

LIFE Multi Peat

Peatland restoration as part of the climate solution

European Peatland Policy Working Group

05.06.2024



PROJECT LOCATION:

Belgium, Germany, Ireland, Netherlands and Poland

BUDGET INFO:

Total amount: **7.763.615€**

EC Co-funding: **4.269.983(55%)**



DURATION:

01/10/2021 - 30/09/2026

COORDINATING BENEFICIARY:

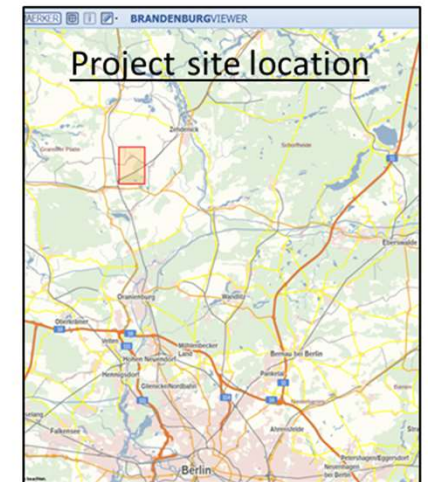
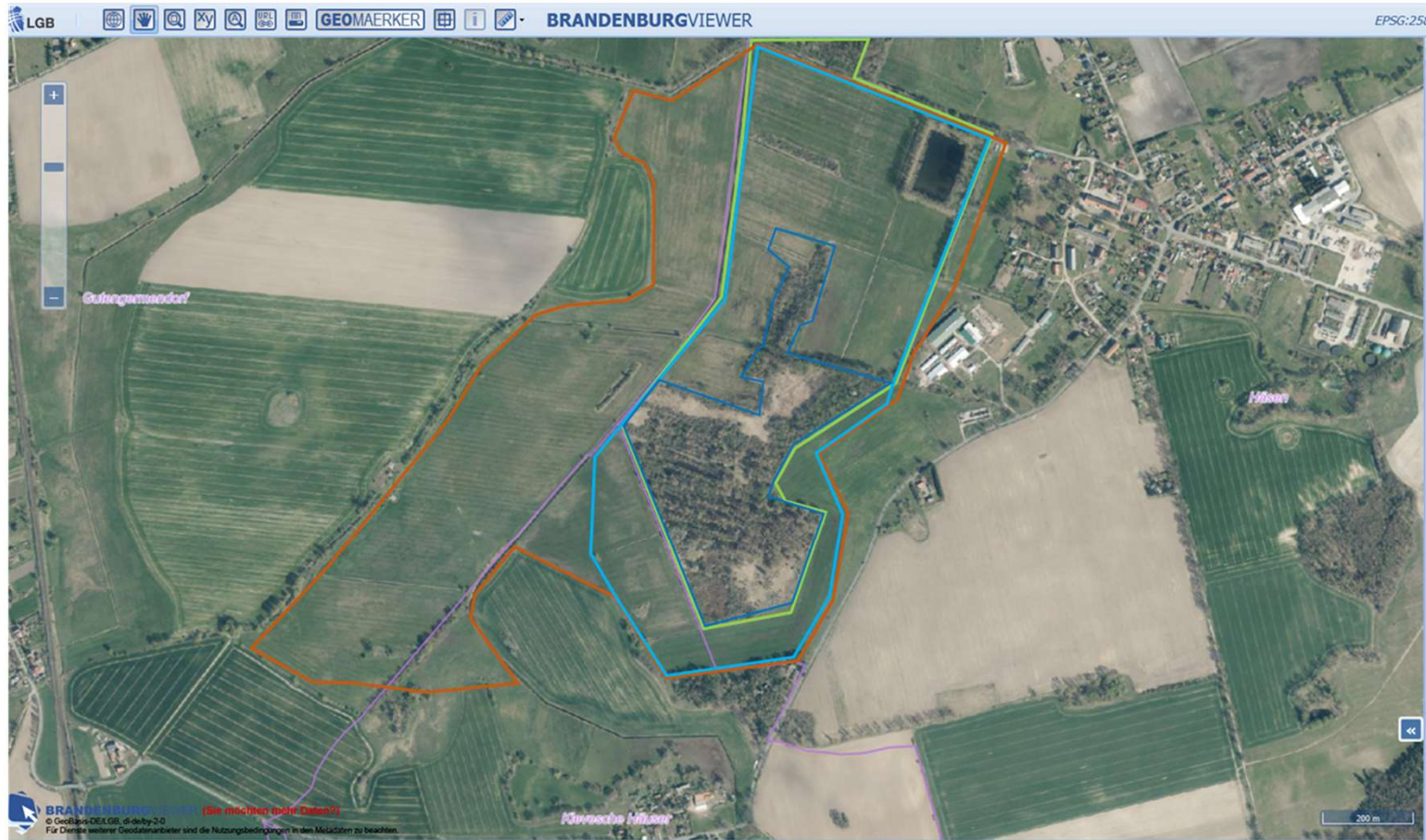
1. Nature And Biodiversity Conservation Union – NABU

