



TECHNIK
HOCHSCHULE MAINZ
UNIVERSITY OF
APPLIED SCIENCES



Presented at the FIG e-Working Week 2021,
21-25 June 2021 in Virtually in the Netherlands



eWORKING WEEK 2021 20-25 JUNE
SMART SURVEYORS FOR LAND
AND WATER MANAGEMENT
CHALLENGES IN A NEW REALITY

Spatial Information Supporting a Collaborative Landscape-Based Place Branding

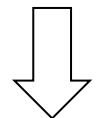
Markus Schaffert,
Torge Steensen
Hochschule Mainz
University of Applied Sciences

Thorsten Becker
The Lower Saxony Institute for Historical
Coastal Research, Wilhelmshaven



Agenda

focus of
the presentation:



GIS analyses

- brief overview
- landscape metrics

Quantitative landscape assessment

Participatory mapping

- method
- results

Qualitative landscape assessment

Mixed Methods

Project & Study Area



Project's meta data:

- Regiobranding (parent project). Branding of urban-rural regions using landscape characteristics
- Funded by Germany's Federal Ministry of Education and Research (BMBF)

- Hamburg Metropolitan Area is study area (with 3 focus regions within)
- 8 partners disciplines : diverse scientific and local stakeholders from three study regions (Lead: Leibniz Universität Hannover)



Background Map: Style: Stamen Design, data: © OpenStreetMap contributors



Aim & Methods



Regiobrandings aim:

Identify characteristics of the regional landscape and use them for sustainable place branding (creating a marketable image/ a unique selling proposition to the outside, and strengthening identity to the inside)

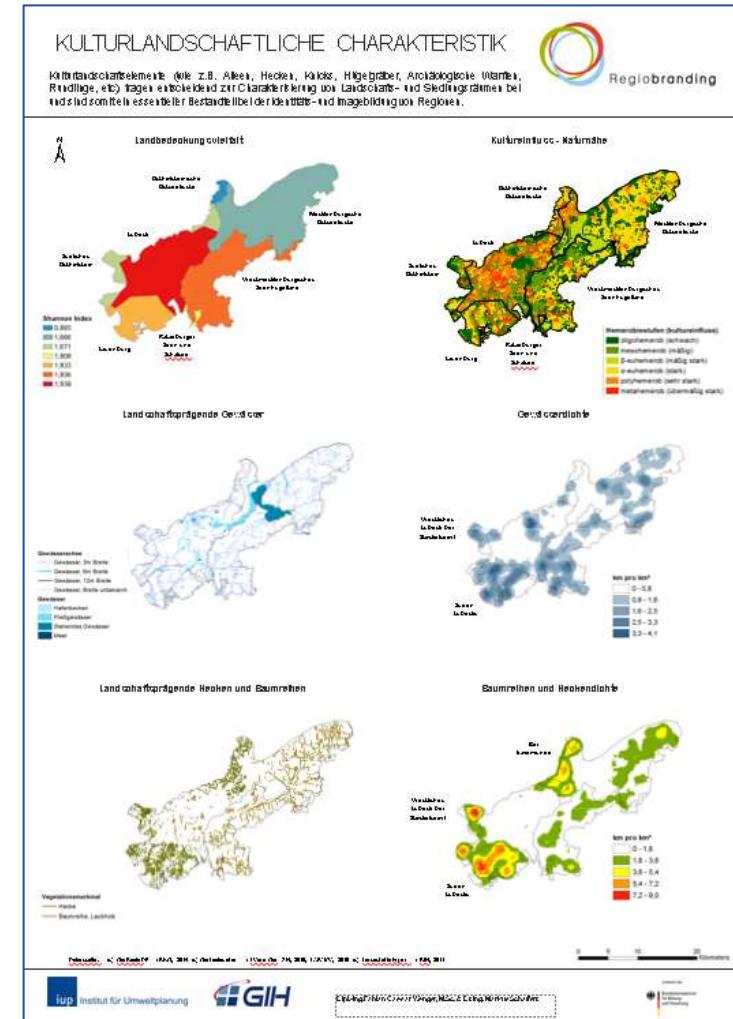
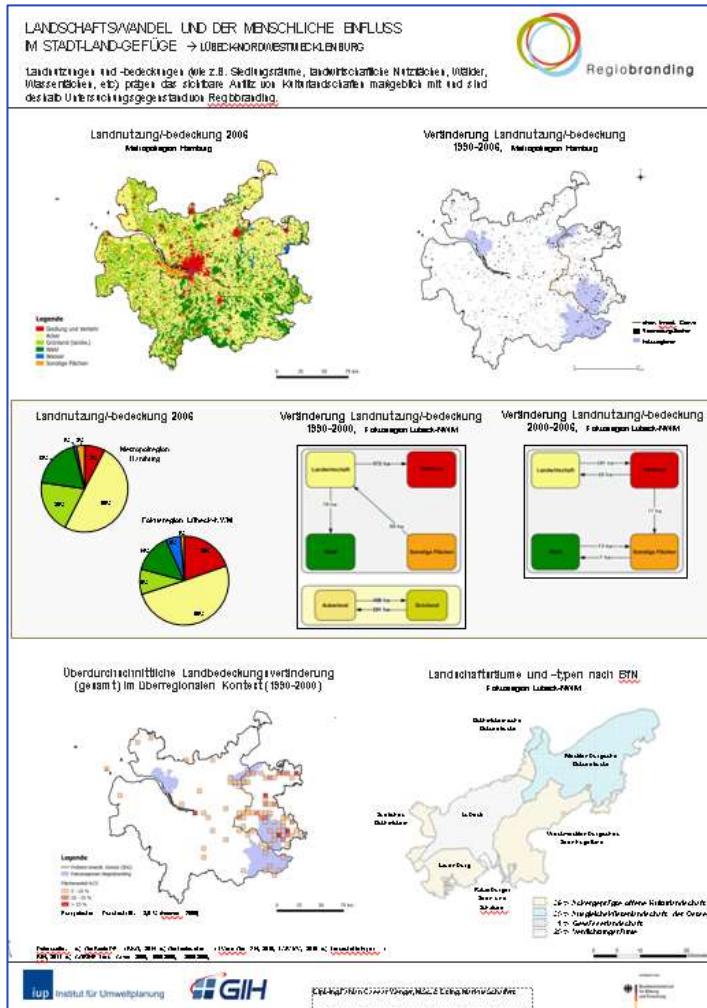
Our „sub-projects“ aim:
generating information by mixed-method GIS approach (and informing stakeholders steering place building in the focus regions)

