustainable forestry](#) to ‘*Sustainability at the heart of a living, working, active landscape valued by everyone*’. Consideration of non-forestry uses of land adjacent to forests can also be relevant to the Department’s purpose, and may lead to opportunities to realise both environmental and economic benefits.

Opportunity: Identify potential for promoting woodland expansion adjacent to Forest Service forests where appropriate.

Opportunity: Review the extent of non-Forest Service woodland in the West Fermanagh Forestry Planning Area, and the range of pressures that could affect its sustainability.



Activity: Assess provision of **ecosystem services** by non-Forest Service woodland adjacent to forests.

Outcomes	Benefits
<ul style="list-style-type: none">- Landscape improvement through tree planting.- Baseline information on woodland management.	<ul style="list-style-type: none">- Woodland ecosystem services, benefitting people, the environment, and the economy.- Landscape scale woodland management.



5 - Supplying Sustainable Wood Products

Forest Service forests supplied “over 0.4 million cubic metres of timber for industrial use, and underpinned further economic activity by the wood processing sector, estimated at £60M-£80M.... sourcing more than 10% of timber supply from forest thinning hence improving the long-term resilience of forests on wind firm soils”.

[Forest Service Annual Report 2019 – 2020](#)

Timber harvesting operations are managed to avoid adverse environmental impacts, particularly preventing movement of sediment and pollutants into watercourses. During the period of the previous forest plan, 2016-2021, west Fermanagh forests have produced an average of 90,000 cubic metres (equivalent to 3,000 lorry loads) of timber per year, mainly from [clearfelling](#).

To provide assurances of [sustainable management](#), Forest Service forests and management are subject to a periodic assessment and annual audits of compliance by an independent certification body. In the UK certification bodies use the [UK Woodland Assurance Standard](#) (UKWAS) to assess the management of Forest Service forests against the requirements of both the Forest Stewardship Council® (FSC)® (Licence code: FSC-C084232), and the [Programme for Endorsement of Forest Certification](#) (PEFC) (Licence code: PEFC/16-40-1924). As a result of FSC® and PEFC forest management and ensuing ‘chain of custody’ certification components, wood products derived from Forest Service forests can be marketed by processors using the logos of the FSC® and PEFC. The logos signify that wood products have come from responsibly managed forests.

Over time forest plans will seek to reduce the proportion of the total amount of timber produced by [clearfelling](#), and increase timber production from [thinning](#) of plantations that will eventually be clearfelled. Where site conditions are suitable plantations will be managed using [low impact silvicultural systems](#), LISS, in which clearfelling is avoided and [continuous forest cover](#) is maintained.

Opportunity: Review the timing and boundaries of planned felling, to complement landscape design and enhance water protection, using Geographic Information Systems (GIS) tools and datasets.

Opportunity: To optimise the supply of timber from thinning and use of LISS, including [continuous cover forestry](#).

Activity: Make use of advanced GIS tools and datasets to improve the design of [felling coupes](#).

Activity: Optimise [thinning](#) in west Fermanagh forests, and enhance planning capability.

Activity: Develop and apply a rationale for identifying further areas where the use of LISS is appropriate.

Outcomes	Benefits
<ul style="list-style-type: none"> - Maintain supply of certified timber. - Improved knowledge of future timber availability. - Greater resilience of timber availability through the use of alternative silvicultural systems. 	<ul style="list-style-type: none"> - Sustainable economic activity in the rural landscape. - Industrial output of home produced wood products to a variety of markets, including construction, agriculture, energy, and domestic heating.

Supplying Sustainable Wood Products: Opportunity to Review Harvesting Plans in Florencecourt Forest

Thinning Area:

'Thinning' is the selective removal of trees to improve the growth rate or health of the remaining trees. Thinning will be planned for both clearfell and LISS areas following survey work as part of this review.

Extended Rotation:






Extended rotation is where trees are retained beyond the normal age of clearfelling. Five hectares of Florencecourt Forest is currently managed as extended rotation. The potential to increase this area will be reviewed particularly where there is benefit to priority species, such as red squirrels.

Low Impact Silviculture Systems (LISS):

LISS is an alternative approach to timber production that does not involve clearfell. 99 hectares of Florencecourt Forest is currently managed under LISS. Further opportunities to extend the use of LISS will be explored.

Clearfell:

363 hectares of Florencecourt Forest is currently managed using a clearfell system. These areas will be evaluated to determine if there is potential to convert them to LISS. Where a clearfell system is appropriate the fell year will be reviewed using all available data.

-  Plantation on Ancient Woodland Site (PAWS)
-  Natural Reserve
-  Clearfell coupe boundaries
-  Area managed as LISS
-  Open ground



6 - Regenerating Forest Land

“Forest regeneration is the act of renewing tree cover by establishing young trees naturally or artificially - generally, promptly after the previous stand or forest has been removed. The method, species, and density are chosen to meet the goal of the landowner.”

[Land use, Land-Use and Forestry Fact Sheet 4.12 Intergovernmental Panel on Climate Change](#)

Regeneration of forest land after felling (or occasionally after destruction by fire or disease) is an opportunity to improve the design of a forest to meet longer term objectives. These objectives include enhancing the landscape, protecting water, using a wider range of trees species, improving wildlife habitats and increasing the resilience of the forest. Felled areas may be replanted, or allowed to regenerate naturally from seed, or left unplanted to include more open ground in a forest. In some circumstances wood production can be increased by using improved planting material, for example, grown from seed harvested in seed orchards.

The development and improvement of forest design and regeneration plans are a significant forest management activity involving extensive engagement with government bodies, organisations, local people and other stakeholders. Forest design plans have resulted in the creation of additional [water buffer](#) areas some of which are suitable for establishing new [native woodland](#). Regeneration plans are created for non-Forest Service forests and woodland in conjunction the regulation of felling.