ASSOCIATED BENEFICIARIES:

2. Natuurpunt
3. National University of Ireland
4. Natuurmonumenten
5. Eurosite
6. Klub Przyrodników
7. Ogólnopolskie Towarzystwo Ochrony Ptaków (OTOP)



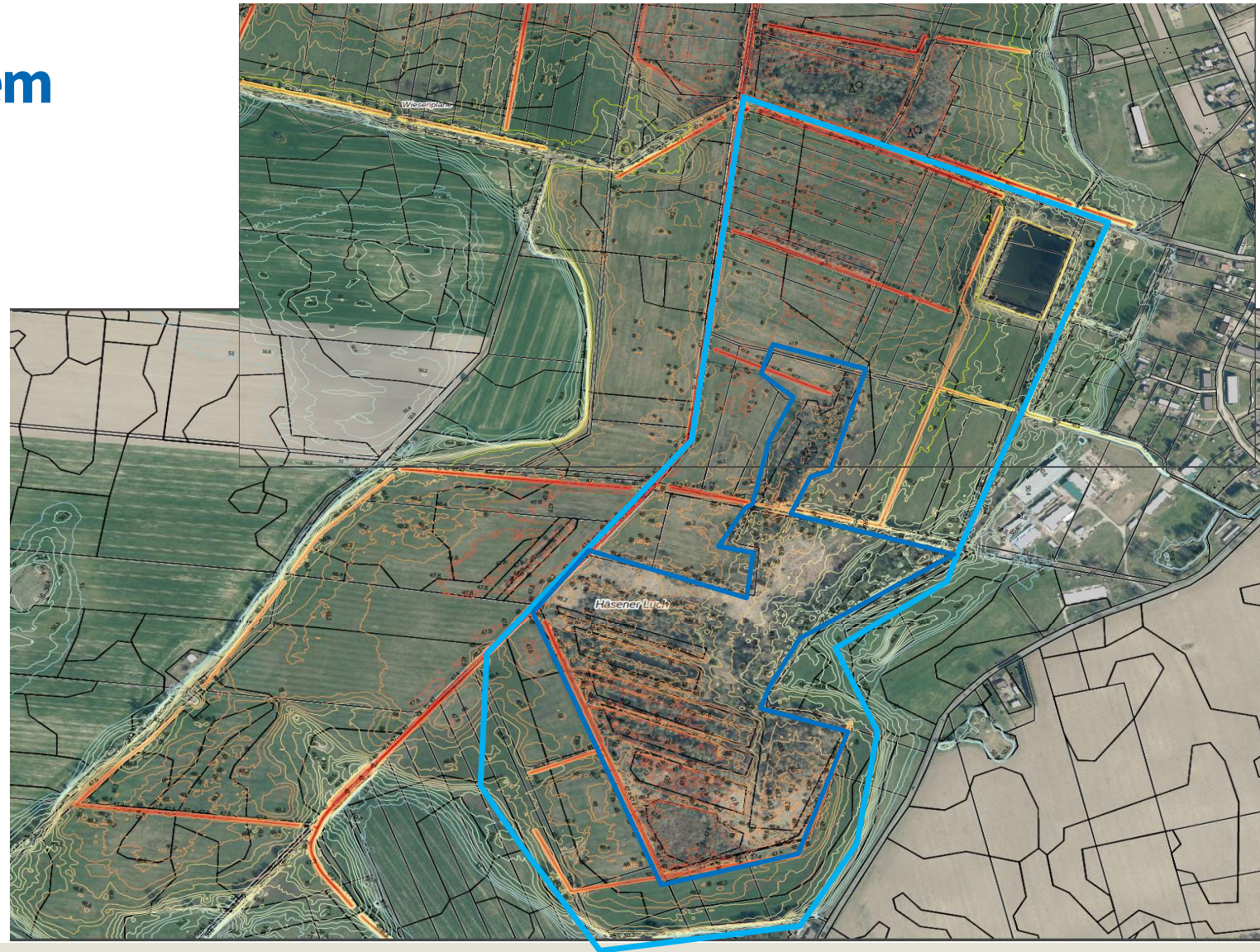
Project setting and site in Häsener Luch



