Environmental Pillar position on GAEC 2

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A policy position developed by the Environmental Pillar in response to Ireland's adoption of GAEC 2 within the CAP Strategic Plan 2024-2027

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Environmental Pillar position on GAEC 2

Introduction

The Environmental Pillar is an organisation that works to represent the views of 32 of Ireland's leading environmental NGOs. We work to promote environmental sustainability and the protection of our natural environment. The Environmental Pillar has adopted a series of recommendations for the Irish government and the European Commission in response to the ongoing design and adoption of measures under GAEC 2 of Ireland's CAP Strategic Plan 2023-2027.

Recommendations:

1. The definition, mapping and implementation of safeguards for organic soils under GAEC 2 should be ambitious and consistent with national and EU obligations to reduce land use emissions from farmed organic soils and peatlands.
2. The implementation of GAEC 2 should be ambitious and consistent with the implementation of other GAECs designed to protect soil and reduce GHG emissions.
3. Given that the intention of GAEC 2 is to minimise carbon loss from organic soils a definition of organic soils that is based on traditional depth criteria of 30 – 50cm is no longer appropriate. Organic soils should be defined based on their percentage organic matter content rather than soil depth criteria.
4. Ireland should use the updated Derived Irish Peat Map developed by the RePEAT project to implement GAEC 2.
5. Ireland should use the updated Derived Irish Peat Map to map peat soils ≤ 10cm.
6. A threshold of ≥50% could be used to identify a land parcel as having organic soil; however, the threshold should be revised downwards if it would result in the omission of extensive small areas of organic soils nationally (e.g. ≥ 5% of mapped organic soils).
7. If a land parcel contains a peatland habitat then the whole land parcel should be subject to the requirements of GAEC 2 regardless of the percentage of the land parcel covered by organic soil.
8. It is essential that farmers and communities are central in shaping and implementing land use change. Communities and landowners must be involved in decision making through early and sustained engagement. Wherever possible management interventions should look to deliver multiple environmental and social benefits and reward practitioners for the ecosystem services provided.
9. Taking the objective of GAEC 2 into account it is therefore necessary that minimum protection of organic soils should require:
    a) No new drainage of organic soils,
    b) No renewal or deepening of drains,
    c) No extension of pumping capacity in land management,
10. We recommend that the government carry out a review of existing legislation and regulations related to drainage works, including a review of the provisions of the Arterial Drainage Act (1945) and later amendments.
11. In the case of drained peatlands used as grasslands there should be a ban on conversion to cropland, as is the case in Germany's CSP.

12. As a minimum, any drained peatlands already used as cropland should not be ploughed deeper than 30cm.
13. In Denmark no tillage is allowed on soils with >12% carbon within protected areas (in total 28,800 ha). The Irish authorities should give serious consideration to prioritising organic soils being used for tillage for rewetting.
14. Semi-natural grasslands, such as those identified in the Irish Semi-natural grassland survey[1], which are located on organic soils should be protected from intensification including drainage, ploughing and reseeding. This should also include a ban on conversion to tillage. Farmers should be supported through agri-environmental schemes to manage these grasslands sustainably delivering biodiversity, climate mitigation and food.
15. The extensification of grassland management and the ecological restoration of semi-natural grasslands and habitat mosaics should be incentivised by Irish policy in order to enhance the carbon sequestration capacity of Irish grasslands.
16. Ireland should consider a requirement for reduced allowance of nitrogen input on semi-natural grasslands on organic soils.
17. The density of livestock and deer on blanket bog should be maintained at sustainable levels[2].
18. Blanket bog should not be grazed between the start of November and the end of February.
19. We recommend that a ban on turf-cutting / peat extraction within farmed Natura 2000 sites is introduced under GAEC 2.
20. Based on the available evidence there is an overwhelming case that no burning should take place on both active and degraded Blanket bog, Raised bog, Wet heath and on grasslands.
21. There should be a requirement for no drainage, no burning and sustainable stocking densities on grazed Blanket Bog and Wet Heath.
22. If burning is allowed on Dry Heath it should only be undertaken if it is subject to licensing.
23. A new licensing system should require that any burns are in line with best practice and are subject to prior approval and have spatial and temporal controls to ensure that deep burns do not cause damage to the soil.

Context

Good Environmental and Agricultural Condition

Under the Common Agricultural Policy (CAP) 2023 -2027, changes have been made to the existing conditionality and greening systems[3] to reflect the EU's higher green ambitions and to contribute to the targets of the European Green Deal[4]. All farmers receiving CAP supports must comply with enhanced conditionality requirements which set out within statutory management requirements and basic requirements under the nine standards of Good Environmental and Agricultural Condition (GAEC)[5]. Member States must define a national standard for each of the GAECs taking into account the specific characteristics of the area concerned.

The framework of standards of GAECs aims to contribute to the mitigation and adaptation to climate change, the tackling of water challenges, the protection and quality of soil and the protection and

[1] 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 and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

[2] Artz, R. R. E., Donnelly, D., Andersen, R., Mitchell, R., Chapman, S. J., Smith, J., ... & Cuthbert, A. (2014). Managing and restoring blanket bog to benefit biodiversity and carbon balance–a scoping study.

[3] https://agriculture.ec.europa.eu/common-agricultural-policy/income-support/cross-compliance_en

[4] https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

[5] https://agriculture.ec.europa.eu/system/files/2022-12/csp-at-a-glance-eu-countries_en.pdf

quality of biodiversity. According to the European Commission[6] "*these basic standards should better take into account the environmental and climate challenges and the new environmental architecture of the CAP…it also aims to make the CAP more compatible with the expectations of society through improving consistency of the policy with the environment, public health, animal health, plant health and animal welfare objectives*" For those farmers who do not comply with those requirements, Member States should ensure that "*proportionate, effective and dissuasive penalties are applied*."

GAEC 2

Regulation (EU) 2021/2115[7] sets out GAEC 2 as relating to the 'Protection of wetland and peatland' with the main objective of the standard being the protection of carbon-rich soils (often referred to as organic soils in Irish policy). According to Ireland's CAP Strategic Plan (CSP)[8] the main objective of the standard is "*the protection of carbon-rich soils…Large quantities of carbon are stored in peatlands (and wetlands) and certain agricultural practices (e.g. ploughing) may have a negative impact on such soils with regard to carbon storage. The minimum standards established for management under this GAEC will be aimed at minimising carbon loss from such soils*."

The application of GAEC 2 in Ireland has been delayed until 2024[9]. Ireland is one of four Member States that have opted to delay the implementation of GAEC 2 until 2024[10]. The reason for the delay being that time was needed to define and map carbon-rich soils. The Department of Agriculture, Food and the Marine have specifically cited "*limitations because of scale issues which means that it cannot be used to deliver a specific cartographic layer at parcel/farm level*." The department has committed that the description of the on-farm requirements and the types of agricultural areas present in the designated areas will be included in an updated version of the CAP Strategic Plan by the end of 2023.

