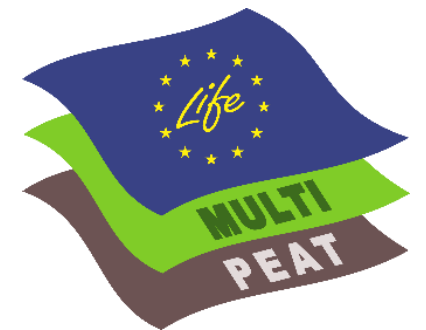




LIFE Multi Peat's monitoring activities and results



LIFE Multi Peat

Project location:

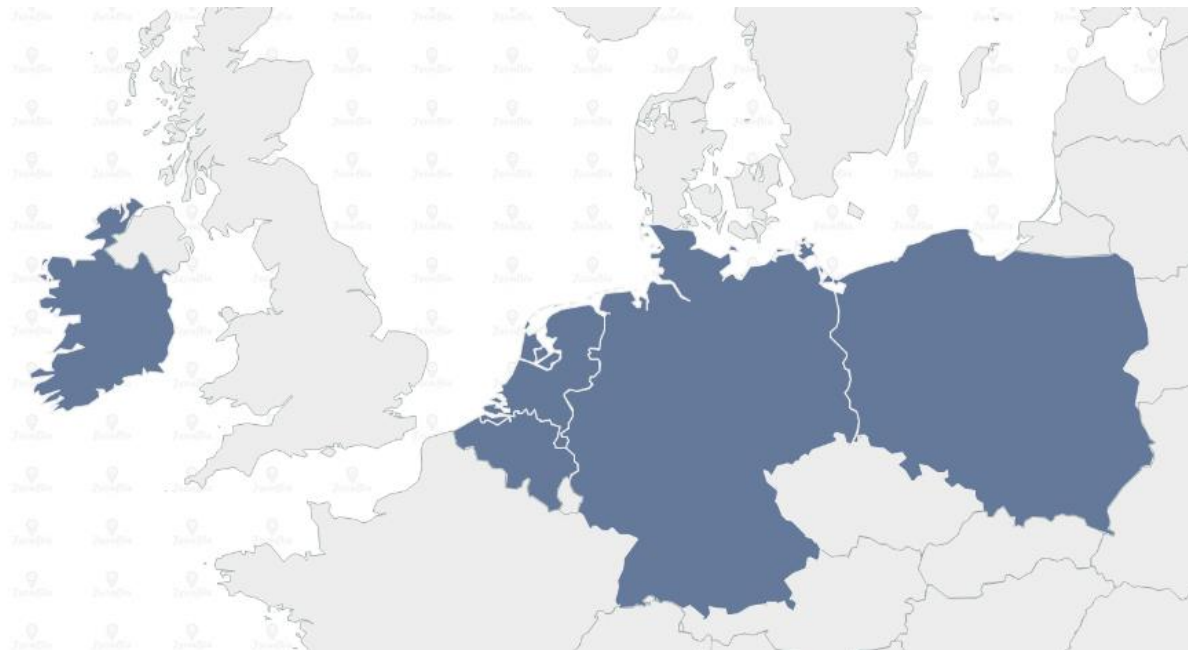
Belgium, Ireland, Netherlands, Poland
and Germany

Budget:

Total Amount: 7.763.615€

Duration:

1/10/2021 - 30/09/2026



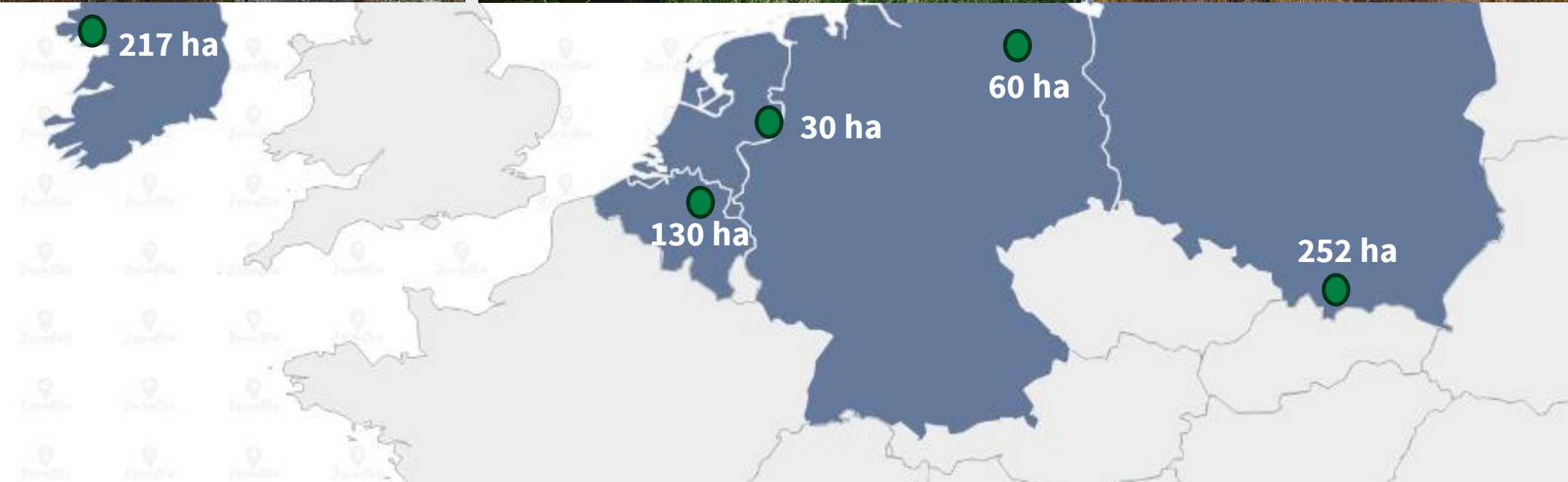
Coordinating Beneficiary:

NABU

Associated Beneficiaries:

Natuurpunt, University of
Galway, Natuurmonumenten,
Eurosité, Klub Przyrodników,
Ogólnopolskie Towarzystwo
Ochrony Ptaków (OTOP)