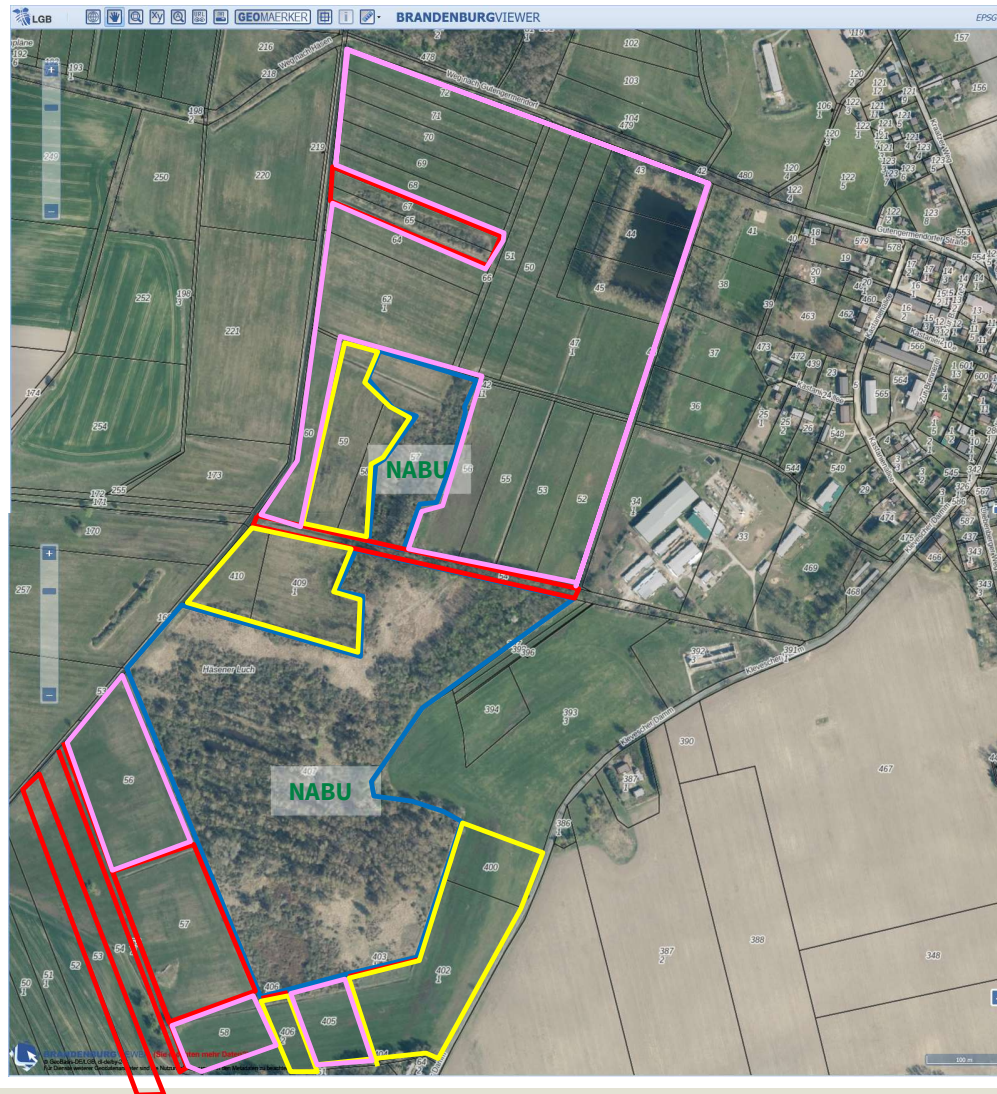
Legend

-  Border between villages
-  Fen complex Häsener Luch
-  Nature Reserve Häsener Luch
-  Project site in Häsener Luch
-  NABU-owned core area




DEM-Drainage System



Stakeholder setting – land acquisition in Häsener Luch

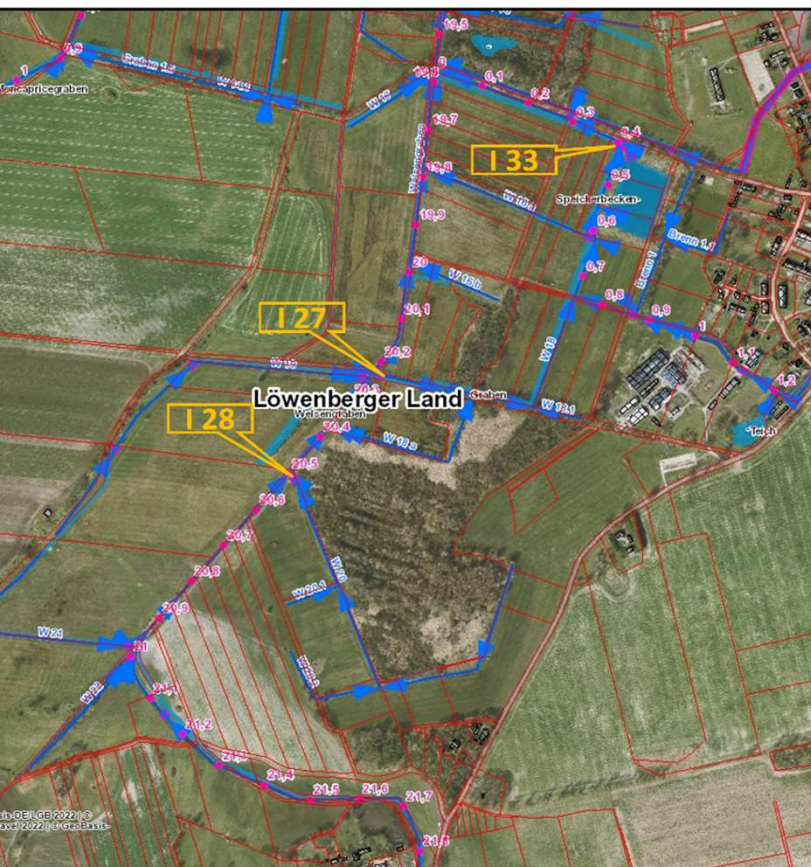


Legend

-  Nature Reserve Häsener Luch
-  NABU Core area
-  Purchase/d
-  Swap
-  Consent with pot. compensation

