Native Woodland Conservation Scheme

September 2015









Published by:

Forest Service
Department of Agriculture, Food & the Marine,
Johnstown Castle Estate
Co. Wexford
Tel. Lo-Call 1890 200 509
E-mail forestservice@agriculture.gov.ie
Web www.agriculture.gov.ie/forestservice

All photos Forest Service, unless otherwise indicated.

 $^{\circ}$ Forest Service, Department of Agriculture, Food & the Marine, Ireland $^{\circ}$ September 2015

Contents

1. Introduction	1			
2. Objectives of the NWS Conservation				
3. Targeting of NWS Conservation	3			
4. Grants and premiums	5			
5. Eligible operations	5			
6. Legal basis of NWS Conservation	6			
7. State Aid requirements	6			
8. Eligibility	7			
9. Conditions of aid	7			
10. Application procedure	9			
11. Silvicultural standards	15			
12. Necessary criteria for foresters and ecologists	15			
13. Other information	17			
14. Consultation and public notification procedure	17			
15. Pre-approval	17			
16. Eligibility for Direct Payments (2015-2019),				
Cross Compliance, Land Use Reconciliation Requirements	18			
17. Good practice and SFM	18			
18. Payment	18			
19. Penalties	18			
20. Appeals	19			
21. Change of applicant	19			
22. Joint Management Consent	20			
23. Right-of-entry	21			
24. Responsibility for forest management	21			
25. Insurance	21			
26. Failure to abide by the scheme terms and conditions	21			
27. Overpayments made in relation to a scheme contract	22			
28. Contract period	22			
29. Remedial works	23			
30. Review of scheme details	23			
31. Tax Clearance Requirement and Value Added Tax	23			

32. Information and data protection	23
33. Forestry Act 1946	24
Annex 1: Definitions	27
Annex 2: Grant and Premium Rates	29
Annex 3: State Aid Requirements	30
Annex 4: Silvicultural Standards	32
Annex 5: Native Woodland Plan	44
Annex 6: Native Woodland and Watercourses	57
Annex 7: References and Further Reading	62

1. Introduction

The Forest Service of the Department of Agriculture, Food & the Marine operates a package of measures under the Forestry Programme 2014-2020, aimed specifically at promoting the proactive protection and expansion of Ireland's native woodland resource. These measures represents a key biodiversity component within Ireland's national forest policy.

These measures are as follows:

- Native Woodland Establishment (as represented by Grant & Premium Categories 9 and 10 under the Afforestation Grant & Premium Scheme), which funds the establishment of *new* native woodland on open 'greenfield' sites; and
- ➤ Native Woodland Conservation Scheme, which promotes the appropriate restoration of existing native woodland (including the conversion of non-native forest to native woodland), through the provision of financial support to forest holders towards the cost of appropriate works.

Both measures have been developed and implemented in partnership with Woodlands of Ireland, the National Parks & Wildlife Service (NPWS), the Heritage Council, Inland Fisheries Ireland (IFI) and other native woodland stakeholders, and are supported by a multi-annual training programme and a continuously-evolving package of supporting literature for practitioners (see Annex 7 for available resources). It is envisaged that both measures will continue to develop over the coming years, based on the ongoing partnership, experiences gained, and evolving priorities.

This document sets out the terms and conditions of the Native Woodland Conservation Scheme (NWS Conservation), and also the silvicultural standards that apply. This document should be read in conjunction with the *Forestry Standards & Procedures Manual*, which is available along with various circulars at www.agriculture.gov.ie/forestservice/publications/ and www.agriculture.gov.ie/forestservice/grantandpremiumschemes/

Various terms used in this document are defined in Annex 1.

(The corresponding details for the Native Woodland Establishment measure are set out in the Forest Service documents *Afforestation Grant & Premium Scheme 2014-2020* and *Native Woodland Establishment GPC9 & GPC10: Silvicultural Standards*. Both documents are available at www.agriculture.gov.ie/forestservice)

2. Objectives of NWS Conservation

The aim of NWS Conservation is to support the appropriate restoration of existing native woodlands and (where appropriate) the conversion of existing non-native forest to native woodland, in order to promote the restoration of Ireland's native woodland resource and associated biodiversity. All projects under NWS Conservation must promote the appropriate native woodland type (or types) identified for the site being applied for, based on soil type, existing woodland, ground vegetation, elevation, etc. Support is provided in the form of grant payment for approved restoration works and (for private Applicants) a 7-year annual premium payment.

In addition to the above, NWS Conservation also supports the realisation of wider ecosystem functions and services that native woodlands can deliver. In particular, these include the protection and enhancement of water quality, aquatic habitats and in-stream species,

the creation of linkage between semi-natural habitats at a landscape level, and carbon sequestration as part of Ireland's contribution to combating climate change. Annex 6 describes the potential application of NWS Conservation in relation to the protection of watercourses and aquatic habitats and species.

Many sites under NWS Conservation will be suitable for growing quality timber and other wood products on an ongoing long-term basis. Applicants are encouraged to pursue this potential, where compatible with the native woodland ecosystem objectives and prevailing site conditions. This entails the use of 'close-to-nature' Continuous Cover Forestry (CCF) based on shelterwood, selection and coppicing systems that mimic natural processes and minimise site impacts. Realising wood (and non-wood) products from the woodland generates valuable income for the owner, and an economic basis for the ongoing management of many of Ireland's native woodlands, beyond the scheme itself.

NWS Conservation creates opportunities for implementing traditional forms of woodland management that form part of our countryside heritage, including coppicing. Other important benefits include landscape enhancement and cohesion, the strengthening of the cultural and historical heritage associated with Ireland's native woodlands, and the provision of local amenities and opportunities for woodland interpretation and environmental education.

NWS Conservation has an overriding ecological focus, demonstrated by, for example, its emphasis on minimal site disturbance, species selection based on the most appropriate native woodland type, the use of native planting stock, and long-term 'close-to-nature' management (see Annex 4 for the various silvicultural standards that apply in this regard). With this focus, the scheme creates opportunities for woodland owners within environmentally-sensitive areas to develop woodlands which have the potential for wood production and income generation, and which also contribute towards addressing the various environmental sensitivities involved (e.g. NATURA sites, Acid Sensitive Areas, high status waterbodies, fisheries sensitive areas and Freshwater Pearl Mussel catchments). This is achieved through cooperation between the owners, foresters, ecologists, the Forest Service and other statutory bodies and scheme partners, and the application of the Forest Service Appropriate Assessment Procedure and other safeguards.

Three funding categories apply under NWS Conservation, depending on applicant status (private or public) and the nature of the project being submitted. These are:

- 1. NWS Conservation 'Private High Forest'(*)
- 2. NWS Conservation 'Private Emergent Woodland'
- 3. NWS Conservation 'Public Woodland'(*)

(* Categories 'Private High Forest' and 'Public Woodland' can include existing high forest woodland regarded as being native in tree composition but requiring restoration work, and existing high forest comprising non-native conifer species, where clearfelling and conversion to native woodland is being proposed.)

As different grant rates, premium availability, criteria and annual targets apply, each category must be applied for separately. (Note, the 7-year NWS Conservation Premium is only available under the categories 'Private High Forest' and 'Private Emergent Woodland'.) See Annex 2 for grant and premium details under NWS Conservation.

The aim of NWS Conservation is to support the restoration of 1,950 hectares of native woodland under the Forestry Programme 2014-2020, comprising 520 ha under the category 'Private High Forest', 360 ha under 'Private Emergent Woodland', and 1,070 ha under 'Public Woodland'.

Projects under NWS Conservation will typically comprise the following approaches:

- Existing 'high forest' native woodland requiring appropriate restoration works (e.g. removal of individual or groups of non-natives, removal of invasive exotics, protection against deer and / or livestock).
- The conversion of existing conifer forest to native woodland (e.g. the removal of uniform Sitka spruce plantation adjoining a sensitive watercourse, deer fencing, and reforestation with native woodland, through planting and / or natural regeneration).
- Existing scrub constituting emergent woodland that is predominantly native (e.g. protective fencing, removal of non-natives and invasive exotics, and respacing).
- NWS Conservation also has a particular application in relation to the protection of watercourses and aquatic habitats and species see Annex 6 for details.

Regarding emergent native woodland, NWS Conservation category 'Private Emergent Woodland' provides support for the retention and appropriate management of suitable areas of 'scrub'. These areas often represent early-stage native woodland comprising mainly 'pioneer' species naturally regenerating onsite, and will develop into high forest native woodland. These woodlands represent an important biodiversity feature within the landscape, with the potential for delivering many ecosystem services. Also, with retention and appropriate intervention (e.g. fencing, respacing), they have the potential for future wood production under CCF. NWS Conservation category 'Private Emergent Woodland' is designed to encourage landowners to consider the possibility of retaining existing 'scrub' and to allow this habitat to grow on as native woodland, for both environmental and wood production purposes.

3. Targeting of NWS Conservation

In order to maximise contribution of NWS Conservation to Ireland's native woodland resource, and to realise wider ecosystem services (particularly water protection and habitat linkage), the Forest Service will target funds towards sites with a high ecological priority. This will strategically maximise the beneficial impact on Ireland's native woodland resource and on the delivery of the various ecosystem functions and services outlined above.

Applications under each of the various categories must satisfy <u>at least one</u> of the qualifying criteria set out below. The exact criteria satisfied by any individual project must be clearly indicated in the Native Woodland Plan (see later).

3.1 Criteria under NWS Conservation category 'Private High Forest':

- An 'ancient woodland' site, i.e. a site that has been under continuous woodland / forest cover since 1650.
- 2. A woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- 3. An undesignated woodland comprising woodland type(s) listed under Annex I of the EU Habitats Directive.
- 4. An 'old woodland' site, i.e. a site that has been under continuous woodland / forest cover since the 1830s.

- 5. A woodland / forest adjoining a sensitive watercourse, where native woodland restoration can contribute to the protection of water quality and aquatic habitats and species. Water sensitive areas include Freshwater Pearl Mussel catchments, fisheries sensitive areas, Acid Sensitive Areas, and high status waterbodies identified under the Water Framework Directive.
- A woodland / forest adjoining or within 1 km of a woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- 7. A woodland / forest adjoining or within 1 km of a non-woodland habitat designated for conservation purposes under European and / or national legislation.
- 8. A project involving the ecologically compatible development of a native woodland amenity for public access and recreation, woodland interpretation and environmental education (including NWS Conservation projects with a NeighbourWood Scheme tiein.)

3.2 Criteria under NWS Conservation category 'Private Emergent Woodland:

To be eligible under this category, the emergent woodland must be predominantly native, must have an average canopy height of at least 4 metres, and must be situated on mineral soil. The site can initially comprise up to one-third open space. Qualifying criteria are as follows:

- An emergent native woodland within a natural riparian zone, or adjoining a sensitive watercourse, where native woodland restoration can contribute to the protection of water quality and aquatic habitats and species. Water sensitive areas include Freshwater Pearl Mussel catchments, fisheries sensitive areas, Acid Sensitive Areas, and high status waterbodies identified under the Water Framework Directive.
- 2. An emergent native woodland adjoining an 'ancient woodland' site, i.e. a site that has been under continuous woodland / forest cover since 1650.
- 3. An emergent native woodland adjoining or within 1 km of a woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- 4. An emergent native woodland adjoining an undesignated woodland comprising woodland type(s) listed under Annex I of the Habitats Directive.
- 5. An emergent native woodland adjoining an 'old woodland' site, i.e. a site that has been under continuous woodland / forest cover since the 1830s.
- 6. An emergent native woodland adjoining or within 1 km of a non-woodland habitat designated for conservation purposes under European and / or national legislation.
- 7. A project involving the ecologically compatible development of a native woodland amenity for public access and recreation, woodland interpretation and environmental education (including NWS Conservation projects with a NeighbourWood Scheme tie-in.)

3.3 Criteria under NWS Conservation category 'Public Woodland':

Criteria under this category are as per the category 'Private High Forest'.

4. Grants and premiums

The grant rates and the number of grant instalments paid differ across the three NWS Conservation categories 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland'. In addition, the 7-year NWS Conservation Premium is payable only to private landowners under the categories 'Private High Forest' and 'Private Emergent Woodland'.

Annex 2 details the grant and premium structure that applies under NWS Conservation.

5. Eligible operations

Under NWS Conservation, a cost-based grant towards approved costs (exclusive of VAT), subject to the maximum laid down in Annex 2, will be available to private land-holders or companies for projects which comply with the requirements, terms and conditions of the scheme. Costs presented must be based on the actual treated area for each approved operation. Grants will be available only for projects which, prior to restoration works, have been granted approval by the Department, following the submission of a NWS Conservation Form 1, Native Woodland Plan and other required documentation. Support for woodland restoration under this measure will be granted solely in connection with duly justified and substantiated costs, and no over-compensation will take place.

Grants will be paid in one or two instalments, depending on the category being applied under (i.e. 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland' – see Annex 2). All payments of grants will be conditional on the woodland being successfully restored in compliance with the conditions of approval and standards as outlined in the Forest Service Forestry Standards & Procedures Manual and the NWS Conservation silvicultural standards, as set out in Annex 4. Any area restored outside of the approved area will not be eligible for grant aid.

Section 10 below sets out the application procedure.

Annex 2 details the maximum grant payable and the instalment structure under each of the three categories under NWS Conservation, and the NWS Conservation Premium available to private landowners under the categories 'Private High Forest' and 'Private Emergent Woodland'.

Support will be available under NWS Conservation for the following eligible operations:

- Preparation of a site-specific Native Woodland Plan by a NWS Ecologist and NWS Forester;
- Purchase of suitable native planting stock;
- Ground preparation, where appropriate (e.g. light scarification to facilitate natural regeneration);
- Forest protection (fencing, tree guards and other measures)(*);
- Clearance of invasive species such as laurel and rhododendron;
- Costs associated with non-commercial tree felling, where appropriate (e.g. tree felling on highly sensitive parts of the site, where alternative, non-conventional techniques are required, including manual felling in riparian zones or to remove non-natives in 'refuge' areas)(**);
- Woodland rejuvenation (including understorey and coupe planting, natural

regeneration works and filling-in);

- Maintenance (including vegetation management);
- Woodland edge management;
- Maintenance of open spaces, rides and glades;
- Re-spacing;
- ➤ The restoration of former coppice or coppice-with-standards woodland to active coppice management; and
- On application, other related operations, as deemed appropriate and as approved by the Forest Service.

(* Deer fencing is capped at €16.25 / metre, 120 metres / ha, and at €1,950 / ha, for IS436 standard fencing; and at €12.00 / metre, 150 metres / ha, and at €1,800 / ha, for non-IS436 fencing. All deer fencing caps will be determined by the area enclosed and protected by the fence, subject to the maximum project area of 12 ha. All proposed fencing must be clearly identified and described by type on a fencing map, as described in the *Forestry Standards & Procedures Manual*.)

(** Where a marketable quantity of timber is realised from thinning / felling undertaken as part of an approved Native Woodland Plan, the quantity (in cubic metres) of timber must be documented and details submitted to the Forest Service, together with evidence of timber-related income (including invoices and receipts). Similarly, where a marketable quantity of timber is realised for the owner's use, or used by a third party but not sold, the quantity of timber must be documented and details submitted, together with an estimate of its indicative value. The Forest Service may reduce the grant payable accordingly, reflecting the value of the timber realised and (where relevant) the normal costs associated with standard replanting.)

The cost of any eligible operation is based on the treated area and the maximum grant rate per hectare. For example, if the treated area is 1 ha the grant rate cannot exceed €5,000/ ha for any operation or cumulative operations for that treated hectare. It is not possible to transfer grant aid from one part of the forest where the maximum eligible costs were not exceeded to another part where costs have exceeded €5,000/ha. Eligible costs for eligible operations will be assessed for each area treated.

6. Legal basis of NWS Conservation

NWS Conservation is 100% Exchequer-funded under the following legal framework: European Union guidelines for State Aid in the agriculture and forestry sector and in rural areas, 2014-2020. The legal basis for the measure is provided by the Forestry Programme 2014 -2020 and the European Commission's State Aid approval of that programme issued to the Department of Agriculture, Food & the Marine on the 5th February 2015 (ref. no. SG-Greffe (2015) D/1056/7).

NWS Conservation is administered by the Department of Agriculture, Food & the Marine and operates throughout the State. The scheme shall be operational from the 22nd September 2015 for a period to be determined by the Minister for Agriculture, Food & the Marine.