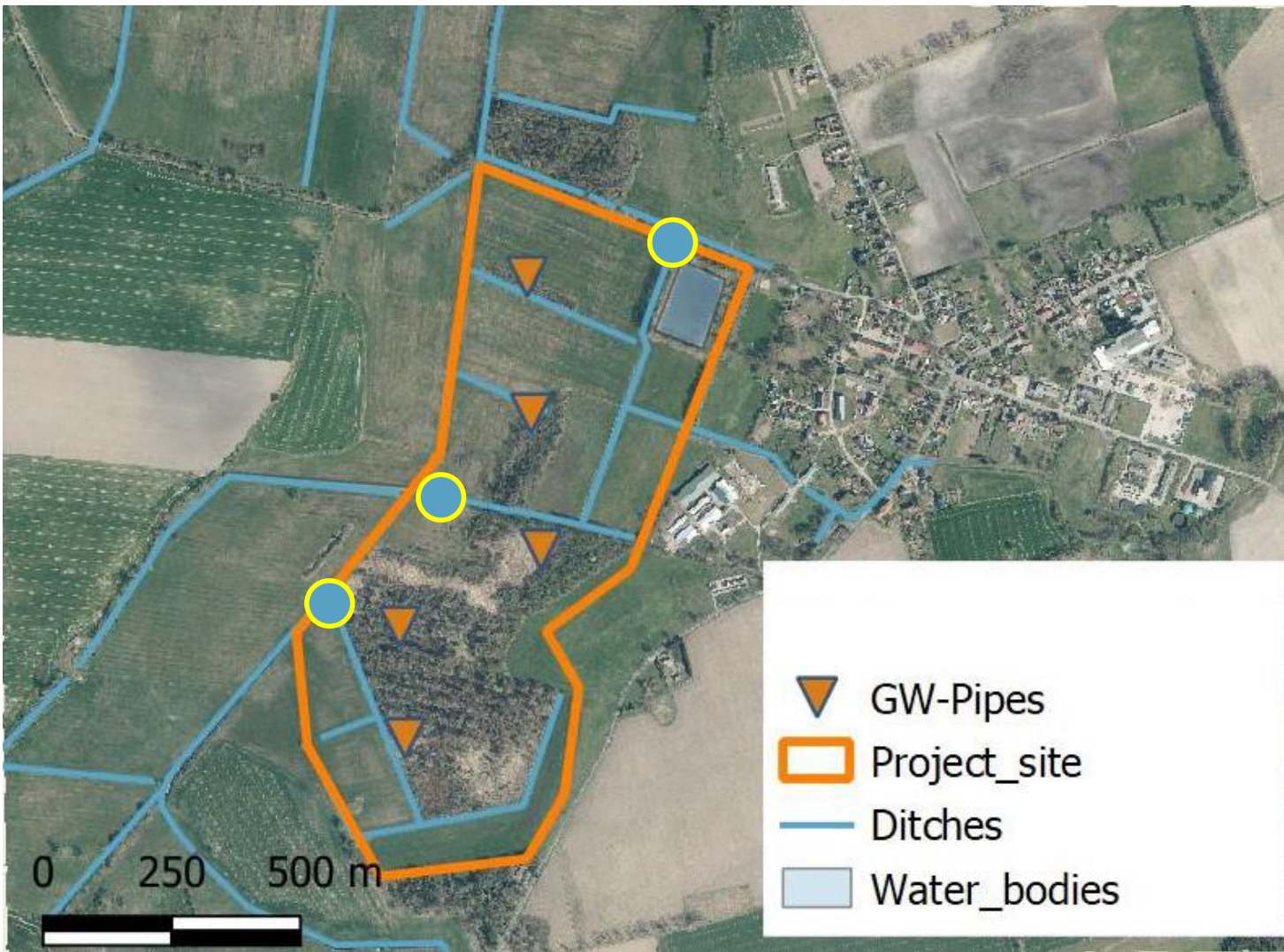
Project goals

- **Restoring** degraded peatlands (689 ha)
- Reduction of 50% of annual CO₂ Emissions = **3600 t CO₂-eq/yr**
- Establishing **paludiculture** (wetland farming) solutions
- Analysing the potential of voluntary **carbon credits** from peatland restoration measures
- Develop an EU-wide toolkit to catalogue peatland projects, policies and data