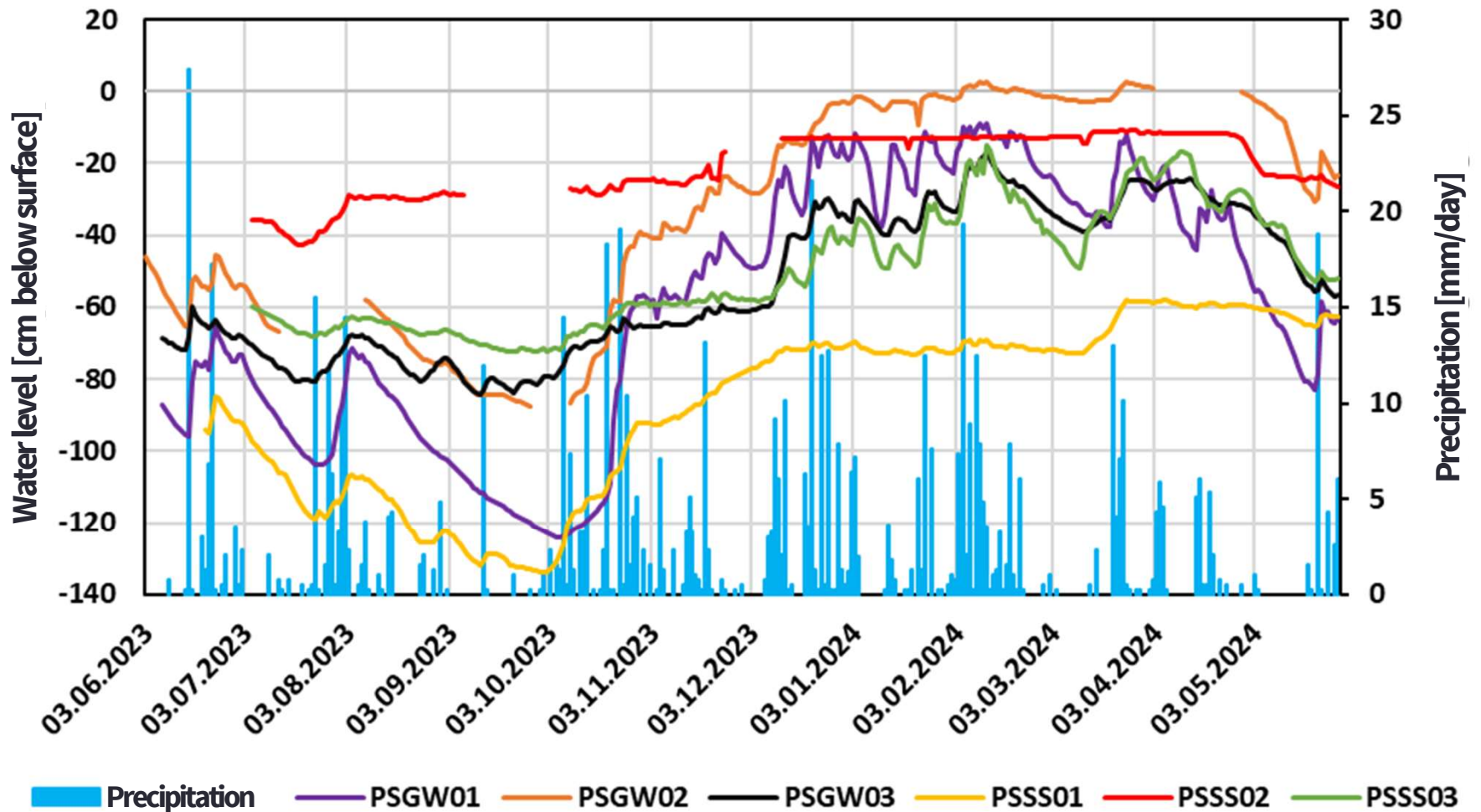
Restoration of degraded peatlands on all site

Repair of ditch regulating facilities, test rewetting for one year



- Tender
- Letters of consent 8 owners
- Planning, levelling by contractor
- Applying for permission
- Construction by water-soil-association 05/23
- Installing devices 06/23

Water levels test rewetting (Juni 2023 - Mai 2024)



Additional information not shown

NABU-Compensation scheme „Klima +“: Water levels (Source: Biota)