National Policy Context

In the most recent EPA inventory, Ireland land use sector or Land Use Land Use Change and Forestry (LULUCF) was a net source of 7.3Mt CO_2eq in 2022[11]. Grassland is the largest net source of emissions within the LULUCF sector, the drainage of an estimated 339 kha of organic soils has resulted in emissions of 6.9MtCO2 eq annually[12]. Work by Teagasc[13] indicates that the area of grassland on drained peat soils could be 450,000 ha or 6% of the country[14] (slightly higher than the previous upper

[6] https://eur-lex.europa.eu/resource.html?uri=cellar:aa85fa9a-65a0-11e8-ab9c-01aa75ed71a1.0003.02/DOC_1&format=PDF
[7] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R2115
[8] https://www.gov.ie/en/publication/76026-common-agricultural-policy-cap-post-2020/
[9] https://www.gov.ie/en/publication/76026-common-agricultural-policy-cap-post-2020/
[10] https://agriculture.ec.europa.eu/system/files/2022-07/csp-overview-28-plans-overview-june-2022_en.pdf
[11] Environmental Protection Agency, 'Ireland's Provisional Greenhouse Gas Emissions, 1990–2022', 2023. Available: https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands-provisional-greenhouse-gas-emissions-1990-2022.php
[12] Environmental Protection Agency, 'Ireland's National Inventory Submissions 2023', 2023. [Online]. Available: https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands-national-inventory-submissions-2023.php
[13] Green, S., Distribution of cultivated peats. 2020, https://www.teagasc.ie/media/website/rural-economy/rural-economy/spatial-analysis/MOMMay2020.pdf
[14] Note: This map looks at the intersection of enclosed agricultural fields and peat soils (Cut over raised bog and blanket peats). The map excludes all non-cultivated peat soils (intact bogs, BNM bogs etc), commonage areas, and forested areas.

range estimates provided in Table 1 which would suggest that emissions from this land use category may be currently underestimated).

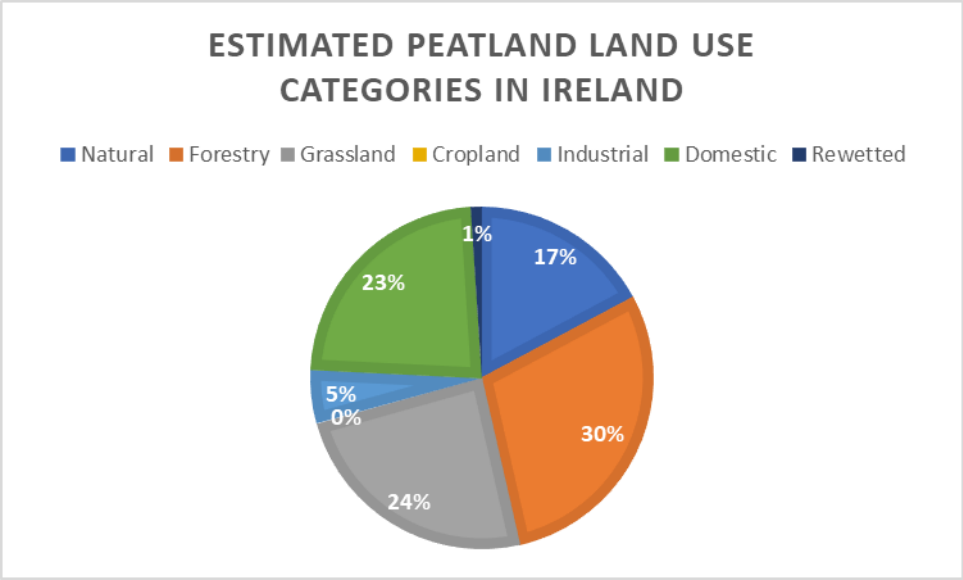

Figure 1. Estimated areas (ha) of peatland land use categories in Ireland. For grassland and domestic peat extraction area an average of the min and max range values was used (Source: Renou-Wilson, F., et al 2022)

Wetlands, including peatlands are a net source of emissions within the LULUCF sector, estimated at 1.7 Mt CO_2eq, in 2022[15]. Recent research[16] on peatland properties influencing GHG emissions and removals highlight key areas where urgent intervention is needed to secure carbon sinks and enhance sequestration. Carbon stocks held in natural and managed peatlands in Ireland are estimated at 2216 Mt of carbon, with around 42% in raised bogs, 42% in lowland blanket bogs and 15% in mountain blanket bogs. Natural and cutover peatlands together contain just under half of the national peatland carbon stock. National emissions are estimated at around 860 kt of carbon per year (or 3.15 Mt CO_2 / yr)[17]. Importantly, GHG emissions from domestic (residential) peat extraction are strongly underestimated, highlighting the need for enhanced engagement, regulation and enforcement[18]. Natural and cutover bogs hold just over half of all of the soil organic carbon stored in Irish peatlands, which represent two-thirds of the national soil carbon stock[17]. According to the EPA this has major implications for policy decisions and requires an urgent suite of actions to:
(1) ensure that these carbon stocks remain in the ground and
(2) promote the development of carbon sinks in all types of land use.

[15] EPA (2023) Ireland's Provisional Greenhouse Gas Emissions 1990-2022 https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/2023-EPA-Provisional-GHG-Report_Final_v3.pdf
[16] Renou-Wilson, F. et al (2022) Peatland Properties Influencing Greenhouse Gas Emissions and Removal https://www.epa.ie/publications/research/land-use-soils-and-transport/research-401-peatland-properties-influencing-greenhouse-gas-emissions-and-removal.php
[17] ibid
[18] Wilson, D., Müller, C., & Renou-Wilson, F. (2013). Carbon emissions and removals from Irish peatlands: present trends and future mitigation measures. *Irish Geography*, *46*(1-2), 1-23.

Table 1. Estimated areas (ha) of peatland land use categories in Ireland (Source: Renou-Wilson, F. et al 2022)

Land use category Area (ha)	Area (ha)	References
Natural	269,267	Wilson et al. (2013a)
Forestry	450,940	Duffy et al. (2020)
Agriculture		
Grassland	332,000 – 420,000	Duffy et al. (2020), Green (2020)
Cropland	1235	Donlan et al. (2016)
Peat extraction		
Industrial	80,000	Duffy et al. (2020)
Domestic	101,767 – 612,000	Malone and O'Connell (2009), Forest Service (2012)
Rewetted	21,000	Wilson et al. (2013a)

Existing national targets for drained organic soils

The Climate Change Advisory Councils (CCAC) have clearly highlighted that the rewetting of drained organic soils and peatland restoration must be a key government priority if Ireland is going to achieve a 51% reduction in net emissions in the LULUCF sector. This 51% reduction target still implies net emissions of 2.4Mt CO_2eq/yr in 2030[19] [20].