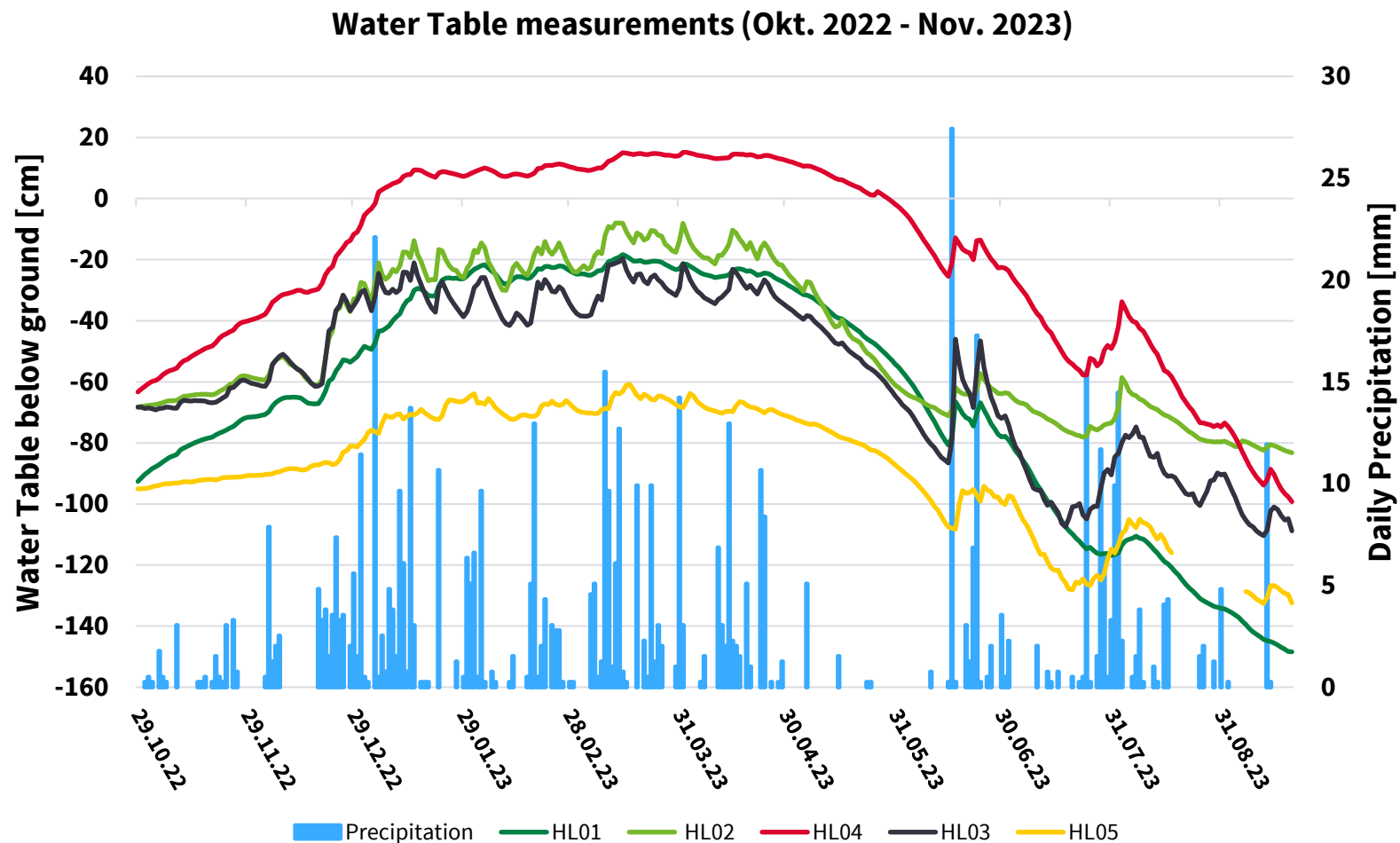
Monitoring (success control) will be exemplified by the German site

Foto: Moorwissen.de (@Tobias Dahms)