Drainage state

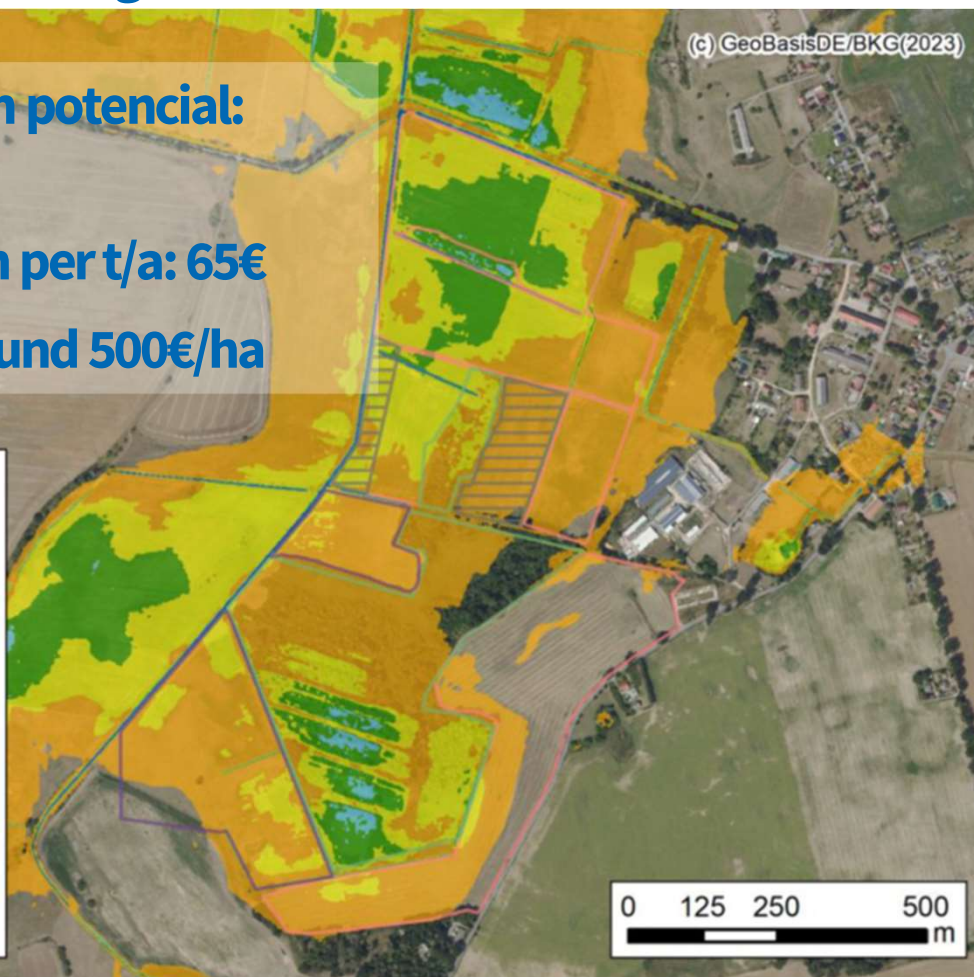
Projected rewetted state

GHG-reduction potential:

300t/a

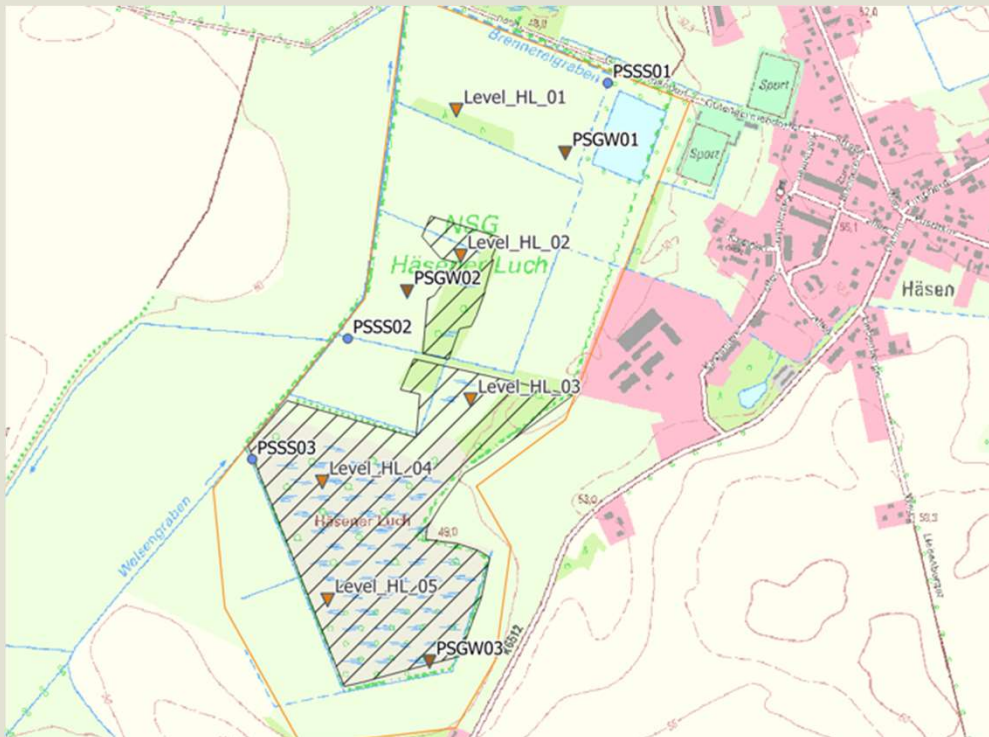
Compensation per t/a: 65€

Each farm around 500€/ha



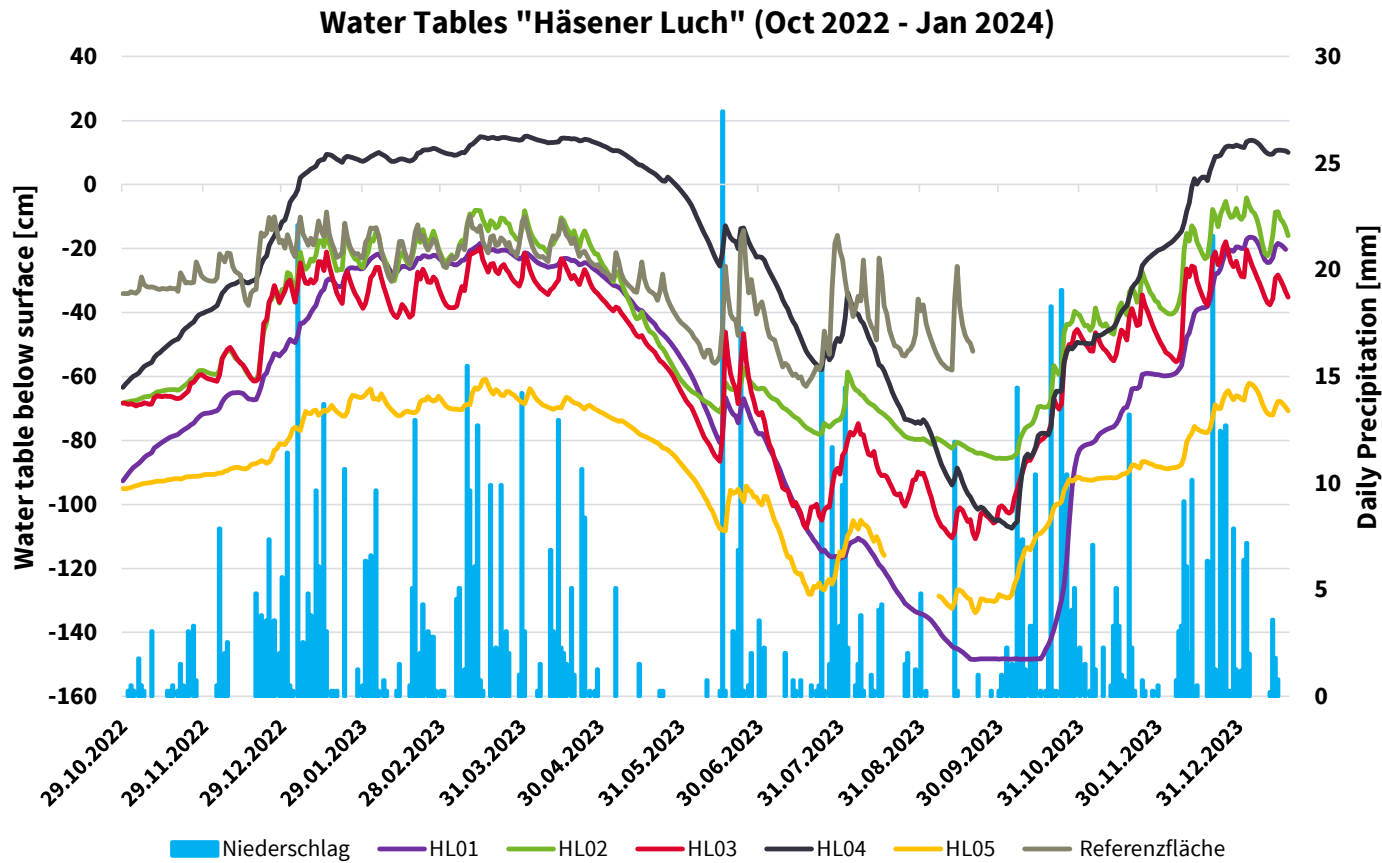
- Antragsfläche**
- Nutzer 1
 - Nutzer 2
 - NABU-Fläche
 - weitere Nutzer
- Entwässerungszustand**
- Wasserstufe**
- 5+
 - 4+
 - 3+
 - 2+
 - 2-
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Hydrological Monitoring



