Wild Western Peatlands

Stakeholder Information Document





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WILD WESTERN PEATLANDS

Purpose of Document

This document is part of a wider strategy to engage with stakeholders regarding Coillte Nature's Wild Western Peatlands project.

The document provides information about the rationale for this project, its scale and timeframe. You will also find information about the proposed sites where the project will take place and an overview of processes that may be used.

You will be introduced to the project team and find out how you can provide input on the project, whether this is general in nature or if you wish to provide detailed technical information.



After you have had time to review this document, we would like to know:

What is your overall reaction to this project?

What do you see as key obstacles or areas of concern for this project?

Can you provide us with technical or site-specific information that is relevant to this project?

Do you have comments on the draft list of priority sites for this project (see p7).

You will find details about the project team and how to connect with us at the end of this document. You can find out more about Coillte Nature at www.coillte.ie/coillte-nature

About Coillte Nature

Coillte Nature is the not-for-profit branch of Coillte. We are building on 30 years' experience in forestry, land management and habitat restoration to deliver real impact on the climate and biodiversity crises through innovative projects-of-scale across four strategic themes:



Rehabilitating ecosystem services by bringing sensitive or degraded lands into better health



Reforesting our landscapes by planting new native woodlands on un-forested land



Restoring important biodiversity areas by investing in major habitat improvements



Regenerating urban forests for the benefit of people and nature

Coillte Nature is underpinned by principles of partnership, integrity and accountability, informed by the best ecological evidence, and supported through collaboration and engagement with public, private, non-governmental and community partners.

COILLTE nature WILD WESTERN PEATLANDS STATE OF THE PROPERTY OF

Why the Wild Western Peatlands project?

"These areas were planted to create rural employment at a time when the importance of peatlands for carbon storage and biodiversity was not well understood. The Wild Western Peatlands project will allow us to rehabilitate a rare habitat of international importance. Learnings from this project will help us to develop a range of solutions for rehabilitating other similar areas."

DR CIARÁN FALLON, DIRECTOR AT COILLTE NATURE



The National Parks and Wildlife's Prioritised Action Framework for Ireland (2014–2020)

gives an objective to implement "measures to better integrate modified forest landscapes with Natura 2000, with the aim of restoring extent and connectivity of Annex 1 habitats and habitats for species."

The National Biodiversity Action Plan (2017–2021) calls for "maximised positive outcomes for biodiversity and ecosystem services and restoration of areas impacted by inappropriate forestry".

The National Peatlands Strategy (2018) calls for the present management of state-owned peatland to be "evaluated and alternative management options aimed at increasing the delivery of all the ecosystem services of naturally functioning peatlands" to be considered, with special responsibility for Coillte to continue to "show leadership in responsible management, rehabilitation and restoration of peatlands".

Atlantic blanket bog is a rare and precious habitat which is an important part of our cultural and environmental heritage. The Wild Western Peatlands project will see Coillte Nature redesign approximately 2,100 hectares of Atlantic blanket bog which is primarily planted with spruce and pine forests. Bog restoration is the most favoured redesign option for this project as it results in the restoration of the original Annex 1 peatland habitat.

Atlantic blanket bog landscapes provide a valuable habitat for many species including several rare plants, birds and invertebrate species. Pools that occur on the flatter areas of blanket bog support many mosses and plants, and provide essential habitats for both migrating and resident wetland birds.

Careful management of these areas is key for climate action as blanket bogs accumulate and store carbon. The peatlands also store and filter water, playing a vital role in the management of water catchments.

Our aim is to take an ecological approach to restoring and rehabilitating these sensitive landscapes. We'll do this by rewetting bogs and wet heath as much as possible and using other redesign methods such as developing riparian buffers and restructuring stands of lodgepole pine. Pioneer native woodlands will be established in some areas where rewetting isn't feasible, especially on free-draining slopes. These sparse pioneer woodlands will feature hardy native species like willow, birch and Scots pine that are sourced in Ireland and ecologically appropriate for exposed locations.