- GIS analyses (using data from public authorities)
→ landscape elements that are frequent, large, dense, rare ...

- Participatory mapping
→ Integrating local knowledge (what is special about the landscape from perspective of the locals?)

GIS analyses:

landscape metrics calculated on the base of mapping agency's geo data*



*ATKIS Basis DLM (geodatenbasis.de, Bundesamt für Kartographie und Geodäsie),
CORINE Land Cover (European Environment Agency)

→ „Outside view“

Schaffert/Wenger, F.C. (2016) – Poster Regiobranding
(GIH, IUP – Leibniz Universität Hannover)



Participatory mapping - Introduction



→ „Inside view“

Foto: @ C. Blaumann,
Mensch und Region, Hannover



Participatory mapping - Workshops

■ Workshop Glückstadt (29 Participants):

Map characteristic elements of the landscape in your region

Kartieren Sie (spontan) kulturlandschaftliche Besonderheiten in Ihrer Region

To which areas do you go for recreation and which activity do you carry out?

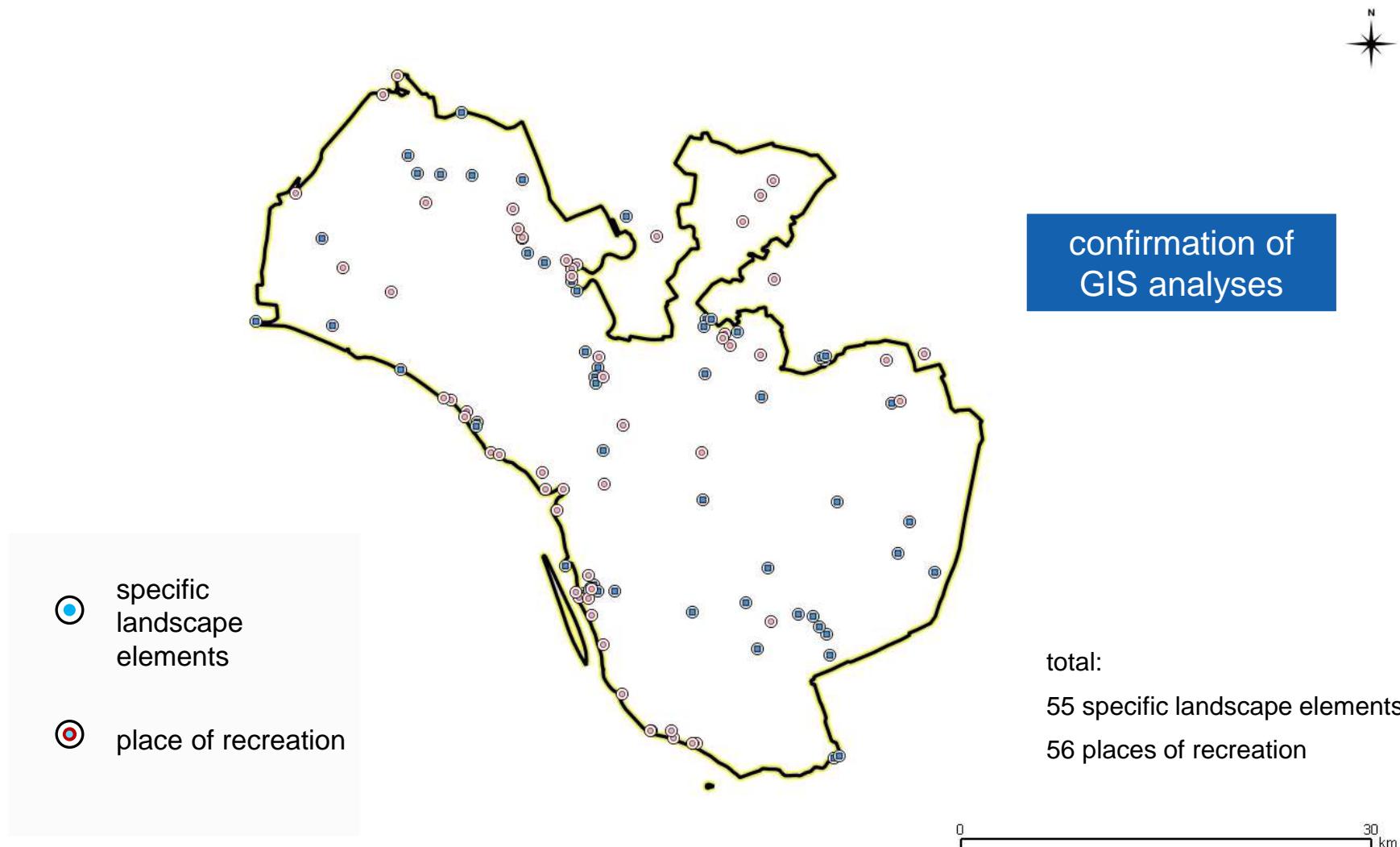
Welche Gebiete suchen Sie persönlich für Ihre Erholung auf und welchen Aktivitäten gehen Sie dabei nach?

■ Workshop Itzehoe (34 Participants):

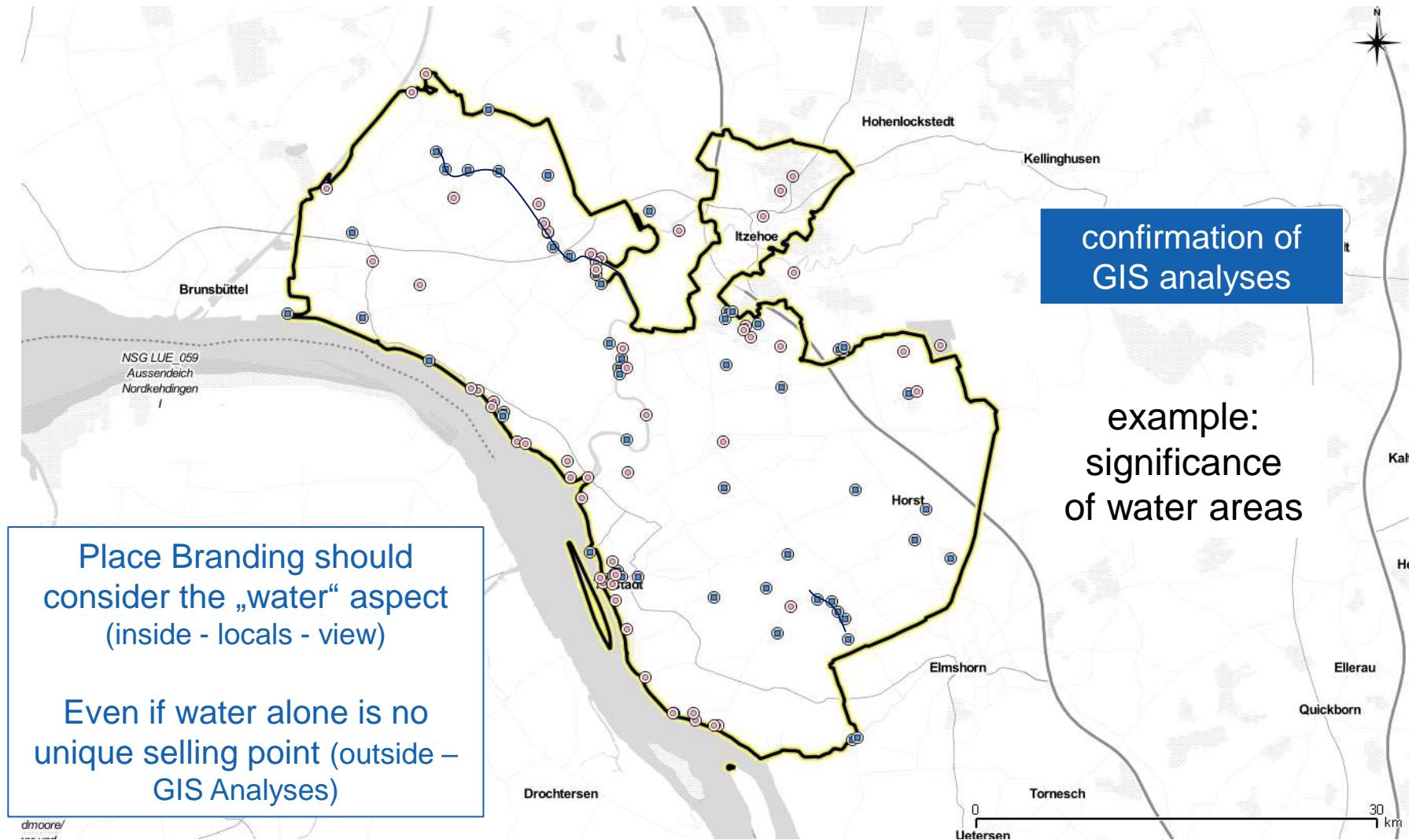
Mark your favorite places and views on the available map of your region. Name and describe them briefly

