



**Enhanced Decommissioning,  
Rehabilitation and Restoration Scheme  
(EDRRS)**

**Kellysgrove Bog Rehabilitation  
Ex-Post Report**

# Bord na Móna

## DOCUMENT CONTROL SHEET

Client	Bord na Mona Lands and Habitats					
Project Title	Peatlands Climate Action Scheme – Kellysgrove Bog					
Document Title	Ex- Post Report					
Document No.	PCAS – Kellysgrove Bog					
This Document Comprises	DCS	TOC	Text	List of Tables	List of Figures	No. of Appendices
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## Table of Contents

1. Executive Summary.....	4
2. Introduction .....	4
3. Description of Rehabilitation Measures .....	4
3.1 Deviation from the submitted rehabilitation plans .....	5
3.2 Implementation .....	5
3.3 2.3 Challenges encountered and lessons learned .....	7
4. Monitoring .....	7
5. Validation.....	7
6. Conclusion.....	8

### Note

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## 1. Executive Summary

Kellysgrove Bog is in east Co. Galway, just over 2km south of Ballinasloe.

The key objective of the proposed measures under EDRRS (Enhanced Decommissioning, Rehabilitation and Restoration Scheme) also referred to as PCAS (Peatlands Climate Action Scheme) is to re-wet this raised bog, setting it on a trajectory towards raised bog restoration.

An area of 132.4 hectares was rehabilitated between April and September 2021, generally by blocking existing drains with peat drain blocks

The monitoring regime in place consists of Hydrology, Water Quality and Biodiversity monitoring while an Archaeological Impact Assessment Report was prepared in advance of rehabilitation.

## 2. Introduction

This report should be read in conjunction with the Kellysgrove Bog Cutaway Bog Decommissioning and Rehabilitation Plan available on the bnmecas website at the following location <https://www.bnmecas.ie/bogs-peatlands-climate-action-scheme/>. It should also be read in conjunction with the EDRRS Annual Report and the EDRRS Annual Monitoring and Verification report.

Kellysgrove Bog is located in east Co. Galway, just over 2km south of Ballinasloe. The bog was previously drained by Bord na Móna but was not used for industrial peat production and thus supported raised bog vegetation.

A public consultation process was carried out prior to the commencement of the rehabilitation, details of the public consultation process and submissions are contained in Chapter 4 of the final Rehabilitation plan available on the EDRRS website <https://www.bnmecas.ie/>.

## 3. Description of Rehabilitation Measures

The key objective of the proposed measures under EDRRS (Enhanced Decommissioning, Rehabilitation and Restoration Scheme) also referred to as PCAS (Peatlands Climate Action Scheme) is to re-wet this raised bog, optimising hydrological conditions, reducing carbon emissions from this site and setting it on a trajectory towards raised bog restoration (promoting the development of peat forming *Sphagnum* rich vegetation).

The total area in Kellysgrove Bog is 203 hectares and the area rehabilitated under EDRRS contributing to the overall 33,000 hectares to be rehabilitated under the Scheme, is 132.4 hectares.

The breakdown of the rehabilitation proposed and implemented is set out in Table 1 below.

Methodology Reference	Methodology Description	Originally proposed and approved by NPWS (Hectares)	Rehabilitation implemented (Hectares)
DPT2	Drain blocking (max 7/100 m)	105.1	105.1
MLT1	No Work required	91.0	27.3
	Not included in rehab area (constraint/ other)	7.5	71.2
Total		203.6	203.6
<b>Total hectares rehabilitated (contributing to overall EDRRS hectares (33,000 Ha))</b>			<b>132.4</b>

*Table 1: Rehabilitation Measure Breakdown*

The total number of drain blocks completed in Kellysgrove Bog is 2705.

### *3.1 Deviation from the submitted rehabilitation plans*

The original submission to the NPWS for approval included a total area for rehabilitation of 196.1 hectares of which 105 hectares were Deep Peat 2 (DPT2) rehabilitation measure with 91 hectares designated as Marginal Land (MLT1). Following a review of the MLT1 areas in the overall Year 1 bogs, the MLT1 area was reduced to 27.3 hectares as this was deemed to be the area that would benefit from adjacent rehabilitation measures. There was no change to the area of the DPT2 rehabilitation measure. This change did not affect the rehabilitation measures completed or the costs of the bog rehabilitation and the only impact was a reduction in the overall hectares included against the EDRRS target of 33,000 hectares.

The frequency and location of drain blocks was dictated by the gradient of the drains and care was also taken to avoid disturbance of existing vegetation/ scrub where possible.

In summary, the only deviation from the originally submitted rehabilitation plan was in the total area for rehabilitation. The measures proposed and subsequently approved by the NPWS were completed as designed.