The project will be delivered in partnership with state bodies, communities and key NGOs to ensure technical synergy and a thorough understanding of the issues and delivery of best practice management of western peatland forests. Working closely with a range of stakeholders and ensuring ecological best practice are critical objectives for this project.

"Peatland restoration is the No. 1 nature-based solution to the biodiversity and climate crisis in Ireland. Inaction is not an option."

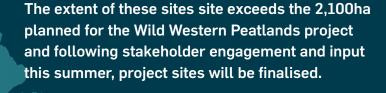
DR. CATHERINE FARRELL. TRINITY COLLEGE DUBLIN



Shortlisted Sites

The following sites are to be given high priority

- 01 Glentornan, Co. Donegal
- 02 Glennamong, Co. Mayo
- O3 Derryclare, Co. Galway
 Pilot site, see p.9–12 for
 more details
- 04 Cappaghoosh, Co. Galway
- 05 Derrynafulla, Co Cork



These sites have been shortlisted taking the following criteria into account

- Representative of various challenges related to redesigning western peatland forests.
- Proximity and hydrological connection to SACs with blanket bog and wet heath habitats.
- Opportunity to partner with a range of key stakeholders.
- Sites that are representative of typical Coillte western peatland forests with a mosaic of unplanted and afforested areas.
- Sites are of low timber production value with the majority of conifers growing at Yield Class 12 or below.

A consultation process was undertaken with local management staff, environmental managers and stakeholders who have an in-depth knowledge of local sites leading to the selection of potential sites suitable for this project.

Environmental Goals and Actions

The redesign and restoration of sites in the Wild Western Peatland project will employ a range of approaches best suited to each site including:



Blanket bog and wet heath restoration

- Identify priority restoration sites for rewetting and remove conifers (machine/manual/ ringbarking)
- Reduce flows in drains with dams to increase water levels and encourage bog vegetation
- Control invasive species and manage natural regeneration of exotic conifers



Riparian buffer zones

- Identify key buffer zones and install silt traps to stop silt and nutrients entering watercourses
- Remove conifers very sensitively (machine/ manual/ringbarking) and brash from aquatic zones
- Strike willow cuttings, plant and seed lowdensity native trees and shrubs in riparian zones
- Control invasive species and natural regeneration of exotic conifers



Landscape-scale forest redesign

- Restructure conifer plantation forests by clearfelling or thinning
- Restock with native woodland where appropriate (e.g. Scots pine, birch, alder, rowan, holly and willow)
- Manage naturally regenerating conifers
- Soften the forest edges creating more naturallooking gaps where native species may regenerate

Pilot site Derryclare, Co. Galway

The Coillte property at Derryclare lies to the west of Lough Inagh and Derryclare Lough in Connemara, North of the Galway to Clifden road (N59). This area is a key tourist and angling destination and is close to the Wild Atlantic Way and the Western Way. The forest is highly visible from the surrounding area, and when it was planted over 50 years ago there was little consideration given to landscape design. This iconic site contains areas of high biodiversity value and therefore offers great potential for resdesign and restoration.

To the south-east of the property lies an old oak-dominated woodland, designated in 1980 as Derryclare Nature Reserve and managed by the NPWS. It is one of the finest examples of semi-natural Atlantic oak woodlands in Ireland. The Reserve is enclosed to the east by the lake and the conifer plantations to the west, with no natural opportunity to extend its boundaries.

"Derryclare in Connemara has some of the greatest potential for nature restoration that I've seen anywhere in Ireland. It's name means 'oak wood of the plain' and it so exciting to think this may one day return"

PÁDRATC FOGARTY, TRISH WILDLIFF TRUST



Pilot site Derryclare, Co. Galway

Area	Approx. 560 ha
Elevation	10-180m
Bedrock	Schist dominant,
	Quartzite at elevations

The Coillte property at Derryclare is undesignated but fully surrounded by the Twelve Bens/Garraun Complex Special Area of Conservation (Natura 2000 code: IE002031).