Management of forests under some [low impact silvicultural systems \(LISS\)](#) involves making use of natural regeneration, where it occurs, and supplementary planting if required.

Opportunity: Review and revise forest design and forest regeneration plans to include more [native broadleaved trees](#) and open ground, and favour the use of a wider range of [conifer species](#) for regeneration where appropriate.

Opportunity: Revise felling and regeneration plans to increase age, species and structural diversity in forests.

Opportunity: Specify the use of more productive Sitka spruce (*Picea sitchensis*) planting material in regeneration plans where site conditions are suitable.

Activity: Assess the suitability of current and planned [water buffer](#) areas for the establishment of new [native woodland](#).

Activity: Identify areas suitable for use of alternative conifer species including Norway spruce (*Picea abies*), Douglas fir (*Pseudotsuga menziesii*) and western red cedar (*Thuja plicata*).

Activity: Identify areas where wildlife habitat can be enhanced by planting a wider range of tree species.

Activity: Identify areas managed as [LISS](#) where supplementary underplanting is appropriate.

Outcomes	Benefits
<ul style="list-style-type: none"> - Regeneration plans identifying the establishment of native woodland adjacent to watercourses, and the appropriate use of alternative conifer species. 	<ul style="list-style-type: none"> - Forests which deliver better ecosystem services and have more natural capital. - Forests that are more resilient to the effects of disease, climate change and other pressures.

7 - Growing Trees Sustainably

“The essential consideration for the landowner or manager is to ensure that the forest thrives and is not degraded. This includes protecting young trees to make sure they become successfully established, and protecting the health of forests and woodlands, for example by ensuring they have the necessary resilience to cope with emerging threats and changing conditions – in particular climate change. It also involves maintaining levels of fertility and site potential for future rotations.”

[UK Forestry Standard, 4th Edition \(2017\)](#)

Growing trees sustainably involves monitoring the health and vitality of the forest, and responding appropriately to threats. West Fermanagh forests are vulnerable to a similar range of threats occurring elsewhere in Northern Ireland. Harm to forest users and the environment arise from criminal or anti-social behaviour, the effects of fire, pests, diseases, wind and storm damage, and loss of soil fertility.

Areas recently planted with native and other **broadleaved** trees, including new **riparian woodland**, are particularly susceptible to damage by deer and from uncontrolled livestock grazing. Cattle, sheep, deer and feral goats are also able to hinder or prevent woodland development by **natural colonisation** and **regeneration**. Management of deer to prevent damage to young trees is routinely undertaken in a number of forests including Ballintempo, Belmore, Big Dog, Castlecaldwell and Conagher forests

Additionally, tree diseases can also impact forest growth and development. The ongoing impact of ramorum disease (*Phytophthora ramorum*) on larches (*Larix spp.*) in forest plantations remains a concern. In addition, it is apparent that the effects of ash dieback disease (*Hymenoscyphus fraxineus*) are becoming increasingly widespread in woodland and trees in the wider environment. Further information is available on the [DAERA website](#).

The risk of damage from many of these threats is managed by operational measures and contingency planning in conjunction with monitoring and regularly liaising with neighbours, partners and stakeholders.

Opportunity: Liaise with neighbours and statutory bodies in relation to controlling damage to woodlands, preventing deer poaching and other wildlife crime.

Activity: Collate and analyse monitoring information including assessments of tree growth and nutrition.

Outcomes	Benefits
- Updated monitoring and contingency plans.	- Healthy, safe forests. - Protected natural environments.

8 - Minimising the use of Pesticides and Fertilisers

“The use of artificial pesticides and fertilisers is generally a last resort in practising sustainable forest management...Pesticides and fertilisers are expensive, and should only be deployed in a reactive way to protect trees when a problem has been identified or is highly likely. Their use on special sites such as ancient woodland is particularly discouraged.”

[UK Forestry Standard 4th Edition 2017](#)

Pesticide use in Forest Service forests is restricted by statutory regulation and the adoption of a specific integrated pest management strategy to minimise pesticide use. This strategy requires non-chemical control options to be considered and favoured wherever possible, for example, where there is risk of causing harm to people and the environment. In principle pesticides are used as a last resort, and the use of specific pesticides by the forestry industry is kept under constant review.

There are two main uses of chemical control for pests and diseases in forests. The first use is to protect forests from the fungal disease causing stem rot, *Heterobasidion annosum*, using a solution of urea applied to tree stumps after cutting. The second use is to protect trees replanted after felling from insect damage caused by the pine weevil (*Hylobius abietis*), on a proportion of sites during the initial 1 – 2 years. The preferred currently available option involves the use of a product containing a neonicotinoid substance (acetamiprid) applied off-site to trees before planting, and where necessary after planting. Control of invasive rhododendron (*Rhododendron ponticum*) and laurel (*Prunus laurocerasus*) is normally achieved using a glyphosate based herbicide in combination with cutting.

Environmental monitoring of water bodies carried out in recent years has identified both detections of pesticides and biological effects. Although forestry may not be the only source of pesticides it has not been conclusively ruled out by the Northern Ireland Environment Agency (NIEA) given the targeted use in forestry of some of the pesticides detected.

Fertilisers have been routinely used to enable woodland establishment and promote tree growth in upland forests, including in West Fermanagh Forestry Planning Area, since the early 1960s until around 2000. Fertiliser use followed prescriptions for different tree species and site conditions that had been developed over many decades of research and monitoring. Since 2000 increasing areas of forest that had required fertiliser have been felled. Consequently it is increasingly likely that a proportion of regenerated areas will become deficient in nutrients and may again require fertiliser to maintain growth.