Participation in NWS Conservation is voluntary.

7. State Aid requirements

The detailed State Aid requirements for NWS Conservation are set out in Annex 3. The main elements that require input by the applicant are:

➤ Incentive Effect: This applies where the applicant is a small- or medium-sized

enterprise (SME) and / or the immediate beneficiary. The applicant / enterprise must indicate on the NWS Conservation Form 1 application form for aid that "The work described herein would not have been undertaken without the financial support provided under State Aid rules. Without this aid there would be no change to current activities." For large companies, documentary evidence must be submitted in relation to the counter-factual for each of the measures proposed (i.e. what would happen without the aid?).

- ➤ **Proportionality of the aid:** Large companies must provide documentary evidence that the aid is proportionate. Only applications that are deemed to be proportionate will be grant-aided by the Forest Service.
- Transparency: Ireland must publish on its website at a national level certain information, on the State Aid schemes, including NWS Conservation.

8. Eligibility

Individuals applying for participation in NWS Conservation must be over 18 years of age and must hold a Personal Public Service Number (PPSN). Companies must provide their company registration details (CRO number).

Applicants for approval must be the owner, leaseholder or joint manager of the land at the time of the application. Exceptions to this rule will only apply where: (i) the owner is deceased and his / her legal representative submits the application; or (ii) the owner consents in writing to the submission of the application in the name of a designated third party.

In order to qualify for payment of NWS Conservation grants (and premiums, where applicable), ownership conditions set out in the previous paragraph apply. If requested, applicants must provide documentary evidence of ownership and of leasing or joint management, where relevant, as detailed in the *Forestry Standards & Procedures Manual*.

The Department will refuse applications for grant aid where it is found that an application was made by a person other than a person who meets the above criteria.

9. Conditions of aid

Where an applicant makes an application for aid that is deemed valid and is approved by the Department, a contract then exists under the scheme between the applicant and the Minister. The terms and conditions of NWS Conservation, as set out in this document (which may be revised from time-to-time by the Minister), any circulars amending the scheme requirements, all application forms (including the Form 1), Letters of Approval and (where appropriate) remedial works notifications, form the terms and conditions of this contract. The contract will be identified by a unique contract number (CN) assigned to it by the Department when the application for approval (i.e. NWS Conservation Form 1) is received.

Payments will be based on either the area claimed as eligible for payment by the applicant (on the Form 2, Form 3 or Form 4 and associated maps) <u>or</u> the area determined by the Department to be eligible for payment, whichever is the lesser.

1. The Department's computerised mapping and payment system (iFORIS) is used by the Department to capture a digital representation of the payment area based on the applicant's claim map. Capturing the claim map in a digital form allows for the accurate measurement and calculation of the payment area. The process of electronically capturing the claim map is referred to as 'digitisation'. The digitised area of a contract (i.e. the entire plantation) is the sum of the areas of the individual forest plots (excluding biodiversity) comprising that contract number or plantation. For each plot contained in an application for payment, the digitised area is the entire area of the forest plot within the perimeter boundary of that plot measured by the Department's iFORIS system.

- 2. The **determined area** of a contract number or plantation is the sum of the areas, determined by the Department to be eligible for payment, of the individual forest plots comprising that contract number or plantation. The determined area is calculated by excluding any ineligible areas (e.g. power line corridors, rock, gas lines, ineligible areas of biodiversity).
- 3. The claimed area is the total area of the forest plots specified by the applicant in the application as being claimed for payment of a grant. The claimed area is calculated by the applicant by deducting any part of the plot that is not eligible to receive the NWS Conservation grant (e.g. power line corridors, rock, gas line and eligible biodiversity areas) from the digitised area.
- 4. Whichever is the lesser of the claimed area or the determined area is deemed to be the area eligible for payment, known as the 'payable area'. This is the area on which payments of NWS Conservation grants will be based, subject to compliance with the requirements of the scheme as regards submission of proof of ownership, if requested.
- 5. The **payable area** will be the area treated and subject to eligible works. Areas which have not been treated or subject to work cannot be included in the payable area. For example, if a 10 ha wood only requires the clearance of 2 ha of rhododendron the payable area will be 2 ha, and not 10 ha. Similarly, areas thinned will relate to the treated area and the area of trees that benefited from the thinning. Note, treated area to include the 15% Areas for Biodiversity Enhancement (ABE) requirement.

Where an area delineated as the payable area on a map submitted by the applicant differs from the area specified on the species plot table attached to a map or the area specified on the Form 2, Form 3 or Form 4, the lesser of these areas will be deemed to be the area claimed by the applicant.

Where a notification (i.e. a remedial works letter) is issued to the applicant specifying remedial works required to bring his/her plantation up to standard, the date specified in that letter by which the works must be completed is binding on the applicant. In exceptional circumstances, the Minister may grant an extension to that date. Requests for such extensions must be submitted in writing by the applicant and the NWS Forester at least 30 days before the expiry of the original deadline for completion. Failure to complete the specified works to the satisfaction of the Forest Service will result in a penalty, as set out in the document titled Forestry Schemes Penalty Schedules (DAFM, 2015).

Grants will be paid only when the entire plantation is up to the required standard. If part of the plantation fails inspection, payment will be withheld on the entire area until remedial works are carried out to the required standard.

Where the Forest Service decides that it is not possible to bring the plantation, or part thereof, up to the required standard, no further payment will be made for that area. Where the grant and / or part thereof, is not to be paid, the Forest Service may also require repayment of the

amount paid in respect of the plantation or in respect of the area that does not meet the required standard.

Payments shall be made in respect of applicants who make valid applications prepared by a NWS Forester and who have undertake native woodland restoration works in accordance with the Approval Letter and in compliance with:

- all relevant EU requirements and national legislation;
- The terms and conditions of this scheme, as set out in this document (and any revisions thereof), any circulars amending the scheme requirements, the application forms, Approval Letters and, where appropriate, remedial works notifications;
- the Code of Best Forest Practice Ireland;
- the Irish National Forest Standard;
- the Forest Service suite of environmental guidelines relating to water, biodiversity, archaeology, landscape, harvesting and protection (including protection against fire), species guidelines relating to the Kerry slug and otter, and the Forestry & Freshwater Pearl Mussel Requirements; and
- the Forestry Standards & Procedures Manual.

10. Application procedure

All queries and documentation regarding NWS Conservation should be directed to:

Approvals Section

Department of Agriculture, Food & the Marine

Johnstown Castle Estate

Co. Wexford

Lo-Call 1890 200 509

E-mail forestryappeng@agriculture.gov.ie

www.agriculture.gov.ie/forestservice

All relevant forms are available on the Department website at www.agriculture.gov.ie/forestservice/

10.1 NWS Conservation Form 1 (Pre-Approval)

Application for approval under NWS Conservation must be made in hardcopy using the NWS Conservation Form 1 (Pre-Approval), signed by the applicant, a NWS Forester and a NWS Ecologist, following a site visit and a detailed field assessment by the NWS Forester and the NWS Ecologist.

The relevant category being applied under (i.e. 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland) must be clearly indicated on the Form 1. As different grant rates and instalment structure, premium availability, criteria and annual targets apply to each, individual categories must be applied for separately, using separate Form 1s.

In addition, in order to maximise the contribution of NWS Conservation to Ireland's native woodland resource, and to realise wider ecosystem services (particularly water protection and habitat linkage), the Forest Service will target funds towards sites with a high ecological

priority. Therefore, applications under each of the category must satisfy <u>at least one</u> of the qualifying criteria set out under Section 3, for it to be deemed potentially suitable to proceed for further evaluation. On receipt, the Forest Service will undertake an initial appraisal, to ensure that one or more of the required scheme criteria are satisfied.

In addition, a project will be ineligible for funding under NWS Conservation, if work of a similar nature was previously undertaken on site with Forest Service grant aid, within the previous 15 years.

For an application for pre-approval under NWS Conservation to be considered complete, additional documentation is also required:

- Certified Species Map signed by the NWS Forester and illustrating the application area. This map is used for area and grant (and where applicable, NWS Conservation Premium) calculation. An original 1:5,000 OS map is required, and the standard mapping conventions set out in the Forestry Standards & Procedures Manual apply.
- Native Woodland Plan, which sets out the ecological (and other) objectives for the woodland, and appropriate works required to achieve these. The plan must adhere to the requirements and template provided in Annex 5 of this document. As well as addressing key aspects required in order to facilitate the Forest Service in its evaluation of the application, the Native Woodland Plan will also serve as a basis for the woodland owner to manage the woodland into the future. The Native Woodland Plan must be developed jointly by the NWS Forester and the NWS Ecologist, based on a detailed site assessment. The NWS Forester involved must also oversee the initial works and must submit the NWS Conservation Form 2.
 - Both individuals must sign the document, alongside the applicant. See Annex 5 for requirements regarding the preparation of the Native Woodland Plan.
- ➤ Site location map, based on a Discovery Series 1:50,000 map and showing the main access approach onto the site. The standard mapping conventions set out in the Forestry Standards & Procedures Manual apply.
- Fencing map clearly identifying all proposed fencing, and describing same by type, following the mapping convention set out in the *Forestry Standards & Procedures Manual*.

Individual applications under all three categories of NWS Conservation must not exceed 12 ha in area. Applications from private landowners (under categories 'Private High Forest' and 'Private Emergent Woodland') are limited to one application in any financial year. (Joint owners may not apply under separate applications.) Furthermore, the Forest Service will not issue approval for more than 12 ha in any one financial year to any individual private applicant. The Forest Service will monitor applications received under the category 'Public Woodland', to ensure the appropriate distribution of resources allocated under this category across the various public bodies involved, and regionally throughout the State. In relation to the category 'Public Woodland', the Forest Service may also rank and select projects for approval, based on ecological priorities and merit.

Larger sites can be funded under the scheme by submitting separate applications for separate areas over consecutive years. if further applications under NWS Conservation (or indeed, applications under Native Woodland Establishment GPC9 and / or GPC10) are envisaged in the coming years for other sites within the same property, applicants should provide, in the Native Woodland Plan, an outline of the overarching vision and the timeframe involved, and how any current application fits in.

Applications under the Native Woodland Conservation Scheme (NWS Conservation) shall be subjected to a prior environmental assessment and consultation process by the Department to ensure that proposed projects are compatible with the protection and enhancement of the environment and that they are unlikely to have a negative impact on, *inter alia*, water quality, biodiversity, archaeology and the landscape. Further information about the Forest Service environmental assessment (including screening for appropriate assessment and screening to determine EIA requirements) and consultation process is provided in the *Forestry Standards & Procedures Manual*. In all cases, the cost of compiling an unsuccessful application will not be recoupable.

Approval (often with conditions attached) under NWS Conservation is issued by the Forest Service in the form of a Letter of Approval. Work can only commence after receipt of this Letter of Approval. Recipients are required to confirm within 28 days of receipt of the Letter of Approval, whether or not they wish to utilise the approval. (Confirmation can be sent by e-mail to forestryappenq@agriculture.gov.ie). If the response is 'No' (or no response is received within 28 days), the approval is cancelled.

Approval is only valid up to and including the expiry date specified in the Letter of Approval.

The terms and conditions of NWS Conservation, as set out in this document (which may be revised from time-to-time by the Minister), any circulars amending the scheme requirements, all application forms (including the Form 1), Letters of Approval and (where appropriate) remedial works notifications, form the terms and conditions of any contact arising under the scheme.

In addition, all projects approved under NWS Conservation shall be carried out in compliance with:

- all relevant EU requirements and national legislation for the time being in force;
- the Code of Best Forest Practice Ireland;
- the Irish National Forest Standard;
- ➤ the Forest Service suite of environmental guidelines relating to water, biodiversity, archaeology, landscape, harvesting and protection (including protection against fire), species guidelines relating to the Kerry slug and otter, and the Forestry & Freshwater Pearl Mussel Requirements; and
- the Forestry Standards & Procedures Manual.

The contract will be identified by a unique Contract Number, which is assigned to it by the Department when the NWS Conservation Form 1 is received.

An approval under NWS Conservation confirms only that the proposed project detailed in the application complies with the silvicultural and environmental requirements of the scheme and that the approval provides permission to undertake approved works on all or part of the area specified.

The issuing of approval under NWS Conservation does not guarantee that the proposed works (as amended by any conditions applied by the Department) will be successful. Responsibility for the success of the works rests solely with the applicant, and the Department will not accept any liability if all or part of the works fail. Nor can the NWS Forester and the applicant rely upon inspection by the Department to ensure that the standards required of him or her are achieved. Failure to undertake works to the required standard may give rise to recovery by the Department of the grant and premium paid to the applicant, which will include interest

payable at the appropriate rate. The Department accepts no liability for costs incurred by an applicant at this stage or at all.

Approval will be granted subject to the availability to the Department of funding under each of the NWS Conservation categories in any one financial year. On application to the Forest Service, applications may be held over by the Department from one financial year to another, and subsequent approval issued in a chronological basis, based on the date of receipt of a complete pre-approval application.

All approved initial works must be completed within 6 months of the Letter of Approval date.

10.2 Payments

NWS Conservation is a cost-based scheme and all payments are exclusive of VAT. Costs presented must be based on the actual treated area for each approved operation.

As set out in Annex 2, the maximum grant rates and instalment structure differ between the three NWS Conservation categories (i.e. 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland'). The 7-year NWS Conservation Premium is also payable, under the categories 'Private High Forest' and 'Private Emergent Woodland'.

All payments will be made *via* Electric Fund Transfer (EFT) directly to the applicant's bank account. Also, all payments will be made directly to the applicant, unless a valid bank mandate specifies a third party.

Applicants and their Agents shall comply with all requirements under VAT legislation. All payments under NWS Conservation will be made exclusive of VAT, regardless of the applicant's VAT status.

As the grant and premium payment structure differs between the three categories 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland' (see Annex 2), the following applies regarding grant and premium payment:

10.2.1 'Private High Forest'

First Instalment

Applications for payment of the first instalment (up to €3,800 / ha) of the NWS Conservation grant and the first NWS Conservation Premium (€350 / ha) available under this category must be made using a NWS Conservation Form 2. The first grant instalment may be claimed immediately after initial works have been completed. The time limit for receipt of the Form 2 in the Department shall be six weeks after the date of completion of initial works. A 4-week extension to this deadline can be granted, on application to the Forest Service. Grants and premiums will be forfeit in cases where the relevant timeline for Form 2 submission is not met.

The applicant and the NWS Forester who submitted the original Form 1 and who oversaw the initial work, must complete the Form 2 application following a site visit and a detailed field assessment by the NWS Forester. The Form 2 application form sets out the requirements to be met to make a valid application, and must be accompanied by the following:

➤ a Certified Species Map prepared and signed by the NWS Forester, indicating the area for which grant draw-down is being applied for;

- ➤ a fencing map clearly identifying all approved fencing erected, and describing same by type, following the mapping convention set out in the *Forestry Standards & Procedures Manual*;
- invoices for all approved costs incurred during initial works;
- > Tax Clearance Certificates for all those contractors involved in the works;
- > Supplier's Document / Provenance Declaration Form for all planting material used;
- full proof of ownership (the first instalment grant will not be paid until ownership has been established); and
- bank mandate, where relevant.

The NWS Conservation Form 2 also includes a statement of costs to be completed by the NWS Forester. This statement of costs must detail:

- the costs incurred for all approved operations undertaken up to the completion date of initial works (as supported by valid invoices); and
- the costs projected for all approved operations to take place after the completion date of initial works and before the 4th year anniversary of the completion date of initial works (i.e. up to Form 3 stage).

The overall grant payable is based on these presented costs (based on the actual treated area for each approved operation, and exclusive of VAT) or the maximum grant payable, whichever is the lesser amount. The first instalment is then calculated at 75% of this figure, with the remaining 25% representing the second instalment, payable 4 years after the completion of initial works.

Where a Form 2 application is lodged with the Department within the required six week timeframe but supporting documentation remains to be submitted, the application will be held open for a maximum of 2 calendar years from the data of completion of the initial works. Unless all supporting documentation needed to make a valid application for the first instalment grant and the first NWS Conservation Premium is received in the Department within the 2-year limit, the annual NWS Conservation Premiums that would have been due for payment in respect of the intervening calendar years will be forfeited. As regards the first grant, payment may be made on receipt of supporting documentation up to 6 years after the date of completion. However, no arrears of premium for the intervening years will be paid. After Year 6, the grant will also be forfeited and the contract considered terminated if a fully valid claim with all necessary documentation has not been lodged in the Department.

