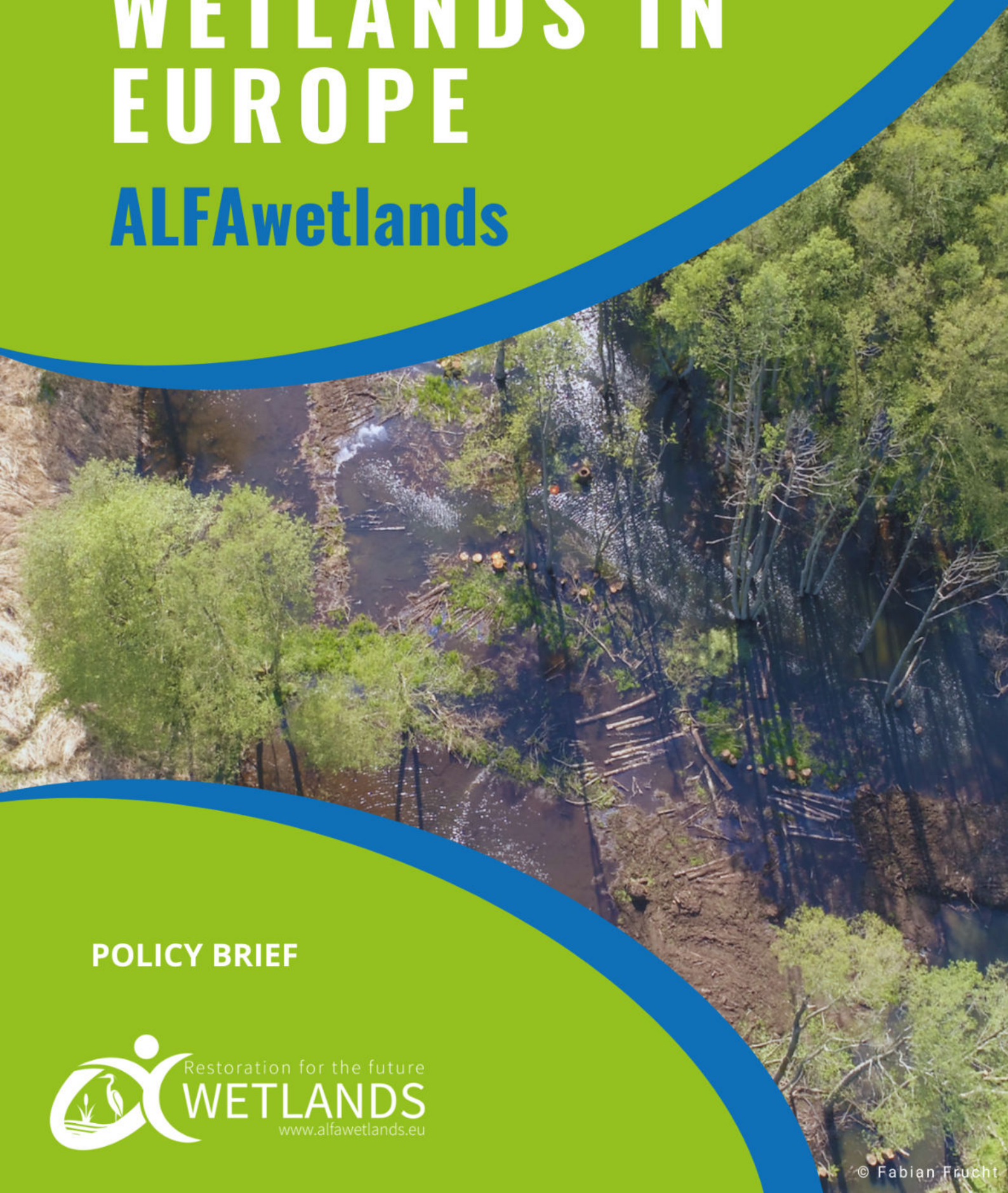
RESTORING WETLANDS IN EUROPE

ALFAwetlands



POLICY BRIEF

Restoration for the future
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The context

While Europe is increasingly facing the effects of climate change with more frequent droughts and floods, restoring wetlands is more crucial than ever. Nature is our best ally to mitigate and adapt the effects of climate change.

Various policies offer the potential for wetland restoration. Already adopted in 1971, the 'Ramsar Convention on Wetlands', sets as an intergovernmental treaty the foundation for national action and international cooperation for the conservation and wise use of wetlands and their resources. [1] The EU has committed to enhance and restore ecosystems in different policies, notably as part of the EU Green Deal adopted in 2019. The UN has dedi-cated our current decade to be the Decade for Ecosystem Restoration. [2, 3.]

Putting Europe's biodiversity on a path to recovery by 2030, is the aim of the EU Biodiversity Strategy, and its most important key element is the recently adopted Nature Restoration Law (NRL). This law is the first of its kind, setting legally binding targets to restore degraded ecosystems in Member States of the European Union. [4]

Policies offer unprecedented potential for EU large-scale restoration of wetlands

To implement the EU Green Deal, the EU Biodiversity Strategy has been adopted with the aim of protecting and enhancing biodiversity by proposing clear commitments and actions. Restoring wetlands plays a prominent role as a nature-based solution to be further deployed and invested in.

For its implementation, the NRL [5] is the first EU law focused on the restoration of ecosystems. The law includes targets for restoring ecosystems based on existing regulations and additional specific ecosystems (Chapter 2). Restoration targets will help to safeguard biodiversity, lock-in carbon, improve resilience to droughts and floods and purify waters by reviving millions of hectares of wetlands.

