



# Restoring wetlands in Europe

Country Fact Sheet Belgium // ALFAwetlands Policy Brief

### Distribution and condition of peatlands

Belgium's peatlands are estimated to cover approximately 779 km<sup>2</sup>, this equates to about 2,5 % of the land surface of Belgium. <sup>1</sup> 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<sup>2</sup>

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). <sup>3</sup> 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. <sup>4</sup>

The Flemish Energy and Climate Plan (VEKP) <sup>5</sup> 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<sub>2</sub> 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<sup>6</sup> 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.<sup>7</sup>

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. <sup>8</sup> 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.<sup>9</sup> 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.<sup>10</sup> 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 250hectare part of the valley has already been restored.<sup>12</sup>

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.



(1) UNEP (2022). Global Peatlands Assessment - The State of the World's Peatlands: Evidence for action toward the conservation, restoration, and sustainable management of peatlands. Main Report. Global Peatlands Initiative. United Nations Environment Programme, Nairobi. (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.

- (3) Belgium's (Wallonia) CAP Strategic Plan
- (4) Belgium's (Flanders) CAP Strategic Plan
- (5) Vlaams Energie- en Klimaatplan 2021 2030
- (6) The Flemish Climate Policy Plan
- (7) Waalse Klimaatplan

(8) Decleer, K. et al. (2016): Mapping wetland loss and restoration potential in Flanders (Belgium): an ecosystem service perspective. Ecology and Society 21(4):46 https://doi.org/10.5751/ ES-08964-21044608964-210446 (9) De Dobbelaer, T. & Raman, M. (2023): Living Lab Belgium, Poster. ALFAwetlands-project

(10) Factsheet Peatland for Climate and Biodiversity INTERREG NWE Care-Peat

(11) Maes, D. et al. (2018). PAS-gebiedsanalyse in het kader van herstelmaatregelen voor BE2200029 Vallei- en brongebieden van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden. (Rapporten van het Instituut voor Natuur- en Bosonderzoek; Nr. 17). Instituut voor Natuur- en Bosonderzoek. (12) The Care-Peat impact within the Valley of the Zwarte Beek (13) Natuurinrichting Zwarte Beek Projectuitvoeringsplan Vallei

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



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