Non-payment of a NWS Forester or a NWS Ecologist for works carried out will be a matter for resolution between the applicant and the NWS Forester and NWS Ecologist, and the Minister shall bear no liability.

Payment of the first instalment grant is made to the applicant (or a third party, where mandated), after validation of documentation received, and confirmation that Form 2 works have been completed in accordance with conditions of approval and relevant Forest Service standards, and that the ongoing management of the woodland is consistent with the approved Native Woodland Plan.

Second Instalment

The second instalment of the NWS Conservation grant (as calculated above) may be claimed for payment 4 years (48 months) after the completion date of initial works. Application for payment of the second instalment grant must be made using the NWS Conservation Form 3. This will be dispatched by the Department in the 3 months before the 4th year anniversary of the completion date of initial works. Where the applicant requires an extension, an application must be submitted to forestryprogram2014-2020@agriculture.gov.ie before 5 pm of the last working day of the Form 3 expiry date. Only one extension will be granted. If the application for payment is not submitted within the timeframe specified, the application is deemed ineligible for support.

The applicant and a NWS Forester must complete the Form 3 application following a site visit and a detailed field assessment.

Payment of the second instalment (up to €1,200 / ha) is made to the applicant (or a third party, where mandated), after validation of documentation received, and confirmation that Form 3 works have been completed in accordance with conditions of approval and relevant Forest Service standards, and that the ongoing management of the woodland is consistent with the approved Native Woodland Plan.

As described above, applicants are required to submit all relevant invoices for initial works at Form 2 stage. Regarding subsequent works, beneficiaries of grant aid under this scheme are required to retain, for a period of 6 years after payment of the 1st instalment grant, all receipts and invoices relating to subsequent work undertaken to maintain the woodland and to further implement the approved Native Woodland Plan. The Minister may, at his or her discretion, require the submission to the Department of such receipts and / or invoices at any time during this period.

NWS Conservation Premium

The first NWS Conservation Premium (€350 / ha) is paid to the applicant alongside the first grant instalment. The relevant application form (NWS Conservation Form 4 (Premium)) for the second and subsequent NWS Conservation Premiums are posted to the applicant by the Department on an annual basis.

Payment of this premium is contingent on the satisfactory completion of initial works, the satisfactory completion of Form 3 works, and the ongoing management of the woodland in accordance with the approved Native Woodland Plan.

Subject to the terms and conditions of NWS Conservation being met, and the ongoing management of the woodland in accordance with the approved Native Woodland Plan. The premiums payable under NWS Conservation will be paid on the basis of one each calendar year, commencing in the year in which the first grant instalment was paid.

Subject to and limited by the duration of the contract as defined above, each NWS Conservation Premium is normally applied for in the year in which it is due for payment. Where such an application is not made within the year, all conditions for eligibility for the premium must be fulfilled and the valid application must be received in the Department within 3 years of the 1st January of the year in which that particular premium falls due for payment, otherwise the premium payment for that year will be forfeited. For example, a premium due in 2016 must, at the latest, be applied for and paid by 31st December 2018. If premiums have been forfeited or not claimed for 6 consecutive years or more, the contract will be deemed to have been

terminated and no further payments will issue under that contract. Payments already made under the contract may be recovered if the woodland has not been maintained to Forest Service standards.

10.2.2 'Private Emergent Woodland'

Payment under this category is as per 'Private High Forest', except that the NWS Conservation Form 2 is used to apply for the single grant instalment of up to €2,500 / ha (i.e. no Form 3 applies). The statement of costs included in the Form 2 should therefore only include the costs incurred for all approved operations undertaken up to the completion date of initial works (as supported by valid invoices). The overall single instalment grant payable is based on these presented costs (based on the actual treated area for each approved operation, and exclusive of VAT) or the maximum grant payable (see Annex 2), whichever is the lesser amount.

Payment of the NWS Conservation Premium is also as per 'Private High Forest'.

10.2.3 'Public Woodland'

Payment under this category is as per 'Private High Forest', except that the NWS Conservation Form 2 is used to apply for the single grant instalment of up to €2,500 / ha (i.e. no Form 3 applies). The statement of costs included in the Form 2 should therefore only include the costs incurred for all approved operations undertaken up to the completion date of initial works (as supported by valid invoices). The overall single instalment grant payable is based on these presented costs (based on the actual treated area for each approved operation, and exclusive of VAT) or the maximum grant payable (see Annex 2), whichever is the lesser amount.

Note that the NWS Conservation Premium is not available under the category 'Public Woodland'.

11. Silvicultural standards

An applicant must comply with various silvicultural standards, as detailed in Annex 4 and the *Forestry Standards & Procedures Manual*.

12. Necessary criteria for foresters and ecologists

NWS Conservation projects require the submission of a site-specific NWS Conservation Plan prepared jointly by an accredited forester and an accredited ecologist, in consultation with the applicant. This plan is crucial, setting out the specific ecological priorities for the site (including the most appropriate native woodland type(s) to promote and wider environmental sensitivities such as NATURA related considerations), and the proposed management objectives and operations.

Ecologists and foresters wishing to develop applications under NWS Conservation must satisfy the Forest Service in advance that they have the necessary knowledge and expertise to undertake the specialised work involved in developing and implementing projects under

the scheme. In this regard, individuals must fulfil certain criteria, as set out below.

12.1 Foresters

Foresters wishing to develop applications under NWS Conservation must first be listed as a NWS Forester on the Forest Service List of Registered Foresters (as indicated by the entry 'Yes' in the 'NWS' column - see www.agriculture.gov.ie/forestservice/forestservicegeneralinformation/). To be listed as such, an individual must already be included on the Forest Service list of Registered Foresters (having fulfilled the respective criteria regarding qualifications and professional indemnity insurance) and must also have completed the Native Woodland Training Course held periodically by the Forest Service in association with Woodlands of Ireland.

Individuals can have their names added to the notification list for future courses, by contacting the Forest Service (forestryappenq@agriculture.gov.ie) or Woodlands of Ireland (woodsofireland@iol.ie).

12.2 Ecologists

Ecologists wishing to develop applications under NWS Conservation must first be listed on the Forest Service List of NWS Ecologists. To be listed as such, an individual must satisfy the Forest Service that s/he is suitably qualified and experienced to undertake the ecological assessment of native woodland, and to input into the planning and management of native woodland, as required under NWS Conservation. To comply, the following three criteria must be fulfilled:

Criterion 1: Qualifications and experience

An individuals wishing to be included on the Forest Service List of NWS Ecologists is invited to make a submission to the Forest Service setting out his / her ecological qualifications and experience relevant to the type of work involved under NWS Conservation. The submission should be presented using the following headings:

- academic qualification(s) (including the full title of the qualification and of any relevant theses, dissertations, etc. cited);
- relevant work experience, with special emphasis on work involving woodlands; and
- career timeline clearly illustrating months / years spent working in the relevant field.

The submission must also include an example of recent and relevant work authored by the individual. This can include, for example, an ecological report, an academic thesis or a scientific publication, and should be scanner-friendly.

Candidates should highlight their knowledge of woodland botany, their experience undertaking botanical surveys, and their ability to identify ecological priorities for the purpose of guiding habitat restoration and management.

Submissions are assessed confidentially by a panel of experts, based on academic qualifications, relevant work experience and the submitted example of work. Once the assessment is completed, the individual is informed whether or not his/her submission

has been successful.

Submissions should be sent to Forest Service (forestryappenq@agriculture.gov.ie), for the attention of the Forest Service Ecologist.

Criterion 2. Completion of the Native Woodland Training Course

These courses are held periodically by the Forest Service in association with Woodlands of Ireland. Individuals can have their names added to the notification list for future courses, by contacting the Forest Service (forestryappenq@agriculture.gov.ie) or Woodlands of Ireland (woodsofireland@iol.ie).

Criterion 3: Submission of proof of Professional Indemnity Insurance cover for a minimum of €500,000

Given the cost involved, individuals can defer taking out insurance cover until they have fulfilled either or both of the above criteria. Several insurance providers offer this cover – contact Woodlands of Ireland for further information.

Please note, proof of cover will be sought on an annual basis.

Once all three of the above criteria have been fulfilled, the individual's name and details are added to the Forest Service List of NWS Ecologists, for general circulation. A copy of the current Forest Service List of Native Woodland Ecologists is available from the Forest Service (forestryappeng@agriculture.gov.ie).

13. Other information

The Department may also, at its discretion, require other forms of technical investigation and reports to be submitted to facilitate its assessment of the project. These may include, *inter alia*, an ecological assessment and report by a suitably qualified ecologist.

14. Consultation and public notification procedure

The Department may consult with relevant consultation bodies including National Parks and Wildlife Service, the National Monuments Service, the Environmental Protection Agency, Inland Fisheries Ireland, and the relevant local authority. Other bodies may also be consulted with, as required.

15. Pre-approval

Only projects which receive prior written approval from the Department, and which are undertaken in compliance with the terms and conditions of approval, will be eligible for support.

A pre-approval issued under NWS Conservation may be subject to additional conditions as laid down by the Minister. These may be of a silvicultural or environmental nature, or may relate to other requirements. It is the responsibility of the applicant to ensure that all works are undertaken in compliance with the requirements of the scheme. The Department accepts no responsibility or liability for costs incurred by an applicant on foot of pre-planting approval or at all.

NOTE: It is the responsibility of the applicant to inform the Forest Service in writing of any proposed material change to the approval issued and to seek approval for any such change before restoration works commence. Failure to obtain approval from the Department for proposed changes may render the pre-approval null and void.

16. Eligibility for Direct Payments (2015-2019), Cross Compliance, Land Use Reconciliation Requirements

Beneficiaries of NWS Conservation must ensure that land entered into the scheme is not included, or the subject of a claim, under any other area-based scheme administered by the Department. The Minister may impose adjustments, reductions in payments and / or penalties or may recoup money already paid if an application under the scheme exceeds the area approved, and / or overlaps with an area that is the subject of a claim under another area-based scheme administered by the Department.

17. Good practice and SFM

Adherence to good forestry practice and the principles of sustainable forest management (SFM) is mandatory and applies across all operations of the scheme. Guidance on how forestry operations should be carried out so as to ensure compliance with SFM is provided in the *Code of Best Forest Practice – Ireland*, which can be downloaded from the Department's website at www.agriculture.gov.ie/forestservice/publications/

18. Payment

As the contract under this scheme is between the applicant and the Department, payment is made to the applicant. However, applicants may mandate grant payments to a NWS Forester using a mandate document that satisfies the requirements of the Minister as set out in the *Forestry Standards & Procedures Manual*. Such mandates are a voluntary arrangement between the applicant and his / her NWS Forester. Mandates to other parties e.g. Contractors or Foresters not registered with the Forest Service, will not be facilitated. In the event that a payment fails to be made in accordance with a valid mandate, no liability shall be attached to the Minister.

If it is subsequently found that any undue payment or overpayment has occurred in respect of any grant or other payment made under the scheme, the Department will recover the entire amount of the undue payment or overpayment from the applicant, regardless of how the undue payment or overpayment arose.

The Department may offset the amount owed from any other monies due to the applicant by the Department. The Department may also recover the monies as a simple contract debt in a court of competent jurisdiction.

19. Penalties

Failure to comply with the terms and conditions of the scheme, incorporating The Code of Best Forest Practice – Ireland; Forestry Standards & Procedures Manual; circulars amending

scheme requirements; and the relevant environmental guidelines and requirements may result in an appropriate penalty or sanction being applied.

Penalties which shall apply to certain specific breaches of the scheme are set out in the document entitled *Forestry Schemes Penalty Schedules* (DAFM, 2015), which form a condition of grant aid. Other breaches of the scheme not specified in the Scheme Penalties Schedules may also incur a penalty. However, all or any failure to comply with the scheme or any breaches of its terms and conditions may result in a penalty.

Penalties may include the repayment of all or part of the grant(s) and / or all or part of the NWS Conservation Premium(s).

Monetary penalties shall include interest payable at the rate provided for under S.I. No. 13 of 2006. Interest shall be calculated for the period elapsing between a date specified in a notification to the applicant of the repayment obligation and either repayment or recovery by deduction.

Penalty amounts may be deducted from future payments due to the applicant under the forestry schemes or from payments due under other schemes administered by the Department. Where monetary penalties are not paid or recovered within the period requested, the Department may take whatever action is deemed necessary for their recovery. The Department may also recover the monies as a simple contract debt in a court of competent jurisdiction.

The principle of proportionality will apply. Penalties may be imposed that are, in the opinion of the Minister, proportionate to the alleged breach of the scheme.

The imposition of a penalty shall not relieve an applicant of an obligation to comply with an instruction from the Minister to undertake remedial works in respect of a forest.

20. Appeals

If an applicant is dissatisfied with any decision made by the Department regarding NWS Conservation, it is open to him / her to appeal against that decision to the Agriculture Appeals Office, Kilminchy Court, Portlaoise, Co. Laois (Lo-Call 1890 671 671 or 057 866 7167). The appeal must be made in writing within three months of the date of the decision in question being notified to the applicant. The appeal must include the facts and contentions on which appeal the applicant intends to rely, together with such documentary evidence that the applicant wishes to submit in support of his / her appeal.

21. Change of applicant

The Department must be notified in advance if:

- grant-aided forest is transferred, sold, leased or otherwise disposed of by the applicant during the term of the NWS Conservation contract; or
- ➤ a judgement mortgage or an inhibition or similar restriction is placed on the Folio for the site during the term of the contract.
- In the event of the death of the applicant, i.e. owner, joint owner or joint manager who was claiming the NWS Conservation grant (and premium, if applicable), the Forest Service must be notified as soon as possible by the deceased's next-of-kin, legal personal representatives or Registered Forester.

When notice of a change of ownership is received by the Department, payment will be suspended until a new applicant is registered under the scheme. The new owner will be entitled to apply for the NWS Conservation grant (and premium, if applicable).

New applicants must submit all necessary documentation as early as possible and no later than one year after the date of the deed of transfer for the land ownership change, or the date that a deceased applicant's estate is settled. Failure to meet these deadlines may result in a new owner not being admitted to the scheme and the contract will, in effect, be terminated.

In every case, all documentation relating to change of ownership and applications for payments must be submitted before the expiry of the term of the contract. In exceptional circumstances (e.g. delays in finalising a deceased person's estate), the date by which documents must be submitted may be extended at the discretion of the Minister.

All decisions regarding eligibility for payment of grant (and premium, if applicable) will be made by reference to the level of compliance with the conditions of the scheme, including the completion of outstanding remedial works, on the date of the deed of transfer of the site or the date that a deceased applicant's estate is settled. For example, where remedial works have not been satisfactorily completed by the date of the deed of transfer, the new owner will be responsible for completion of the remedial works and, once satisfactorily completed, s/he will be eligible to apply for payment of grants due for the period after the date of the deed, if not already paid.

The Minister will refuse payment of grant to the previous owner(s) if s/he has failed to maintain the plantation to the standard required under the scheme for the period of the NWS Conservation contract under his / her ownership.

The Department will not divide grant payments according to ownership for part of a year; individual grant payments will not be split or subdivided. The parties to any sale or transfer should take these payments into account in the timing and terms of their legal arrangements and / or contracts for sale.

In exceptional circumstances affecting a change of ownership process, at his or her discretion, the Minister may extend the closing date of a contract subject to such conditions as may be specified by the Minister.

Where a debt is accrued under a contract for any reason and the cause of the debt has existed and / or continued during the ownership of more than one owner, the debt will be allocated in accordance with the amount of overpayment received by each owner; each owner will be responsible for repaying the overpayment s/he received.

Further information about the procedures involved when a grant-aided forest is being transferred, sold, leased or otherwise disposed of during the term of the contract, is available at www.agriculture.gov.ie/forestservice/forestservicegeneralinformation

The Minister reserves the right to alter these procedures from time-to-time.

22. Joint Management Consent

A landowner may enter into a joint management arrangement with an immediate family member to jointly manage the forest and assign the NWS Conservation grants to that family member. A joint management arrangement may only be made between immediate family members, namely the spouse, children, parents and / or siblings of the landowner. Joint Management Consent forms are available in the *Forestry Standards & Procedures Manual*.

