Planning and Environmental Consultants

Biodiversity Management Plan

Long Point, Lough Rea

DOCUMENT DETAILS

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Prepared By:	**MKO** **Tuam Road** **Galway** **Ireland** **H91 VW84**

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
03	Final	03/07/2025	SC	PD

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1. INTRODUCTION

1.1 Background

MKO were commissioned to prepare a Biodiversity Management Plan (BMP) for a proposed amenity area enhancement development at Long Point, Lough Rea, Co. Galway. The total area of the site is approximately 125 ha and the site is located off the R351, the Lake Road south of Loughrea town.

The site location is provided in Figure 1-1.

1.1.1 Objectives of the Biodiversity Management Plan

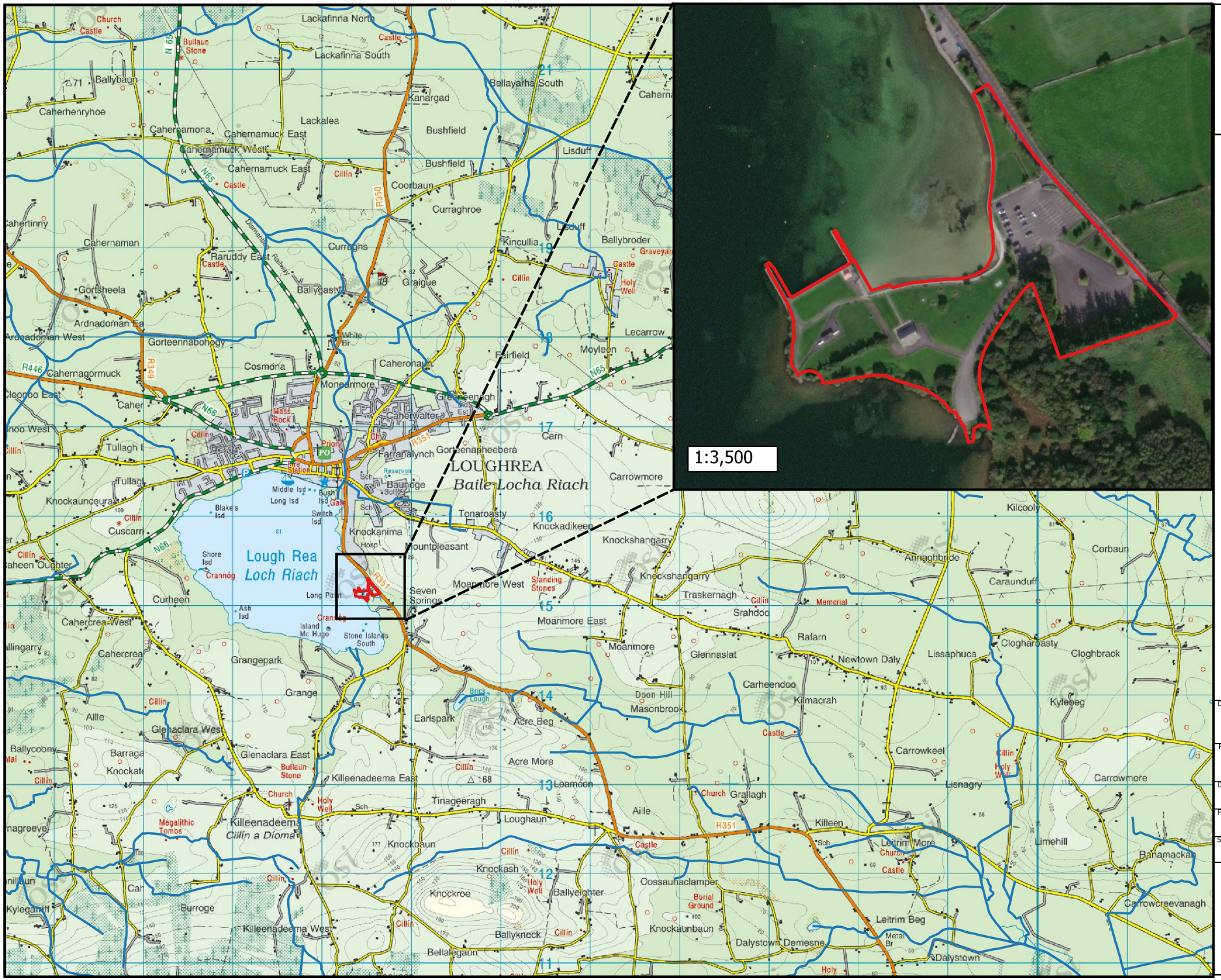
The objectives of this Biodiversity Management Plan are as follows:

- To establish high biodiversity habitats within the site and to enhance existing habitats where they are currently *in-situ*.
- To promote biodiverse grasslands and woodland within areas of the site, enhancing connectivity to the surrounding environment.
- Reduce potential threats on the adjacent protected sites such as Lough Rea SAC, SPA, and pNHA.
- To provide additional foraging habitat and resting/breeding sites for protected fauna including bats, badger and birds.
- Management of habitats to enhance them for pollinator species (e.g. species diverse grassland)

1.2 Statement of Authority

Multidisciplinary walkover surveys were undertaken of the site and adjacent lands by MKO ecologists, John Hynes (BSc., MSc., ACIEEM), Padraig Desmond (B.Sc.), Cora Twomey (B.Sc) Deepali Mooloo (B.Sc., M.Sc.) and Brónagh Boylan (B.Sc) on various dates between 2023 and 2025. This report has been prepared by Pádraig Desmond.