Opportunity: To contribute to the minimisation of pesticide use by planning the sequencing of felling years and increasing the area of forest managed under low impact silvicultural systems (LISS).

Activity: Environmental monitoring of forested catchments in conjunction with NIEA.

Outcomes	Benefits
- Pesticide use is minimised to the extent that residues are significantly below environmental monitoring thresholds.	- Economic activity in forests contributing to the health and well-being of local people.

9 - Targeting Invasive Species

“Here, as elsewhere in the world, invasive species are increasingly a serious threat to biodiversity and the benefits that healthy ecosystems provide to us... They are a risk to our unique flora and fauna, our economic interests such as forestry, fishing, and farming, our health, and our recreational interests.”

[An Invasive Alien Species Strategy for Northern Ireland \(2013\)](#)

A number of invasive non-native plant species occur in most forests with the potential to affect access, biodiversity, regeneration of forests and tree growth. The most widely occurring invasive plant species are rhododendron and laurel. Both are susceptible to *Phytophthora ramorum* (the cause of ‘ramorum disease’ of larch, and known in the USA as ‘sudden oak death’) and can act as hosts for the disease in a woodland. This can increase the amount of **inoculum** in an area.

Although there are fewer invasive non-native mammal species in forests than plants, the impact on biodiversity and tree health of the grey squirrel (*Sciurus carolinensis*), and of introduced deer species, can be locally significant.

Some invasive species are subject to regulation under the [Wildlife and Natural Environment Act \(Northern Ireland\) 2011](#), and the [Invasive Alien Species \(Enforcement and Permitting\) Order \(Northern Ireland\) 2019](#). Actions targeted against invasive species by public bodies are co-ordinated under the [Invasive Alien Species Implementation Plan](#). Effective action against invasive non-native species is generally very costly and is not undertaken without good justification, for instance removal from threatened protected habitats, **ancient woodland** sites and **riparian** areas.

Opportunity: Prioritise areas where control of rhododendron and laurel is required.

Opportunity: Prioritise areas where control of colonising woodland is required in protected habitats and riparian areas in Forest Service forests.

Activity: Collate and analyse data on the occurrence of invasive plant species in forests.

Activity: Assess extent of colonisation of protected habitats and **water buffer** areas by Sitka spruce and other **conifers**.

Outcomes	Benefits
<ul style="list-style-type: none"> - Decreasing area of forest land affected by invasive plant species. - Reduced threats to biodiversity and tree health. 	<ul style="list-style-type: none"> - Forests are more attractive. - Better access for angling.



10 - Protecting Habitats and Species

“Northern Ireland’s biodiversity plays a significant role within its economy. A healthy, properly-functioning natural environment is the foundation of sustained economic growth, prosperous communities and personal well-being.”

[Valuing Nature A Biodiversity Strategy for Northern Ireland to 2020.](#)

A quarter of the 76,000 ha of land managed by the Forest Service is designated for nature conservation. Designations include [Special Area of Conservation \(SAC\)](#), [Special Protection Area \(SPA\)](#), [Area of Special Scientific Interest \(ASSI\)](#) or [National Nature Reserve \(NNR\)](#).

Designated areas in and adjacent to west Fermanagh forests are listed in [Appendix II](#). As a competent authority Forest Service is required to undertake assessments of the potential impact of forestry on areas designated as either SAC or SPA. In the West Fermanagh Forestry Planning Area (FPA) this includes [Pettigo Plateau SPA](#) and [SAC](#), [Upper Lough Erne SPA](#) and [SAC](#), [Cuilcagh Mountain SAC](#), [Largalunny SAC](#), [Lough Melvin SAC](#), and [Monawilkin SAC](#).

In addition to identifying designated areas forest plans also identify areas in forests that correspond to priority habitats formerly described in the [EU Habitats Directive](#). These include native woodland, parkland, species-rich grassland, bog and heathland.

Forest design plans identify areas for [native woodland](#) expansion and [natural reserves](#) which are areas where intervention is restricted. Forest design plans also identify current and planned open habitats. This includes areas which may currently be [afforested](#) and open ground along internal forest edges

Forests and woodlands provide habitats for a number of rare and protected plants, invertebrates, birds and mammals, and support populations of wild deer which are managed to prevent damage to susceptible trees. Biodiversity of forests is also enhanced through management of deadwood habitat, and protecting ancient woodland remnant features, veteran trees, and other features of high biodiversity value from damage in the course of forest operations. Other measures include extending the period of time between planting and [clearfelling](#) (extended [rotation](#)), and converting the management of areas to [low impact silvicultural systems](#) to maintain [continuous forest cover](#).

[Ancient semi-natural woodland](#) is particularly important as it provides a range of habitats which support a rich diversity of plants and animals compared to more recent woodland. However, it is very limited in extent and there are relatively few intact examples outside of protected areas. Such woodland can be found in or close to Forest Service forests such as Castlecaldwell, Castle Archdale, Conagher, Florencecourt and Marlbank forests.

Forest Service records indicate that badgers (*Meles meles*) are widely distributed in West Fermanagh FPA and have been recorded in Ballintempo, Castle Archdale, Conagher, Derrylin & Nann Island, and Ely forests. Red squirrels (*Sciurus vulgaris*) are widespread and have been recorded in Ballintempo, Belmore, Carrigan, Castlecaldwell, Derrylin & Naan Island, Ely Lodge, Florencecourt, Lough Navar and Sillees forests. The Irish hare (*Lepus timidus hibernicus*) has been recorded in Castlecaldwell and Florencecourt forests. Rare birds in west Fermanagh include merlin (*Falco columbarius*) which have been recorded in Belmore and Lough Navar forests. Hen harriers (*Circus cyaneus*) have been recorded in Belmore, Big Dog, Derrylin & Naan Island, Florencecourt and Tullychurry forests. Red grouse (*Lagopus lagopus*) have been recorded in Carrigan Forest.