This ALFAwetlands policy briefing aims to highlight the potential for the restoration of wetlands and peatlands in the Nature Restoration Law and showcase specific initiatives across Europe.

Why do wetlands & peatlands matter?

In times of a rapidly changing climate with more severe droughts and heat waves, mankind benefits from essential regulating ecosystem services provided by natural and rewetted wetlands, such as climate and water regulation. Their catchments provide high-quality drinking water and wetlands also play a role in flood-water regulation, especially in lowland or coastal settings. [6] Beyond that, natural wetlands harbour unique biodiversity. [7] Peatlands, a special wetland type, are among the most efficient carbon-storing ecosystems. Covering only around 3-4 % of the planet's land surface, they contain up to one-third of the world's soil carbon – twice the amount of carbon to be found in the world's forest biomass. [8]

Drained and natural peatlands (see Figure 1) [9], in the whole of Europe cover 593,727 km^2 – This is larger than the land area of France. [10] Over the past centuries Europe has drained half of its peatlands for inten-sified land use. This development results in Europe being the second largest emitter of greenhouse gases from drained peat soils (230 Mt CO_2 eq/year, equating to approximately 7% of EU-27 total greenhouse gas emissions (3,601 Mt CO_2 eq/year in 2019). [11]

Why does the Nature Restoration Law matter to wetlands and peatlands?

The NRL recognizes wetlands as ecosystems where conservation, restoration and sustainable use needs to be ensured (recital 5). This aligns well with the goal of the ALFAwetlands project to maximise climate change mitigation & biodiversity of wetlands.

A great variety of wetland types, now to be restored as part of the NRL, can be found in the ALFAwetlands project regions. In Living Labs, platforms of interdisciplinary research, stakeholders from different backgrounds collaborate to conduct ecological and social science as well as modelling to produce scientific evidence on the impacts of managing hydrology, tree stands and soils.

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NRL Article 4.1 includes the following restoration targets for 28 wetland habitat types listed in the EU Habitats Directive such as wet grasslands, bogs and fens, wet forests, coastal wetlands, etc (Annex I):

Member States shall put in place restoration measures on at least 30 % of the total area of all habitat types listed in Annex I by 2030, on at least 60 % by 2040 and 90 % by 2050 of the area of each group of habitat types listed in Annex I. Until 2030, priority should be given to areas that are located within Natura 2000 sites.

Within the NRL, the importance of peatlands, especially for biodiversity and climate protection (recital 59 NRL) is recognized. The adopted NRL includes peatlands degraded by different forms of land use (e.g. agriculture, forestry, peat extraction). This broad approach promotes greater equilibrium among EU Member States, recognizing diverse land use practices that might be central in certain peatland-rich EU countries.

NRL Article 11.4 endorses the restoration of organic soils in agricultural use constituting drained peatlands. Restoration measures shall be put in place on at least:

- **30%** of drained peatlands by **2030**, of which at least a quarter shall be rewetted;
- **40%** of drained peatlands by **2040**, of which at least a third shall be rewetted;
- **50%** of such areas by **2050**, of which at least a third shall be rewetted.

The restoration goals for agriculturally used peatlands in the EU Member States according to NRL (Art. 11.4) are visualized in figure 1. The NRL describes various measures to reach these goals (Annex VII) spanning from converting cropland to permanent grassland to rewetting for paludicultural use or the establishment of peat-forming vegetation (ecological restoration, see box) (recital 59, NRL). The sustainable wet peatland use after restoration, will minimize peat decomposition, CO2 emissions and soil subsidence.

Globally agreed climate targets cannot be achieved without rewetting of peatlands. [12,13] Especially rewetting of temperate and boreal agricultural peat soils like in EU will have rapid climate benefits. [14] Therefore, Article 11.4 indicates that Member States should incentivise rewetting as restoration measure to make it an attractive voluntary option for landowners and land users Additionally, Member States are encouraged to boost access to training and raise awareness on the benefits of restoring peatlands.

The National Nature Restoration Plans

Member States need to propose National Nature Restoration Plans (NRPs) determining (priority) areas to restore and engage in dialogues with local stakeholders to implement restoration. Each Member State shall submit a draft of the national restoration plan referred to in Art.14 and 15 NRL to the Commission by 1 September 2026. Despite flexibility, the main objective of the law is to "ensure the recovery of biodiverse and resilient nature across the Union territory". This will oblige Member States to put emphasis and resources on restoring wetlands ecosystems according to NRL targets.
Scientific data and maps produced in the ALFAwetlands project could be made available to policy makers to support the preparation of NRPs.

About the ALFAwetlands Project

ALFAwetlands aims to enhance the geospatial knowledge of wetlands, assess restoration pathways through co-creation, and provide sustainability indicators to maximize climate mitigation, biodiversity and other ecosystem benefits, including social justice.
The project includes 9 Living Labs with 33 wetland sites across Europe, fostering collaboration on ecological, economic, and social issues. It seeks to improve restoration practices that can be scaled to other areas. ALFAwetlands is coordinated by the Natural Resources Institute Finland (Luke) and involves experts from 15 organizations across 10 EU countries.