The EPA Land Use Review[21] concluded that only those modelled scenarios which included both ambitious rewetting of grasslands on organic soil (up to 90% or 302,000ha) and restoration of exploited peatlands (70,000ha) would achieve net-zero in the AFOLU sector by 2050. While the EPA highlighted that the restoration of degraded peatlands would have significant co-benefits for climate mitigation, biodiversity, water quality and water regulation an analysis of existing Irish policy indicated that **in many cases stated policy targets were not consistent with the levels of land use change required[22].** The implementation of GAEC 2 has an important role to play in advancing sustainable land use in Ireland by addressing problematic national policies.

Table 2. Existing policy targets for drained organic soils in Ireland

Source	Rewetting Target	% Target	Deadline
Ag Climatise Roadmap	Under the Ag Climatise Roadmap, there is a target to reduce the management intensity of at least 40,000 ha of peat based agricultural soils to reduce CO_2 emissions. Based on an assumed area of 337,000 ha, if the 40,000 ha	12%	2030

[19] CCAC (2021) Climate Change Advisory Council Carbon Budget Technical Report https://www.climatecouncil.ie/media/climatechangeadvisorycouncil/Technical%20report%20on%20carbon%20budgets%2025.10.2021.pdf

[20] CCAC (2023) Climate Change Advisory Council Annual Review 2023 https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR-2023-FINAL%20Compressed%20web.pdf

[21] EPA (2022) Land Use Review: Fluxes, Scenarios and Capacity Synthesis Report https://www.epa.ie/publications/research/epa-research-2030-reports/Evidence-Synthesis-Report-4.pdf

[22] ibid

	were to be fully rewetted, it would equate to a **12%** rewetting target by 2030.		
ClimAP 2023	At least 80,000 ha per annum of reduced management intensity of grasslands on drained organic soils (direct savings of 0.88 Mt CO_2eq in 2030). Based on an assumed area of 337,000ha this equates to a **24%** rewetting target by 2030.	24%	2030
CCAC Illustrative Scenario	337,000 ha of drained organic soils of which the 110,000 ha should be rewetted by 2030, which equates to a **33%** rewetting target by 2030.	33%	2030
EPA Land Use Review	Only scenarios which included ambitious organic soil rewetting of **90%** or 302,000 ha managed to achieve net-zero AFOLU sector by 2050.	90%	2050

The coherence of GAEC 2 with national land use & climate policies

According to Ireland's CSP the objective of the implementation of GAEC 2 will have an emphasis on measures to promote and maintain carbon sequestration in targeted areas with high carbon stocks:

> "*GAEC 2 is a new GAEC relating to protection of peatland and wetland…With effect from 2024 it will provide for measures to promote and maintain carbon sequestration in targeted areas with high carbon stocks. Due to the nature of Ireland's soils, it is anticipated that a significant portion of Irish agricultural land will fall under the definition of peatland/wetland that will be applicable to GAEC 2."*

GAEC 2 should be viewed as a foundational step towards improving land use management in Ireland and its implementation should be coherent with other relevant national policy objectives to improve the management of organic soils. In support of this Ireland's CSP links GAEC 2 directly to Ireland's Climate Action Plan 2021:

> *"Several GAEC standards will contribute directly to the Climate Action Plan 2021. GAEC 1 concerns the maintenance of permanent grassland in relation to agricultural area. The aim is to preserve existing carbon stock. GAEC 2 aims to protect carbon rich grasslands and peatlands; Ireland proposes to implement GAEC 2 from 2024. GAEC 9 on the protection of Environmentally Sensitive Permanent Grassland (ESPG) bans the ploughing or conversion of ESPG in designated areas. GAECs 1, 2 and 9 will all contribute to addressing Obj4.N2".*
>
> *"Obj4.N2: Improve the protection and management of existing carbon stores, including grasslands and peatlands"*

This implies that the level of ambition of measures that will be adopted by Ireland will go beyond simply prevention further damage to organic soils and will actually require measures that maintain active carbon sequestration:

1. **The definition, mapping and implementation of safeguards for organic soils under GAEC 2 should be ambitious and consistent with national and EU obligations to reduce land use emissions from farmed organic soils and peatlands.**

The coherence of GAEC 2 with other GAECs

The implementation of GAEC 2 should also be coherent with the implementation of the other GAECs. Across the new GAECs there is an emphasis on sustainably managing soils (Table 3). There is a strong emphasis on the protection of soils in GAECs 1, 2, 3, 5, 6, 7, 9; while GAECs 4 and 8 would also have knock on benefits for soils where buffer strips and non-productive areas or features are protected. Where organic soils are involved, sustainable management practices would also result in a reduction in GHG emissions, particularly CO_2. We will return to the need for coherence between GAECs when we provide recommendations on the implementation of GAEC 2.

2. **The implementation of GAEC 2 should be ambitious and consistent with the implementation of other GAECs designed to protect soil and reduce GHG emissions.**

Table 3: Description of the nine GAECs

GAEC	Description
1	Maintenance of permanent grassland
2	Protection of wetland and peatland
3	Ban on burning arable stubble, except for plant health reasons
4	Establishment of buffer strips along water courses
5	Tillage management, reducing the risk of soil degradation and erosion, including consideration of the slope gradient
6	Minimum soil cover to avoid bare soil in periods that are most sensitive
7	Crop rotation in arable land, except for crops growing under water
8	Minimum share of agricultural area devoted to non-productive areas or features.
9	Ban on converting or ploughing permanent grassland designated as environmentally-sensitive permanent grasslands in Natural 2000 sites

The Implementation of GAEC 2 in Ireland

Definition

As previously stated Ireland will implement GAEC 2 from 2024 onwards on the basis that time was required to define and map organic soils. The definition chosen for organic soils is a critical step as it will greatly influence the mapping, area and overall benefits of GAEC 2 for climate, water and biodiversity.

