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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.

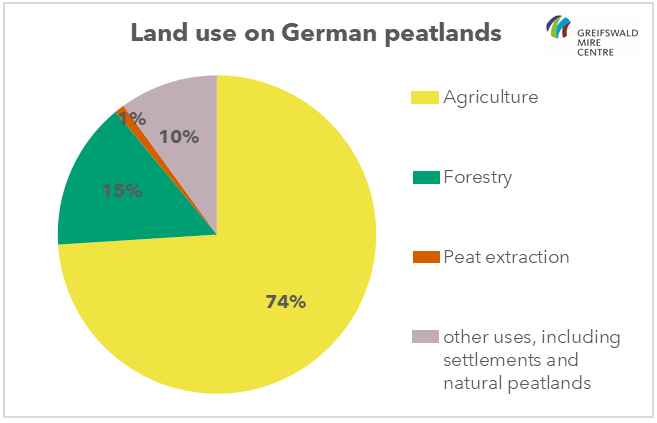


*Figure 1: Map of peatland use in Germany, showing proportions of different land use categories. Data: Global Peatland Database 2022, © Greifswald Mire Centre*

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]

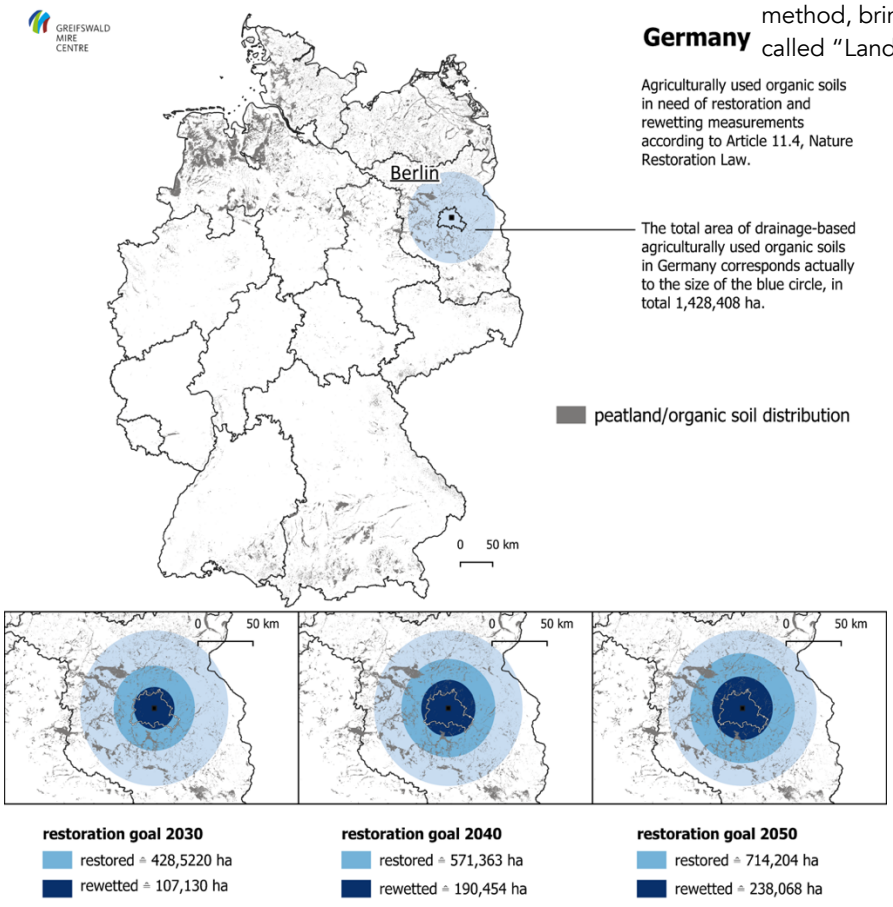


*Figure 2: Distribution of peatlands in Germany and a schematic illustration of the size of peatland area affected by NRL goals in Germany, compared to the size of Berlin (own compilation GMC, based on Global Peatland Database September 2024)*

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