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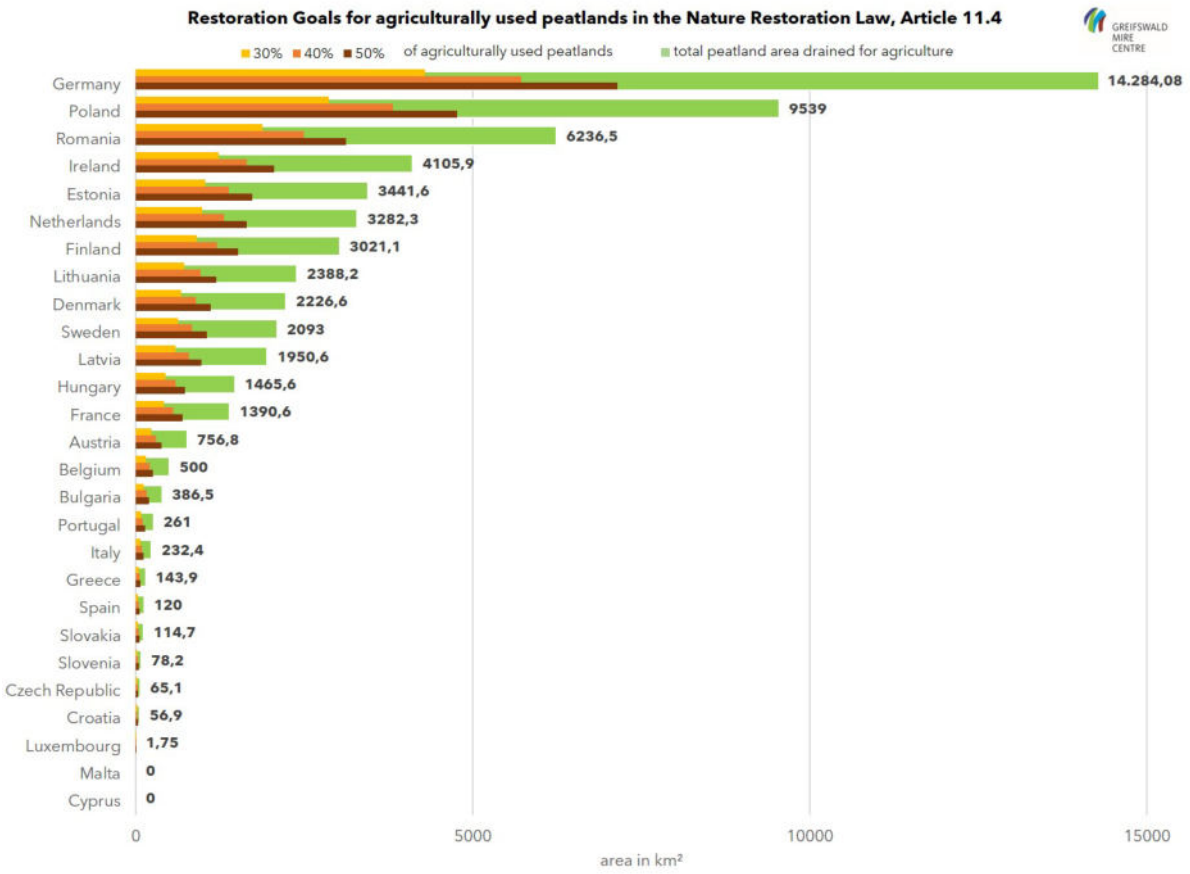

Figure 1: Drained peatlands in agricultural use of EU Member States to be restored according to Article 11.4 NRL, compared with the total area of drained peatlands in agricultural use (GPD 2024)

Know the difference

Wetlands are "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". [15]

Peatlands are ecosystems in which under permanently water-saturated, oxygen-poor soil conditions dead plants do not completely decay and with a naturally accumulated peat layer at the surface. [16,17]

Peat is semi-decomposed accumulated plant material consisting of at least 30% dead organic material. [17]

Mires are natural peatlands where peat is accumulating. [16]

Paludiculture is the productive land use of wet and rewetted peatlands that preserves the peat soil and thereby minimizes CO_2 emissions and subsidence. [18]

Ecological Restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. It aims to move a degraded ecosystem to a trajectory of recovery that allows adaptation to local and global changes, as well as persistence and evolution of its component species. [19]

Rewetting is the deliberate action of raising the water table on drained soils to re-establish water saturated conditions, e.g. by blocking drainage ditches or disabling pumping facilities. [20]

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COUNTRY FACT SHEETS

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Country Fact Sheet Austria //
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Distribution and condition of peatlands

According to the Austrian Peatland Strategy 2030+, the extent of peatland ecosystems in Austria is estimated to be around 30,000 hectares and that of peat soils at least 50,000 hectares. [1] The western parts of the country, which are rich in precipitation, have an above-average distribution of peatlands, while in the east and south-east, with a few exceptions and apart from the extensive reed belts of Lake Neusiedl, peatlands are less abundant. The distribution of peatlands in Austria also follows an altitudinal gradient: peatlands occur in climatically more favourable lowlands and in submontane and montane altitudes in the northern foothills of the Alps.

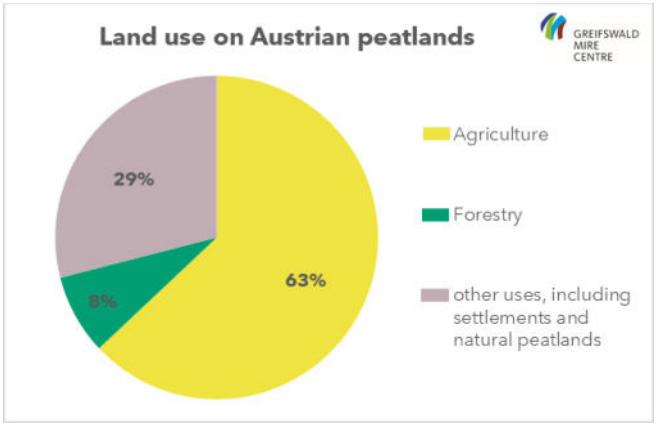

Figure 1: Map of peatland use in Austria, showing proportions of different land use categories. Data: Global Peatland Database 2022, © Greifswald Mire Centre

A recent study by Paternoster et al. (2021) [2] states that over 90 % of these peatlands are in need of restoration. Over the past centuries, peatlands have been under intense land-use pressure - the drainage of peatlands for agricultural and forestry purposes is the greatest cause of loss. Today, more than two thirds of Austria's peatlands are under land use: 63 % are used for agriculture and 8 % for forestry (see fig. 1). The remaining 29 % constitute other uses like settlements and –to small extend- natural peatlands.