The owner of the land and the applicant are both liable for the repayment of grants and premiums paid, if the applicant fails to abide by the conditions of the scheme.

A joint management arrangement may be cancelled at any time, provided the owner takes over the obligations of the scheme

23. Right-of-entry

The Minister reserves the right to carry out inspections at reasonable times on any land submitted for pre-approval or on any land for which NWS Conservation grants and or premiums have been paid or claimed under this scheme or any other forest-related scheme. applicants are obliged to ensure that, where required, adequate access to the land and forests is provided to allow inspections by the Department.

24. Responsibility for forest management

Responsibility for the successful native woodland restoration works rests with the applicant. Where an applicant contracts the services of a third party to harvest and / or manage the forest, and to prepare and submit claims, it is the applicant's responsibility to ensure that the third party contracted has sufficient insurances to indemnify the work undertaken. Any issue arising under this contract due to the detriment of the applicant, such as inadequate work, or preparing an inaccurate claim, etc., is a matter for the owner to resolve with the forester.

The inspection of a forest by the Department shall not relieve the applicant of responsibility for the accuracy of applications submitted, the successful restoration or maintenance of the woodland, or any responsibility to meet the required standards or terms and conditions of the scheme. The Department is not liable for errors (or financial loss) as a result of inaccurate claims or faulty workmanship by the applicant or his / her forester. The Department does not guarantee the success of any restoration works or bear any liability in respect of any woodland for which it has granted pre-approval in any circumstances. It is the sole responsibility of the applicant who submits land for native woodland restoration that the woodland will be successfully restored. If the Department subsequently determines that a woodland, or any part thereof, has not been restored in accordance with the silvicultural standards and / or conditions as approved on application, the applicant will be required to repay all grants in respect of the woodland restoration or any part of the woodland which has not be restored as approved.

25. Insurance

Applicants should ensure that their forest has adequate insurance cover against damage from, *inter alia*, fire, and windblow, etc.

26. Failure to abide by the scheme terms and conditions

The Minister reserves the right to forfeit any payments on the basis of non-compliance with the requirements of the scheme.

Where, for the purposes of obtaining payment under this scheme, the applicant or a person

acting on his / her behalf knowingly makes a false or misleading statement or withholds essential information, the applicant's participation in the scheme may be terminated and all or part of the aid paid shall be repaid.

Where an applicant or a person acting on his / her behalf fails to abide by the terms and conditions of the scheme, or where there is any material change in the circumstances of the applicant which would be in conflict with the letter or the spirit of the scheme, the applicant's participation in the scheme may be terminated and all or part of the aid paid shall be recovered by the Department. The Department may offset the amount owed from any other monies due to the applicant by the Department or it may seek to recover the amount as a simple contract debt in a court of competent jurisdiction.

The obtaining of aid under the scheme by fraudulent means by the applicant or a person acting on his / her behalf, or others acting alone or together, may render such persons liable to prosecution.

27. Overpayments made in relation to a scheme contract

Where any overpayment is made due, *inter alia*, to over claim or over declaration by the applicant or his / her agent, or to error or miscalculation by the applicant, his/her agent, or the Department, the money overpaid may at the discretion of the Minister be recouped from the applicant who received the overpayment. Such recoupment will be decided on a case-by-case basis, taking into account any mitigating factors, including culpability.

Amounts to be recouped may be deducted from future payments due to the applicant under the forestry schemes or from payments due under other schemes administered by the Department. Where debts are not recovered within the period specified, the Department may take whatever action is deemed necessary for their recovery. The Department may also seek to recover the amount as a simple contract debt in a court of competent jurisdiction.

28. Contract period

Applicants have a responsibility to ensure that woodland funded under the scheme is maintained throughout the contract period in accordance with the Native Woodland Plan and scheme requirements. Otherwise, the Forest Service will seek to recover grant aid and premiums paid, and interest charged at the appropriate rate.

The contract period starts on the completion date of initial works. The contract term under NWS Conservation is 10 years. The contract can terminate before this where the second instalment has not been applied for before the Form 3 expiry date. Where circumstances exist that may require an extension of the contract term (for example, outstanding remedial works), the expiry date of a contract may be extended at the discretion of the Minister. The contract can also be terminated where remedial works are not undertaken to the satisfaction of the Department within the timeframe specified. In these cases, a debt will be raised to recover all funds paid to the applicant and no further payments will be made.

Following an inspection, the Department may decide to terminate the contract for reasons to be specified in the contract termination letter. In these cases, a debt will be raised to recover any payment made. The Department will give 3 weeks prior notice of contract termination, during which time the applicant can enter an appeal.

29. Remedial works

Where a notification (i.e. a Remedial Works Letter) is issued to the applicant specifying remedial works required to bring his / her NWS Conservation site up to standard, the date specified in that letter by which the works must be completed, is binding on the applicant. In exceptional circumstances, the Minister may grant an extension to that date. Requests for such extensions must be submitted in writing by the applicant and the NWS Forester at least 30 days before the expiry of the original deadline for completion. Failure to complete the specified works to the satisfaction of the Forest Service within the timeframe specified will result in a penalty, as set out in the document entitled *Forestry Schemes Penalty Schedules* (DAFM, 2015).

Grants and premiums will be paid only when the entire NWS Conservation site is up to the required standard. If part of the NWS Conservation site fails inspection, payment will be withheld on the entire until the specified remedial works are carried out to the required standard.

Where the Forest Service decides that it is not possible to bring the NWS Conservation site – or part thereof – up to the required standard, no grant or premium payments will be made for that area. Where the grant and / or premium – or part thereof – is not to be paid, the Forest Service may also require repayment of the amount paid in respect of the site or in respect of the area that does not meet the required standard.

30. Review of scheme details

The Minister reserves the right, at any time, to alter the grant and premium rates under the scheme, and to alter or to lay down further procedures and conditions under the scheme.

NWS Conservation shall operate for a period to be determined by the Minister.

Areas may be removed from the scheme at the discretion of the Department of Agriculture, Food & the Marine, with 30 days notice.

31. Tax Clearance Requirement and Value Added Tax

It is a condition of this scheme that all grant-aided activities shall be conducted in compliance with the laws of the State relating, *inter alia*, to tax and employment. Proof of compliance, such as the provision of Tax Clearance Certificates, may be required by the Department.

All grants paid under NWS Conservation are exclusive of VAT.

32. Information and data protection

The Minister reserves the right to make information available to the public regarding the areas covered by the scheme including the number of participants, farms, historical and archaeological sites, hectares covered, forest location etc., while continuing to observe the terms of the Data Protection Act.

Under State Aid requirements (see Annex 3), the Department will publish details of beneficiaries that fall within the categories described.

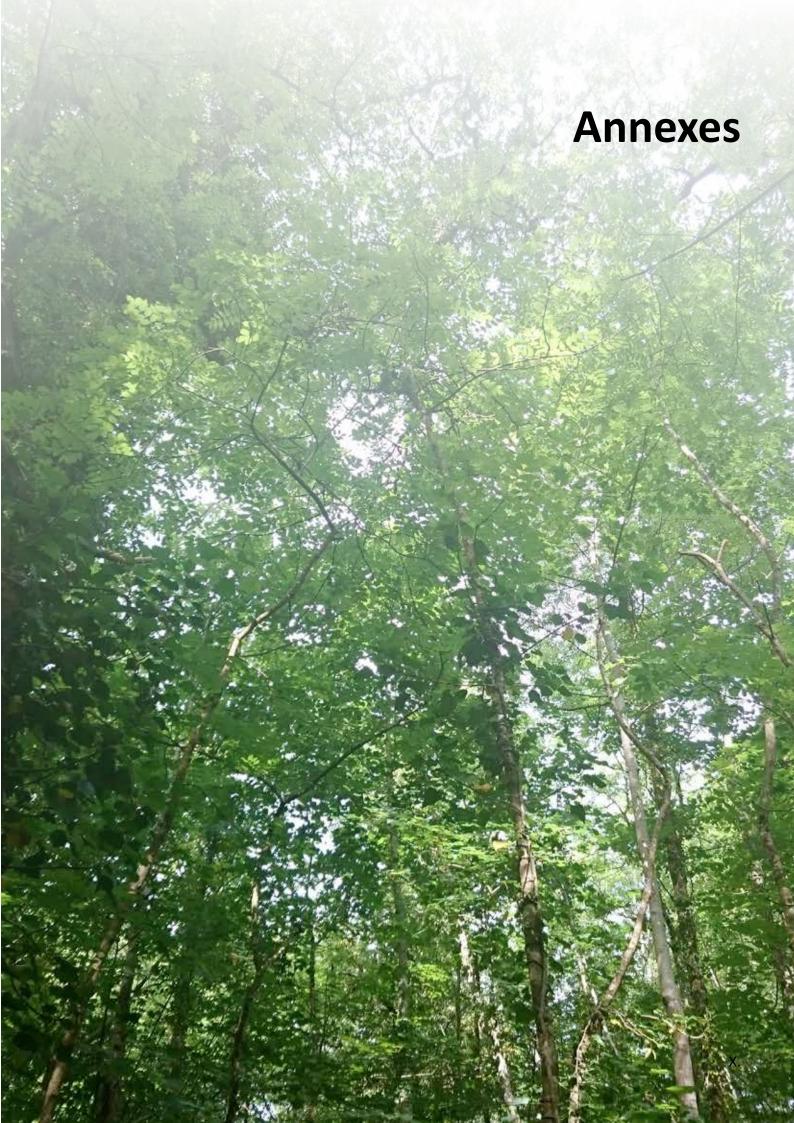
By declaring their eligibility and consent to apply for NWS Conservation, applicants must agree to the release of non-personal information supplied by them in respect of their application to comply with current environmental consultation procedures. Furthermore, applicants consent to be contacted by the Department in respect of approved forestry training courses. Applicants must also consent to the release of their details to Teagasc and Timber Producer Groups who may subsequently communicate with applicants in relation to the forestry training and development and the harvesting of timber.

All information supplied by applicants in respect of a NWS Conservation approval and / or grant claim and any supporting documentation shall be made available to any other Department or Agency or Local Authority for the purposes of consultation, Audits, Cross Compliance Controls and all Rural Development measures, and, as appropriate, in accordance with the requirements under the Freedom of Information Acts.

33. Forestry Act 1946

All woodlands are protected by the Forestry Act, 1946 (and any Act that succeeds or replaces that Act), which controls felling of trees. Under this Act, with certain exceptions, it is illegal to cut down any tree, grant-aided or not, unless a Felling Licence has been obtained from the Forest Service.

Where required, an application for a Felling Licence should be submitted prior to or in tandem with the NWS Conservation Form 1. For further information and relevant Felling Licence application forms, contact felling.forestservice@agriculture.gov.ie



Forest Service, Department of Agriculture, Food & the Marine

Annex 1 **Definitions**

For the purposes of the Native Woodland Conservation Scheme, the following definitions apply:

'Applicant' means a person who has applied for Approval under the Scheme or has planted woodland following an Approval under the Scheme.

'Appropriate Assessment' means an assessment in accordance with the European Communities (Birds & Natural Habitats) Regulations 2011 (S.I. 477 of 2011).

'Approval' means a NWS Conservation Pre-Approval granted by the Minister.

'Department' means the Department of Agriculture, Food & the Marine.

'Direct costs' are the cost of materials, labour and machinery employed in the completion of native woodland restoration works, but excluding supervision, design, surveying and layout costs.

Environmental Impact Assessment (EIA) means an assessment in accordance with the European Communities (Forest Consent and Assessment) Regulations 2010 (S.I. No. 558 of 2010), as amended.

'Farm' or 'Holding' means all the land parcel production units in the State (owned, leased or rented) that are under the control of the applicant.

'Farmer' is defined as a person who carries out an agricultural activity such as 'the rearing or growing of agricultural products including harvesting, milking, breeding animals and keeping animal for farming purposes'.

'Forest' is as defined in the European Communities (Forest Consent and Assessment) Regulations 2010 (S.I. 558 of 2010), i.e. "land under trees with (a) a minimum area of 0.1 ha, (b) tree crown cover of more than 20% of the total area, or the potential to achieve this cover at maturity".

'Forest Service' means the Forestry Division of the Department of Agriculture, Food & the Marine.

'Forestry Environmental Guidelines' means the following publications as amended from time-to-time: 'Forestry & Water Quality Guidelines'; 'Forestry & Landscape Guidelines'; 'Forestry & Archaeology Guidelines', 'Forest Biodiversity Guidelines'; 'Forest Harvesting & the Environment Guidelines'; 'Aerial Fertilisation Requirements'; 'Forestry & Forest Protection Guidelines'; 'Otter Guidelines'; 'Kerry Slug Guidelines'; and the 'Forestry & Freshwater Pearl Mussel Requirements'. The Minister may, from time-to-time, amend the guidelines or add further guidelines to this definition.

'Form 3 works' are defined as approved operations that take place after the completion date of initial works and before the 4th anniversary of the completion date of initial works.

'Immediate Family Member' means spouse, parent, brother, sister, son or daughter.

'Initial works' are defined as approved operations undertaken prior to the submission of the NWS Conservation Form 2 (1st Instalment Grant).

'Joint Management Consent' means consent submitted by the owner of specific lands consenting to the payment of grants and/or premiums to an immediate family member who

jointly manages the forest.

'Lease' means a term of years absolute in possession for at least 40 years from the commencement date of the contract under the Scheme.

'Minister' means the Minister for Agriculture, Food & the Marine.

'Native Woodland Scheme (NWS) Ecologist' means a person who has satisfied various criteria in relation to native woodland-related qualifications and expertise, training and Professional Indemnity Insurance, as described in Section 12.

'Native Woodland Scheme (NWS) Forester' means a qualified person named on the Register of Foresters and Forestry Companies, available from the Department, who has also completed a specific NWS Training Course, as described in Section 12.

'NWS Conservation Form 1 (Pre-Approval)' means an application for the Minister's approval to undertake native woodland restoration works under the terms of all current legislation, guidelines and the conditions of this scheme. The application is to be prepared and counter signed by a NWS Forester and a NWS Ecologist. This form applies under all three categories, i.e. NWS Conservation 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland'. The Forest Service must approve the application before any work commences.

'NWS Conservation Form 2 (1st Instalment Grant)' means an application to receive the first grant instalment under the NWS Conservation category 'Private High Forest', and the single grant instalment under the NWS Conservation categories 'Private Emergent Woodland' and 'Public Woodland', following the completion to required standards of initial works within the terms of the pre-approval. The application to be prepared and countersigned by a NWS Forester, and the associated works must be approved by the Forest Service.

'NWS Conservation Form 3 (2nd Instalment Grant)' means an application relevant under the NWS Conservation category 'Private High Forest', submitted to receive the 2nd grant instalment, which can be claimed 4 years after the completion date of the initial works. The application to be prepared and countersigned by a NWS Forester as defined below, and the associated works approved by the Forest Service. Note, this form does not apply to NWS Conservation categories 'Private Emergent Woodland' and 'Public Woodland', as both categories involve a single grant instalment.

'NWS Conservation Form 4 (Annual Premium)' means an application which is to be submitted annually to the Forest Service to receive subsequent NWS Conservation premiums. Note, this form only applies under the NWS Conservation categories 'Private High Forest' and 'Private Emergent Woodland'.

'Penalty Schedules' means the schedules outlined and described in the *Forestry Schemes Penalty Schedules* document (DAFM, 2015).

'Registered Forester' means a qualified person named on the Register of Foresters and Forestry Companies, available from the Department.

'Scheme' means the Native Woodland Conservation Scheme (also abbreviated as 'NWS Conservation') 2014-2020.

'Sustainable Forest Management' means the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economical and social functions, at local, national and global levels and that does not cause damage to other ecosystems.

Annex 2 **Grant and Premium Rates**

The Table 1 sets out the maximum grant rate and the instalment structure for each of the three categories under NWS Conservation, i.e. 'Private High Forest', 'Private Emergent Woodland' and 'Public Woodland'.

NWS Conservation is a cost-based scheme up to the maximum limits shown. All payments are exclusive of VAT. Costs presented must be based on the actual treated area for each approved operation.

The following table also details the NWS Conservation Premium. Private woodland owners only are eligible for the NWS Conservation Premium, and support is subject to the ongoing implementation of the approved Native Woodland Plan. The premium is aimed at maintaining and improving the environmental stability of forests where the protective and ecological role of these forests is of public interest and where the cost of maintenance and improvement measures exceeds the income from these forests.