The use of **low impact silvicultural systems** in conifer stands is generally understood to be beneficial in terms of increasing biodiversity. Some raptor species, such as hen harrier, benefit from a mosaic of plantation ages resulting from managed **clearfelling**. Forest glades and unplanted breaks, or rides, are particularly important for nesting and foraging of forest edge dwelling raptor species. These species include buzzard, merlin, red kite, goshawk (*Accipiter gentilis*), kestrel (*Falco tinnunculus*) and raven (*Corvus corax*).

Forest operations are planned to avoid adverse effects on rare and vulnerable species. It is also important that people wishing to use forests for recreational purposes are aware of the needs of protected species, particularly easily disturbed breeding raptors.

Opportunity: Complete Habitats Regulations Assessments (HRAs) of revised forest plans in respect of SACs as appropriate.

Opportunity: Identify areas of open habitat where intervention is necessary to address potential loss of biodiversity, and maintain ecological connectivity.

Activity: Review potential effects of forest operations specified in forest plans.

Activity: Undertake assessments of the risk to open and parkland habitats from colonising by trees and other threats to biodiversity.

Outcomes	Benefits
<ul style="list-style-type: none"> - Contribution of forests to Northern Ireland biodiversity is maintained or increased. 	<ul style="list-style-type: none"> - Opportunities for watching birds and wildlife in forests.

11 - Restoring Peatland Habitats

“Peatland covers 12% of the land area of Northern Ireland... It is a resource which is of enormous importance to the stability and general well-being of our environment, creating distinctive upland and lowland landscapes, conserving biodiversity, and affecting river catchment hydrology. Peatland is also valuable as an archival record of climatic and vegetational history and archaeological remains. Globally, peatland acts as a massive carbon store with implications for the ‘greenhouse effect’ ”.

Conserving Peatland In Northern Ireland: A Statement of Policy (1993)

Internationally, peatland habitats are threatened from human activities and climate change and are therefore considered areas of high conservation importance. Historically, in Northern Ireland, land with a peat depth of more than 50 cm was acquired on a large scale because it was considered to be suitable for **afforestation** without compromising agricultural production. These areas were planted with Sitka spruce (*Picea sitchensis*) and lodgepole pine (*Pinus contorta*) which are tolerant of exposure and wet soil conditions. However, as the areas acquired became more extensive and increasingly infertile it was found that greater inputs, in terms of cultivation, drainage and fertiliser, were needed to establish plantations and to maintain tree growth. This took place over large areas of Ireland and Scotland, and to a lesser extent, in Wales and northern England. Similar activity has also taken place in other European countries particularly in northern Sweden and Finland.

Growing trees which require repeated inputs of fertiliser is not consistent with **sustainable forestry**, and requires forestry planners to specify species and **silvicultural systems** that require lower inputs. This limits options for productive forestry on the more infertile areas of peat which have a poor capacity to retain nutrients which are required for growth.

Restoring peatland areas, which have been highly modified to grow trees, safeguards the storage of carbon in soil, and enables the recovery of biodiversity associated with bog habitats. However, it also requires inputs in terms of tree removal or treatment of felled areas. Inputs can include removal of branches remaining from harvested trees, blocking of drains, burying of stumps, and ground-smoothing by tracked excavator. Conversion of forest to non-forest would result in a reduction in the wood production potential of forests, and, possibly, limit recreation opportunities. Therefore it is critical that potential restoration sites are identified and carefully considered. Forest Service has developed a new approach to prioritising the restoration of peatland habitats, which is provided in **Appendix III**.

Approximately 40% (4,260 hectares) of West Fermanagh Forestry Planning Area forests are comprised of areas with soil described as peat of more than 50 cm deep, the majority of which are within the West Fermanagh Uplands Landscape Unit. The largest areas of forest cover on deep peat are located within Ballintempo, Big Dog, Carrigan, Conagher and Lough Navar forests.

Opportunity: Identify and prioritise areas of afforested peat more than 50 cm deep for restoration to open peatland habitat.

Activity: Apply the process outlined in **Appendix III** for identifying and mapping potential candidate restoration areas based on peat depth, slope and topography.

Outcomes	Benefits
<ul style="list-style-type: none"> - Reduction in area of regeneration of upland forests and their timber production potential. - Change in upland forested landscapes. - Reconnection of remnant patches of isolated peatland. 	<ul style="list-style-type: none"> - Flood risk mitigation and carbon storage. - Improved NI greenhouse gas projection.

Appendix I

Composition of Forest Service forests

The areas and composition of Forest Service forests in West Fermanagh Forestry Planning Area are shown by Forest Landscape Unit in Tables 1.1 and 1.2 below.

Table 1.1
West Fermanagh Uplands Landscape Unit

Forests	Area (Hectares)	Composition (%)			
		Broadleaf	Conifer	Mixed	Open ground + water
Ballintempo	1946	5	69	1	25
Belmore	866	9	80	3	8
Big Dog	1101	6	71	0	23
Carrigan	1764	3	62	0	35
Conagher	1064	12	62	0	26
Florencecourt	1346	14	28	2	56
Garrison	427	18	67	0	15
Lough Navar	2628	10	62	0	28
Marlbank	98	40	44	12	4
Total Landscape Unit	11240	9	61	1	29

Table 1.2
Lough Erne Landscape Unit

Forests	Area (Hectares)	Composition (%)			
		Broadleaf	Conifer	Mixed	Open ground + water
Castle Archdale	517	46	35	12	7
Castlecaldwell	206	49	42	5	4
Derrylin and Naan Island	104	37	60	0	3
Ely Lodge	251	16	41	34	9
Necarne	89	57	34	4	5
Riversdale	143	23	45	16	16
Sillees	572	25	69	1	5
Tullychurry	833	5	41	0	54
Total Landscape Unit	2715	25	47	7	21

Appendix II

Environmental Regulation, Designated Areas, and the Historic Environment

1. Environmental Regulation

Afforestation, deforestation, forest road works and forest quarry works are subject to regulation under the [Environmental Impact Assessment \(Forestry\) Regulations \(Northern Ireland\) 2006](#), as amended under the [Environmental Impact Assessment \(Forestry\) \(Amendment\) Regulations \(Northern Ireland\) 2017](#). Thresholds beyond which projects must be screened are determined by the type of project and existence of a designation, as listed in Schedule 2 of the 2006 Regulations.