### *3.2 Implementation*

The rehabilitation measures commenced on April 28<sup>th</sup>, 2021 with between three and five Operatives deployed at various stages using excavators to carry out the rehabilitation. The work was supervised by a Bord na Mona Area Leader with support provided by the Bord na Móna Engineering and Surveying Team. Inspections and site visits were carried out by Bord na Móna Ecology and Environmental Compliance teams.

The rehabilitation measures were completed on September 1<sup>st</sup>, 2021. Figures 1 and 2 below show drone images of the rehabilitation in progress on Kellysgrove Bog.





*Figure 1: Drain blocking being carried out at Kellysgrove*



*Figure 2: Drain blocking being carried out at Kellysgrove*

### 3.3 2.3 Challenges encountered and lessons learned

During the design stage a land ownership issue was identified in an area of 21 Hectares to the north west of the area proposed for DPT2 rehabilitation. While Bord na Móna had the turbary right to extract peat from this area, the land was owned by a third party. Discussions were had with this third party and they kindly provided a letter of consent that permitted the rehabilitation to be completed in this area.

Domestic turf cutting (private turbary) had significant impacts on the northern end of the bog and significant areas of the bog was constrained from rehabilitation due to this turfcutting.

Operationally no significant challenges were encountered unique to Kellysgrove. The main lessons learned were around the approach in choosing where to start and finish the rehabilitation. This required a review of the flow directions before commencing rehabilitation and working towards the outfall so as to avoid creating wet conditions within the works area.

## 4. Monitoring

The following table is a summary of the monitoring carried out on Kellysgrove Bog to date. Further details in relation to this monitoring is available in the Annual Monitoring and Verification Report and this report will be updated on an annual basis.

A baseline habitat survey and raised bog Ecotope survey was carried out in 2016.

Monitoring	Method/Type	Frequency/Duration
Hydrological	10 Piezometers - 5 deep/5 shallow with 3 loggers	Summer/Winter (for scheme duration)
Biodiversity	Habitat Mapping	Completed prior to scheme commencement and updated in Year 1 with Year 5 scheduled
	Vegetation Monitoring	Year 1 & Year 4
	Wintering Birds Survey	N/A
	Breeding Birds Survey	Year 1/2/3/4
	Pollinator Survey	N/A
Water Quality	2 Sampling Points - pH/Suspended Solids/Total Phosphorus/Total Ammonia/Chemical Oxygen Demand/Colour/Dissolved Organic Carbon	Monthly - until 2 years post rehab
Archaeology	Initial Archaeological assessment carried out	Prior to rehabilitation
Carbon	N/A	N/A

Table 3: Monitoring regimes

## 5. Validation

Kellysgrove Bog will be subject to a post rehabilitation validation carried out by the NPWS to determine if any additional measures are needed, this validation is underway but not yet finalised.



## 6. Conclusion

No quality or design non-conformance issues were identified during the inspection and verification process and the supervising Engineer formally signed off on the completed rehabilitation on September 30<sup>th</sup>, 2021.

Figure 3 and 4 below show images of Kellysgrove Bog post rehabilitation.