Organic soils and in particular peat soils have traditionally been defined based on the criteria of organic content and soil depth. The depth criteria being the result of previous generations focus on mapping peatlands to exploit them; peat soils shallower than 50 cm were not suitable for commercial extraction and peat shallower than 40 cm were considered suitable for ploughing[23]. Different countries around the world have adopted peat depths ranging from 5 to 50 cm (and more) to define and map organic soils/peatlands[24]. In Ireland there is significant diversity when it comes to

[23] IUCN (2023) Use of Peat Depth Criteria: Accounting for the Lost Peatlands https://www.iucn-uk-peatlandprogramme.org/sites/default/files/2023-06/Use%20of%20Peat%20Depth%20Criteria%20-%20Accounting%20for%20the%20Lost%20Peatlands_1.pdf

[24] UN (2022) Global Peatlands Assessment: The State of the World's Peatlands https://wedocs.unep.org/bitstream/handle/20.500.11822/41236/peatland_assessment_SPM.pdf?sequence=3#:~:text=Peatlands%20are%20more%20extensive%20than,every%20part%20of%20the%20world.

definitions. The EPA's seminal Bogland[25] report adopted a context dependent definition of peat soils of "*soil that contains peat over a depth of at least 45 cm on undrained land and 30 cm deep on drained land; the depth requirement does not apply in the event that the peat layer is directly over bedrock*;" however the EPA subsequently defined organic soils as having >20% SOC and depth >30 cm[26]; while Teagasc, use a depth >40 cm and sub-divide organic soils with <50% SOC into sandy, loamy and peaty organic soils based on the percentage of clay and sand content[27].

Over recent decades the awareness of the importance of shallow organic soils as a substantial carbon store has increased. As a result, there has been a widespread move away from minimum depth thresholds when defining organic soils such as peat and a move towards the use of percentage organic matter as a key indicator[23]. This approach is also better aligned with the definitions of other soil types which use percentage organic matter as a standard indictor, whereas a minimum depth threshold is not. **We would advise that a SOC threshold, not greater than 30% and ideally ≤20% should be used to define organic soils.**

According to the UN's Global Peatlands Assessment on the state of the world's peatlands if depth thresholds were used to define organic soils moving forward then the inclusion of climate concerns would in peatland / organic soil conservation, would rationally lead to more shallow thresholds (e.g. 10 cm), which would significantly increase the area of peatland regionally and globally[24]. Irish research has found significant soil carbon stocks in organic soils of 0-10cm[28] [29]. A shallower threshold under GAEC 2 would better account for the contribution of organic soils in Ireland to climate change.

3. **Given that the intention of GAEC 2 is to minimise carbon loss from organic soils a definition of organic soils that is based on traditional depth criteria of 30 – 50cm is no longer appropriate. Organic soils should be defined based on their percentage organic matter content rather than soil depth criteria.**

Mapping

The implementation of GAEC 2 requires that organic soils can be mapped at a fine spatial resolution. Given the important role of Irish peatlands within the national effort to reduce greenhouse gas emissions, there has been ongoing efforts in recent years to improve the understanding of their spatial extent and function[30]. According to Ireland CSP existing data sets to implement GAEC 2 have been considered, however they have limitations because of scale issues which means that they cannot be used to deliver a specific cartographic layer at parcel/farm level[8].

Estimations of the extent of peat soils in Ireland has varied across previous studies and the use of different data sets and map sources means that no current map is likely to represent the full spatial

[25] EPA (2011) BOGLAND: Sustainable Management of Peatlands in Ireland https://www.epa.ie/publications/research/land-use-soils-and-transport/STRIVE_75_web_SC.pdf
[26] Clancy, M. A., Sancho, A. J. J., Cummins, T., & Byrne, K. A. (2015). The need to disaggregate podzols and peaty podzols when assessing forest soil carbon stocks. Irish Forestry.
[27] Simo, I., Creamer, R.E., Reidy, B., Jahns, G., Massey, P., Hamilton, B., Hannam, J.A., McDonald, E., Sills, P. and Spaargaren, O. 2008. Soil Profile Handbook, Final Technical Report 10. EPA, Johnstown Castle, Co.Wexford.
[28] Jarmain, C., Cummins, T., Jovani-Sancho, A. J., Nairn, T., Premrov, A., Reidy, B., ... & Byrne, K. A. (2023). Soil organic carbon stocks by soil group for afforested soils in Ireland. Geoderma Regional, 32, e00615.
[29] Clancy, M. A., Sancho, A. J. J., Cummins, T., & Byrne, K. A. (2015). The need to disaggregate podzols and peaty podzols when assessing forest soil carbon stocks. Irish Forestry.
[30] Connolly, J., Holden, N. M., & Ward, S. M. (2007). Mapping peatlands in Ireland using a rule-based methodology and digital data. Soil Science Society of America Journal, 71(2), 492-499.

extent of peat soils in Ireland[31]. Work by Connolly et al. (2007)[32] compared a range of data sets to estimate the extent of peat soils in Ireland, and produced a Derived Irish Peat Map (DIPM). This approach provided the best-estimates of peat extent at the time by overlapping multiple sources of data. The DIPM was subsequently updated by Connolly & Holden (2009) and it was estimated that peat soil extent in Ireland covers approximately 1.5Mha or 20.6% of the country. This value is larger than previous estimates, mainly due to the inclusion of smaller areas of organic soil which had not been captured by previous studied. The RePEAT project has been funded by DAFM[33] to resurvey and map Irish peatlands to refine the assessment of organic soils and GHG Inventories. A key output of the project will be a further updated to the DIPM. The map will be available in late 2023 and should be used to implement GAEC 2 in 2024. The map identifies 24% of Ireland (1.7Mha) as being covered in peat with an overall 84% accuracy. This is a higher peatland cover and accuracy than previous maps due to the identification of additional shallower peat soils and through the use of an additional 20,000 validation points. The map is much more comprehensive than the Teagasc soil and subsoils map[34] currently used by DAFM and the EPA's new land cover map, which maps land cover rather than soils type[35]. A major advantage to the map is that it can be used to map shallower peat soils (e.g.≤10cm) to a high degree of accuracy, allowing Ireland to adopt an ambitious definition of organic soils.

4. **Ireland should use the updated Derived Irish Peat Map developed by the RePEAT project to implement GAEC 2.**
5. **Ireland should use the updated Derived Irish Peat Map to map peat soils ≤ 10cm.**

Land Parcel

Given that management at farm level will occur at field level it is important that land parcels which may contain more than one soil type are identified as either organic soils or not. Whatever threshold is used should have a strong scientific basis and it should be precautionary to ensure that as much organic soil as possible is subject to sustainable management. It has been suggested that a threshold of ≥ 60% organic soil should be used to define a land parcel under GAEC 2; however, this in our view is not precautionary. Whatever threshold is used it should ensure that small areas of organic soils such as the inter-drumlin peat deposits found around the border counties of Cavan and Monaghan are not excluded[31]. The department and the Commission should ensure that whatever threshold is used at land parcel level, that it does not result in the exclusion of ≥ 5% of the overall peat areas identified nationally by the Derived Irish Peat Map developed by the RePEAT project.