Pádraig is a Project Ecologist with MKO with over 4 years' experience and has extensive experience in a range of projects including quarries, peatland restoration, renewable energy, housing developments, and road schemes.



Map Legend

Site Boundary

WFD Watercourses

Drawing Title

Site Location

Project Title: Proposed Outdoor Amenity Enhancement Project at Long Point, Loughrea, Co. Galway	
Drawn By: SC	Checked By: PD
Project No.: 220727	Drawing No.: Figure 2-1
Scale: 1:55,000	Date: 10/09/2024

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website: ww.mkoireland.ie

2. ECOLOGICAL BASELINE

2.1 Designated Sites

The Proposed Development site is located adjacent to Lough Rea SAC and Lough Rea SPA, which are designated for the following habitats and species:

Lough Rea SAC

- Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. [3140]

Lough Rea SPA

- Coot (*Fulica atra*) [A125]
- Shoveler (*Spatula clypeata*) [A857]
- Wetland and Waterbirds [A999]

2.2 Existing Habitats and Flora

Full details on the existing habitats, flora and fauna recorded within the site are provided in the accompanying Ecological Impact Assessment (EcIA). Figure 5-1 of the EcIA provides a habitat map of the existing site, which highlights the important habitats within and adjacent to the site. This has been provided again in Figure 2-1 of this report for ease of reference.

Drawing Title

Habitat Map

Project Title

Long Point, Lough Rea

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MKO
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Tuam Road, Galway
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+353 (0) 91 735611
email:info@mkoireland.ie
Website: ww.mkoireland.ie

3. BIODIVERSITY MANAGEMENT PLAN

3.1 Proposed Biodiversity Enhancement Measures

The sections below detail the different restoration and biodiversity enhancement measures to be implemented throughout the quarry site.

3.1.1 Woodland and Treelines

Trees, either as scattered park land trees or forming clusters or treelines, provide highly important habitat for a host of fauna, including insects, birds, and bats. They provide important foraging and commuting corridors for fauna and provide breeding habitat for range of species.

3.1.1.1 Tree retention

To facilitate the Proposed Development, there is requirement to fell mature and semi-mature within the site, for safety and management reasons. However, where trees are not to be felled, these will be retained and protected.

3.1.1.2 Tree planting

As per the Landscape plan provided as part of this application, and the site layout of the Proposed Development provided in Figure 2-2 of the accompanying EcIA, there is provision for the planting of linear treelines and tree clusters throughout the site. Planting will predominantly comprise native species as well as some non-native species suitable to such a development. Species proposed include:

- *Pinus sylvestris* (Native Scots Pine)
- *Betula Pendula* and nigra (Native Birch)
- *Acer campestre* (Field Maple)
- *Quercus robur* (Native Oak)

Tree planting will also aim to bolster existing linear treelines which form a boundary between the amenity area and Lough Rea, as shown in Figure 3-1. Species to be planted to bolster existing treelines adjacent to the lake will include:

- Willow *(Salix spp.)*
- Alder *(Alnus glutinosa)*
- *Quercus robur* (Native Oak)

All tree planting will be done so with consideration to optimising biodiversity and should be done so in consultation with a qualified ecologist.

3.1.2 Management of species diverse grasslands

Species diverse grasslands provides an important food source to a range of species throughout the year via the production of seeds for small mammals and birds in autumn and winter and attracting insects/pollinators during the summer months.

As per the site layout of the Proposed Development, provided in Figure 2-2 of the accompanying EcIA, there is provision for species diverse grasslands throughout the site. These are again indicated in Figure 3-1 of this report. Existing grassland within the site is heavily management and presents as species poor,

grass dominated Amenity grassland. Management of grasslands within the site, as indicated in Figure 3-1, will include the following:

- There will be no application of fertilizer or other chemicals into these areas.
- From August/September 2024, these areas will be cut for hay or mown (with the removal of cuttings). This will be undertaken yearly from then on in August/September to remove the sward from the site. These areas will be left fallow for the rest of the year.
- Should scrub or invasive species begin to establish in this area, these will be removed, as per the relevant guidance for each.
- The use of seed mix should be avoided in the establishment of species diverse grassland. The preferred approach is to allow the existing seed bank to establish via the above management. Should an additional measure be required to increase diversity within these areas, green hay sourced from a local area of species rich grassland can be scattered in the target areas.
- In areas where species diverse grassland is proposed where there is currently no grassland, topsoil from excavations within the site during construction will be put aside and spread on these areas, to ensure a seed bank of local provenance is in place to allow this habitat to establish.