In areas designated as [Special Area of Conservation \(SAC\)](#) or [Special Protection Area \(SPA\)](#) management plans and, where necessary, operational plans in connection with forestry or recreational activities, are subject to regulation under the [Conservation \(Natural Habitats etc.\) \(Northern Ireland\) Regulations](#) (as amended), commonly referred to as the Habitats Regulations. Operational plans for forest management activities in [Areas of Special Scientific Interest \(ASSI\)](#) are subject to regulation under the [Environment Order \(Northern Ireland\)](#).

[Nature Reserves \(NR\)](#) and [National Nature Reserves \(NNR\)](#) are declared under the [Nature Conservation and Amenity Lands Order \(Northern Ireland\) 1985](#), and are managed in accordance with a management plan.

2. Designated areas

Forestry land is designated under the [Habitats Regulations](#), the [Environment Order](#), and/or the [Nature Conservation and Amenity Lands Order \(Northern Ireland\) 1985](#). Forestry land may also include [Sites of Local Nature Conservation Importance \(SLNCI\)](#), which are local areas designated by Councils under the [Strategic Planning Policy Statement \(SPPS\) for Northern Ireland](#), and [Planning Policy \(PPS\) 2: Natural Heritage](#). Designated areas adjacent to and on land managed by Forest Service are shown in Table 1.

Table 1

Designated areas adjacent to and on land managed by Forest Service.

Designated site or area	Designation type	Forest adjacent or included within
Pettigoe Plateau	SPA	Tullychurry
Upper Lough Erne	SPA	Derrylin and Naan island
Cuilcagh Mountain	SAC	Florencecourt
Fardrum and Roosky Turloughs	SAC	Ely Lodge
Largalunny	SAC	Conagher Lough Navar
Lough Melvin	SAC	Garrison
Monawilkin	SAC	Conagher Lough Navar
Pettigoe Plateau	SAC	Tullychurry
Upper Lough Erne	SAC	Derrylin and Naan island
West Fermanagh Scarplands	SAC	Ballintempo
		Carrigan
		Big Dog
		Conagher
Castle Archdale Forest	NR	Castle Archdale
Castlecaldwell Forest	NR	Castlecaldwell
Correl Glen Forest	NR	Conagher
		Lough Navar

Designated site or area	Designation type	Forest adjacent or included within
Crossmurrin	NR	Marlbank
Hanging Rock & Rossaa Forest	NR	Marlbank
Killykeeghan	NR	Marlbank
Lough Naman Bog	NR	Conagher
Marble Arch	NR	Marlbank
Ross Lough	NR	Sillees
Aghanaglack	ASSI	Ballintempo
		Belmore
Banagher	ASSI	Ely Lodge
Belmore Mountain	ASSI	Belmore
Big Dog Scarps and Lakes	ASSI	Big Dog
		Carrigan
		Conagher
Blackslee	ASSI	Lough Navar
Boho	ASSI	Belmore
Braade	ASSI	Lough Navar
Carrickbawn	ASSI	Carrigan
Conagher	ASSI	Conagher
Cuilcagh Mountain	ASSI	Florencecourt
Fardrum and Roosky Turloughs	ASSI	Ely Lodge
Florencecourt	ASSI	Florencecourt
Glen East	ASSI	Lough Navar
		Conagher
Glennasheever	ASSI	Lough Navar
		Conagher
Ground Bridge	ASSI	Garrison
Largalunny	ASSI	Conagher
		Lough Navar
Lenaghan Wood	ASSI	Lough Navar
Lough Alaban	ASSI	Ballintempo
Lough Formal	ASSI	Carrigan
Lough Melvin	ASSI	Garrison
Lough Naman Bog and Lake	ASSI	Conagher
Lough Navar Scarps and Lakes	ASSI	Lough Navar
		Conagher
Marlbank	ASSI	Marlbank
		Florencecourt
Monawilkin	ASSI	Conagher
Mullynaskeagh	ASSI	Conagher
Pettigoe Plateau	ASSI	Tullychurry
The Cliffs of Magho	ASSI	Lough Navar
Upper Lough Erne - Belleisle	ASSI	Derrylin and Naan island
Upper Lough Erne - Trannish	ASSI	Derrylin and Naan island
West Fermanagh Scarplands	ASSI	Big Dog
		Carrigan
		Conagher
		Ballintempo

3. Forests and the Historic Environment

Forests and woodland often include historic sites, such as earthworks, ruined structures and buried archaeological features. These may be designated as state care or scheduled sites and monuments, or they may be non-scheduled. Features listed in the [Northern Ireland Sites and Monuments Record](#) (NISMR) that are located in forests or within 50m of forest boundaries are shown in Table 2. Some Forest Service forests include or are connected to areas of [historic parks, gardens and demesnes](#) including Castlecaldwell, Ely Lodge, Castle Archdale, Necarne Castle (Castle Irvine), and Florencecourt.