Political Agenda to restore Austrian Peatlands

Adopted in 2022, the **Austrian 2030+ peatland strategy** [3] is part of Austria's obligations under the Ramsar Convention, which mandates the protection and responsible use of wetlands. To set the peatland strategy in motion, is the aim of the EU-funded LIFE project AMooRe. With a funding budget of 44 million euros over 10 years it gives a unique opportunity to protect, restore, and monitor the country's peatlands. An extraordinary committee consisting of all nine Austrian federal states and the two responsible ministries, the Federal Ministry of Agriculture, Forestry, Regions and Water Management and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, has joined forces for this project to promote peatland protection in Austria. [4]

Peatlands are not only the responsibility of the Austrian federal states, but also affect water management, agriculture and forestry, which in turn play an important role in climate policies. Therefore, this topic is considered in an integrative and interdisciplinary manner in politics. The peatland strategy is preceded already by 10 different national programmes and strategies in which peatlands and organic soils are considered. At the same time, peatlands are not yet included in several strategies, including the national energy and climate strategy. [1] A selection of strategies including peatlands will be explained in more detail here.

The **National CAP Strategic Plan 2023-27** calls under GAEC 2 for protection for designated wetlands and organic soils under agricultural use via conditionality, i.e. compliance with minimum standards. In the current CAP period, paludicultures are eligible for funding as an agricultural activity only as permanent grassland, in particular litter meadows. These are extensive, low-yielding grassland that is mown once a year and whose biomass can generally only be used for livestock bedding. [5]

The **EU Soil Protection Strategy** for 2030 aims to limit the drainage of wetlands and organic soils and restore drained and managed peatlands to increase carbon stocks and minimise flood and drought risks. [6]

The **Austrian Strategy for Adaptation to Climate Change** emphasises the protection of wetland habitats, their ecosystem services and biodiversity. One specific field of action is to ensure sufficient water quality and quantity under climate change and to increase water storage and retention capacity in the landscape. [7]

Looking at the **Nature Restoration Law** and the obligations of Austria to restore peatlands, clear area targets set out in Article 11.4 can be derived from the total area of organic soils in agricultural use. Based on the data from the Global Peatland Database, these organic soils in agricultural use cover 75,680 ha in Austria, from which the following obligations can be calculated:

- 22,704 ha of peatland should be restored, and 5,676 ha rewetted by 2030,
- 30,272 ha of peatland should be restored, and 10,091 ha rewetted by 2040 and
- by 2050, 37,840 ha of peatlands should be restored, and 12,613 ha rewetted.

Fig. 2 shows a schematic visualisation of the extent to which agriculturally used organic soils need to be restored or rewetted.