Table 1 Grant and premium rates under NWS Conservation.

NWS Conservation category	Total grant payable (exclusive of VAT) € / ha	1 st Instalment € / ha	2 nd Instalment (where applicable) € / ha	NWS Conservation Premium
Private High Forest	5,000	3,800	1,200	- €350 / ha / year for 7 years
Private Emergent Woodland	2,500	2,500	Not applicable	
Public Woodland	2,500	2,500	Not applicable	Not applicable

Annex 3

State Aid Requirements

1. The incentive effect

Small to medium sized enterprises (SMEs) and beneficiaries must indicate on the application form for aid under the measures proposed that "The work described herein, would not have been undertaken if it wasn't for the financial support provided under state aid rules. Without this aid there would be no change to current activities." For large companies, documentary evidence must be submitted in relation to the counter-factual (what would happen without the aid) for each of the measures proposed. This involves a credibility check of the counterfactual to establish that the company would not carry out works, for example, if aid was not available. A counter-factual is credible if it is genuine and relates to the decision-making factors prevalent at the time of the decision by the beneficiary regarding the activity.

Large companies must submit an internal company document (separate to the application form) showing that the company has analysed the viability of the project – with and without aid – and showing the "incentive effect". The document must clearly state what would have happened without the support available under this scheme. That means that the documentation (internal report) produced by the company must establish that the aid will cause at least one of the following:

- > a material increase in the size of the project, or
- a material increase in the scope of the project, or
- > a material increase in the total amount spent on the project.

The Forest Service will require that the company document shows a credible analysis and demonstration of the incentive effect. The document should contain an analysis which answers the following questions:

- Would the project proceed without State Aid assistance?
- Would the level of project expenditure be less without State Aid support? If so, indicate by how much.

This information should indicate changes in the project size, scope and total spend. This incentive effect document should be submitted with the Form 1. The application will only be deemed to have been accepted as valid once the company has been advised by the Forest Service that the incentive document meets the requirements set out above and is fully compliant with the European Union Guidelines for State Aid in the agriculture and forestry sector and in rural areas 2014-2020.

2. Proportionality of the aid

Large companies must provide documentary evidence that the aid is proportionate. This can be achieved by submitting an Internal Rate of Return (IRR) and Net Present Value (NPV) analysis of the investment with aid and without aid with the Form 1. Only applications that

are deemed proportionate will be grant aided by the Forest Service.

3. Transparency

Ireland shall publish on its website at a national level the following information on the State Aid schemes:

- the full text of the notified aid scheme and its implementing provisions,
- the granting authority,
- the names of the individual beneficiaries,
- the form (in particular the aid instrument) and amount of aid granted to each beneficiary,
- the date of granting, the type of undertaking (SME / large enterprise),
- the region at NUTS level II(*) in which the beneficiary is located and the principal economic sector in which the beneficiary has its activities, at NACE (**) group level. This requirement only applies to individual aid awards greater than €60,000 for beneficiaries active in primary agriculture production and €500,000 for others.

The beneficiaries table for the previous calendar year will appear on this Department's website and will be replaced annually with the updated table. This will be done before March of that year.

A large company is defined as one with: a headcount of more than 250 people; a turnover greater than €50 million; or a balance sheet greater than €43 million (also see Annex I of Commission Regulation (EU) no. 651/2014). If a company is part of a group, the employee, turnover, annual balance sheet and ownership limits apply to the group. It is up to the applicant to properly declare themselves as a large company.

(* NUTS is short for 'Nomenclature of Units for Territorial Statistics' and is a geographic classification developed by the EU. NUTS level II relates to "basic regions for the application of regional policies", and in Ireland's case, refers to the following regions: IE01 Border, Midland and Western; and IE02 Southern and Eastern.)

(** NACE is the statistical classification of economic activities in the European Community. It is an internationally agreed standard that facilitates the comparison of economic statistics between different countries and organisations. In the case of the scheme, it describes the activity of the applicant in terms of his / her role in the economy, in other words, what economic activity is s/he engaged in?)

Annex 4

Silvicultural Standards

1. Introduction

As previously set out, three funding categories apply under NWS Conservation, depending on applicant status and the nature of the project being submitted. These are:

- NWS Conservation 'Private High Forest'(*)
- 2. NWS Conservation 'Private Emergent Woodland'
- 3. NWS Conservation 'Public Woodland'(*)

(* Categories 'Private High Forest' and 'Public Woodland' can include existing high forest woodland regarded as being native in tree composition but requiring restoration work, and existing high forest comprising non-native conifer species, where clearfelling and conversion to native woodland is being proposed.)

Projects under NWS Conservation will typically comprise the following approaches:

- Existing 'high forest' native woodland requiring appropriate restoration works (e.g. removal of individual or groups of non-natives, removal of invasive exotics, protection against deer and / or livestock).
- The conversion of existing conifer forest to native woodland (e.g. the removal of uniform Sitka spruce plantation adjoining a sensitive watercourse, deer fencing, and reforestation with native woodland, through planting and / or natural regeneration).
- Existing scrub constituting emergent woodland that is predominantly native (e.g. protective fencing, removal of non-natives and invasive exotics, and respacing).
- NWS Conservation also has a particular application in relation to the protection of watercourses and aquatic habitats and species see Annex 6 for details.

This annex (i.e. Annex 4) and the *Forestry Standards & Procedures Manual* set out the silvicultural standards that apply under NWS Conservation.

2. NWS Conservation or Native Woodland Establishment GPC9 & GPC10?

Separate standards and procedures apply to NWS Conservation and Native Woodland Establishment GPC9 & GPC10. Therefore, Native Woodland Establishment and NWS Conservation *must be applied for separately, and not as part of the same application*.

To assist in differentiating between the two measures, the following applies:

- Areas submitted under Native Woodland Establishment GPC9 & GPC10 can contain a portion of scrub, as per the standard Area for Biodiversity Enhancement (ABE) eligibility criteria see the *Forestry Standards & Procedures Manual*.
- Areas submitted under NWS Conservation can initially comprise up to one-third open space. Within the Native Woodland Plan, existing open spaces can then be treated as a combination of retained habitats and open spaces under the 15% ABE requirement,

and areas for planting / natural regeneration.

3. Area, size and width

Individual applications under all three categories of NWS Conservation must not exceed 12 ha in area.

The minimum plot size and width applicable under the Afforestation Scheme (see the Forestry Procedures & Standards Manual) also apply to NWS Conservation, with the following exception: NWS Conservation plot width must be 20 metres or greater, as measured tree-to-tree (i.e. excluding open spaces such as aquatic buffer zones, public road setbacks and archaeological exclusion zones).

4. Site requirements

In addition to the necessary criteria under each of the NWS Conservation categories (i.e. 'Private High Forest', Private Emergent Woodland' and 'Public Woodland' - see Section 3 'Targeting of NWS Conservation'), the following site requirements apply:

- Where planting and / or natural regeneration forms part of the NWS Conservation project, the site must be capable of supporting the vigorous growth and sustainable long-term development of the most appropriate native woodland type(s) identified. This must be achievable without the need for fertiliser input (with the possible exception of a once-off hand application at planting, to boost initial growth.)
- > Sites subject to severe and persistent threats that could undermine the long-term sustainability of any woodland restoration work carried out, may not be accepted (e.g. sites within a locality heavily infested with rhododendron or within a deer 'hotspot').
- In the case of projects involving the conversion of conifer forest to native woodland, site conditions (soil, elevation, aspect, etc.) must be suited to the growing of native broadleaves. For example, conifer forests on high elevation deep peat will not be eligible.

5. Native woodland type

<u>Each project under NWS Conservation must promote the native woodland type or types</u> <u>identified as being the most appropriate for that particular site.</u> The identification of the most appropriate native woodland type(s) occurs during the development of the application, as set out below.

Promoting the most appropriate native woodland type(s) for the site becomes the principle planning and management objective and will influence subsequent operations. For example, under NWS Conservation, it will have a direct bearing on which species to favour within an existing woodland, through thinning, coupe planting, etc.

For NWS Conservation projects, the identification of the most appropriate native woodland type(s) is made by the NWS Ecologist and the NWS Forester during the development of the Native Woodland Plan (see Annex 5), using the detailed classification system set out in the document entitled *The Classification of Native Woodlands in Ireland and its Application to Native Woodland Management* (Cross et al., 2010).

6. Acceptable species

All tree species proposed for planting under NWS Conservation must be: (i) native to the island of Ireland; (ii) representative of the native woodland type or types being promoted on site (as described above); <u>and</u> (iii) included in the list of species set out in Table 2.

Table 2 Acceptable species under NWS Conservation. (Note, other native species not listed above may be acceptable, e.g. species with a restricted natural range. If proposed, provide full details in the Native Woodland Plan.)

Overstorey & major species		Understorey & min	Understorey & minor species	
Alder	Alnus glutinosa	Hazel	Corylus avellana	
Silver birch	Betula pendula	Hawthorn	Crataegus monogyna	
Downy birch	Betula pubescens	Spindle-tree	Euonymus europaeus	
Sessile oak	Quercus petraea	Holly	Ilex aquifolium	
Pedunculate oak	Quercus robur	Crab apple	Malus sylvestris	
Scots pine	Pinus sylvestris	Aspen	Populus tremula	
		Wild cherry	Prunus avium	
		Blackthorn, sloe	Prunus spinosa	
		Grey willow	Salix cinerea	
		Elder	Sambucus nigra	
		Rowan	Sorbus aucuparia	
		Yew	Taxus baccata	
		Guelder rose	Viburnum opulus	

7. Species mix, composition and layout

For NWS Conservation projects, <u>initial stocking must comprise acceptable species appropriate</u> to the native woodland type being promoted (see above) and planted in the following planting ratio: 80% overstorey & major species: 20% understorey & minor species.

A higher percentage of understorey and minor species may be acceptable where such species dominate the native woodland type being promoted, e.g. hazelwood on limestone, wet woodland dominated by willow. Where proposed, provide full details in the Native Woodland Plan.

The required spacing under NWS Conservation is 2.0 metres x 1.5 metres, giving a planting density of 3,300 trees / ha. These specifications are aimed at promoting the rapid establishment and the development of a vibrant emerging canopy in areas planted under NWS Conservation.

Group planting is favoured under NWS Conservation, to allow for a more natural planting pattern that reflects the micro-conditions of the site. However, if proposed, full details must be provided in the Native Woodland Plan.

The following are general design principles for group planting under NWS Conservation:

- Individual groups should be simple and broad-stroke in shape, reflecting the contours, localised soil variations, damp hollows and other natural features.
- In keeping with the 5-10% open space requirement under NWS Conservation, retain

small gaps (6-10 metres) between groups, for the development of ground flora.

- Position understorey and minor species along the edge of the groups, to take advantage of light and to encourage a graded canopy edge.
- Individual groups should comprise one to three overstorey species with compatible growth rates. Avoid complicated mixtures.
- ➤ Generally, individual groups should not be greater than 50 metres in width.

8. Natural regeneration

Natural regeneration (NR) is the establishment of new trees and shrubs from seed arriving naturally (by animals, wind, water, etc.) on site from overhead sources or from outside sources, typically adjoining or nearby, and occasionally distant.

Within the context of NWS Conservation, NR has many advantages over planting (e.g. the conservation of the local genetic biodiversity, lower site inputs and disturbance, reduced pressure on limited planting stock). However, it is difficult to predict whether or not NR will occur on a given site within the available timeframe under NWS Conservation.

NR is eligible under NWS Conservation, subject to the following rules:

- Areas on the site where NR is to be actively pursued must be clearly identified on the Native Woodland Plan operation map (see Annex 5), and relevant operations to achieve it clearly detailed.
- Selected NR areas must have a realistic expectation of success within the scheme timeframe. This assessment should be based on, for example, evidence of advanced regeneration or the distance from suitable parent trees in the overhead canopy or adjoining hedgerows. (A common approach under NWS Conservation might involve a mixture of planting and NR, the latter focused on areas alongside adjoining seed sources.)
- Preparatory NR operations such as scarification, fencing and vegetation management – must be completed before the first grant instalment can be paid.
- An emerging woodland cover of the intended native species, comprising 75% of the standard planting density, must be established within those areas earmarked for NR, before the second grant instalment (if relevant) can be paid. (Supplementary planting should be carried out, where NR is insufficient or uneven.) This standard should be reached 4 years (i.e. 48 months) after the completion date of the initial works. Longer periods may be acceptable, subject to agreement with the Forest Service.

9. ABE requirement

Under NWS Conservation, up to 15% of the site must be allocated as Areas for Biodiversity Enhancement (ABEs). This includes 5-10% retained habitats and 5-10% open spaces.

Both components must form an integral part of the project area and which must be treated with particular regard to biodiversity.

Open spaces are required for good woodland management and to comply with the various Forest Service environmental guidelines. As such, they include ridelines and forest roads and

associated margins, together with buffer zones adjoining aquatic zones and exclusion zones adjoining archaeological features.

Through careful design, planning and management, these open spaces can contribute significantly to woodland biodiversity. Management should aim to encourage structural and species diversity within open spaces. For example:

- ensure an undulating woodland edge with protrusions into adjoining open spaces both internal and external - in order to maximise the habitat 'edge effect' between the woodland canopy and the open space,
- orientate new open spaces to maximise exposure to direct sunlight (i.e. south-facing aspect), as this is likely to increase the range of species present,
- plant low-lying native shrub and medium-sized native trees along the margin of open spaces, to encourage a gradual transition from the ground layer within the open space up to the woodland canopy itself,
- where appropriate, pit-plant groups of native riparian species (e.g. alder, willow, birch, hazel) within the aquatic buffer zone, as this can contribute to water quality and the ecosystem enhancement of adjoining watercourses (on fertile sites, natural regeneration of such species from local seed sources is likely to occur).

10. Planting material

10.1 Suitable sources

In order to promote the conservation of genetic biodiversity, all planting material used under NWS Conservation must be: (i) derived from suitable seed sources from within Ireland; and (ii) fully traceable from seed collection to the planting site.

All planting material used under NWS Conservation is subject to EU and / or national requirements, to ensure suitability for use and traceability from source to final planting site. See the *Forestry Standards & Procedures Manual* for details and requirements.

Further requirements apply to NWS Conservation:

- ➤ Table 3 lists the source or sources acceptable for each species eligible under NWS Conservation. *All sources must be from within the island of Ireland* (other than in exceptional circumstances clearly defined by the Forest Service(*)).
- Furthermore, all planting material used within a woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat, must originate from reproductive material collected from within that site or vicinity, or from an alternative site acceptable to both the Forest Service and NPWS.

(* Note that the Forest Service may occasionally permit material from other defined sources in order to alleviate planting stock shortages, specifically oak. Such changes are announced *via* periodic Forest Service Circulars (e.g. Circular 1/2015).)

The National Register of Basic Material (maintained by the Department of Agriculture, Food & the Marine) incorporates all approved seed sources, seed stands, seed orchards, seed categories, ownership details, current status and maps. Landowners who wish to have stands considered for inclusion in the National Register should apply to the Forest Service of the

Department (contact FRM@agriculture.gov.ie). The registration of stands for understorey and minor species is particularly welcome. <u>Of particular relevance to NWS Conservation is that stands may be registered for the purpose of gene conservation</u>.

Table 3 Acceptable sources for planting material, for eligible species under NWS Conservation.

	Pedunculate & sessile oak	Scots pine	All other eligible species
A seed stand registered in the National List of Basic Material in the category 'Selected', and regarded as being indigenous	✓		✓
A seed stand registered in the National List of Basic Material for the purpose of gene conservation	✓	✓	✓
An Ancient Woodland oak stand included in the National List of Basic Material as 'Source Identified' for the purpose of gene conservation	√		
A seed stand registered in the National List of Basic Material in the category 'Selected', and of Scottish origin		\checkmark	
A seed orchard registered in the National List of Basic Material in the category 'Qualified' or 'Tested', and of Scottish origin		\checkmark	
A seed source or stand registered in the National List of Basic Material in the categories 'Source Identified', 'Selected' or 'Qualified', and regarded as being indigenous and heterogenous			✓

10.2 Willow

Often the most effective way to establish willow is to insert (or 'strike') cuttings directly into the ground. As set out in Table 2, the planting of grey willow is acceptable under NWS Conservation, where appropriate to the native woodland type being promoted. As with other eligible species, this material is subject to certain requirements, to ensure suitability and traceability.