Table 2

State-care, scheduled and non-scheduled historic sites and monuments located in or near forest boundary (within 50m).

Forest	Townland	Type	Protection	Location
Ballintempo	Aghanaglack	Giant's grave: Aghanaglack dual court tomb (megalithic)	State care and scheduled	In forest
	Aghanaglack	Mass rock: Carrickanaltar	Non-scheduled	In forest
	Clogherbog	Multiple-cist cairn (unlocated)	Non-scheduled	In forest
	Killycreen West	Skeoge (non-antiquity)	Non-scheduled	Near forest
	Killycreen West; Tullybrack or Ora More	Two possible crannógs (submerged)	Non-scheduled	In forest
	Legnagay Beg	Island - possible crannóg	Non-scheduled	In forest
	Mullyard	Cloghroga (non-antiquity)	Non-scheduled	In forest
	Slapragh	Cairn	Non-scheduled	Near forest
	Tullybrack or Ora More	Two standing stones	Non-scheduled	In forest
Belmore	Carrickmacflaherty; Drumman	Giant's grave: Megalithic tomb (neolithic)	Scheduled	In forest
	Cavantreeduff; Tonardrum	Rath	Non-scheduled	In forest
	Dooletter	Holy well	Non-scheduled	In forest
	Lesky	Enclosure	Non-scheduled	In forest
	Moylehid	Ring cairn (prehistoric)	Scheduled	In forest
	Moylehid	Battle site	Non-scheduled	Near forest
	Moylehid	Island - possible crannóg	Non-scheduled	In forest
	Moylehid	Passage tomb, giant's grave: Eagle's Knoll cairn, megalithic tomb (neolithic)	Scheduled	In forest
	Moylehid	Giant's grave: Megalithic tomb (neolithic)	Non-scheduled	In forest
	Moylehid	Rath (platform)	Non-scheduled	In forest
	Moylehid	Cave: Scollan's Cave (unlocated)	Non-scheduled	In forest
	Tents	Giant's stone (non-antiquity)	Non-scheduled	Near forest
	Treel	Enclosure	Non-scheduled	In forest
	Treel	Enclosure	Non-scheduled	In forest

Forest	Townland	Type	Protection	Location
Big Dog	Dog Big	Carrigeenbrack court tomb: Megalithic tomb (neolithic)	Non-scheduled	In forest
	Dog Little	Skaghlea cairn, court tomb: Megalithic tomb (neolithic)	Scheduled	In forest
	Meenagleragh	Island - possible crannóg	Non-scheduled	Near forest
	Meenagleragh	Megalithic tomb (prehistoric)	Non-scheduled	In forest
	Meenagleragh	Non-antiquity	Non-scheduled	In forest
	Meenagleragh	Giant's grave: Megalithic tomb (neolithic)	Scheduled	In forest
	Rossinure Beg	Giant's graveyard, Booley hut: Settlement site	Non-scheduled	In forest
	Rossinure Beg	Giant's graveyard: Megalithic tomb (prehistoric)	Non-scheduled	In forest
Carrigan	Carrigan	Dermot and Grania's Bed (non- antiquity)	Non-scheduled	In forest
	Carrigan	Cairn: Laghta Vic Donal or Laght- macdonnell	Non-scheduled	In forest
	Carrigan	Coffin stone: Carrick Leam or Wil- liam's Rock	Non-scheduled	In forest
	Carrigan; Clogher- bog	The Shaking Stone (non-antiqui- ty)	Non-scheduled	In forest
	Clogherbog	Inscribed cave	Non-scheduled	In forest
	Rossinure More	Non-antiquity	Non-scheduled	Near forest
Castle Archdale	Ballymacataggart	Rath	Non-scheduled	In forest
	Ballymacataggart	Church (unlocated)	Non-scheduled	In forest
	Ballymacataggart	A.P. site	Non-scheduled	In forest
	Ballymacataggart	Enclosure	Non-scheduled	In forest
	Ballymacataggart	A.P. site	Non-scheduled	In forest
	Bunaninver	Castle and bawn: Old Castle Archdale (fortification)	State care	In forest
	Bunaninver	Enclosure	Non-scheduled	In forest
	Bunaninver	Tree ring	Non-scheduled	In forest
	Drumaran	Rath: Drumaran Fort	Scheduled	In forest
	Drumarky	Burnt mound (prehistoric)	Non-scheduled	Near forest
	Drummal	Rath (platform)	Non-scheduled	In forest
	Glenross	Rath	Non-scheduled	In forest
	Inish More or Dav- ey's Island	Church and enclosure: Abbey, Davey's Island (medieval)	Scheduled	In forest
	Mullies	Rath (counterscarp)	Scheduled	In forest
	Rossachrin	Rath (platform)	Non-scheduled	In forest
	Rossachrin	A.P. site	Non-scheduled	In forest
	Strongbow Island	Fortification: Strongbow's Island	Non-scheduled	In forest
	Castlecaldwell	Leggs	Enclosure	Non-scheduled
Leggs		A.P. site	Non-scheduled	Near forest
Lower Lough Erne		Crannóg	Non-scheduled	Near forest
Rossbeg		Castlecaldwell (fortification)	Scheduled	In forest
Rossbeg		Castlecaldwell (church and grave- yard)	Non-scheduled	Near forest
Rossmore		A.P. site	Non-scheduled	In forest