6. **A threshold of ≥50% could be used to identify a land parcel as having organic soil; however, the threshold should be revised downwards if it would result in the omission of extensive small areas of organic soils nationally (e.g. ≥ 5% of mapped organic soils).**

If a land parcel contains a peatland habitat then the whole land parcel should be subject to the requirements of GAEC 2 regardless of the percentage of the land parcel covered by the peatland

[31] Connolly, J., & Holden, N. M. (2009). Mapping peat soils in Ireland: updating the derived Irish peat map. Irish Geography, 42(3), 343-352.
[32] Connolly, J., Holden, N. M., & Ward, S. M. (2007). Mapping peatlands in Ireland using a rule-based methodology and digital data. Soil Science Society of America Journal, 71(2), 492-499.
[33] https://www.gov.ie/en/press-release/c00a0-ministers-mcconalogue-and-hackett-announce-two-projects-under-the-allocation-of-the-carbon-tax-fund/
[34] Fealy, R. M., Green, S., Loftus, M., Meehan, R., Radford, T., Cronin, C. and Bulfin, M. 2009.Teagasc EPA Soil and Subsoils Mapping Project-Final Report. Volume I. Teagasc. Dublin
[35] https://www.epa.ie/our-services/monitoring--assessment/assessment/mapping/national-land-cover-map/

habitat. This would be in line with the precautionary principle and would take into account the protected status of peatland habitats under the Habitats Directive and the conservation status of many peatland dependent species[36].

7. **If a land parcel contains a peatland habitat then the whole land parcel should be subject to the requirements of GAEC 2 regardless of the percentage of the land parcel covered by organic soil.**

Management

In order to align the implementation of GAEC 2 with national and EU obligations to reduce land use emissions from farmed organic soils and peatlands:

- Ireland needs ambitious national regulations to define minimum management requirements to protect organic soils from further deterioration. Where necessary this will require the introduction of licensing and publication of best practice guidelines for land owners on the management of organic soils.
- Existing national policies which are counterproductive to the aims of GAEC 2 should be reformed.
- Any measures should be monitored and evaluated to improve implementation over time.
- Non-compliance should result in proportionate, effective and dissuasive penalties.

While the objective of GAEC 2 is the protection of carbon-rich soils it must be recognised that in order to rehabilitate and restore peatlands rewetting will be necessary. Many Irish peatlands are drained and heavily modified / disturbed, and are deemed to be in Bad condition. Key pressures include historical overgrazing, ongoing grazing practices, ongoing drainage and burning, and increased recreation use, drainage and disturbance for peat extraction, both industrial and domestic extraction. Some peatlands can be restored to their original state but require active restoration measures while others have been altered irreversibly[37].

The implementation of GAEC 2 should be designed to be complementary to more ambitious rewetting measures, including both water table management and full rewetting[38].

8. **It is essential that farmers and communities are central in shaping and implementing land use change. Communities and landowners must be involved in decision making through early and sustained engagement. Wherever possible management interventions should look to deliver multiple environmental and social benefits and reward practitioners for the ecosystem services provided.**

16 Member States have delayed the full implementation of GAEC 2; five of those (BE-FL, DE, EL, NL and FI) opted for a two-step approach with some requirements already applying from 2023 while others will apply from 2024/2025 once mapping is complete. 19 Member States have already specified practices under GAEC 2 in their CAP Plans (Table 4). Ireland is one of just 9 Member States, who have postponed identifying management requirements[38]. Ireland can therefore benefit from an analysis of best practice management measures that have already been identified by other Member

[36] http://www.ipcc.ie/wp/wp-content/uploads/2022/11/The-IPCCs-Status-of-Peatland-Biodiversity-Poster.pdf
[37] INCASE Project: A tale of Two Peatland Papers https://www.incaseproject.com/post/a-tale-of-two-peatland-papers
[38] Green Restoration Ireland (2023) Moor Returns – A Community Peatland Code for Ireland: Part 1 – The Science https://greenrestorationireland.coop/moor-returns-a-community-peatland-code-for-ireland-part-1/

States.

Table 4: GAEC 2 - On farm practices for the protection of wetlands and peatlands[39]

Management Measure	Member States	No of CSPs
Ban/restrictions on drainage	AT, BE-FL, BE-W, BG, DE, EE, EL, LV, LT, LU, MT, NL, PT, RO, FI	15
Tillage restrictions/ ploughing ban	AT, BE-FL, BE-W, BG, DE, DK, EE, EL, IT, LV, LT, LU, MT, PT, RO, SI, FI, SE	18
Extraction/ burning of peat	AT, BE-FL, BG, EL, LT, PT, RO, SI, FI	9
other*	AT, BG, DE, DK, EL, LU, MT, NL, PT, RO, SI, FI, SE	13
not yet included	CZ, IE, ES, FR, HR, CY, HU, PL, SK	9
*** other practices include restrictions on fertilisation, or machinery use, or obligatory maintenance requirements to prevent overgrowth of the area, prohibiting a change in the water level.**		

Drainage

Drainage is one of the first steps involved in the extraction of peat and the intensification of land use on organic soils. Drainage results in the lowering of the water table within the soil, resulting in the oxidation of stored organic matter, a process which results in the production of CO_2, a potent green-house gas[40]. For every 10 cm reduction in the water table depth there will be a reduction in the net warming impact of emissions by at least 3 t CO2e ha-1 yr-1 , until WTDe is < 30 cm. Raising water levels above that level continues to have a net cooling impact until WTDe is < 10 cm[41]. Rewetting just 3% of agricultural land in the EU will save up to 25% of agricultural GHG emissions[42]. Raising the water table of drained peatlands in agricultural use can greatly reduce GHG emissions without necessarily halting their productive use[43]. Activities which drive or maintain a low water table within organic soils such as new drainage, renewal of deepening of drainage or extension of pumping capacity will result in significant GHG emissions and should therefore be addressed through GAEC 2.

It is no surprise that bans and restrictions on drainage are one of the most common categories of measures introduced by 15 Member States in their CSPs (Table 4). Ireland's CSP acknowledges that "*Intensive agriculture, **particularly drainage**, in these areas can lead to reduced organic stocks, which in turn contributes to climate change (emphasis added)*." It is important that both drainage and pumping capacity are addressed as maintaining an existing drainage network while increasing the pumping capacity will result in dehydration of the soil, resulting in an increase in GHG emissions.