To facilitate the sourcing of suitable grey willow planting material for a specific NWS Conservation project, cuttings taken from existing grey willow trees found onsite or on contiguous land, and subsequently struck directly into the site as part of the project, may be acceptable, subject to the following:

➤ Operators taking cuttings must be registered in advance with the Forest Service as Registered Seed Collectors. Furthermore, operators must inform the Forest Service in advance of the cutting operation, by applying for a Seed / Cutting Collection Permit.

This will generate a Master Certificate of Provenance and users will be required to issue a 'Provenance Declaring Form' for the material.

- The material can only be cut for the sole purpose of providing planting material for the NWS Conservation project in question.
- Full details of the operation (including the location of source trees) must be included in the Native Woodland Plan.
- Operators must be familiar with the identification of native willow species, and must follow good practice regarding the taking of cuttings and the timing of the operation (typically late November to early March), in order to prevent lasting damage to the source tree(s). The People's Millennium Forests (2000) publication Our Trees(*) provides basic guidance on growing from cuttings.
- Operators must also be aware of possible restrictions regarding the taking of cuttings within protected areas, and seek prior consent from the relevant authority.
- The onus is entirely on the applicant to seek and attain the relevant permission from any other landowner on whose land the proposed source trees are located.

(* Available at www.woodlandsofireland.com/publications)

10.3 Plant Passports

In the context of Ireland's special Protected Zone status with respect to specific harmful forest pests and diseases, plants of those species acceptable under NWS Conservation and listed below should only be purchased from nurseries / brokers registered under the EU Plant Health Directive, and must be accompanied by a valid EU Plant Passport to certify the absence of the relevant pests and diseases:

- Scots pine (Pinus sylvestris): Protected Zone Code ZP CONF.
- Sessile oak (Quercus petraea): Protected Zone Code ZP A16
- Pedunculate oak (Quercus robur): Protected Zone Code ZP A16
- Rowan (Sorbus aucuparia): Protected Zone Code ZP B2
- Hawthorn (Crataegus monogyna): Protected Zone Code ZP B2
- Crab apple (Malus sylvestris): Protected Zone Code ZP B2

Regarding wild cherry (*Prunus avium*), a Protected Zone Code is not applicable, but a standard Plant Passport is required.

See the Forestry Standards & Procedures Manual for further details and requirements.

11. Pests and diseases

Forest Service policy is to maintain a healthy forest environment by ensuring good management, and by identifying risks and maintaining a sustained commitment to measures that prevent the entry and establishment of destructive forest pests and diseases, including those which may impact negatively on native woodland.

Everyone involved in NWS Conservation, or in any other tree- or forest-related activity, should

be vigilant and immediately contact the Forest Service, Department of Agriculture, Food & the Marine, if any <u>unusual</u> pest or disease is observed.

For this purpose, the Forest Service can be contacted by e-mail at forestprotection@ agriculture.gov.ie or by phoning 01-607 2651. Alternatively, unusual pests or diseases can also be reported on the Forest Service TreeCheck app. (see www.treecheck.net).

12. Ground preparation, drainage, fertiliser application

Under NWS Conservation, all operations - include the felling of non-natives, invasive removal, fencing, planting and preparing for natural regeneration - must be carefully tailored in order to promote the relevant native woodland type(s) with the minimum amount of site disturbance possible. The focus is on retaining natural site conditions and to facilitate the emergence or continuation of the woodland type (or types) that would occur naturally on the site.

Wherever planting is undertaken as part of a NWS Conservation project, this consideration influences ground preparation, drainage and fertiliser application.

Ground preparation is largely limited to inverted mounding, scrap mounding, shallow ripping, pit planting, auger planting and light scarification (to assist natural regeneration). Where planting is preceded by harvesting (e.g. on NWS Conservation sites involving the conversion from conifer forest to native woodland), appropriate windrowing or brash-piling of lop-and-top is acceptable.

Drainage is generally unacceptable under NWS Conservation. (However, localised drainage may be allowed in exceptional circumstances – full details must be provided at the application stage.) The blocking of existing drains may be acceptable, to reinstate natural wet conditions and to improve the functionality of aquatic buffer zones regarding the protection of adjoining watercourses.

(Note, in relation to works undertaken as part of NWS Conservation projects within Freshwater Pearl Mussel catchments, the fundamental objective is to ensure that no silt, nutrients and / or herbicides enter the receiving waters. Therefore, great care must be exercised in the selection and implementation of restoration works (including planting), to meet this fundamental objective.)

Fertiliser application is acceptable under NWS Conservation in certain circumstances, for example, as a once-off application at planting to boost growth for a specific ecological purpose. The appropriate fertiliser must be applied by hand around the base of each tree. Slow release, organic formulations are recommended.

13. Vegetation management

Under NWS Conservation, the control of competing vegetation such as grasses, herbaceous plants, brambles, bracken, etc. is critical for the rapid establishment and growth of young trees, both planted and naturally regenerating. Inadequate vegetation management will result in mortality, loss of growth and vigour, and the need for further inputs subsequently (e.g. beating up).

Non-herbicide control (trampling, mulches, mats, etc.) is generally realistic only on small sites, in small areas earmarked for natural regeneration, and in highly sensitive areas (e.g. aquatic buffer zones). Otherwise, targeted herbicide application represents the most practical,

effective and economical method of vegetation management.

Pre- and post-planting herbicide application must be kept to the minimum required to ensure success, and should be used in combination with other methods to control competing vegetation, e.g. the use of larger planting stock. Post-planting application should be carried out using a knapsack sprayer, with the aim of maintaining a 1-metre wide control area around the base of each tree until they are free of competing vegetation.

For further information and requirements, see the Forestry Standards & Procedures Manual.

Under the *Forestry & Water Quality Guidelines*, herbicide use is generally not permitted inside the aquatic buffer zone. However, exceptional circumstances may pertain, where the limited and targeted use of herbicides in this zone may be acceptable to the Forest Service, following consultation (where appropriate) with Inland Fisheries Ireland and the National Parks & Wildlife Service, e.g. the stem injection of rhododendron.

For health, safety and environmental reasons, herbicide use must adhere to the *Forestry & Water Quality Guidelines*, Forest Protection Guidelines, and the Guidelines for the Use of Herbicides in Forestry.

The new Sustainable Use Directive will also be an important feature of NWS Conservation, ensuring proper use of pesticides.

14. Protection against grazing

NWS Conservation sites must be fully protected from the time of any associated planting, or (where planting is not involved) by Form 2 submission. All existing fences and boundaries must be to a standard which excludes domestic stock and protects the woodland, including planted and naturally regenerating trees and woodland flora. Additionally, sites must be protected from other grazing animals, including deer, feral goats, rabbits and hares, as required. Basic fencing requirements are specified in the *Forestry Standards & Procedures Manual*.

Alternative fencing and barriers, including A-frame fencing (see Photo 1), 'dead hedging' (using conifer brash, cut rhododendron and other woody material), stonewall repair and hedge laying, may be considered eligible on a case-by-case basis – full details must be provided at the application stage.

Tree guards for protection against rabbit, hare and deer browsing should be used where appropriate, e.g. small sites, single or group planting within aquatic buffer zones, for understorey or small coupe planting. As well as protecting against grazing, tree guards also highlight the location of individual trees, for follow-up maintenance.

Consider providing access for desirable mammals, e.g. a badger gate positioned where the fenceline crosses an established track.

All protective measures should be inspected on a regular basis, with maintenance carried out, as required.

If necessary, incorporate measures into the overall woodland layout and design to facilitate the ongoing control of grazers. These include strategic sight lines, deer lawns and elevated hides. Note, sites heavily populated with deer, or located in a deer 'hotspot' area, may not be accepted under NWS Conservation, as native woodland restoration may not currently be a realistic and sustainable proposition.

Photo 1 A-frame fencing and other alternative fencing and barriers, may be acceptable under NWS Conservation, on application.



15. Protection against fire

Fire risk is relevant to NWS Conservation, particularly in upland areas. Requirements for firebreaks, a fire plan, etc., apply, as set out in the *Forestry Standards & Procedures Manual*.

16. Treatment of non-native tree species

The primary focus of NWS Conservation is to promote the most appropriate native woodland type (or types) for the site, as identified in the Native Woodland Plan. This often necessitates the removal of non-native species (e.g. beech, sycamore, fir, spruce, etc.) that may be present as individuals, as groups or as stands, and replacement with appropriate native species through planting and / or natural regeneration.

Depending on ecological and silvicultural considerations, operational issues and other factors, the ideal rate of removal of non-natives will vary from site to site, from immediate removal (through selective felling or clearfell) to a more gradual removal over a number of years.

Generally, non-native species must be removed from the site by:

- the second grant instalment under the category 'Private High Forest', or
- ➤ 4 years (48 months) after the completion of initial works, under the categories 'Private Emergent Woodland' and 'Public Woodland',

unless clear ecological, silvicultural or other reasons presented in the Native Woodland Plan justify a more gradual approach. If a more gradual approach is being proposed, full details (including a map showing the location of the trees involved) must be included in the Native Woodland Plan. The Forest Service will carry out spot inspections subsequently, to ensure that the process of gradual removal, where approved, continues subsequently.

Due to their biodiversity, cultural and landscape value, non-native veteran trees can be retained indefinitely. However, the position of these trees must be marked on a Native Woodland Plan existing habitat map as small features of biodiversity value, and all associated natural regeneration controlled on an ongoing basis.

Where techniques such as stem injection and ring-barking are proposed to eliminate

individual or small groups of non-native trees, applicants should take full account of possible future health and safety considerations arising from these operations.

(NWS Conservation projects must adhere to the 1946 Forestry Act (and to the replacement 2014 Forestry Act, once commenced). Applications for a Felling Licence should be made prior to or in tandem with the initial application, to avoid delays after any approval is issued under the scheme.)

17. Treatment of exotic invasive species

A number of invasive exotic and naturalised plant species represent a serious threat to native woodlands, depending on site and soil types. These include rhododendron, cherry laurel, red osier dogwood, Japanese knotweed and snowberry. These have the potential to rapid colonise sites and to out-compete native trees, shrubs and ground flora, thereby substituting native communities over time. Under NWS Conservation, these species must be effectively controlled and removed if present on the site, through the application of current best practice appropriate to the site (i.e. cutting and stump treatment, stem injection, foliar spray, mechanical flaying or uprooting, etc.). A long-term strategic approach is required under the NWS Conservation, based on initial and follow-up treatment, simultaneous control on adjoining sites (where possible), and ongoing monitoring.

Rhododendron and cherry laurel represent a particularly significant threat, and treatment includes cutting and stump treatment, the spraying of regrowth, stem injection and mechanical uprooting and removal. The Woodlands of Ireland Native Woodland Information Note No. 3, entitled *The Control of Rhododendron in Native Woodlands*, sets out a range of appropriate options.

Note that heavily infested sites or sites within a heavily infested locality may not be accepted under NWS Conservation, as native woodland restoration may not currently be a realistic or sustainable proposition in severe cases.

18. Formative shaping

Under NWS Conservation, where quality wood production is an objective, formative shaping should be applied to young trees, following the rules set out in the *Forestry Standards & Procedures Manual*. This will promote good stem quality at an early stage, thereby increasing the scope for compatible hardwood production within the native woodland in the future.

Potentially, formative shaping can also be applied to naturally regenerating trees.

19. Integration of NWS Conservation with the NeighbourWood Scheme

Projects under NWS Conservation may have potential for compatible development as local amenities, with particular emphasis on:

- appropriate levels of public access and types of recreational use,
- interpretative / educational features promoting awareness and understanding of native woodlands, and
- educational tie-in with local schools.

In order to facilitate this type of development, projects under NWS Conservation can be accompanied by parallel applications under Element 3 of the NeighbourWood Scheme, a separate Forest Service grant package supporting the development of 'close-to-home' woodland amenities developed in partnership with local communities and other interested recreational 'user groups', for public use and enjoyment.

Element 3 of The NeigbourWood Scheme provides funding for the installation and upgrade of appropriate recreational facilities within woodlands. Facilities can be general in nature (e.g. footpaths, signage, waymarkers, car-parking, seating and picnic tables) or specialised for a particular activity or use (e.g. dedicated nature trails, bird-watching hides).

All facilities must satisfy specific criteria focused on quality, durability, and sensitive layout and design.

The criteria and available grant levels under Element 3 of the NeighbourWood Scheme are set out in the documentation for that scheme. Applicants under NWS Conservation wishing to avail of NeighbourWood Scheme Element 3 are required to highlight in the NWS Conservation Form 1, any parallel application under the NeighbourWood Scheme.

20. Future management

The future long-term management of sites under NWS Conservation must be consistent with:

- the promotion of the native woodland type(s) identified for the site, and associated native woodland ecosystem(s),
- the delivery of related ecosystem functions and services that native woodlands can deliver, in particular, the protection and enhancement of water quality and aquatic habitats and species, and the creation of linkage between semi-natural habitats in the surrounding area,
- other objectives identified by the applicant, including wood production(*), the provision of local amenities, and opportunities for woodland interpretation and environmental education,
- > any specific conditions of approval set out by the Forest Service.

(* Many sites under NWS Conservation will be suitable for growing quality timber and other wood products on an ongoing long-term basis. Applicants under the scheme are encouraged to pursue this potential, where compatible with the native woodland ecosystem and site conditions.)

Annex 5 Native Woodland Plan

1. Overview

The Native Woodland Plan is prepared jointly by a NWS Forester and a NWS Ecologist working in close consultation with the applicant. The plan is a key part of the application process, as it sets out the ecological (and other) objectives for the woodland, and appropriate works required to achieve these. Exactly how each plan evolves is site-specific, but the following are key considerations that should be noted.

- The initial point of contact varies. The applicant usually contacts the NWS Forester who then engages the NWS Ecologist, often someone they have worked with previously. Alternatively, the applicant might contact the NWS Ecologist, who will subsequently bring in the NWS Forester.
- ➤ The Native Woodland Plan is an agreed document prepared and signed off by the NWS Forester and the NWS Ecologist. The input of each professional should not be treated as a separate component. Typically, the ecologist will focus on ecological issues and the forester on management issues, but considerable overlap should occur as knowledge and expertise are exchanged to achieve a workable plan. Details should be specific (i.e. what will be done, when, and where?) and clearly illustrated through the use of appropriate maps. Technical details inputted by one party should not contradict those inputted by the other. Also, details inputted by one party should not be altered by the other, unless agreed.
- The input of the applicant is vital. In the Native Woodland Plan, his / her objectives and available resources need to be brought centre-stage alongside the ecological priorities, to form the basis for future management. The applicant is also likely to have an intimate knowledge of the site, as well as of local history and sources of relevant information, all of which will contribute to the plan. S/he should also be kept fully informed and involved as the plan develops. Given the nature of NWS Conservation, some applicants will have a keen interest and may wish to input actively into the process. Finally, the applicant is required to sign off on the Native Woodland Plan (in addition to the NWS Conservation Form 1).
- At an early stage, the forester, ecologist and applicant should walk the site together. Starting with a blank copy of the Native Woodland Plan template, they should develop an overview of the site and the likely issues involved in order of priority, including the applicant's own objectives. The ecologist undertakes the ecological survey, habitat identification and ecological prioritisation, and this should occur early in the process, as ecological information will form the starting point for most of the decisions in the plan. Further joint site visits should also take place to review the draft Native Woodland Plan as it develops, in order to ensure a smooth consistency between ecological (and other) priorities and management operations, and to find solutions to difficult issues that may arise.
- It is highly recommended that the woodland contractor who will ultimately carry out

- the actual works, is also consulted in the development of the Native Woodland Plan from the outset. His / her input is vital, as the practicalities of what is being proposed can be examined, and alternatives suggested, if needed.
- The plan must also address any additional environmental sensitivities and social issues relevant to the project. These include, for example, hydrological connectivity with a sensitive watercourse, potential *in situ* and *ex situ* impacts regarding a NATURA site, the location of the project within a sensitive landscape, and the current use of the woodland as a popular local amenity. The information provided may avoid the need for further information being required by the Forest Service. For example, consideration of a downstream NATURA site and the inclusion in the plan of additional safeguards to avoid any impact, may allow the Forest Service to screen out the project for the purposes of Appropriate Assessment, thereby potentially offsetting the need for a NATURA Impact Statement. See the *Forestry Standards & Procedures Manual* for further information on the Forest Service Appropriate Assessment Procedure.
- ➤ Once completed, the Native Woodland Plan is signed off by the NWS Ecologist, the NWS Forester and the applicant, before being submitted to the Forest Service alongside the NWS Conservation Form 1 and other documentation and maps. Each party should be supplied with a copy of the final submitted plan.
- ➤ The Forest Service Letter of Approval is issued to the applicant, with copies sent to the NWS Forester and the NWS Ecologist. Work can only commence after receipt of this Letter of Approval.
- As work proceeds, it is highly recommended that the NWS Ecologist, the NWS Forester and the applicant meet onsite to review progress.
- ➤ If it becomes apparent, after approval is issued, that changes to the plan (e.g. operations, areas) are required, the Forest Service must be contacted and approval secured before proceeding.