*Figure 3: Aerial view of Kellysgrove Bog 4<sup>th</sup> March 2022*





*Figure 4: Aerial view of Kellysgrove Bog taken 4<sup>th</sup> March 2022*

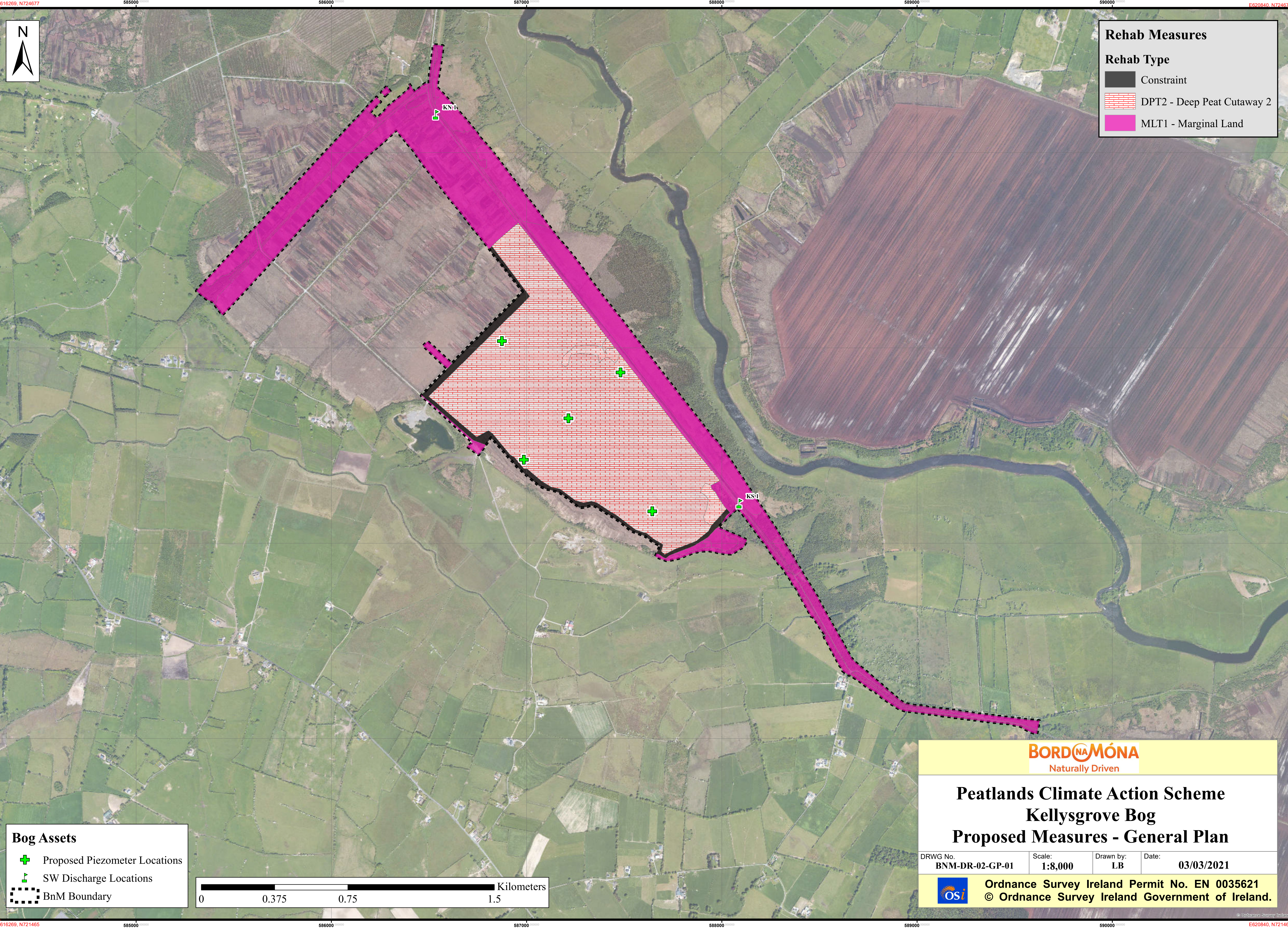
## **Appendix A**

### **Drawings**

Drawing No. BNM-DR-GP-01: Proposed Measures – General Plan (*Original Rehab Plan Submission*)

Drawing No. BNM-DR-22-02-31: Kellysgrove Bog – As Completed





**Rehab Measures**

**Rehab Type**

Constraint

DPT2 - Deep Peat Cutaway 2

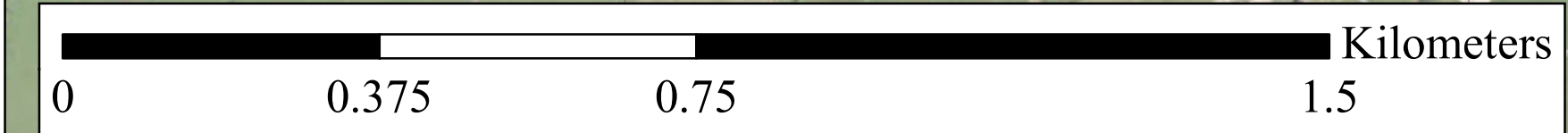
MLT1 - Marginal Land

**Bog Assets**

Proposed Piezometer Locations

SW Discharge Locations

BnM Boundary



**BORD NA MÓNA**  
Naturally Driven

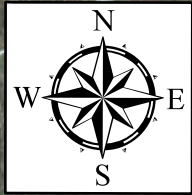
**Peatlands Climate Action Scheme  
Kellysgrove Bog  
Proposed Measures - General Plan**

DRWG No. BNM-DR-02-GP-01	Scale: 1:8,000	Drawn by: LB	Date: 03/03/2021
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Upper Left: 585238E 728564N m



Legend

- Completed (2705 Drain Blocks)
- BnM Boundary
- Constraint
- MLT1
- DPT2

Bord na Móna

## Kellysgrove Bog - As Completed

DWG No.  
BNM-DR-22-02-31

Scale:  
1:10,500

User:  
LenihanM

Date: 20/12/2022



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Lower Right: 589539E 725548N m