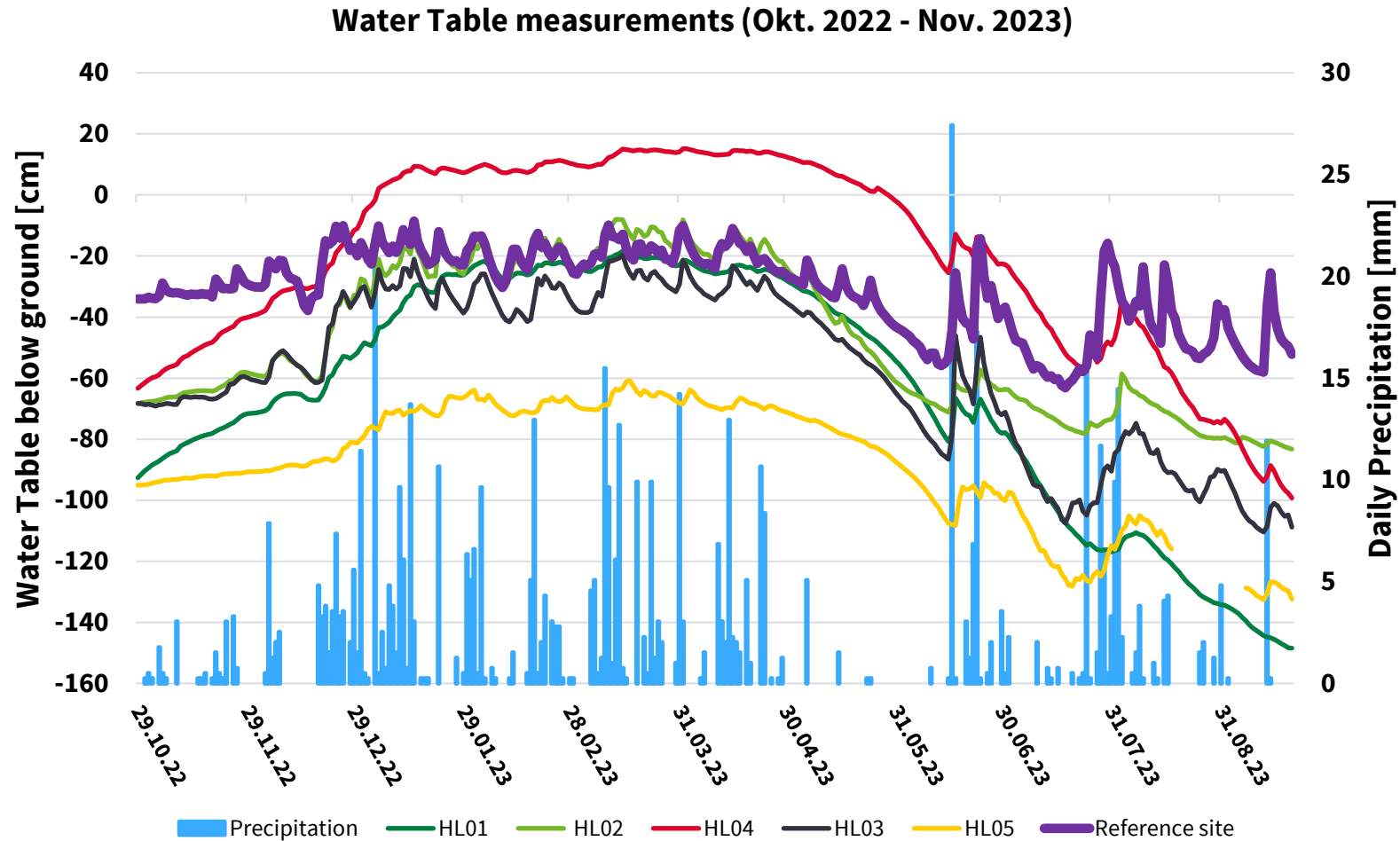
Häsener Luch – Rewetting Actions (as a test)