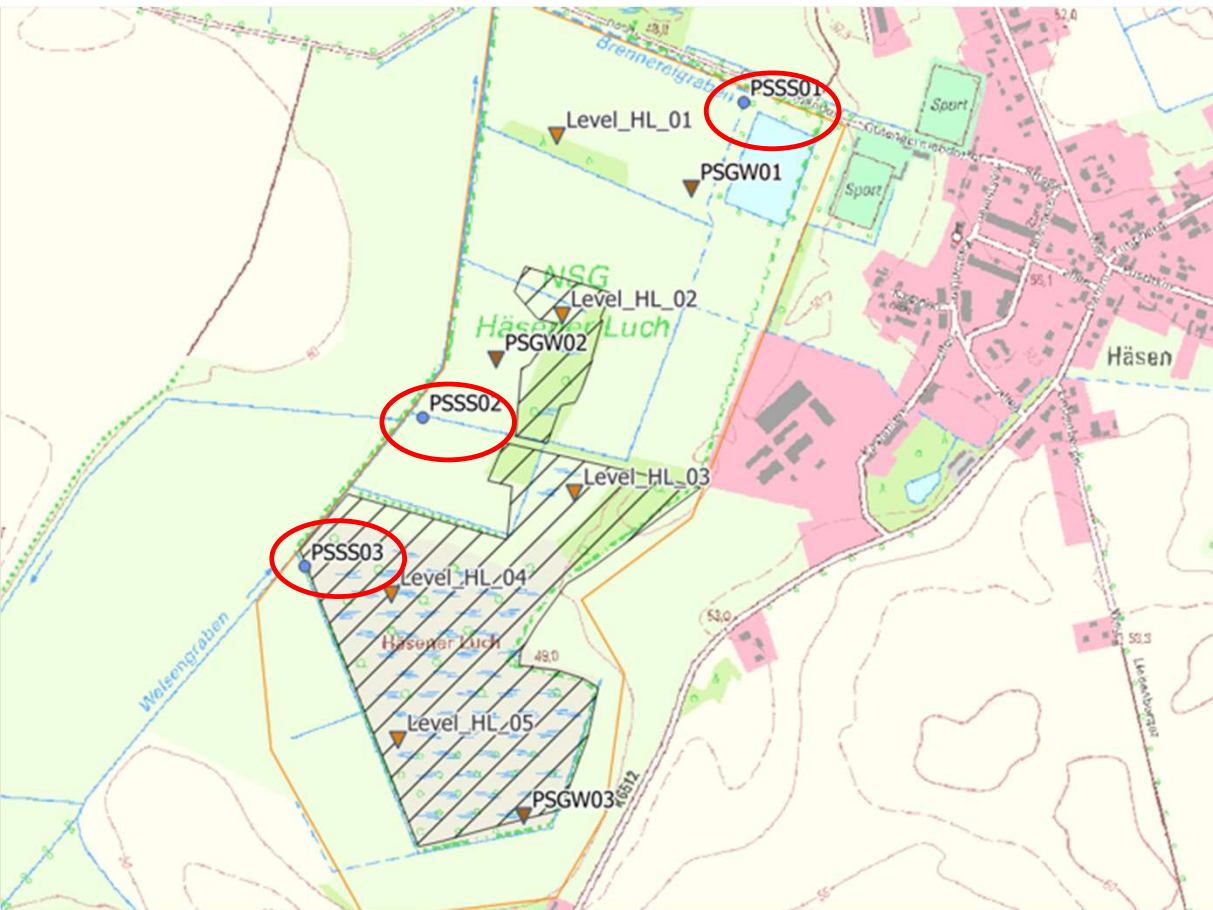
- Monitoring of GW-Level at 5 plots since Oct. 22
- Installation of 6 additional GW-Sensors within the water flow test since Jun. 23
- Cloud-based solution and monthly based export and transfer of daily mean values to the lower water authority