Species diverse grasslands will be established in areas that are highlighted in the Site Layout drawing, and again in Figure 3-1.

3.1.3 Management of Invasive Species

No invasive species is listed on the Third Schedule of the S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011 or on the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No 374 of 2024). However, ongoing due diligence for both terrestrial and lacustrine invasive species will be undertaken by the management team within the site. Should any invasive species be identified, an Invasive species Management Plan (ISMP) will be produced by a suitably qualified ecology to manage any such species. The plan will include best practice measures to prevent invasive species from spreading within or beyond the boundaries of the Proposed Development site.

3.1.4 Enhancement of potential fauna breeding habitat

3.1.5 Bat Boxes

As bats are known to be utilising the site, 5 no. bat boxes will be erected on mature trees on the boundary of the site to provide additional roosting opportunities for these species.

- A minimum of 5 no. bat boxes will be installed on suitable trees in accordance with best practice – at least 3m high on mature trees, away from lighting and at various aspects.
- The placement of the boxes is to be agreed with a suitably qualified Ecologist, following best practice guidelines (Kelleher & Marnell 2022, NRA 2006) will be placed on trees within the existing woodland or along existing treelines and will avoid wide open spaces (Collins, 2016).
- A variety of bat box types will be used to maximise roosting potential across different species and seasons. To reduce the requirement for maintenance, bottomless boxes are recommended. Example are provided in Plates 3-1, 3-2, and 3-3.

Plate 3-1 Schwegler 1FF bat box. Image source: NHBS.com

Plate 3-2 Vincent Pro Bat Box. Image source: NHBS.com

Plate 3-3 1FS Schwegler Large Colony Bat Box. Image source: NHBS.com

3.1.6 Owl boxes

The site is within the known range of barn owls. Given the abundance of foraging habitat (agricultural lands) in lands adjacent to the site, it is proposed to erect 1 no. owl box within the site.

- A minimum of 1 no. owl box will be installed on suitable trees in accordance with best practice – at least 4m high on mature trees or buildings, facing away from prevailing weather conditions, and with clear flight lines to the entrance.
- Alternatively, it can be placed on the gable end of the disused house to the eastern section of Killarney west quarry. This is on condition that the quarry void will not be extended to include this barn at any time.
- The placement of the boxes is to be agreed with a suitably qualified Ecologist, following best practice guidelines (Lusby & McCarthy, 2022) and will be placed on trees within the existing woodland or along existing treelines and will face open lands.
- A variety of owl box types are available to be bought or can be constructed as per Lusby & McCarthy (2022) guidance. An example box is indicated in Plate 3-4.

Plate 3-4 Eco Barn Owl Nest Box. Image source: NHBS.com

3.2 BMP Implementation and monitoring

In advance of commencement of the enhancement works detailed in this BEMP, a 36-month schedule will be drawn up. All landscape works and maintenance works will be detailed in the schedule and will be carried out by a qualified landscape contractor with particular items to be carried out in consultation with a qualified ecologist as described below. The Maintenance Schedule will cover the following items:

- Monitoring of the target habitats will be carried out for a period of 5 years with one yearly visits by an Ecologist during the growing season. The ecologist will produce an ongoing Biodiversity Monitoring report, tracking the progress of the habitat restoration and enhancement measures. Presence of invasive species, if any, and effects of the grassland management will be monitored. The Ecologist will recommend any additional measures that need to be implemented or adjusted.
- A yearly assessment of the restored and enhanced habitats will be undertaken by qualified ecologists, which will include relevés within the target habitat to measure any increased species diversity within the target areas.
- Should habitats fail to establish as required, additional measures may be undertaken to encourage their success.
- A licenced bat Ecologist will inspect the bat and owl boxes within the 24-month period to ascertain if they are being used and will recommend any changes or relocations that may be necessary. Bottomless bat boxes are recommended as they are self-cleaning, removing the need for maintenance and associated licensing. Occupancy of the boxes will be reported to NPWS.

Map Legend

- Proposed Development Site
- Proposed Grassland management areas
- Proposed native tree planting/bolstering adjacent to lake

Drawing Title

Biodiversity Enhancement & Management Plan

Project Title

Long Point, Lough Rea

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SC	PD
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email:info@mkoireland.ie
Website: ww.mkoireland.ie

4. CONCLUSION

This Biodiversity Management Plan sets out the enhancement measures to be implemented within the Proposed Development site to promote higher biodiversity within the overall site. It aims to maximise benefit for local biodiversity, as well as protecting European Sites from impacts arising from existing threats. This Plan has set out measures to be implemented as part of the development and ongoing monitoring for no less than 5 years post construction.

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