9. **Taking the objective of GAEC 2 into account it is therefore necessary that minimum protection of organic soils should require:**
   a) **No new drainage of organic soils,**

[39] European Commission (2023) Approved 28 CAP Strategic Plans (2023-2027) Summary overview for 27 Member States Facts and figures https://agriculture.ec.europa.eu/system/files/2023-06/approved-28-cap-strategic-plans-2023-27.pdf
[40] Landry, J., & Rochefort, L. (2012). The drainage of peatlands: impacts and rewetting techniques. Peatland Ecology Research Group.
[41] Evans, C. D., Peacock, M., Baird, A. J., Artz, R. R. E., Burden, A., Callaghan, N., ... & Morrison, R. (2021). Overriding water table control on managed peatland greenhouse gas emissions. *Nature*, *593*(7860), 548-552.
[42] Position Paper: Preserve peatlands in post-2020 CAP https://www.nweurope.eu/projects/project-search/care-peat-carbon-loss-reduction-from-peatlands-an-integrated-approach/news/position-paper-preserve-peatlands-in-post-2020-cap/
[43] Evans, C. D., Peacock, M., Baird, A. J., Artz, R. R. E., Burden, A., Callaghan, N., ... & Morrison, R. (2021). Overriding water table control on managed peatland greenhouse gas emissions. Nature, 593(7860), 548-552.

b) **No renewal or deepening of drains,**
c) **No extension of pumping capacity in land management,**[44]

According to Ireland's Climate Change Advisory Council[45], in order to ensure coherence with respect to peatland rewetting and restoration policy, the Government should review existing legislation and regulations related to drainage works, including a review of the provisions of the Arterial Drainage Act (1945) and later amendments.

10. **We recommend that the government carry out a review of existing legislation and regulations related to drainage works, including a review of the provisions of the Arterial Drainage Act (1945) and later amendments.**

According to Ireland's CSP the objective of the implementation of GAEC 2 will have an emphasis on measures to promote and maintain carbon sequestration in organic soils. To go beyond simply protecting the storage capacity of peatlands and organic soils and to promote sequestration implies that drainage should not only be halted but reversed. To rehabilitate drained peatlands and restore their carbon sequestration capacity it will be necessary to incentivise land owners to rewet soils. Reversing past drainage is an important step in improving the management of water tables to reduce GHG emissions. For more information on the Environmental Pillar's position on rewetting please read our position paper - Supporting greater ambition for Ireland's peatlands in the Nature Restoration Law [46].

Tillage & Ploughing

Tillage restrictions and ploughing bans are the most popular measures under GAEC 2, having been adopted within the CSPs of 18 Member States. While across Europe the trend has been for tillage to replace permanent grasslands[50] this has not been the case in Ireland where dairy expansion is leading to a reduction in land under tillage[47]. EU policies that limit the reconversion of land back to tillage should be questioned given the need for more tillage and horticulture from a food security, diversification, biodiversity and climate perspective. Having said that while the overall land under cultivation for arable crops on drained organic soils in Ireland is very small the greenhouse gas emissions are significant enough to warrant protection and rewetting if possible[48] [49]. For this reason, we believe there is a strong case to treat tillage on organic soils differently to tillage on mineral soils.

11. **In the case of drained peatlands used as grasslands there should be a ban on conversion to cropland, as is the case in Germany's CSP.**
12. **As a minimum, any drained peatlands already used as cropland should not be ploughed deeper than 30cm.**

[44] Structure of the conditionality in the next CAP funding period: GAEC 2 "Adequate Protection of Wetlands and Peatlands" https://greifswaldmoor.de/files/dokumente/Infopapiere_Briefings/2020_Vorschlag%20zur%20Ausgestaltung%20GL%C3%96Z%202_GAP_GMC_DVL_.pdf
[45] CCAC (2023) Annual Review 2023 https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR-2023-FINAL%20Compressed%20web.pdf
[46] Environmental Pillar (2022) Supporting greater ambition for Ireland's peatlands in the Nature Restoration Law https://environmentalpillar.ie/wp-content/uploads/2022/12/Environmental-Pillar-2022-Supporting-greater-ambition-for-Irelands-Peatlands-in-the-EU-Nature-Restoration-Law-Proposal.pdf
[47] https://www.independent.ie/farming/tillage/tillage-area-in-retreat-as-nitrates-land-pressure-bites/a749305765.html
[48] Wilson, D., Blain, D., Couwenberg, J., Evans, C. D., Murdiyarso, D., Page, S., ... & Tuittila, E. S. (2016). Greenhouse gas emission factors associated with rewetting of organic soils.
[49] WaterLANDS (2022) Higher ambition for Peatlands in the EU Nature Restoration Law Proposal

13. **In Denmark no tillage is allowed on soils with >12% carbon within protected areas (in total 28,800 ha). The Irish authorities should give serious consideration to prioritising organic soils being used for tillage for rewetting.**

In croplands, practices to increase soil organic carbon by adding carbon-rich matter to soils (manure, compost, or crop residues) should be considered; and management options that reduce soil disturbance and carbon losses, such as conservation agriculture, reduced tillage or growing perennials should also be considered. All of these options will have trade-offs including increased N_2O emissions, problems with weed control, increased herbicide use or lower productivity per area over time[53]. As documented by BirdWatch Ireland the introduction of a green cover requirement under Article 21 of S.I. No. 393 of 2022 to comply with the Nitrates Action Programme; could have serious implications for farmland birds that are reliant on winter stubbles[50]. This was done without proper consultation, without adequate research into the implications for farmland birds and without any due consideration of pursuant legal implications. This sort of situation should be avoided when it comes to the implementation of GAEC 2. Any proposed changes should be assessed in a holistic way, there should be consultation with all stakeholder and legal compliance should be ensured.

The protection of semi-natural grasslands

Permanent grasslands cover 34% of the European Union's agricultural area[51]. The EU defined "*as land used to grow grasses or other herbaceous forage that has not been included in the crop rotation of the holding for a duration of five years or longer*[52]." GAEC 1 relates to the maintenance of permanent grassland based on a ratio of permanent grassland to agricultural area. The intention of GAEC 1 as described in Ireland CSP is to set limits on the conversion of permanent grassland to tillage in order to preserve the soil organic carbon sink held in permanent grasslands. This is based on the logic that permanent grasslands store larger amounts of carbon in their soil than croplands and the conversion of permanent grasslands to tillage therefore results in the loss of carbon from the soil which is released as CO_2[53]. It is therefore argued that protecting permanent grasslands from conversion to tillage is a positive measure from a climate perspective.

The reality is much more complex. Grasslands are grazed by ruminant livestock which produce methane (CH_4) and may be subject to varying degrees of nutrient application depending on the intensity of the agricultural system, which results in N_2O emissions. The overall climate impact of grazed grasslands relative to tillage will therefore depend on the balance between the ability of the soil to sequester and store carbon and the emissions resulting from stocking densities and management decisions such as fertiliser application[52] [54]. The net green-house gas balance of intensive livestock grazing systems with higher stocking densities and higher inputs are in general

[50] BirdWatch Ireland (2022) Position paper on the Nitrates Action Programme Green Cover Requirement and implications for farmland birds that use Winter Stubbles. https://birdwatchireland.ie/app/uploads/2023/08/BirdWatch-Ireland-position-paper-on-Green-Cover-requirement.pdf

[51] Schils, R. L., Bufe, C., Rhymer, C. M., Francksen, R. M., Klaus, V. H., Abdalla, M., ... & Price, J. P. N. (2022). Permanent grasslands in Europe: Land use change and intensification decrease their multifunctionality. Agriculture, Ecosystems & Environment, 330, 107891.