Hydrological Monitoring



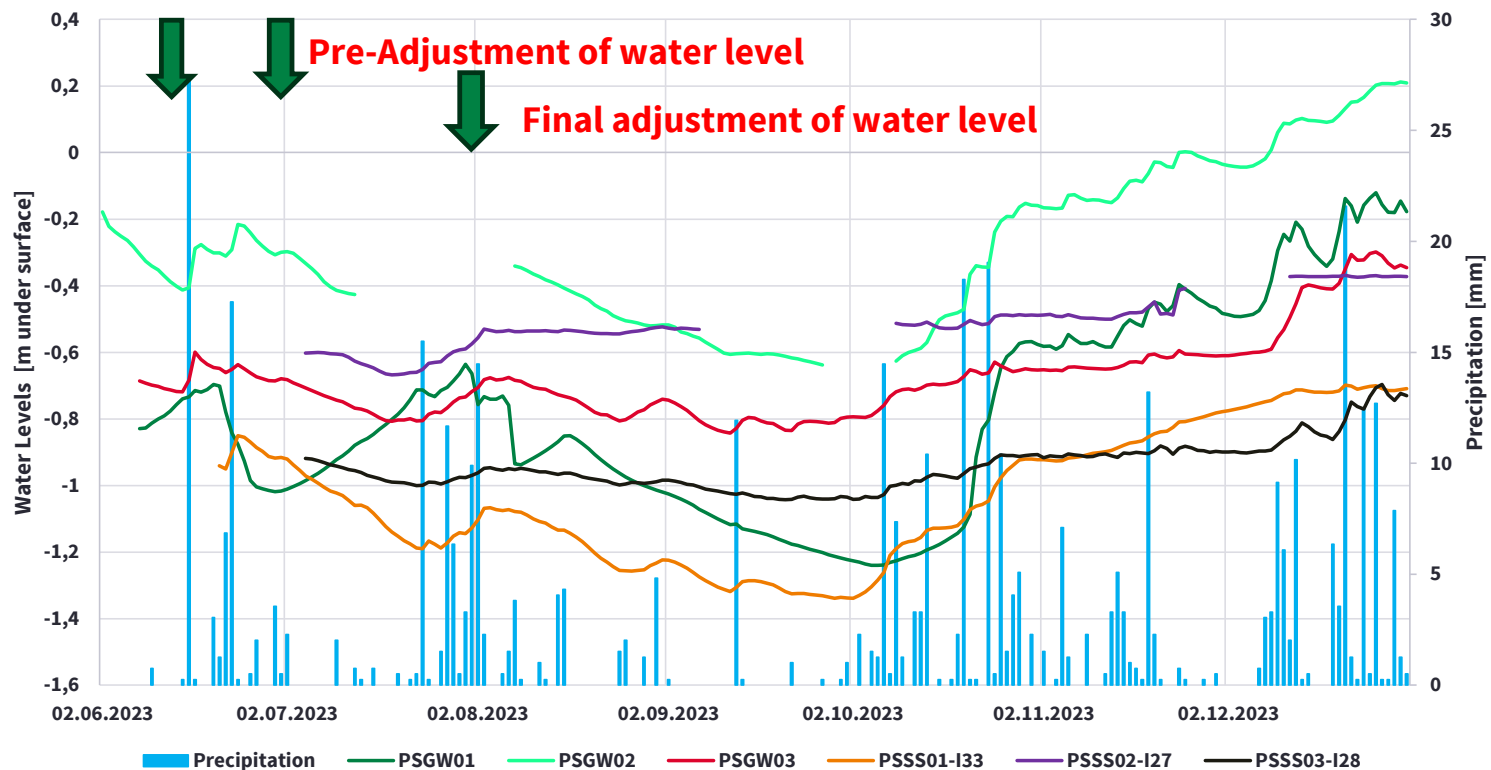
Hydrological Monitoring

Test rewetting by re-activating three old ditch regulation facilities (Schachtstaue)



Hydrological Monitoring

Test-Rewetting Häsener Luch



- PSSS01 and PSSS03 reached the planned water levels
- Effects must be evaluated throughout spring
- We try to get a information on sub-surface drainage systems

GHG Monitoring – Poland and Germany



In each country three sites (drained, rewetted, restored).

Installation of 3 plots per site in Poland and 5 plots in Germany



Installation of wooden boardwalks around the plots



Installation of PAR, soil and air temperature sensors as well as rain gauge sampler with cloud support for all three Polish sites



Starting Measurements in June 2023 in Poland with combined transparent and opaque chambers, CO₂ measured by LI-COR 810 and CH₄ by manual sampling

GHG Monitoring - Germany

- Measurements started mid of september 2023 at all three sites (drained, rewetted, restored)
- Combination of transparent and opaque chambers with different shading levels
- Insitu measurements of CO₂ and CH₄ with LiCOR 7810



Survey of regional peatland stakeholders

Trust - Contacts - Awareness - Willingness to Engage

Pre-1970th (pre-melioration)

- Häsener Luch was used and appreciated in various ways: as a fishing spot, playground, local recreation area, and retreat for protected animal and plant species.
- Aesthetic and ecological value beyond the Häsener Luch area due to small bodies of water in the region.

Post-1970th (post-melioration)

- Local population perceives changes as a strongly negative development that has overlaid the original character of the region.
- The decrease in biodiversity (esp. fish and birds) is perceived as a loss.
- Almost all interviewees welcome the restoration efforts and the prospect of greater retention of water in the landscape.
- The role of peatlands for climate protection and adaptation was previously little known but has significantly increased by the presence of the restoration project.

Survey of regional peatland stakeholders

Pre-1970th

“There used to be many birds and animals in the area. There were also animals that were not so common anymore. But suddenly, they all disappeared.”

“For example, in the Luch behind the reservoir, we used to go to the meadows and ice skate every winter. The whole thing was under water. We could ice skate endlessly. It was ideal for us.”

“Former peat-cutting sites form ponds and small lakes here, where ducks, wild swans, and other waterfowl used to breed. In the autumn, flocks of wild geese and cranes would stop by here on their journey south.”

Post-1970th

“We definitely have much less water than before, I must say, a lot less. All the holes, the small ponds and lakes that we had around here, they are all dry. We used to play there as children, fish, build rafts and float around on them. There is nothing left in there. It’s all empty.”

“Since this major measure was completed, this area has been relatively dry. Since then, it has become increasingly dry and the growth of trees and shrubs has become more lush.”

“The melioration was completely useless, it didn’t improve anything at all. What was the melioration for anyway? We never had too much water, it was always dry. They only did melioration because it was in the plan. Practically, it was pointless. It was never the case that we had too much, that the fields were wet, that was not at all. Only the meadow was wet, but that wasn’t so bad, it was just like that.”

Thank you!

Questions:
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