Markieren Sie auf dem ausliegenden Kartenwerk Ihre persönlichen Lieblingsorte und -aussichten in der Region. Benennen oder beschreiben Sie diese kurz

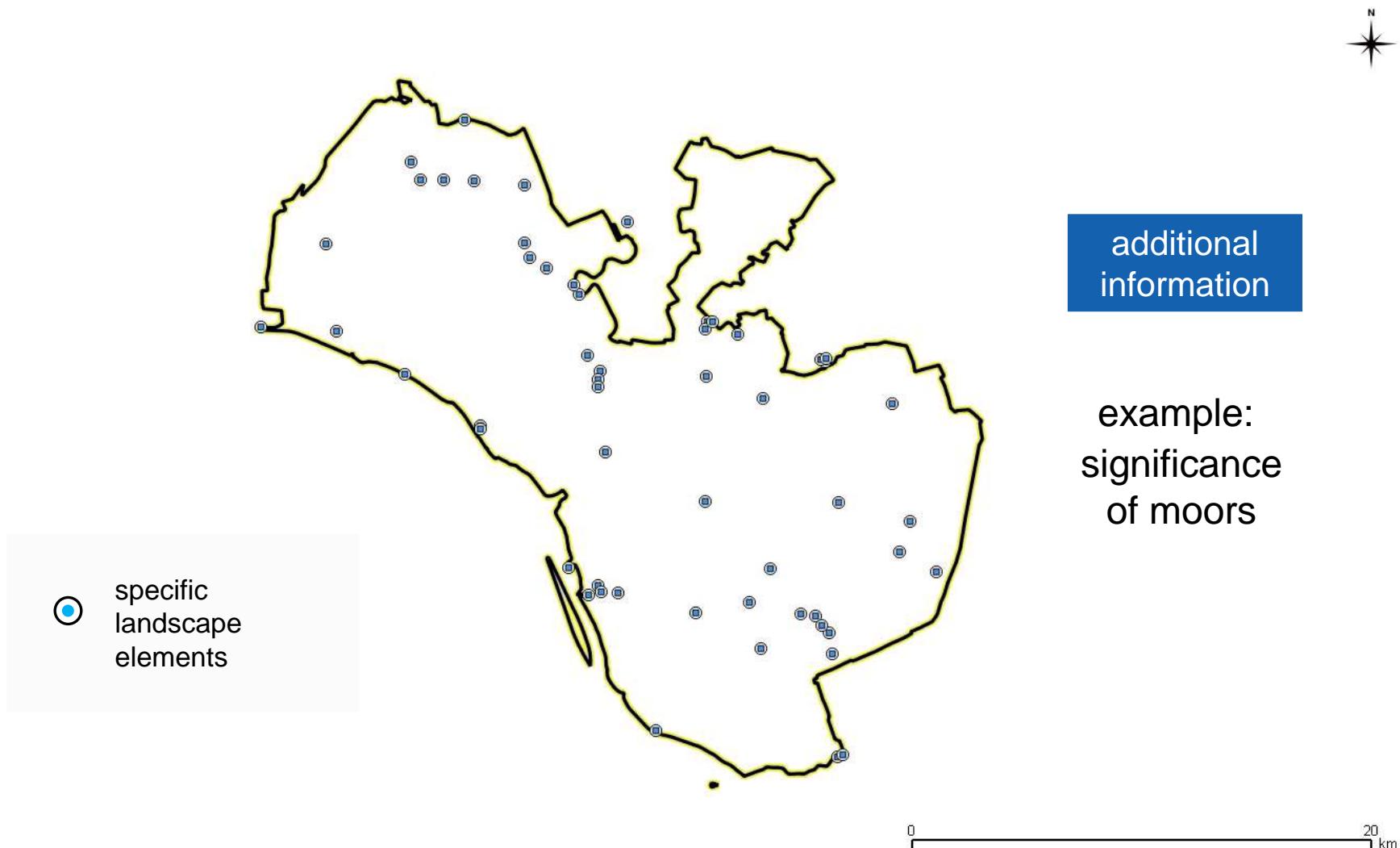
Participatory mapping – Results



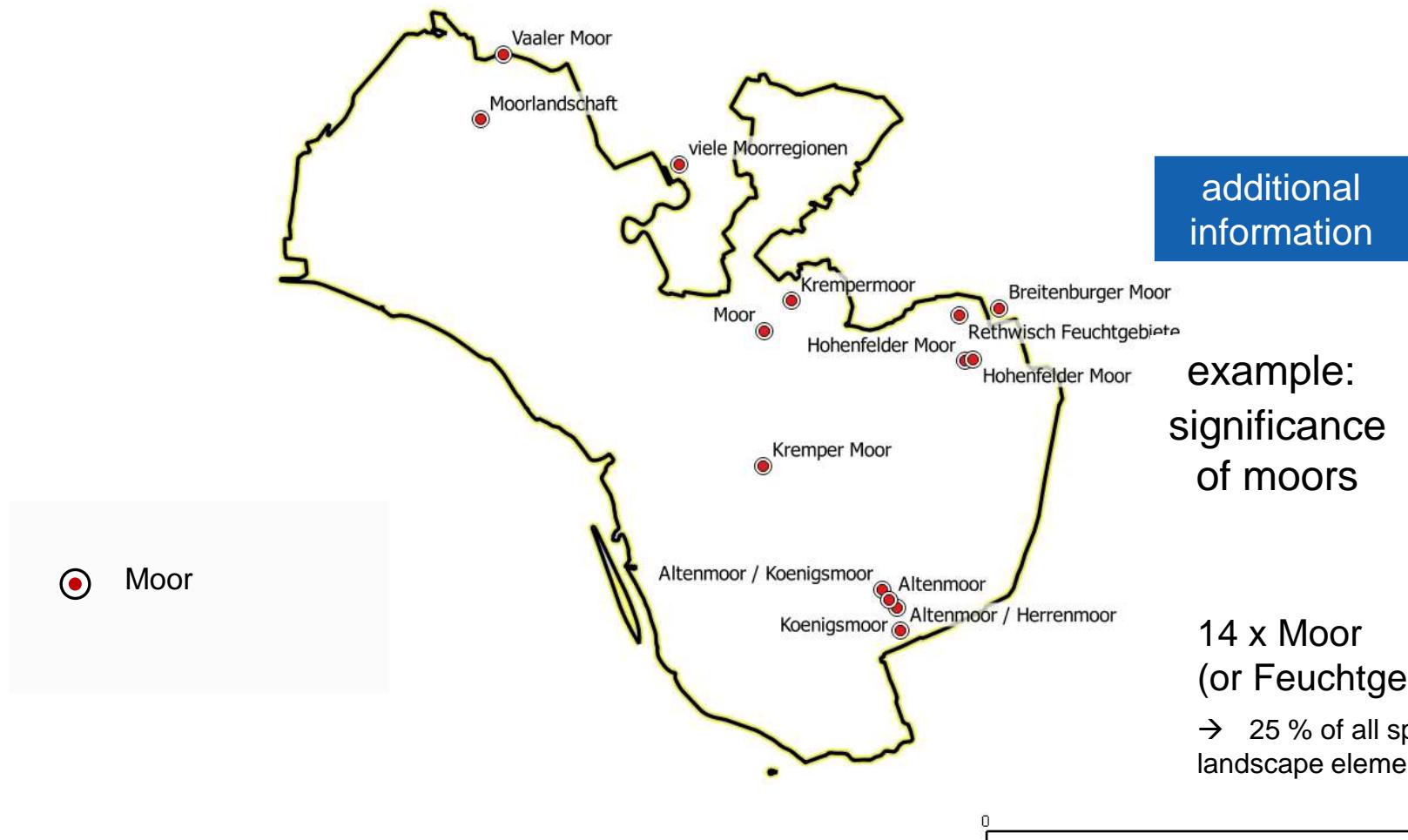
Participatory mapping – Results



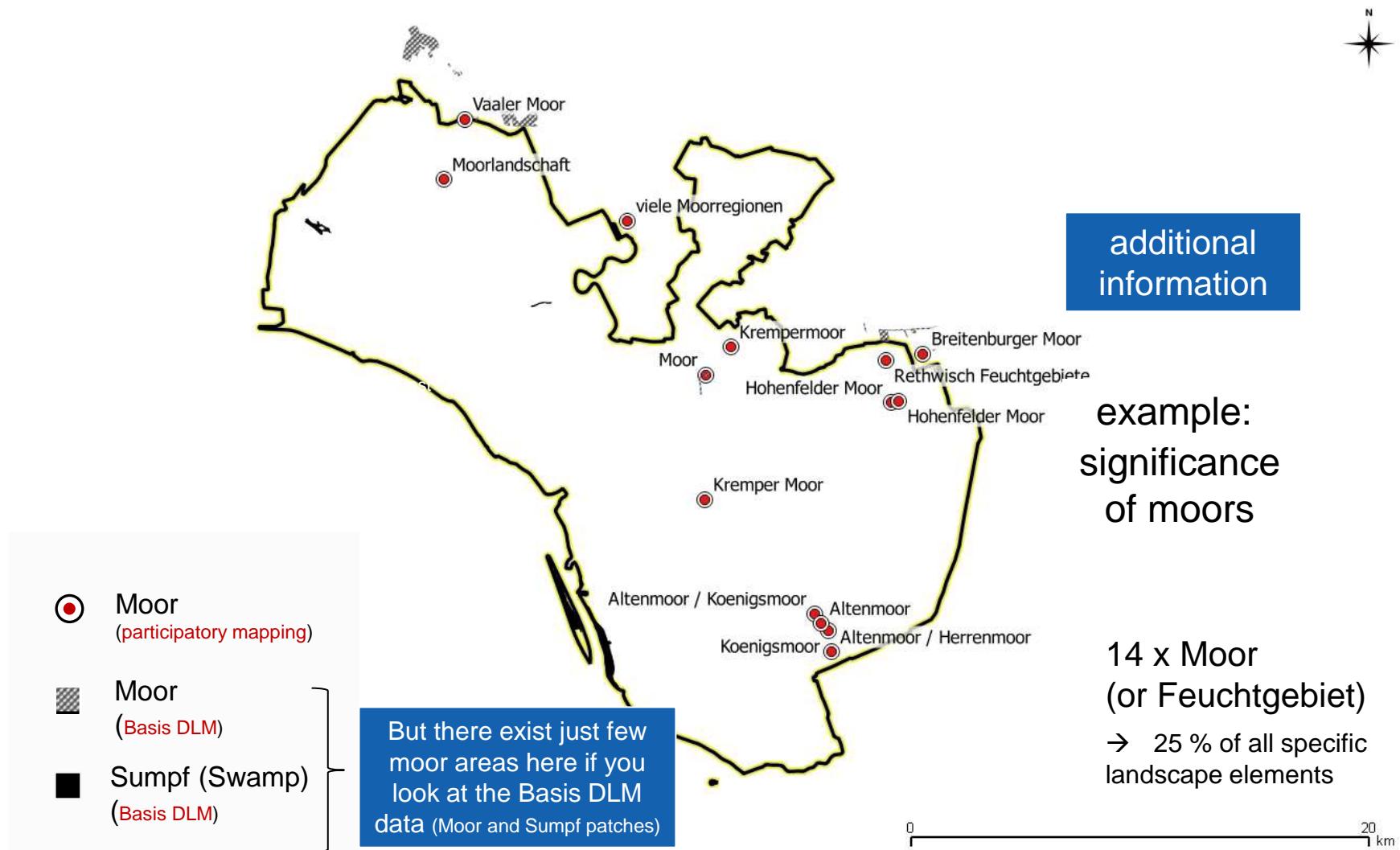
Participatory mapping – Results



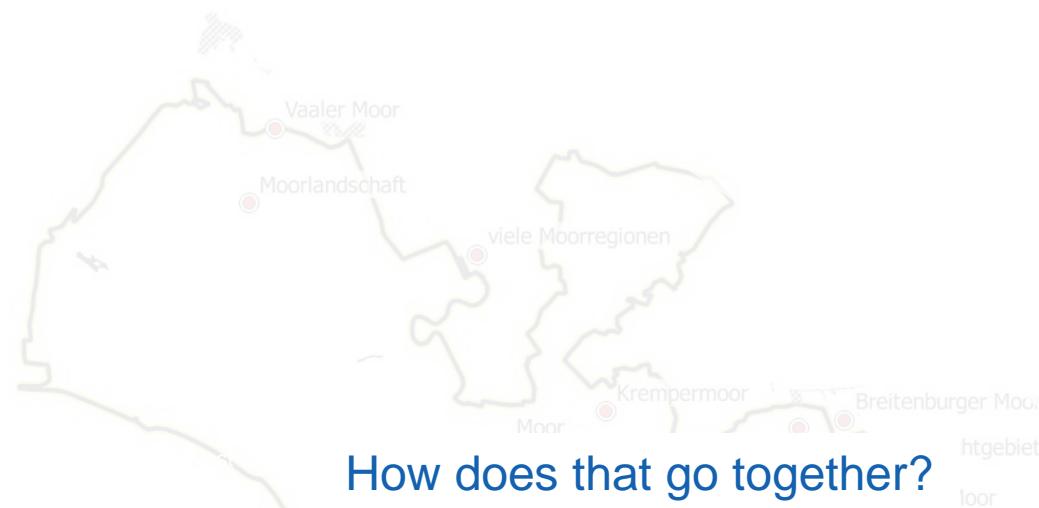