Forest	Townland	Type	Protection	Location
Conagher	Meenacloyabane	Burnt mound	Non-scheduled	In forest
	Meenacloyabane	Burnt mound	Non-scheduled	In forest
Derrylin and Naan island	Naan Island West	Cashel	Non-scheduled	In forest
	Naan Island West	Castle (fortification)	Non-scheduled	Near forest
	Tonymelt	Rath	Non-scheduled	In forest
Ely Lodge	Cullen	Rath	Non-scheduled	In forest
	Cullen	Rath	Non-scheduled	Near forest
Florencecourt	Aghatirourke	Cairn	Non-scheduled	Near forest
	Aghatirourke	Giant's grave, round cairn (pre-historic)	Non-scheduled	In forest
	Aghatirourke	Giant's grave, round cairn (pre-historic)	Non-scheduled	In forest
	Aghatirourke	Rath	Non-scheduled	In forest
	Aghatirourke	Cup and ring marked stone (pre-historic)	Non-scheduled	In forest
	Deer Park	Rath	Non-scheduled	In forest
	Deer Park	Rath	Non-scheduled	In forest
	Doohatty Glebe	Cairn, giant's grave: The Star Cairn, megalithic court tomb (neolithic)	Scheduled	In forest
	Florencecourt Demense	Rath	Non-scheduled	In forest
	Florencecourt Demense	Standing stone: Giant's field (pre-historic)	Non-scheduled	In forest
	Florencecourt Demense	Non-antiquity	Non-scheduled	In forest
	Lisgally	Rath	Non-scheduled	In forest
	Teesnaghtan	Enclosure	Scheduled	In forest
	Teesnaghtan	Cross-inscribed standing stone and cairn: The Forth	Scheduled	In forest
Garrison	Drumnasreane	A.P. site	Non-scheduled	In forest
	Meenacloyabane	Sweat house	Non-scheduled	In forest
Lough Navar	Barr of Bolusty More	Non-antiquity	Non-scheduled	In forest
	Blackslee	Rath	Non-scheduled	In forest
	Blackslee	Rath	Non-scheduled	In forest
	Blackslee	Rath	Non-scheduled	In forest
	Braade	Sweat house	Scheduled	In forest
	Legg	A.P. site	Non-scheduled	Near forest
	Magho	A.P. site	Non-scheduled	In forest
	Magho	A.P. site	Non-scheduled	In forest
	Sruhanure	Rath	Non-scheduled	In forest
Tiranagher Beg	Cist burial (Bronze Age)	Non-scheduled	In forest	
Marlbank	Carrigan	Souterrain: St. Lasser's Cell	Scheduled	In forest
	Killesher	Holy well: St. Lasser's Well	Non-scheduled	In forest
	Mullaghbane	Rath	Scheduled	In forest

Forest	Townland	Type	Protection	Location
Necarne	Cassidy	Rath	Non-scheduled	In forest
	Castle Irvine Demense	Rath	Non-scheduled	In forest
Riversdale	Ballycassidy	Holy well and possible church site: St. Molaises' Well, Baile Ui Chaiside	Non-scheduled	Near forest
	Ballycassidy	Tree square: Camcool	Non-scheduled	In forest
Sillees	Derrynim	A.P. site	Non-scheduled	In forest
	Drumageever	Burnt mound	Non-scheduled	Near forest
	Drumhirk Upper	Burnt mound: Fulacht Fiadh (Bronze Age)	Non-scheduled	In forest
	Kilmore	Rath (platform)	Non-scheduled	Near forest
	Kilnamaddoo	A.P. site	Non-scheduled	In forest
	Kilnamaddoo	Crannóg	Non-scheduled	Near forest
	Stratore	Burnt mound (prehistoric)	Non-scheduled	In forest
	Stratore	Rath	Non-scheduled	Near forest
	Stratore	Burnt mound (prehistoric)	Non-scheduled	In forest
	Stratore	Burnt mound (prehistoric)	Non-scheduled	In forest
	Tullycarbry	Rath	Non-scheduled	In forest
Tullychurry	Derrylougher	A.P. site	Non-scheduled	In forest

Appendix III

Strategy for Restoring Peatland Habitats

1. Rationale

1.1 Northern Ireland Forestry Strategy

The Northern Ireland Forestry Strategy, '[Northern Ireland Forestry – A Strategy for Sustainability and Growth](#)' (2006) restates policy as:

- The sustainable management of existing woods and forests.
- A steady expansion of tree cover to increase the many diverse benefits that forests provide.

The strategy indicated that an amended Forestry Act would place a duty on the Department to promote [afforestation](#) and [sustainable forestry](#), which duly came into effect in 2010.

The Northern Ireland and UK Governments approach to sustainable forestry is set out in the [UK Forestry Standard](#) (UKFS), which is currently in its 4th edition (2017). The UKFS reiterates the legal requirement that “Appropriate protection and conservation must be afforded where sites, habitats and species are subject to the legal provisions of EU Directives and UK and country legislation”. In addition in Northern Ireland, the [Wildlife and Natural Environment Act \(Northern Ireland\) 2011](#) places a General Duty on every public body to ‘further the conservation of biodiversity so far as is consistent with the proper exercise of those functions [it exercises]’.

The [UKFS](#) includes a number of general forestry practice requirements and guidelines that are applicable to [afforested](#) peat or peatland habitats modified for afforestation.

The standard requires forest plans to take full account of a range of requirements and guidelines relating to forest design, biodiversity, water, soil, climate change and provides scope for undertaking peatland restoration projects to improve the delivery of [ecosystem services](#). The requirements that are most relevant to the topic of restoring peatland habitats are Forests and Biodiversity general forestry practice requirements 1 and 4:

- Forests and woodlands should be managed in such a way that conserves or enhances biodiversity; opportunities for enhancing biodiversity should be considered in forest management plans.
- Particular consideration should be given to conserving, enhancing or restoring priority habitats and species identified in the statutory lists of priority species and habitats for England, Scotland, Wales and Northern Ireland, through the delivery of country biodiversity strategies and local level plans.