2. Native Woodland Plan Template

As outlined, the Native Woodland Plan is a key part of the application process, as it sets out the ecological (and other) objectives for the woodland, and appropriate works required to achieve these. The following requirements apply:

- ➤ The Native Woodland Plan must be submitted alongside the NWS Conservation Form and other necessary documentation and maps.
- ➤ The Native Woodland Plan must be jointly prepared by a NWS Ecologist and a NWS Forester, working in close consultation with the applicant. All three individuals must sign off on the document.
- The Native Woodland Plan must fully adhere to the template below, addressing each part in turn. Smaller text in italics included in the template is intended as guidance, and should not be included in the submitted plan. An electronic version of the template is available at www.agriculture.gov.ie/forestservice/
- At specific points in the Native Woodland Plan template, maps are required to illustrate the following information:
 - Soil Map illustrating soil types (only required if more than one soil type is present);

- Existing Habitat Map illustrating existing habitats and small features of biodiversity value;
- Proposed Native Woodland Types to be promoted on site (only required if more than one native woodland type is to be promoted); and
- ➤ **Operation Map** illustrating operational areas in relation to works to be completed by Form 2 submission.
- These maps represent an intrinsic component of the Native Woodland Plan. Maps must adhere to the following conventions:
 - Maps must be based on a 1:5,000 OS map, with the site perimeter outlined in red. Enlarge, if necessary. For the Existing Habitat Map, a recent aerial photograph may provide a more suitable map.
 - Maps must be appropriately titled ('Soil Map', 'Existing Habitat Map', etc.), to reflect the information being illustrated. Features and attributes must be clearly indicated using symbols, colours, letters, text-and-arrows and a concise legend. Linear features (e.g. waterways, hedgerows) should be indicated using colour-coding, and individual features (e.g. badger setts) by letters or symbols.
 - Clearly cross-reference the map with the relevant text in the body of the Native Woodland Plan.
 - Each map should accurately represent the information being illustrated, and be legible. If an individual map becomes too cluttered, use a second map and indicate accordingly (e.g. Operation Map no. 1, Operation Map no. 2).
- The inclusion of photographs in the Native Woodland Plan is required, to illustrate the general site character, operational areas and any unique or unusual features present. The location and orientation of each photograph should be indicated on one of the above Native Woodland Plan maps. Note, photos are sought in order to compliment relevant sections of the Native Woodland Plan, and should not be used as a substitute.
- Aerial photographs can prove highly useful in providing detailed site information and reference points for fixing the location of features, habitat boundaries, etc. on the various Native Woodland Plan maps.
- Note that all references cited in the following template are included in Annex 7.
- ➤ The Native Woodland Plan must be submitted in a photocopy-friendly A4 format, without permanent binding. It is also acceptable in digital format, with an electronic signature (e.g. a cover e-mail from applicant, with the plan included as an attachment).
- The submission of incomplete, inaccurate or incoherent Native Woodland Plans will result in delays, requests for further information, and / or refusal.

Native Woodland Plan

TEMPLATE DOCUMENT: INSERT SPACES, AS NECESSARY

PART 1: GENERAL INFORMATION

Contact details

NWS Forester (name, address, tel., e-mail <u>plus</u> dates of the NWS Training Course completed)

NWS Ecologist (name, address, tel., e-mail plus dates of the NWS Training Course completed)

Site location and area

County

DED

Townland(s)

6 inch OS map number(s)

Site area (ha)

Please tick the relevant category of the Native Woodland Conservation Scheme (NWS Conservation) being applied for under this application (NOTE, tick <u>one</u> category only)

- Category 'Private High Forest'(*)
- □ Category 'Private Emergent Woodland'(**)
- □ Category 'Public Woodland'(*)

^{*} Categories 'Private High Forest' and 'Public Woodland' can include existing high forest woodland regarded as being native in tree composition but requiring restoration work, and existing high forest comprising non-native conifer species, where clearfelling and conversion to native woodland is being proposed.

^{**} To be eligible under the category 'Private Emergent Woodland', the woodland must have an average canopy height of at least 4 metres, and be situated on mineral soil. Also, the site can initially comprise up to one-third open space.

For the relevant NWS Conservation category being applied for, indicate which of the following criteria are met by the proposal:

For the category 'Private High Forest'...

- An 'ancient woodland' site, i.e. a site that has been under continuous woodland / forest cover since 1650(*).
- A woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- An undesignated woodland comprising woodland type(s) listed under Annex I of the EU Habitats

 Directive
- An 'old woodland' site, i.e. a site that has been under continuous woodland / forest cover since the 1830s(**).
- A woodland / forest adjoining a sensitive watercourse, where native woodland restoration can contribute to the protection of water quality and aquatic habitats and species. Water sensitive areas include Freshwater Pearl Mussel catchments, fisheries sensitive areas, Acid Sensitive Areas, and high status waterbodies identified under the Water Framework Directive.
- A woodland / forest adjoining or within 1 km of a woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- A woodland / forest adjoining or within 1 km of a non-woodland habitat designated for conservation purposes under European and / or national legislation.
- A project involving the ecologically compatible development of a native woodland amenity for public access and recreation, woodland interpretation and environmental education (including NWS Conservation projects with a NeighbourWood Scheme tie-in.)

For the category 'Private Emergent Woodland'...

To be eligible under this category, the emergent woodland must be predominantly native, must have an average canopy height of at least 4 metres, and must be situated on mineral soil. The site can initially comprise up to one-third open space. Qualifying criteria are as follows:

- An emergent native woodland within a natural riparian zone, or adjoining a sensitive watercourse, where native woodland restoration can contribute to the protection of water quality and aquatic habitats and species. Water sensitive areas include Freshwater Pearl Mussel catchments, fisheries sensitive areas, Acid Sensitive Areas, and high status waterbodies identified under the Water Framework Directive.
- An emergent native woodland adjoining an 'ancient woodland' site, i.e. a site that has been under continuous woodland / forest cover since 1650.
- An emergent native woodland adjoining or within 1 km of a woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- An emergent native woodland adjoining an undesignated woodland comprising woodland type(s) listed under Annex I of the Habitats Directive.
- An emergent native woodland adjoining an 'old woodland' site, i.e. a site that has been under continuous woodland / forest cover since the 1830s.
- An emergent native woodland adjoining or within 1 km of a non-woodland habitat designated for conservation purposes under European and / or national legislation.
- A project involving the ecologically compatible development of a native woodland amenity for public access and recreation, woodland interpretation and environmental education (including NWS Conservation projects with a NeighbourWood Scheme tie-in.)

^{*} As evident from estate maps, documents and landuse history research.

stst As evident from the $1^{
m st}$ Edition Ordnance Survey maps c.1830 AD, and subsequent maps / records.

(...continued) For the relevant NWS Conservation category being applied for, indicate which of the following criteria are met by the proposal:

For the category 'Public Woodland'...

- An 'ancient woodland' site, i.e. a site that has been under continuous woodland / forest cover since 1650.
- A woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- An undesignated woodland comprising woodland type(s) listed under Annex I of the EU Habitats Directive.
- An 'old woodland' site, i.e. a site that has been under continuous woodland / forest cover since the
- A woodland / forest adjoining a sensitive watercourse, where native woodland restoration can contribute to the protection of water quality and aquatic habitats and species. Water sensitive areas include Freshwater Pearl Mussel catchments, fisheries sensitive areas, Acid Sensitive Areas, and high status waterbodies identified under the Water Framework Directive.
- A woodland / forest adjoining or within 1 km of a woodland designated for conservation purposes under European and / or national legislation, due to its native woodland type / habitat.
- A woodland / forest adjoining or within 1 km of a non-woodland habitat designated for conservation purposes under European and / or national legislation.
- A project involving the ecologically compatible development of a native woodland amenity for public access and recreation, woodland interpretation and environmental education (including NWS Conservation projects with a NeighbourWood Scheme tie-in.)

PART 2: SITE OVERVIEW

Site parameters

- State the elevation range (m) for the site.
- > Describe the average **slope**, noting any local variations.
- Describe the aspect, noting any local variations.
- ➤ Describe the **degree of exposure** (sheltered, moderate, exposed, severe), noting any local variations.

Soil assessment

- From the free soil survey(*), identify the soil type or types (i.e. brown earth, podzol, gley) on the site, and describe drainage and approximate fertility (i.e. base-poor/rich, acid, calcareous, etc.).
- If more than one soil type is present, illustrate the approximate location and extent of each on a Soil Map.

(* See Annex 3 of the Forest Service document Native Woodland Establishment GPC9 & GPC10: Silvicultural Standards.)

Adjacent habitat types and land uses

What are the general habitat types and land uses adjoining the site?

For habitat types, use the 2nd level classification codes listed in pages 14-15 of the Heritage Council's A Guide to Habitats in Ireland (Fossitt, 2000). E.g. "GA Improved Grassland to the north, with dairy farming; WD Highly Modified / Non-Native Woodland to the east, commercially managed conifer plantation..."

Conservation status / designations

- ➢ Is the site: (i) within; (ii) adjoining (0 0.5 km); or (iii) less than 3 km upstream and hydrologically connected to, a Special Area of Conservation (SAC), Special Protection Area (SPA), a Natural Heritage Area (NHA) or proposed NHA, a Nature Reserve, a National Park, or a Refuge for Flora and Fauna?
- If 'yes', state which of the above spatial relationships applies and provide the relevant Site Name and Site Code of the designation(*).

Differentiate where multiple designations apply.

* See National Parks and Wildlife Service website www.npws.ie for information on designated sites.

Special habitats and species

- Are any of the habitats and species listed in Annex I, Annex II or Annex IV of the EU Habitats Directive, or in Annex I of the EU Birds Directive, known to occur on the site? If so, specify, and where appropriate, show the location.
- ➤ Is there a population of a species protected under the Flora (Protection) Order 1999 known to be present or observed within the plot(s)? If so, specify, and where appropriate, show the location.
- Are you aware of any other species on the site that may be considered rare, either regionally or nationally? If so, specify, and where appropriate, show the location.

Note that the applicant may have important local knowledge in this regard.

Various sources of information on habitats and species are available, including:

- Forest Service iNET system, available to Registered Foresters;
- National Biodiversity Data Centre (NBDC) (www.biodiversityireland.ie); and
- National Parks and Wildlife Service (NPWS) (www.npws.ie).

Local records may be available through the local NPWS Office.

 3^{rd} level institutes may also have information regarding particular sites, arising from research projects.

The most up-to-date records of protected species may be requested from the NPWS using a data request form, available to download at: www.npws.ie/media/npws/publications/Data%20request%20form.doc

For further biodiversity-relevant datasets available in Ireland, see Appendix 3 of the report entitled Integrated Biodiversity Impact Assessment: Streamlining AA, SEA and EIA Processes: Practitioner's Manual (EPA, 2013) (PDF available at www.epa.ie/pubs/reports/research/biodiversity/).

Additional sensitivities

- Are there any additional environmental or social sensitivities relevant to the project, which should be considered during the development and implementation of the plan, and future long-term management?
- > Describe the nature of these sensitivities.
- Outline how these environmental sensitivities are to be protected, and where possible, enhanced.

Additional sensitivities include inter alia hydrological connectivity with a sensitive watercourse, potential ex situ impacts regarding nearby NATURA sites, the location of the project within a sensitive landscape, and the current use of the woodland as a popular local amenity.

The information of wider environmental sensitivities provided in the plan may avoid the need for further information being required by the Forest Service (for example, consideration of a downstream NATURA site and the inclusion in the plan of additional safeguards to avoid any impact, may allow the Forest Service to screen out the project for the purposes of Appropriate Assessment, thereby potentially offsetting the need for a NATURA Impact Statement.

PART 3: ECOLOGICAL SURVEY

Timing of ecological fieldwork

On what date(s) was the ecological fieldwork carried out?

Note that the ecological fieldwork should only be carried out from mid-May to the end of September. Dates outside of this period may be acceptable in limited circumstances, and only with the prior approval of the Forest Service.

General ecological overview

Provide an overview of the general ecology of the site.

Existing habitats

Using the 3rd level classification codes on pages 14-15 of *A Guide to Habitats in Ireland* (Fossitt, 2000), identify the *main existing habitats* on the site.

E.q. GA1 Improved agricultural grassland; WD2 Mixed broadleaved / conifer woodland; HD1 Dense bracken.

Habitat surveying should follow the Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011).

For each main existing habitat:

- > illustrate its extent on the Existing Habitats Map (Note that habitats too small or narrow to map clearly may be included as small features of biodiversity value see below)
- provide a short description
- using the DAFOR Scale, record in table format the relative abundance of the flora community
- note other species known to be present but not observed during the survey
- where a habitat corresponds to an Annex I habitat under the EU Habitats Directive, this should be indicated and shown on the habitat map with the appropriate Annex I code.

Criteria for determining if a habitat conforms to Annex I are outlined in the following:

- ➤ Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland (*Perrin* et al., 2014)
- The Irish semi-natural grasslands survey 2007-2012 (O'Neill et al., 2013).

Small features of biodiversity value

Identify small features of biodiversity value to be retained.

E.g. veteran trees (incl. non-native), damp hollows, rocky outcrops, important animal sites (nests, setts, burrows, bat roosts, etc.), large standing or fallen deadwood, Red Data Book species, regionally or locally rare species, stone walls

For each small feature of biodiversity value:

- > using points, illustrate its location on the Existing Habitats Map
- provide a short description (including primary species)

Proposed native woodland type(s)

This section is critical, as it identifies the most appropriate native woodland type or types to be promoted on the site. This selection is highly significant, as promoting the most appropriate native woodland type and associated community is a key objective, dictating many management decisions, including species selection for planting.

Based on soil, ground vegetation, existing tree cover, elevation, climate and other relevant factors:

- > Which of the native woodland type (or types) described in Cross *et al.* (2010) is / are to be promoted on the site?
- What is the basis of this decision?
- If more than one type is to be promoted, illustrate the approximate extent of each on a Proposed Native Woodland Types Map.

Site history

Describe the known history of the site, including the origin of the existing woodland cover, evidence of previous woodland cover, and land use changes through the centuries. Note any archaeological or historic features, as these indicate human presence and potential site impact.

Sources include local knowledge, management records, plans and inventories, aerial photographs, historical records and maps, landuse history, scientific studies, old historic landscape paintings and references in historical writings. Onsite features including existing ground flora and evidence of previous silvicultural management can also yield vital information about the site's history.

For further guidance, see Woodlands of Ireland NWS Information Notes No. 1 (Cartographic and Historical Sources for Native Woodlands) and No. 2 (A History of Woodland Management in Ireland: An Overview) (Byrnes, 2007a&b).

Note that full adherence to the Forest Service Forestry & Archaeology Guidelines and to any special conditions attached to the letter of approval, is required in relation to archaeological features on the site.

Current use(s)

How is the woodland / forest currently used?

E.g. abandoned woodland, commercial timber production, pheasant shooting, public amenity & recreation.

Weaknesses and threats

Describe the nature and severity of existing and / or potential weaknesses and threats that need to be addressed in the project to ensure successful native woodland development.

E.g. grazing pressure, invasive species, over-mature / senescent canopy, poor understorey and inadequate recruitment, windblow, adjoining development, dumping and burning, recreational pressure. The presence of invasive species in the surrounding area should also be noted.

PART 4: OBJECTIVES

Part 4 sets out the long-term vision and the short-term objectives for the site.

Part 4 must take into account all factors identified in preceding sections of the Native Woodland Plan, including the most appropriate native woodland type(s) to be promoted, weaknesses and threats, the retention and protection of existing habitats and small biodiversity features, and wider environmental considerations.