Participatory mapping – Results



Participatory mapping – Results



Participatory mapping – Results



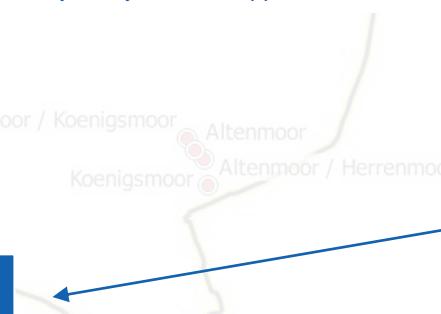
Few moor areas in Basis DLM,
but relatively many moors mapped

● Moor
(participatory mapping)

■ Moor
(Basis DLM)

■ Sumpf (Swamp)
(Basis DLM)

But there exist just few
moor areas here if you
look at the Basis DLM
data (Moor and Sumpf patches)



14 x Moor
(or Feuchtgebiet)
→ 25 % of all specific
landscape elements locals
mapped

0 20 km

Participatory mapping – Results

- „real“ moors mainly disappeared, but are still alive in landscape names
- vice versa: A „real“ moor from a local perspective might differ from the official data´s definition

A ‚moor‘ according to DLM´s definition:

Basen-Zwischenmoor, NSG Glittenberger Moor (Niedersachsen)