[52] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32004R0796

[53] Bengtsson, J., Bullock, J. M., Egoh, B., Everson, C., Everson, T., O'connor, T., ... & Lindborg, R. (2019). Grasslands—more important for ecosystem services than you might think. Ecosphere, 10(2), e02582.

[54] Garnett, T., Godde, C., Muller, A., Röös, E., Smith, P., De Boer, I. J. M., ... & Van Zanten, H. H. E. (2017). Grazed and confused?: ruminating on cattle, grazing systems, methane, nitrous oxide, the soil carbon sequestration question-and what it all means for greenhouse gas emissions. FCRN.

likely to be negative while in low-intensity grazing systems where stocking rates and inputs are low, the benefits of carbon accumulation in the soil are more likely to outweigh other emissions[52 53 55].

Over the last 60 years, the management of European grasslands has in general intensified with increasing stocking densities, higher nutrient inputs, higher cutting frequencies, modulated by drainage, irrigation, resowing and oversowing with species poor seed mixes, as well as weed control with herbicides. This has resulted in a negative impact on the role of European Grasslands from a climate perspective but also it has reduced the multifunctionality of grasslands negatively impacting on their ability to provide a range of ecosystem and cultural services[50]. Therefore, in the interests of protecting the climate mitigation potential of low intensity grassland it is key that semi-natural grassland are protected from intensification and that intensively managed grasslands are subject to measures that reduce reduced management intensity[50].

GAEC 8 bans the conversion or ploughing of permanent grassland designated as environmentally sensitive permanent grasslands in Natural 2000 sites. From an Irish perspective we believe that under GAEC 2 semi-natural grasslands on organic soils should be offered protection from intensification. When other ecosystem services such as biodiversity and the cultural services provided by semi-natural grasslands and High Nature Value farmland habitat mosaics are considered there is an overwhelming case for the protection and sustainable management of these habitats. That is not to say that other land use options such as scrub and native woodland regeneration, rewilding[56] and agroforestry would not also deliver benefits for climate, biodiversity and society but rather that the intensification of semi-natural grasslands, particularly those on organic soils would be overwhelmingly negative from the perspective of the objectives of GAEC 2.

14. **Semi-natural grasslands, such as those identified in the Irish Semi-Natural grassland survey[57], which are located on organic soils should be protected from intensification including drainage, ploughing and reseeding. This should also include a ban on conversion to tillage. Farmers should be supported through agri-environmental schemes to manage these grasslands sustainably delivering biodiversity, climate mitigation and food.**

Extensification of grassland management should be considered in tandem with policies to reduce the national herd and restore and reconnect grassland habitats and habitat mosaics. Extensification of grasslands in the interests of climate may require more proactive action than simply reducing stocking rates and reducing inputs and may require active ecological restoration including the reintroduction of native seed mixtures to restore diverse multifunctional grasslands and habitat mosaics[58]. Denmark for example has introduced a requirement under GAEC 2 for reduced allowance of nitrogen input on soils with >6% carbon (in total 171,000 ha).

15. **The extensification of grassland management and the ecological restoration of semi-natural grasslands and habitat mosaics should be incentivised by Irish policy in order to enhance the carbon sequestration capacity of Irish grasslands.**

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[55] Chang, J., Ciais, P., Gasser, T., Smith, P., Herrero, M., Havlík, P., ... & Zhu, D. (2021). Climate warming from managed grasslands cancels the cooling effect of carbon sinks in sparsely grazed and natural grasslands. Nature Communications, 12(1), 118.

[56] Navarro, L. M., & Pereira, H. M. (2015). Rewilding abandoned landscapes in Europe. In Rewilding European Landscapes (pp. 3-23). Cham: Springer International Publishing.

[57] 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 and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

[58] Schaub, S., Finger, R., Buchmann, N., Steiner, V., & Klaus, V. H. (2021). The costs of diversity: higher prices for more diverse grassland seed mixtures. Environmental Research Letters, 16(9), 094011.

16. **Ireland should consider a requirement for reduced allowance of nitrogen input on semi-natural grasslands on organic soils.**

Overgrazing

The overgrazing of peatlands and organic soils by sheep results in soil erosion, peat loss, nutrient enrichment landscape degradation and biodiversity loss[59]. Overgrazing causes an alteration in soil physical, chemical and biological properties, resulting in changes in vegetation cover, a degradation of soil and a loss of soil C stocks[60]. Overgrazing on peat can also result in more rapid surface water flow, eventually leading to bare peat and gullies[61]. In the interests of protecting organic soils it is important that the density of grazing animals is maintained at sustainable levels.

17. **The density of livestock and deer on blanket bog should be maintained at sustainable levels[62].**
18. **Blanket bog should not be grazed between the start of November and the end of February.**

Turf Cutting

Under Ireland's land eligibility criteria[63] land parcels that are solely used for turf or peat extraction/harvesting activities in the year of application are ineligible. Under GAEC 2 there should be a total ban on turf-cutting and peat extraction within farmed Natura 2000 sites.

19. **We recommend that a ban on turf-cutting / peat extraction within farmed Natura 2000 sites is introduced under GAEC 2.**

Burning

While intact peatlands are net carbon sinks, degraded peat resulting from unsustainable practices such as burning can switch peatlands to a carbon source, resulting in greenhouse gas emissions from burning but also a loss in carbon storage and sequestration capacity[64]. While restoration can return the ecosystem to a carbon sink, prevention of damaging fires is optimal for climate, biodiversity and for peatland communities. According to IUCN the overwhelming scientific evidence base points to burning on peatlands causing damage to key peatland species, peatland ecosystem health, and the sustainability of peatland soils[65]. The environmental impacts of even prescribed burning are far