The following must be included:

- > the applicant's primary objectives for the site; and
 - ecological priorities for the woodland, including the most appropriate native woodland type(s) to be promoted onsite;
 - o how weaknesses and threats are to be addressed; and
 - how wider environmental sensitivities are to be protected, and where possible, enhanced.

Other issues may also be included, where relevant, e.g.

- > opportunities for compatible wood and non-wood products and services, e.g. hardwood and coppice production, foliage, berry and mushroom collection, woodcraft, eco-tourism enterprises; and
- additional considerations, e.g. public access and amenity, use of the woodland as an 'outdoor classroom' by local schools, and woodland research.

Medium- to long-term vision

What is the medium- to long-term vision for the site up to year 50?

E.g. The realisation of a particular woodland type co-incident with hazel coppice on a 12 year cycle.

Short-term objectives

In order of priority, describe the short-term objectives to be achieved within the 4-year period after the completion of initial works (under NWS Conservation category 'Private High Forest', this corresponds to Form 3 submission to draw down the second grant instalment - <u>note that grant</u> payment will depend on these short-term objectives being met.)

Specific details are required, for example:

- > "To clear rhododendron from 4 ha in the northwest corner of the site"
- > "To remove deer grazing through the erection of deer fencing and appropriate culling"
- > "To remove all existing sycamore scattered throughout the site"
- > "To establish natural regeneration on 3 ha of the site"
- > "To create four 0.3 ha coupes within the existing even-aged canopy for subsequent planting, to introduce structural and age diversity"
- > "To clearfell 4 ha of Sitka spruce forest and to replace with new native woodland, through a combination of planting and natural regeneration"

PART 5: OPERATIONS

Part 5 sets out proposed operations (what will be done, when and where?), based on the short-term objectives specified in Part 4.

Form 2 works

- Describe and cost the operations to be completed <u>before Form 2 submission</u>. <u>Note that specific details are required, including areas, species planted, planting ratios, specifications, application rates, etc.</u>
- Illustrate relevant operational areas on an Operation Map, e.g. areas for rhododendron clearance, proposed felling / replanting coupes, areas designated for natural regeneration, etc.
- On the same Operation Map, illustrate any non-woodland habitats to be retained as part of the ABF allowance.

Form 3 works (only complete for the category 'Private High Forest')

- Using a yearly schedule, describe and cost the operations to be completed <u>after initial</u> <u>works have finished and before Form 3 submission</u>. Note that specific details are required (as above).
- > Illustrate relevant operational areas on an Operation Map, if these differ significantly from the operational areas relating to the Form 2 submission.

Medium- to long-term operations

In general terms, describe management operations envisaged up to year 50.

E.q. Thinning/re-spacing where timber production is an objective, inspection and removal of exotics every 8 years, etc.

Other information

Include any other information relevant to this Native Woodland Plan.

For example, if further applications under NWS Conservation (or indeed, applications under Native Woodland Establishment GPC9 and / or GPC10) are envisaged in the coming years for other sites within the same property, give details outlining the overarching vision and the timeframe involved, and how this application fits in.

For example, details regarding the location of willow trees proposed for use as a source for cuttings.

References

Fully reference any documents referred to in this Native Woodland Plan.

E.g. botanical surveys, old land use records, estate plans, historical maps, previous management plans, research literature.

PART 6: DECLARATION					
We, the undersigned, declare that we have jointly prepared this Native Woodland Plan as part of the application for this site under the Native Woodland Conservation Scheme, in accordance with the terms and condition of the scheme, and that all information is accurate and correct to the best of our knowledge.					
NWS Forester					
Signature	Date				
NWS Ecologist					
Signature	Date				
Applicant					
Signature	Date				

A REMINDER As specified in the above template, various maps are required as part of the Native Woodland Plan, illustrating soil types, existing habitats and small features of biodiversity values, native woodland types to be promoted, and operation areas.

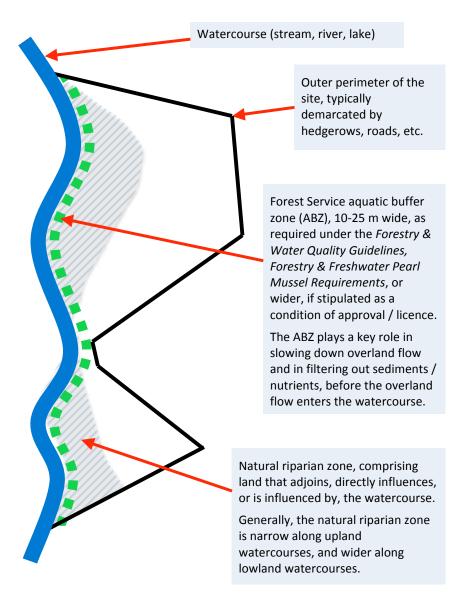
Annex 6

Native Woodland and Watercourses

1. Overview

This annex sets out different scenarios describing how the Native Woodland Conservation Scheme (NWS Conservation) <u>and</u> Native Woodland Establishment GPC9 & GPC10 can be applied on sites adjoining watercourses, to deliver ecosystem services relating to the protection of water, aquatic habitats and associated species. The general approach regarding the treatment of the natural riparian zone and the Forest Service-stipulated 10-25 metre wide aquatic buffer zone (ABZ) is also described.

Before setting out the scenarios, the following diagram represents a 'typical' site adjoining a watercourse.



2. Scenarios

Scenario A: Native Woodland Establishment GPC9 & GPC10 project involving the creation of <u>new</u> native woodland on a greenfield site adjoining a watercourse



Within the Forest Service-stipulated ABZ directly adjoining the watercourse:

- Introduce an ABZ of an appropriate width. Note that the ABZ represents part of the Area for Biodiversity Enhancement (ABE) requirement for the overall site.
- During establishment, exclude all machine traffic from the ABZ and adopt a sensitive, low impact approach to all operations deemed necessary within this area.
- Assess existing land drains and consider installing appropriate measures (e.g. baffles, dams) outside (i.e. upslope) of the ABZ, to slow down water flow and to reduce possible nutrient and sediment inputs into the aquatic zone.
- Allow the natural ground vegetation to develop undisturbed.
- Where appropriate and using suitable native riparian species, develop approximately 10% 20% tree cover within the ABZ, to deliver direct benefits to the aquatic habitat in the form of selective shading and cooling, riverbank stabilisation and the input of food into the aquatic system. Achieve this through the strategic planting of single trees or groups, and / or the natural regeneration of suitable species.
- Monitor the development of the ABZ on an ongoing basis. With the cooperation of the relevant statutory agencies, eliminate invasive exotics and control any excessive tunnelling by native trees. Aim to maintain the ABZ as a mosaic of native riparian scrub and open habitats (including localised wetlands).

Elsewhere within the natural riparian zone (if applicable):

- With minimum site disturbance and inputs, establish the most appropriate native riparian woodland type, as identified by the Native Woodland Establishment Site Appraisal Framework.
- Where sought as a co-objective by the forest owner and where appropriate to the site (in relation to soil conditions, fertility, slope, overall water-related sensitivities, etc.), plan for future wood production based on low impact CCF management and appropriate extraction systems for sensitive sites (e.g. 'iron horses').

Scenario B: NWS Conservation project involving appropriate restoration works within an existing native woodland adjoining a watercourse



Within the natural riparian zone:

- With minimum site disturbance and inputs, undertake appropriate restoration works to promote the most appropriate native riparian woodland type, *via* understorey planting, coupe planting, natural regeneration, fencing, the removal of non-natives (e.g. sycamore) and invasive exotics (e.g. rhododendron), etc.
- Where sought as a co-objective by the forest owner and where appropriate to the site (in relation to soil conditions, fertility, slope, overall water-related sensitivities, etc.), plan for future wood production based on low impact CCF management and appropriate extraction systems for sensitive sites (e.g. 'iron horses').
- Adopt a *de facto* 10 20 metre wide ABZ. Within this area, exclude all machine traffic and adopt a sensitive, low impact approach to all operations deemed necessary. Also, wood production within the ABZ should not be pursued. Monitor the woodland edge along the watercourse on an ongoing basis. With the cooperation of the relevant statutory agencies, eliminate invasive exotics and control any excessive tunnelling by native trees.

Scenario C: NWS Conservation project involving the conversion to native woodland, of non-native forest adjoining a watercourse



Within the Forest Service-stipulated ABZ directly adjoining the watercourse:

- Sensitive removal of the existing non-native canopy, focused on avoiding the disturbance of, and the entry of sediment and woody debris into, the watercourse. Practice extreme care where the existing canopy directly adjoins the water's edge.
- Introduce an ABZ of an appropriate width as part of the reforestation of the site. Note that the ABZ represents part of the Area for Biodiversity Enhancement (ABE) requirement for the overall site.
- Assess existing forest drains and consider installing appropriate measures (e.g. baffles, dams) outside (i.e. upslope) of the ABZ, to slow down water flow and to reduce possible nutrient and sediment inputs into the aquatic zone.
- > Throughout subsequent site development, exclude all machine traffic from the ABZ and adopt a sensitive, low impact approach to all operations deemed necessary within this area.
- Allow the natural ground vegetation to develop undisturbed.
- ➤ Where appropriate and using suitable native riparian species, develop approximately 10% 20% tree cover within the ABZ, to deliver direct benefits to the aquatic habitat in the form of selective shading and cooling, riverbank stabilisation and the input of food into the aquatic system. Achieve this through the strategic planting of single trees or groups, and / or the natural regeneration of suitable species.
- Monitor the development of the ABZ on an ongoing basis. With the cooperation of the relevant statutory agencies, eliminate invasive exotics and control any excessive tunnelling by native trees. Aim to maintain the ABZ as a mosaic of native riparian scrub and open habitats (including localised wetlands).

Elsewhere within the natural riparian zone (if applicable):

- Sensitive removal of existing non-native canopy, focused on avoiding the disturbance of, and the entry of sediment and woody debris into, the watercourse.
- With minimum site disturbance and inputs, establish the most appropriate native

- riparian woodland type (via planting and / or natural regeneration).
- Where sought as a co-objective by the forest owner and where appropriate to the site (in relation to soil conditions, fertility, slope, overall water-related sensitivities, etc.), plan for future wood production based on low impact CCF management and appropriate extraction systems for sensitive sites (e.g. 'iron horses').

3. Common considerations for Scenarios A-C

- Across the entire site, all planting and natural regeneration must reflect the most appropriate native woodland type(s) for that site. Typically, this will involve a native riparian woodland type within the natural riparian zone, phasing into non-riparian native woodland type(s) upslope, as soil and drainage conditions change.
- ➤ The Forest Service Forestry & Water Quality Guidelines apply. Preventing the entry of sediment, nutrients, chemicals and woody debris into the watercourse is paramount. Within the ABZ, all machine operations and herbicide applications are excluded or limited to essential work (such as the pit-planting of small groups of native riparian trees, the removal of existing conifers, or the treatment of large rhododendron by stem injection).
- In areas where the Forest Service Forestry & Freshwater Pearl Mussel Requirements apply, a 25 metre wide ABZ is stipulated.
- ➤ Details regarding the design and treatment of the ABZ and the natural riparian zone should be site-specific. Adopting the Forest Service requirement as the minimum width, the actual width of the ABZ can be increased at various points along its length, to reflect factors that may heighten the risk of sedimentation at particular locations (e.g. natural hollows and other preferred flowpaths, where water gravitates towards as it approaches the receiving watercourse). This will maximise the level of protection against the runoff of sediment and nutrients into the stream or river. Varying the width of the ABZ (particularly in relation to sunlight) will also increase the biodiversity 'edge effect' between the ABZ and the native woodland canopy.
- Further guidance is contained in the Woodlands of Ireland NWS Information Note No. 4 (Native Riparian Woodlands A Guide to Identification, Design, Establishment and Management) (Little et al., 2008).
- Activities within the ABZ may be subject to the agreement of Inland Fisheries Ireland and (where relevant) the National Parks & Wildlife Service.
- Where required, maintain access for anglers, i.e. stiles and setbacks for casting.

Annex 7

References and Further Reading

Barron, C. 2007. The Control of Rhododendron in Native Woodlands. Native Woodland Scheme Information Note No. 3. Woodlands of Ireland. Available at www. woodlandsofireland.com/publications

Bullock, C. & Hawe, J. 2014. The Natural Capital Values of Ireland's Native Woodland. A Report Commissioned by Woodlands of Ireland. Available at www.woodlandsofireland.com/publications

Byrnes, E. 2007a. Cartographic and Historical Sources for Native Woodlands. Native Woodland Scheme Information Note No. 1. Woodlands of Ireland. Available at www. woodlandsofireland.com/publications

Byrnes, E. 2007b. A History of Woodland Management in Ireland: An Overview. Native Woodland Scheme Information Note No. 2. Woodlands of Ireland. Available at www. woodlandsofireland.com/publications

Collins, K. Goodwin, R., Hayden, D., McGorman, H., McConville, J., Sheridan, F., & Carr, G. 2010. Amenity Trees and Woodlands: A Guide to their Management in Ireland. Published by the Tree Council of Ireland in association with the Arboricultural Association (Irish Branch) and the Society of Irish Foresters. Tree Council of Ireland, Ireland.

Cross, J., Perrin, P. & Little, D. 2010. The Classification of Native Woodlands in Ireland and its Application to Native Woodland Management. Native Woodland Information Note No. 6. Woodlands of Ireland, Ireland. Available at www.woodlandsofireland.com/publications

Forest Service. 2000a. Irish National Forest Standard. Forest Service, Department of Agriculture, Food & the Marine (DAFM), Johnstown Castle Estate, Co. Wexford.

Forest Service. 2000b. Code of Best Forest Practice – Ireland. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2000c. Forest Biodiversity Guidelines. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2000d. Forestry and Water Quality Guidelines. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2000e. Forestry and Archaeology Guidelines. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2000f. Forestry and the Landscape Guidelines. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2000g. Forest Harvesting and the Environment Guidelines. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2002. Forest Protection Guidelines. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2006. Forest Recreation in Ireland: A Guide for Forest Owners and Managers. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2008. Forestry and Freshwater Pearl Mussel Requirements: Site Assessment and Mitigation Measures. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2012. Forest Service Appropriate Assessment Procedure: Information Note. March 2012. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2015a. Forestry Standards and Procedures Manual, January 2015. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2015b. Forestry Programme 2014-2020: Ireland. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Forest Service. 2015c. Forestry Scheme Penalty Schedules. Forest Service, DAFM, Johnstown Castle Estate, Co. Wexford.

Fossitt, J. 2000. A Guide to Habitats in Ireland. The Heritage Council, Ireland. Available at www.heritagecouncil.ie

Gardiner, M.J. & Radford, T. 1980. Soil Associations of Ireland and Their Land Use Potential: Explanatory Bulletin to Soil Map of Ireland 1980. National Soil Survey of Ireland. Soil Survey Bulletin No. 36. An Foras Talúntais, Ireland. Available at www.agresearch.teagasc.ie

Little, D., Collins, K., Cross, J., Cooke, D., McGinnity, P. 2008. Native Riparian Woodlands – A Guide to Identification, Design, Establishment and Management. Native Woodland Scheme Information Note No. 4. Woodlands of Ireland. Available at www.woodlandsofireland.com/publications

Little, D. & Cross, J. 2005. Realising Quality Wood from Ireland's Native Woodlands: Silvicultural Guidelines for Wood Production in the Context of the Native Woodland Scheme. Woodlands of Ireland. Available at www.woodlandsofireland.com/publications

O'Neill, F.H., Martin, J.R., Devaney, F.M. & Perrin, P.M. 2013. The Irish semi-natural grasslands survey 2007-2012. Irish Wildlife Manuals No. 78. National Parks & Wildlife Service, Department of Arts, Heritage & the Gaeltacht, Ireland. Available at www.npws.ie

People's Millennium Forests. 2000. Our Trees: A Guide to Growing Ireland's Native Trees in Celebration of a New Millennium. Available at www.woodlandsofireland.com/publications

Perrin, P.M., Barron, S.J., Roche, J.R. & O'Hanrahan, B. 2014. Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland. Version 2.0. Irish Wildlife Manuals No. 79. National Parks & Wildlife Service, Department of Arts, Heritage & the Gaeltacht, Dublin, Ireland. Available at www.npws.ie

Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. 2011. Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council, Ireland. Available at www. heritagecouncil.ie

Forest Service, Department of Agriculture, Food & the Marine