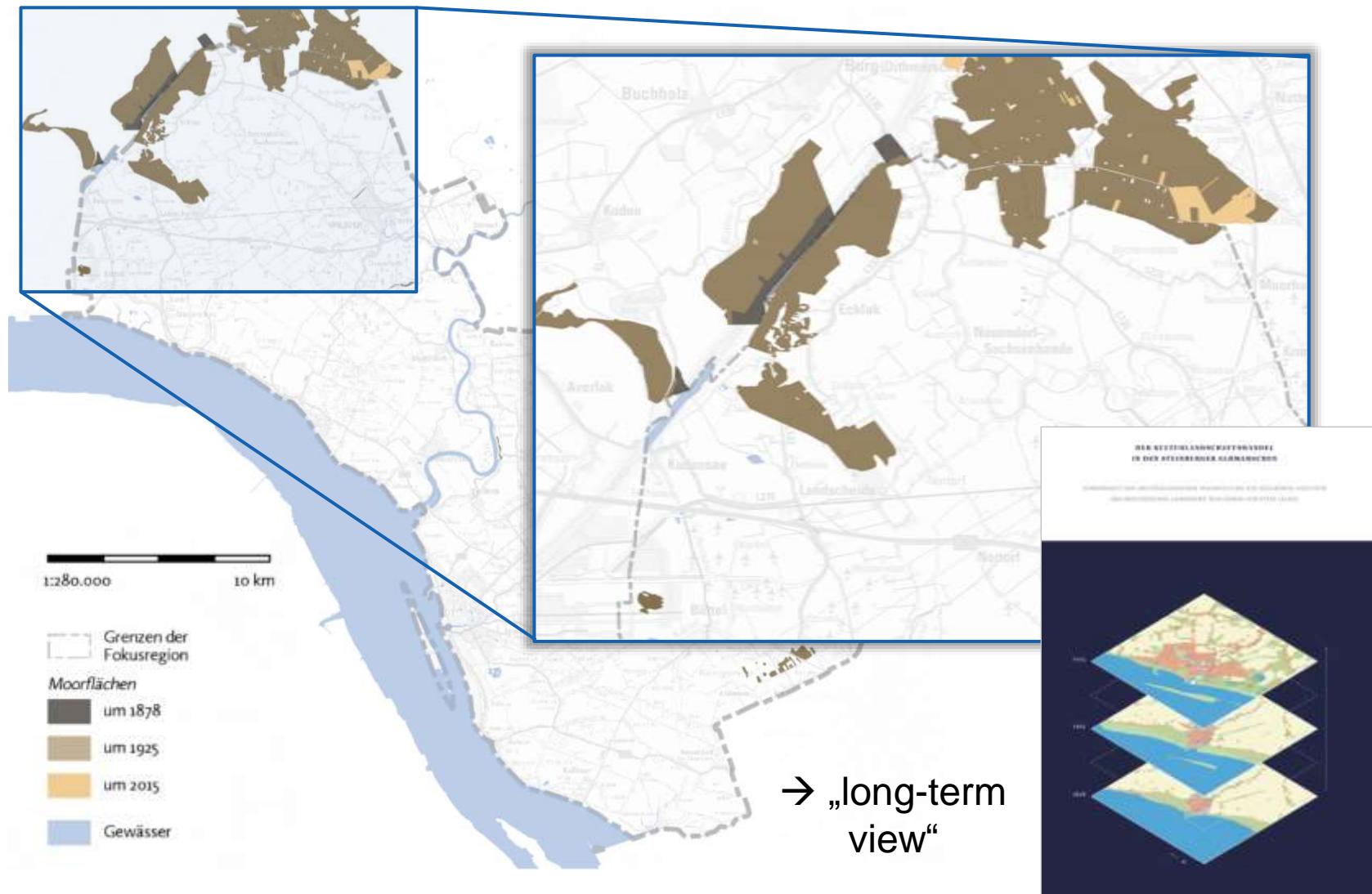


Elke Freese, https://de.wikipedia.org/wiki/Moor#/media/Datei:Glittenberger_Moor.jpg, CC BY-SA 3.0

From AdV (2015): GeoInfoDok,
ATKIS-Objektartenkatalog.
Basis-DLM, Version 6.0.1.

20.6 AX_Moor	Kennung: 43005
Objektart: AX_Moor	
Definition:	
[E] 'Moor' ist eine unkultivierte Fläche, deren obere Schicht aus vertorften oder zersetzen Pflanzenresten besteht. Torfstich bzw. Torfabaufläche wird der Objektart 41005 'Tagebau, Grube, Steinbruch' mit AGT 'Torf' zugeordnet.	
Definition of ‚Moors‘ in ATKIS Basis DLM: an uncultivated area whose top-most layer consists of peaty or decomposed plant remains	
Erfassungskriterien: Fläche >= 1 ha	

Decline of moors



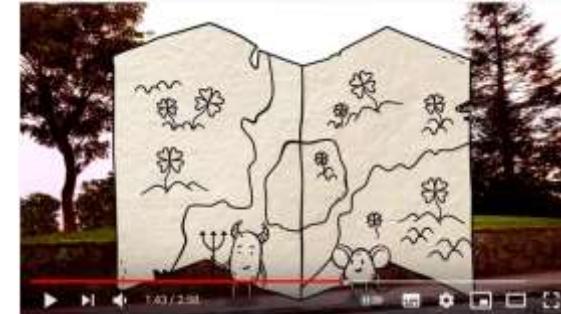
From: Der Kulturlandschaftswandel in den Steinburger Elbmarschen, Archäologisches Landesamt Schleswig-Holstein (Hrsg.), ISBN 978-3-00-058520-3



Spatial information contributing to a collaborative place branding



https://www.steinburg.de/startseite/presse-aktuelles/meldungen/details/tx_news/publikation-zum-kulturlandschaftswandel-in-den-steinburger-elbmarschen-erschienen.html
(Foto: Britta Glatki, Itzehoe)



Regiobranding in Lübeck-Nordwestmecklenburg
<https://www.youtube.com/watch?v=hjkeaXwUqqw>



image to the outside



Regiobranding in den Steinburger Elbmarschen
<https://www.youtube.com/watch?v=a3NAGI2zjco>

FIG paper

- Schaffert, M., Becker, T., Steensen, T. (2021): Spatial Information Supporting a Collaborative Landscape-based Place Branding. Proceedings FIG – International Federation of Surveyors (2021).

Further reading

- Schaffert, M., Becker, T., Steensen, T., & Wenger, F. C., (2020): Qualitative GIS to Support Sustainable Regional Branding and Transition in Northern Germany. In: Methods and Concepts of Land Management: Diversity, Changes and New Approaches (European Academy for Land Use and Development).
- Schaffert, M., Becker, T., & Wenger, F. C. (2021). Partizipatives Kartieren von kulturlandschaftlichen Besonderheiten als Beitrag für einen transdisziplinären Place-Branding-Prozess in der Metropolregion Hamburg. In: Landschaftsbilder und Landschaftsverständnisse in Politik und Praxis, 99-118.