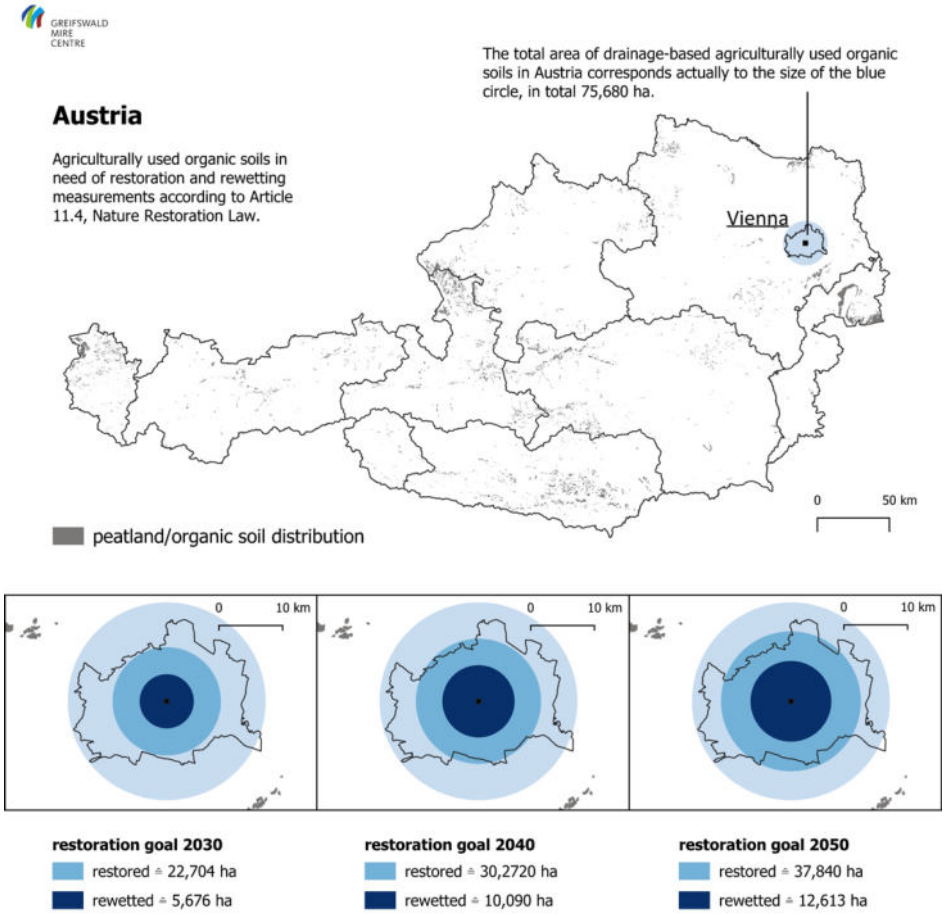

Figure 2: Distribution of peatlands in Austria and schematic illustration of the size of peatland area affected by NRL goals in Austria, compared to the size of Vienna (own compilation, based on Global Peatland Database, September 2024)

Case example from the ALFAwetlands Living Lab: Lake Fertő, Hungary & Neusiedler See- Seewinkel National Park, Austria

Located directly at the Austrian-Hungarian border, the westernmost steppe lake in Europe can be found, Lake Neusiedl. The vast reed belt surrounding the shallow endorheic lake (around 180 km² in total, 100 km² are located on the Austrian side), represents the second largest contiguous reed belt in Europe and provides a habitat especially for invertebrates, amphibians and birds. [8] One third of the reed belt belongs to the Austrian National Park, where no human activities take place in accordance with the wilderness concept. For the remaining parts of the reed belt, it is according to the action plan of the federal state Burgenland foreseen to implement conservation- compatible reed harvesting and management methods for sustainable reed use in collaboration with local reed farmers and landowners. [9] This form of paludiculture already has a long history in the region.

In the recent years, the death of old reed stands ("reed dieback") was observed. Its reasons are likely manifold: less pronounced water fluctuations, aging of reed stocks, damages of rhizomes from harvesting, climate change (e.g. warm winters). The reed mortality is likely to have contributed to the massive population declines of many reed bird species. [10] Extreme dry periods in 2020-22 caused the drying out of large parts of the reed belt. This also made it highly flammable and led to reed fires.

The increasingly drastic problem of dieback of old reed stands interlinked with droughts and wildfires was addressed in research projects. After six years of research and monitoring Nemeth et al. (2022) concluded that to regenerate the reed population and secure habitats not only reed mowing but also burning must be considered as a management measure. [11]

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(3) Austrian 2030+ peatland strategy

(4) LIFE AMooRe

(5) CAP Austria

(6) EU Soil Protection Strategy

(7) Austrian Strategy for Adaptation to Climate Change

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Country Fact Sheet Belgium // ALFAwetlands Policy Brief

Distribution and condition of peatlands

Belgium's peatlands are estimated to cover approximately 779 km², this equates to about 2,5 % of the land surface of Belgium. [1] These peatlands are predominantly located in the Ardennes region, where climate conditions, such as higher rainfall and lower temperatures, favour peat formation. The High Fens (located in the Ardennes) region has one of the oldest natural reserves in Belgium and contains the country's largest peatlands which covers an area of about 4,500 hectares. Other smaller peatlands are scattered across Belgium.

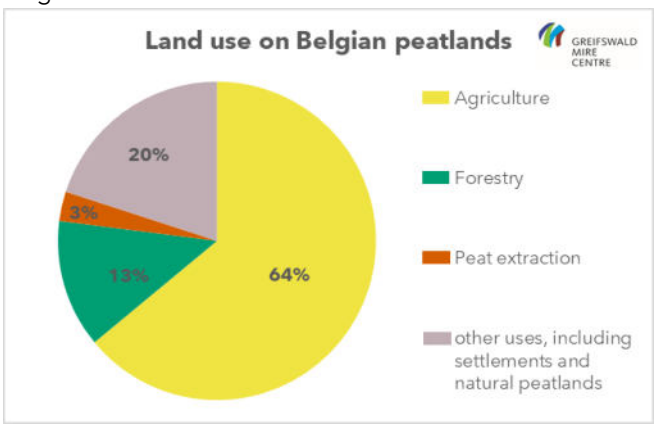

Figure 1: Map of peatland use in Belgium, showing proportions of different land use categories. Data: Global Peatland Database 2022, © Greifswald Mire Centre

Historically, Belgium's peatlands have faced intense land-use pressures, with the most significant cause of degradation being the drainage for agricultural and forestry purposes. Today, 80 % of Belgian peatlands are under land use: 64 % are used for agriculture, 13 % for forestry and 3 % for peat extraction (see fig. 1). The remaining 20 % constitute other uses like settlements and – to small extend – natural peatlands.

Political Agenda to restore Belgian Peatlands [2]

Belgium's commitment to peatland restoration aligns with its obligations under the Ramsar Convention and the EU Biodiversity Strategy for 2030, which emphasizes the protection, restoration, and sustainable management of wetlands. The Habitats Directive Article 17 and Birds Directive Article 12 report, published in 2007, revealed the unfavourable conservation status in Belgium of many habitats and species listed in these directives. The Flemish and Walloon regions drafted prioritised action frameworks (PAFs) for the Natura 2000 network, to help achieve favourable conservation status by 2050 for all habitats and species. In this Belgian Natura 2000 network bogs, transition mires, fens, vegetation on peat soils and petrifying springs with tufa formation are included.