Hydrological Monitoring



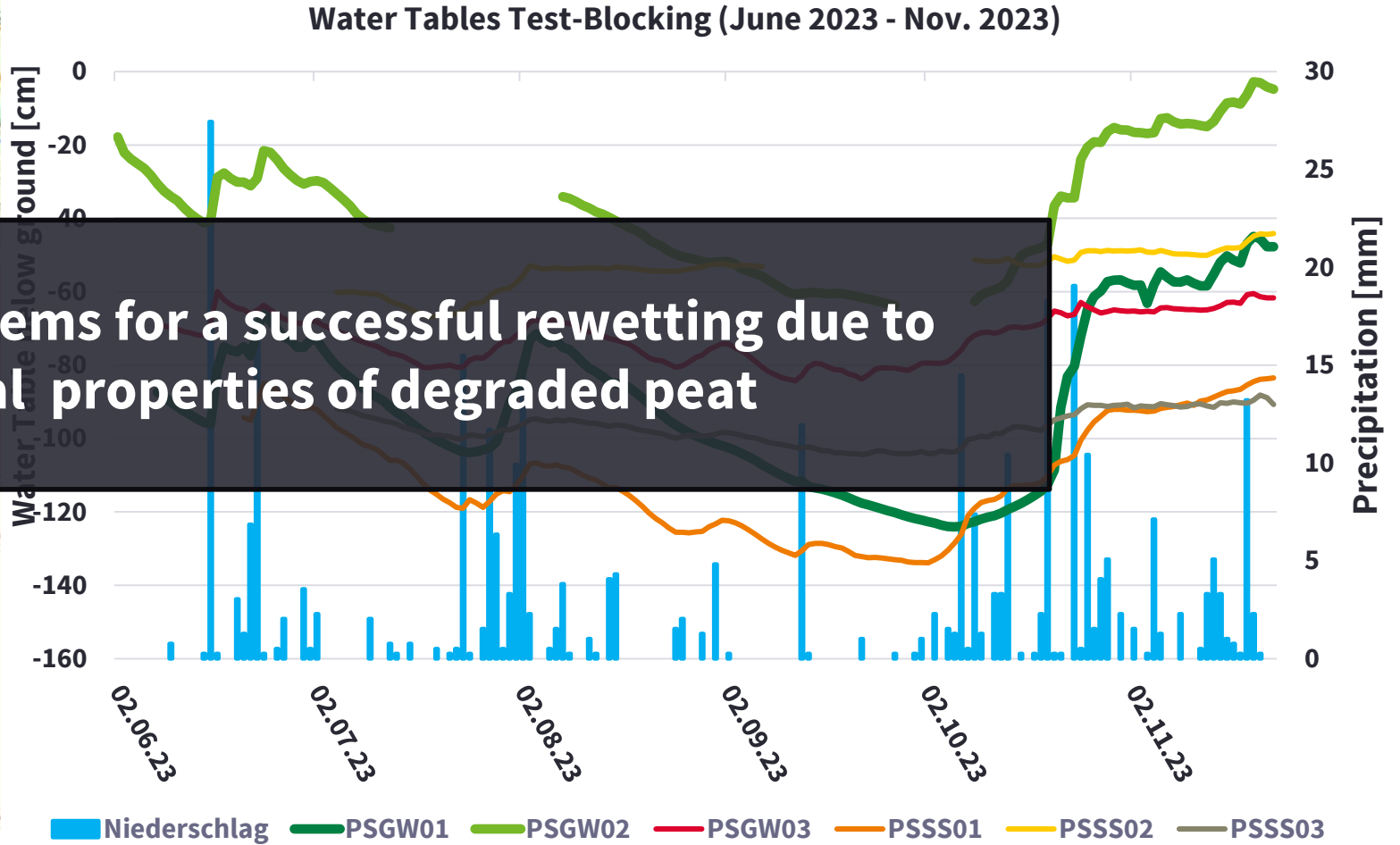
Hydrological Monitoring



Hydrological Monitoring



Possible problems for a successful rewetting due to physical properties of degraded peat



Carbon stocks - Below ground vs. above ground

Below ground carbon

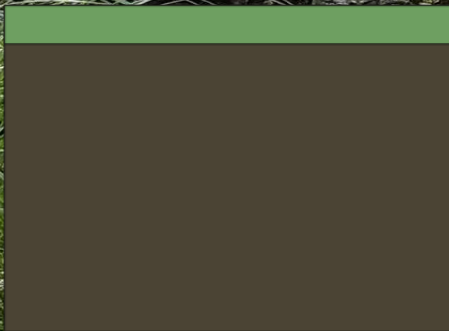
Soil Mapping

$$C_t = (\sum Corg_i * BD_i * PD_i) * Area$$

Above ground carbon

Method not yet defined

Total Carbon



GHG-Monitoring

- Implementation of three GHG-Measuring sites:
 1. dry
 2. will be rewetted
 3. rewetted since 10 years (reference site)
- Five plots at each sites with wooden walkways
- Measuring will monthly and starts September 2023
- Combination of transparent and non-transparent chambers
- In-situ measurements of **CO₂** and **CH₄** with LiCOR 7810
- Laboratory measurements of **N₂O**



Vegetation – GHG Emission estimations (GEST)



UAV

- First drone flight July 7th 2023
- Second drone flight at the end of the project
- Multispectral and RGB images (1-2 cm resolution)
- Parrot Sequoia Multi spectral camera and M300RTK
- Installation of five „ground control points“ for repetition of drone flight at the project end

Images used to:

1. Refine the vegetation zonation and calculate NDVI (Normalized Difference Vegetation Index (plant activity))
2. Calculate wetness index





**So, that was a short overview of
the monitoring activities**

Thanks for your attention!

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