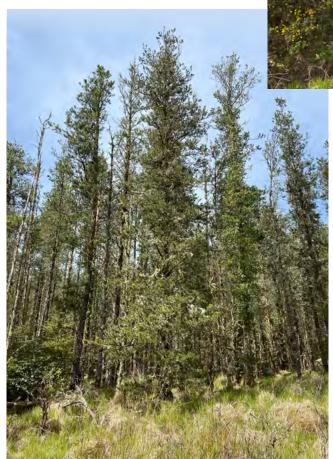
TWELVE PINS



• CLIFDEN

LEENAUN

BELOW — Lodgepole pine planted on deep peat



ABOVE — Regeneration of birch, heather and gorse

Tree cover on Coillte Derryclare property

Lodgepole pine	53%
Lodgepole pine / Sitka spruce mix	21%
■ Sitka spruce	19%
■ Broadleaf	6%
■ Larch	1%



Yield class of conifer forest

YC ≤ 10	70%
// YC 12	10%
YC ≥ 14	20%



Age structure of conifer forest

39%	≤ 20yrs
9%	// 21–30yrs
4%	■ 31–40yrs
49%	■ ≥ 40yrs



Areas of Concern

Carbon Sequestration and Storage

Peatlands are globally important stores of carbon which are altered by changes in land use, including forestry, that disturb the soil or the water table. Drainage or cultivation usually results in loss of soil organic carbon (SOC) by carbon dioxide efflux, by particulate erosion or dissolved in rainwater drainage and runoff.

Conversely, forest growth can lead to an accumulation of SOC, through litter formation and incorporation of organic matter into the soil, as well as the carbon stocks accumulating in the trees. Afforested peatlands can act as sinks or sources of carbon dioxide depending on the balance of carbon input and loss.

This project will assess potential CO2 emissions depending on the future management scenarios for this property using on-site surveys and the best available research both from Ireland and internationally.

Water Bodies and Drainage

The Derryclare property has extensive drains/streams/riparian zones which flow into Derryclare Lough and Lough Inagh which are key salmon angling destinations with populations of the protected aquatic plant species slender naiad (Najas flexilis) and pillwort (Pilularia globulifera). These waterways also feed into the Ballinahinch fishery downstream. Forest operations need to be managed to minimise and mitigate sediment loading which could lead to eutrophication of watercourses.

Red Squirrels

Following a sucessful red squirrel (*Sciurus vulgaris*) translocation project at the adjacent Derryclare Nature Reserve in 2005, there have been sightings on the Coillte Derryclare site. The red squirrel is protected under the Wildlife Act (1976) and Wildlife (Amendment) Acts (2000 & 2010) and the Bern Convention (Appendix III). Key stakeholders will be engaged with to ensure that this population of red squirrel is taken into consideration in the management plans made for the property.

What is happening at Derryclare this season?

Surveying and collection of baseline data for Environmental Impact Statement (EIS) will take place over the summer of 2021. This will include hydrology and ecology surveys, habitat mapping and the compilation of a management plan.

The Coillte Nature team would like to hear from you...

We would like to know:

- What is your overall reaction to this project?
- What do you see as obstacles to, or areas of concern for, this project?
- Can you provide us with technical information that is relevant to this project?
- Are there issues that have not been mentioned in this document that you would like to see addressed in an Environmental/Natura Impact Statement?
- What do you think of the scope of this project regarding the scale and timeframe?
- Do you have comments on list of priority sites for this project? (See p7)

VIEW VIDEO HERE







Karen WoodsOperations Manager



Dr Declan Little Ecological Lead



Hedda DickOutreach Manager

To share your thoughts or for more information about the Wild Western Peatlands project please contact Coillte Nature Outreach Manager Hedda Dick on:

Email hedda.dick@coillte.ie

Phone 087 1927257

Meet us on-site at Derryclare or online:

Register your interest by emailing hedda.dick@coillte.ie
Due to COVID-19 restrictions, attendance at on-site visits will be limited

A WWP Project Manager and Project Team will be appointed over the coming months. This project is subject to planning requirements and to consent from DAFM where felling and deforestation is proposed.

For more information about The Wild Western Peatlands and other Coillte Nature projects see www.coillte.ie/coillte-nature