[59] Douglas, C., Fernandez, F., Ryan, J., 2008. Peatland habitat conservation in Ireland. In: Farrell, C., Feehan, J. (Eds.), 13th International Peat Congress. Tullamore, Ireland.
[60] Catalan, J., Ninot, J. M., & Aniz, M. M. (2017). High mountain conservation in a changing world. Springer Nature.
[61] IUCN UK Commission of Inquiry on Peatlands. https://pearl.plymouth.ac.uk/bitstream/handle/10026.1/17516/IUCN%20UK%20Commission%20of%20Inquiry%20on%20Peatlands%20Full%20Report%20spv%20web.pdf?sequence=1
[62] Artz, R. R. E., Donnelly, D., Andersen, R., Mitchell, R., Chapman, S. J., Smith, J., ... & Cuthbert, A. (2014). Managing and restoring blanket bog to benefit biodiversity and carbon balance–a scoping study.
[63] DAFM (2023) A Guide to Land Eligibility https://assets.gov.ie/258670/53dd4506-4541-43b8-a738-a85b912e14ea.pdf
[64] WWF UK (2019) Carbon loss and economic impacts of a peatland wildfire https://www.wwf.org.uk/sites/default/files/2019-11/Carbon%20loss%20and%20economic%20impacts%20of%20a%20peatland%20wildfire%20in%20north-east%20Sutherland.pdf
[65] IUCN (2024) POSITION STATEMENT: Burning and Peatlands https://www.iucn-uk-peatlandprogramme.org/sites/default/files/2023-04/Position%20Statement%20-%20Burning%20and%20Peatlands%20V4%20-%20FINAL_1.pdf

reaching with negative impacts also proven on the ecology and hydrology of upland rivers[66]. While there is ongoing debate around the role of controlled burns in the management of Dry Heath, what appears clear is that the negative impacts of fires increase in line with their severity, frequency and scale. From a farming perspective Teagasc do not recommend burning as a tool to manage bracken (*Pteridium aquilinum*) or Gorse (*Ulex europaeus*), both of which proliferate after burning[67].

Ireland's CSP on GAEC 3 states: "*GAEC 3 bans the burning of arable stubble which maintains organic carbon and prevents the direct release of CO2to the atmosphere. Burning of crop stubble and crop residues such as straw, will be prohibited except where there is a plant health reason and prior authorisation has been granted by the Department of Agriculture, Food and the Marine*." In addition, "*besides causing air pollution, burning of straw leads to the loss of soil organic matter and essential nutrients, reduces microbial activities and leaves the land more vulnerable to soil erosion*." Rationally, if there is a ban on burning of arable stubble under GAEC 3 in order to maintain soil carbon and prevent the direct release of CO2 to the atmosphere it would not make sense that organic soils, including peatlands would be permitted to be burnt under GAEC 2.

Research has shown that burning can have a large impact on the floristic composition of both wet heath and blanket bog. It has been suggested in a UK context that that burning on blanket bog and wet heath should normally be avoided if favourable condition is to be achieved or maintained[68]. In Ireland Teagasc[69] only promote prescribed burning as part of a habitat management plan where there are no practical alternatives and only if carried out according to best practice. Teagasc state that only Dry Heath containing strong heather should ever be burnt where prescribed burning may benefit heather regeneration. **According to Teagasc, Blanket Bog, Wet Heath or upland grassland should not be burned.** "*On blanket bogs and wet heaths, burning alters habitats irrevocably, damaging bog vegetation such as sphagnum mosses and lichen habitat. On upland grassland burning favours aggressive species, decreasing the diversity of flora and loosing associated fauna biodiversity."*[68]

Based on the consensus that burning of vegetation on blanket bog is damaging to peatland formation and habitat condition, the UK government introduced new regulations in the The Heather and Grass etc. Burning (England) Regulations 2021[70], to prevent the burning of any specified vegetation on areas of deep peat (over 40cm depth) on a Site of Special Scientific Interest that is also a Special Area of Conservation or a Special Protection Area. The legislation does allow for burning, under strict licence, to manage wildfire risk where there is no practicable alternative, any burning must form part of a cohesive management plan that aims to return the land to a natural wet state; and when it is so restored, burning will become unnecessary.

20. Based on the available evidence there is an overwhelming case that no burning should take place on both active and degraded Blanket bog, Raised bog, Wet heath and on grasslands.

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[66] Brown, L. E., & Holden, J. (2020). Contextualizing UK moorland burning studies with geographical variables and sponsor identity. Journal of Applied Ecology, 57(11), 2121-2131.

[67] Teagasc (2017) Hill Sheep Conference 2017 https://www.teagasc.ie/media/website/publications/2017/Hill-Sheep-Conference-2017.pdf

[68] Stewart, G. B., Coles, C. F., & Pullin, A. S. (2004). Does Burning Degrade Blanket Bog? Systematic Review no. 1. Unpublished report, Centre for Evidence-Based Conservation https://environmentalevidence.org/wp-content/uploads/2014/06/SR1.pdf

[69] Teagasc response to a call for a complete ban on burning in the uplands https://www.teagasc.ie/news--events/daily/environment/teagasc-response-to-a-call-for-a-complete-ban-on-burning-in-the-uplands.php

[70] https://www.legislation.gov.uk/uksi/2021/158/contents/made

21. **There should be a requirement for no drainage, no burning and sustainable stocking densities on grazed Blanket Bog and Wet Heath.**

According to Teagasc – "*Uncontrolled wildfires are unequivocally devastating for all uplands*"[68]. Despite this prescribed controlled burns are extremely rare in Ireland with the vast majority of burnt areas being the result of unregulated and uncontrolled wildfires. Limited controlled burning is carried out by Coillte to create fire breaks around forestry plantation and by gun clubs to promote the regeneration of heather for Red Grouse (*Lagopus lagopus hibernicus*). In the past land eligibility on destocked upland habitat was a major driver of burning. However, under Ireland's updated land eligibility rules, land does not need to be burnt to be eligible, once there is an agriculture activity taking place on the parcel. The burning of lands according to DAFM "*should be an activity of last resort, having exhausted all other alternatives*."[62].

In Ireland there is a range of legislation that relates to the burning of vegetation; however, enforcement is poor and convictions are traditionally low. Under Section 40 of the Wildlife Act (1976) as amended by Section 46 of the Wildlife (Amendment) Act 2000, burning vegetation in uncultivated land from 01 March to 31 August is illegal. Despite the serious environmental damage and risks to life, livestock and property there is however no licensing system for controlled burning in Ireland[71]; there is only a code of best practice[72] and in the case of Natura lands, prior approval must be obtained through the Activities Requiring Consent (ARC) system.

For Dry heath where the benefits and risks of burning require further research and stakeholder buy-in there should at a minimum be a requirement for licensing, with the aim of eradicating uncontrolled burning. This licensing regime should build on existing requirements plus additional controls considering the extremely poor regulation of uncontrolled burning in Ireland.

22. **If burning is allowed on Dry Heath it should only be undertaken if it is subject to licensing.**
23. **A new licensing system should require that any burns are in line with best practice and are subject to prior approval and have spatial and temporal controls to ensure that deep burns do not cause damage to the soil.**

[71] Wicklow Uplands Council (2023) A Study to Identify Best Management of Upland Habitats in County Wicklow https://wicklowuplands.ie/wp-content/uploads/2017/08/Final-Report-April-2013-Low-Res.pdf
[72] Prescribed Burning Code of Practice – Ireland https://assets.gov.ie/125030/cd7b70f4-f52a-4664-9908-e52a20738e44.pdf