Forests and Biodiversity Guidelines 24 and 26 refer specifically to restoration of habitats and degraded features:

- Consider practical opportunities to restore open habitats where their value could be reinstated and sustained.
- Ensure wetland features such as springs, flushes and bogs are protected, and take opportunities to restore degraded features.

The UKFS is also the basis of forestry practice for the independent [UK Woodland Assurance Standard \(UKWAS\)](#), which is used for voluntary independent certification. The relevant UKWAS sections include: 2. Management Planning, and 4. Natural, historical and cultural environment:

- 2.1 Long-term policy and objectives
- 2.2 Documentation
- 2.11 Conservation
- 2.13 Conversion
- 2.14 Implementation, amendment and revision of the plan
- 2.15 Monitoring
- 4.1 Statutory designated sites and protected species

1.2 Northern Ireland Biodiversity Strategy

The Northern Ireland Biodiversity Strategy, '[Valuing Nature - A Biodiversity Strategy for Northern Ireland to 2020](#)' (2015), refers to the importance of peaty soils and associated priority habitats, including blanket bog and lowland raised bogs, in providing [ecosystem services](#), such as clean water supplies, carbon storage, and recreation, and identifies forestry and other land management practices as potential threats to these services.

The strategy indicates that many ecosystems, such as peatlands, are in a relatively poor condition, and states the need to reverse the decline and work towards Favourable Conservation Status. It emphasises the importance of peatland soils and vegetation as a carbon store and suggests their value in sequestering carbon may become a particularly economically advantageous characteristic as carbon accounting becomes more important.

1.3 Review of forest design plans

The review stage of forestry planning involves re-examining management objectives, and the forest data on which they are based. Long-term objectives are presented in the form of design plans, which show planned boundaries between forest and open ground and planned felling and regeneration. Forest design plans meet the requirements of the UK Forestry Standard in relation to the proportions of tree species, the proportion managed as open ground, and overall area managed primarily for biodiversity. Adjustments to these proportions are made in the course of felling and regeneration, which can include the introduction of more open ground, and through specific programmes, including, for example, tree planting, and, removal of trees colonising open ground.

1.4 Stakeholder engagement

'Restoring Peatland Habitats' is one of 11 topics identified as a basis for engaging with stakeholders at the initial, scoping stage of forestry planning. Stakeholders responding to the Sperrin scoping consultation in 2018 indicated they were in favour of the restoration of [afforested](#) peatlands; responses from forest industry stakeholders suggested that peatland forestry was, in some cases, an unsustainable land use, while others indicated that restoration could generate environmental benefits, including carbon sequestration and flood risk mitigation.

Stakeholders will be given the opportunity to comment on proposals to review forest design plans via the forestry pages on the DAERA website. As planning proceeds proposals will be developed for all remaining forests by 2022.

1.5 Restoration potential

The rationale for restoration of blanket bog reflects the potential to achieve appropriate hydrological conditions, based on external peat depth and slope datasets. Proposals to convert afforested peatlands or peatlands modified by forestry practices to priority bog habitat will exclude sites that have become degraded due to peat cutting or erosion, intensively drained areas dominated by heather, areas colonised by native tree species, and areas that have developed into native wet woodland.

1.6 Sustainable wood production

The strategy should not affect the potential of forests to deliver sustainable wood production. Candidate restoration areas will mainly consist of areas that were previously identified as open ground in forest design plans and will be excluded from regeneration plans. Assessments undertaken in conjunction with forestry planning have indicated that peatland forests also include a proportion of uneconomic stands comprised of checked (where growth has ceased or stagnated), nutrient deficient or dying trees.

2. Prioritisation of candidate restoration areas

2.1 Site selection criteria

- Planned open ground (either current or in forest design plan).
- Adjacent and integral to designated areas*, or non-designated priority habitat.
- Peat depth $\geq 0.5\text{m}$ and slope $\leq 3^\circ$ over most of the area.
- Afforested areas which are uneconomic (failed, checked, nutrient deficient or dying) or unplanted areas modified by forestry operations and / or colonised with non-native species.

*SAC/ASSI, ASSI, NNR, LNR, and SLNCI

2.2 Prioritisation of restoration

Priority 1: Meeting all criteria: uneconomic stands, peatlands modified by forestry practices or areas colonised with non-native trees shown as open ground priority habitat in design plans, adjacent and integral to designated or non-designated priority habitat, and where peat depth $\geq 0.5\text{m}$ and slope $\leq 3^\circ$ over most of the area

Priority 2: Planned open ground, predominantly meeting remaining criteria; may include up to 30% productive stands (Sitka spruce General Yield Class (GYC) ≥ 10 or lodgepole pine GYC 8).

Priority 3: As for Priority 2, but does not fully meet peat depth and slope criterion.

3. Context of the Strategy and Implementation Plan

- The strategy for restoring peatland habitats in forests supports Northern Ireland strategies for forestry and biodiversity.
- It updates earlier Forest Service strategies and plans related to restoring peatland habitats.
- To prepare operational plans for bog restoration for Priority 1 areas.
- By 2022, to ensure all forestry planning areas have been reviewed to identify candidate peatland restoration sites.
- By 2030, to review the strategy and undertake a strategic review of candidate peatland restoration projects.

4. Review

The rationale and strategy will be subject to review as necessary in respect of:

- The potential to make adjustments to felling plans in response to significant changes to timber marketing conditions affecting poor quality and diseased lodgepole pine, and checked and nutrient deficient Sitka spruce stands.
- The requirement to undertake restoration of heathland habitats; this will be assessed as planning reviews take place.
- The development of a wider Forest Service strategy for the management of open priority habitats.
- New research and technical information

Map 1: Forests and woodland in West Fermanagh Planning Area (FPA)