Belgium is the only country with **two CAP Strategic Plans**: In Wallonia, GAEC (good agricultural and environmental condition of land) 2 protects wetlands and peatlands through prohibitions on ploughing and drainage, and modification of the soil relief (including embankment). [3] In Flanders, GAEC 2 stipulates that grasslands located in wetlands and peatlands must not be converted, ploughed or drained. Additionally, burning of vegetation and peat extraction are prohibited in these areas. Both plans are implemented since 2023 and will be valid until 2027. [4]

The **Flemish Energy and Climate Plan** (VEKP) [5] is the basis for Flemish energy and climate policy for the period 2021-2030. The plan includes achieving the LULUCF target, which for Belgium means achieve a net carbon stock of 320 kt CO_2 equivalents by 2030 through adapted land use and management. Good protection of peatlands is essential, as further loss of the remaining peatlands threatens the release of stored greenhouse gases. The Flemish Climate Policy Plan[6] sets ambitious goals, including restoring 20,000 hectares of wet nature or wetlands by 2030. To ensure the strict protection of peat soils, Flanders is currently conducting a peatland mapping. A policy framework is also being developed to enhance the protection and successful restoration of peatland areas.

The **Wallonia Climate Plan** (PACE 2030) does not specifically address wetlands or peatlands. However, it highlights the importance of preserving and maintaining existing agricultural and forest soils for their potential as carbon sinks. Particular emphasis is placed on the protection of permanent grassland, recognizing its role in carbon sequestration. [7]

Looking at the **Nature Restoration Law** and the obligations of Belgium to restore peatlands, clear area targets set out in

Article 11.4 can be derived from the total area of organic soils in agricultural use. Based on the data from the Global Peatland Database, organic soils in agricultural use cover 50,000 ha in Belgium, from which the following obligations can be calculated:

- 15,000 ha of peatland should be restored, and 3,750 ha rewetted by 2030,
- 20,000 ha of peatland should be restored, and 6,666 ha rewetted by 2040 and
- 25,000 ha of peatlands should be restored, and 8,333 ha rewetted by 2050.

Fig. 2 shows a schematic visualisation of the extent to which agriculturally used organic soils need to be restored or rewetted according to Article 11.4 of the Nature Restoration Law.

Case example from the ALFAwetlands Living Lab: Valley of the Zwarte Beek, Province of Limburg, Flanders, Belgium

The current wetland area in the Flemish region is only 5 % of the total surface area. Moreover, they suffer from eutrophication, pollution, and disrupted hydrological regimes. [8] Most peatlands in Flanders were exploited in the Middle Ages. The remaining 6,000 ha of peatlands are highly fragmented and are likely in a degraded, mineralising state. [9]

The Valley van de Zwarte Beek is a peat valley ecosystem located in the province of Limburg, in the northeastern part of Belgium. The valley stretches over a length of 30 km and consists primarily of fen areas. With a protected area of 1,100 ha, it is one of the larger nature reserves in Flanders. Furthermore, the valley is the largest peat area in Flanders, with peat thicknesses exceeding 1 meter in an 800-ha area. [10]

The Zwarte Beek is a biodiversity hotspot that was saved by local nature conservationists from development projects 50 years ago. Since then, it has grown to one of the most beautiful and vast natural areas of Flanders.

Significant challenges in the valley include intensive drainage and eutrophication. Fertilization in the infiltration area of the Zwarte Beek leads to the nutrient enrichment of groundwater and floodings with enriched river water. In the middle section of the valley, several enclaves with agriculture and drainage form a bottleneck, as do intensive river dredging. The key restoration factor is restoring a hydrologically intact river valley system from the source to the middle section. A natural hydrological regime and good river water quality are the main targets. [11]

Through various EU-funded projects, such as Interreg **Nord-West Europe Care-Peat, Interreg Flanders-Netherlands ADMIRE,** and **LIFE Multi-Peat**, a broad partnership has been working to conserve, restore, and manage the valley. A 250-hectare part of the valley has already been restored.[12]

In 2020, the project implementation plan "Valley" was approved with the aim of restoring a 674-ha zone hydrologically and ecologically. Important measures being taken include restoring river morphology, acquiring land, eliminating drainage by filling ditches and raising riverbeds, and restoring open valley landscapes. The Flemish govern-ment, province of Limburg, local authorities, and the nature conservation association Natuurpunt are working in a strong partnership for this project. The nature management works are financed with Flemish **Blue Deal** and European **NextGenerationEU** funds. [13]

Within the ALFAwetlands project, monitoring of the upstream area will be maintained. Measurements include greenhouse gases, soil samples, biomass, and groundwater levels/ samples. Local communities are involved through guided nature walks and educational events such as study days.

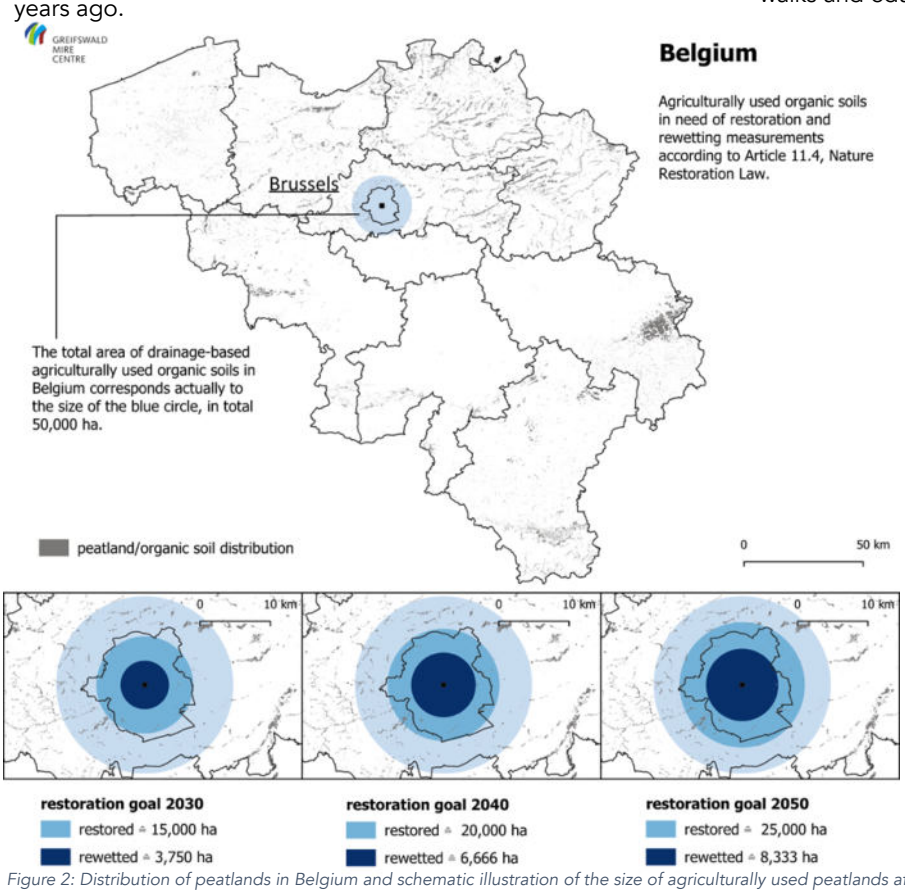

Figure 2: Distribution of peatlands in Belgium and schematic illustration of the size of agriculturally used peatlands affected by NRL goals in Belgium, compared to the size of Brussels (own compilation, based on Global Peatland Database, September 2024)

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(2) Following the Belgian State reforms initiated in the 1980s, the three regions – Flemish, Walloon and Brussels Metropolitan – have become almost exclusively competent for environmental matters. Consequently, each region has developed its own legislation and initiatives concerning wetlands.

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(4) Belgium's (Flanders) CAP Strategic Plan

(5) Vlaams Energie- en Klimaatplan 2021 - 2030

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Restoring wetlands in Europe

Country Fact Sheet Germany //
ALFAwetlands Policy Brief

Distribution and condition of peatlands

Organic soils (peat soils and other organic soils) cover a total area of 18.250 km², this equates to about 5 % of the land surface of Germany. [1] Peatlands are mainly found in the Northern German Plain and in the foothills of the Alps. Five peatland-rich federal states alone account for 87 % of Germany's organic soils: The northern federal states of Brandenburg, Mecklenburg-Western Pomerania, Lower Saxony and Schleswig-Holstein, as well as in Bavaria in the south.

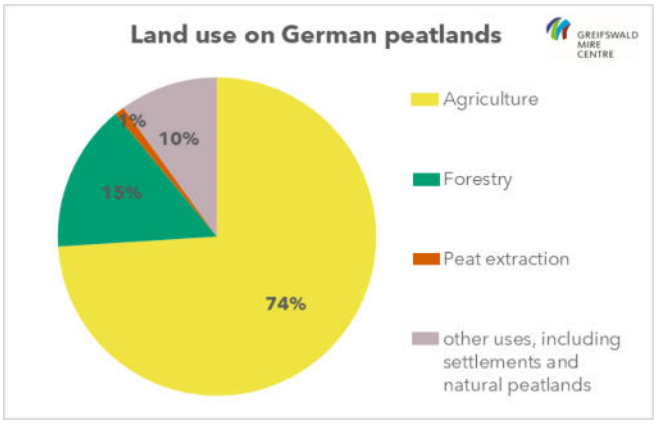

Figure 1: Map of peatland use in Germany, showing proportions of different land use categories. Data: Global Peatland Database 2022, © Greifswald Mire Centre

Historically, peatlands in Germany have faced intense land-use pressure, with the most significant cause of degradation being the drainage for agricultural and forestry purposes. Today, over 90 % of Germany's peatlands are drained and utilized for different land use purposes: 74 % are used for agriculture and 15 % for forestry and 1 % for peat extraction (see graph in Fig. 6). The remaining 10 % constitute other uses like settlements and –to small extend- natural peatlands.[2, 3]

Political Agenda to restore German Peatlands

According to the **National Climate Protection Law**, [4] climate neutrality in Germany has to be reached until 2045. With the update of the law in 2021, specific quantified goals for the LULUCF sector were set. According to this, the sector needs to form a net carbon sink of -40 Mio t CO2-eq. until 2045. Peatlands play a crucial role in achieving this goal as the carbon stock in forests of Germany will decrease during the coming decades for different reasons (e.g. reduced carbon uptake of aged forests and drought damage). [5]

A **Federal-state Target Agreement** for climate protection through peat soil protection was published in 2021 which includes specific goals for organic soils in Germany: Emissions of 5 Mio. t CO2-eq. annually from peatlands shall be reduced until 2030. [6] In 2022, a **National Peatland Protection Strategy** [7] was adopted and the **Federal Action Plan on Nature-based Solutions for Climate and Biodiversity** (2023-2026, 4 bln. EUR) [8] was launched. To achieve the agreed emission reduction goal, the action plan includes, among others, measures for financing peatland rewetting projects, for acceleration of administrative procedures for their official permits, and for development of new biomass utilisation options in paludiculture. Another **strategy** exists **for the reduction of peat utilisation**. [9] It aims at the reduction of peat use for growing media and soil conditioner and, where feasible, to avoid the use of peat altogether. The halt of peat in the hobby sector is to be achieved by 2026, in commercial horticulture peat shall be replaced by substitutes largely by 2030.

Looking at the **Nature Restoration Law** and the obligations of Germany to restore peatlands, clear area targets according to Article 11.4 can be derived from the total area of organic soils in agricultural use. Based on the data from the Thünen Institute. [10] these organic soils in agricultural use cover 1,428,408 ha in Germany, resulting in the following obligations for Germany:

- 428,522 ha of peatland to be restored and 107,130 ha rewetted by 2030,
- 571,363 ha of peatland to be restored and 190,454 ha rewetted by 2040 and
- 714,204 ha of peatlands to be restored and 238,068 ha rewetted by 2050.

Fig. 2 shows a schematic visualisation of the extent to which agriculturally used organic soils need to be restored or rewetted.

Case example from the ALFAwetlands Living Labs: Upper Peene Valley, Mecklenburg Western-Pomerania, Germany

The Upper Peene Valley is located in north-eastern Germany, right in the centre of the federal state Mecklenburg Western-Pomerania. This valley is quite unique as it contains one of the largest contiguous fen areas in Central Europe with a length of 100 km, from its source in the Living Lab area to the estuary in the Szczecin Lagoon. 15.000 ha of peatlands, more precisely fen complexes are to be found in the upper part of the valley.

Two thirds of these peatlands are agriculturally used as meadows and grasslands and for that purpose drained by a complex system of drainage ditches. This drainage-based agriculture is is subsidised and funded by EU payments under the Common Agricultural Policy and is associated with immense climate damage: Research revealed on average a yearly climate impact of 21.7 t CO_2 eq./ha and a subsidence rate of 1-2.5 cm peat each year of the drained peatlands in the region.[11]

For land users it is currently challenging to shift to a climate friendly, wet use (paludiculture) as it lacks governmental and financial support on the one hand and on the other hand often consensus with neighbouring land users or owners needed due to hydrological connection and impacts in case of rewetting. Nevertheless, the region already holds examples of wet use and paludiculture, like a typha cultivation site, established in a research project [12], and rewetted meadows, on which the biomass is currently being harvested for production of paper and packaging materials.

One approach to tackle the described challenges and to enhance peatland rewetting and paludiculture in the region, is bringing actors and stakeholders together within various formats to create trust and develop a common problem understanding and develop strategies. Within the ALFAwetlands project, the co-creative approach of social-ecological transformation, in other words, learning and developing solutions together with all those affected, is fostered. Within a workshop series, scenarios for peatland sites and project ideas are being developed. An important and already proven method, bringing people together to walk and talk, is the so-called "Landscape Walk". [13]

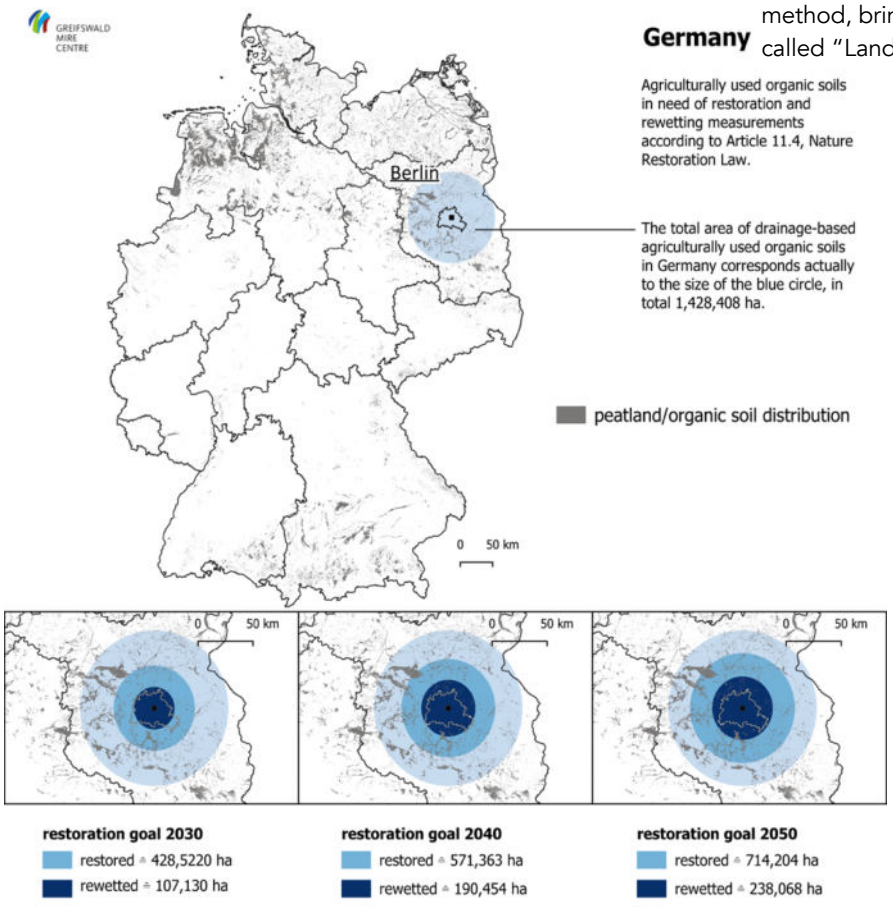

Figure 2: Distribution of peatlands in Germany and a schematic illustration of the size of peatland area affected by NRL goals in Germany, compared to the size of Berlin (own compilation GMC, based on Global Peatland Database September 2024)

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