

Brook Restoration with Citizens

– Examples of the Metropolitan Region of Hamburg, Germany –



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The Landscape, North German Lowland

Structured by the glacial ages –
the North German Lowland is not (in every region) flat.



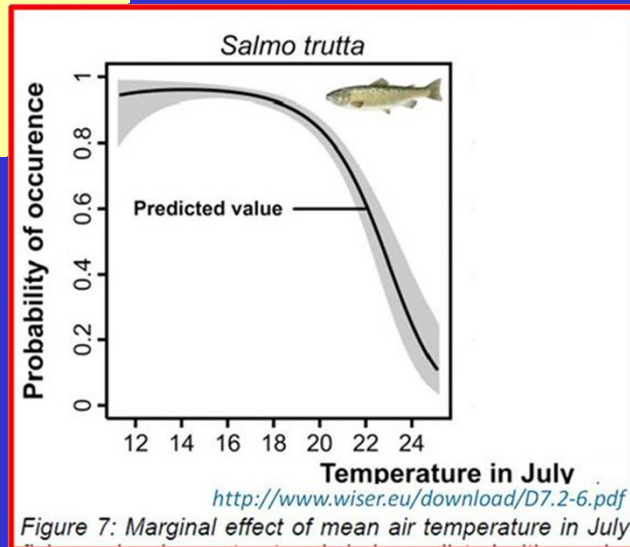
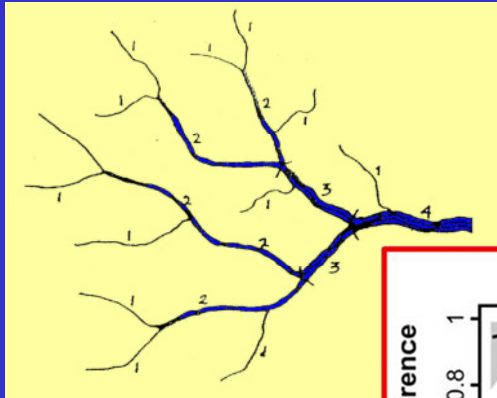
DK: „Danish Lake Highland.“



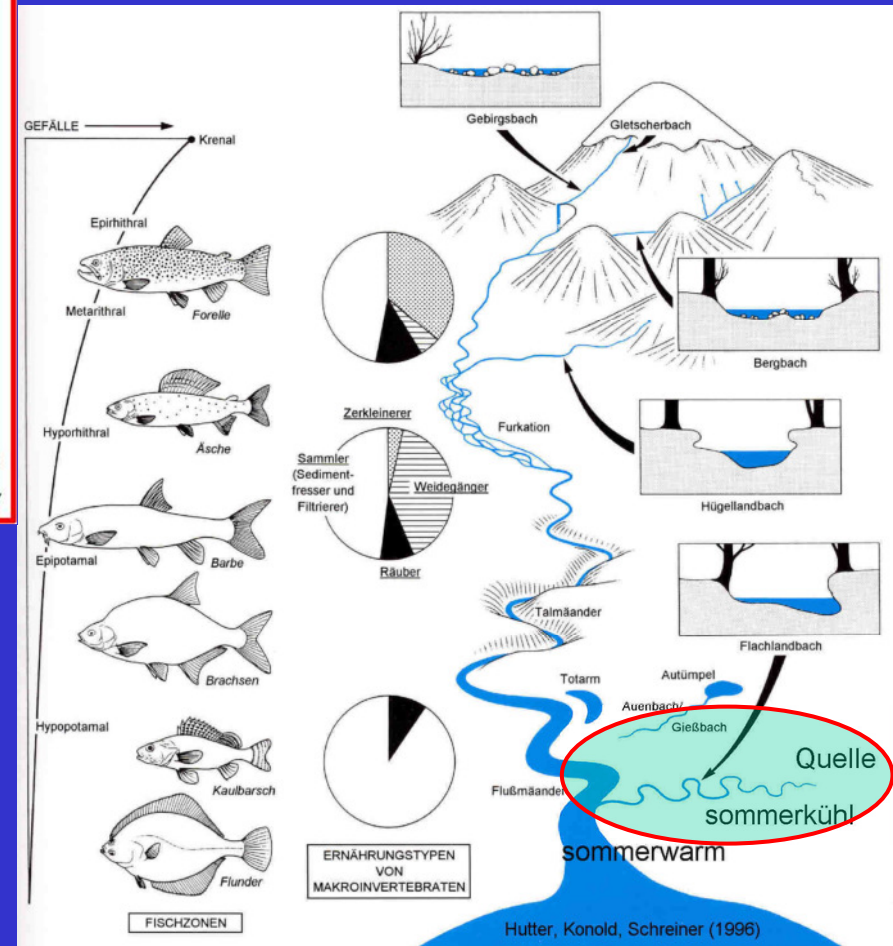
Glacial ages' stones.



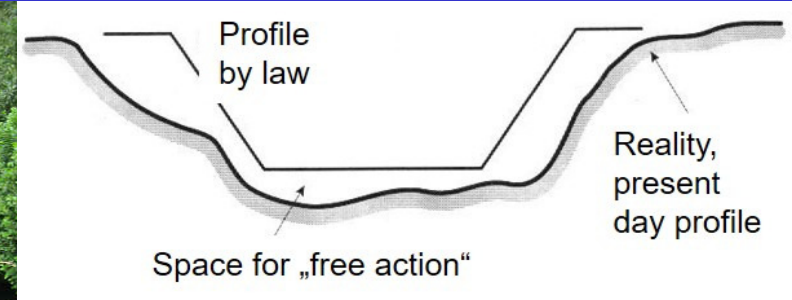
Watercourses – brooks and small rivers



- Brooks and small rivers make up to 80 % of the watercourses` total length
- Many of these are salmonid streams by their natural characteristics.



Reality of present day cross sections



Overwide and over-deep cross sections prevail.
Hard maintenance left it's footprints.

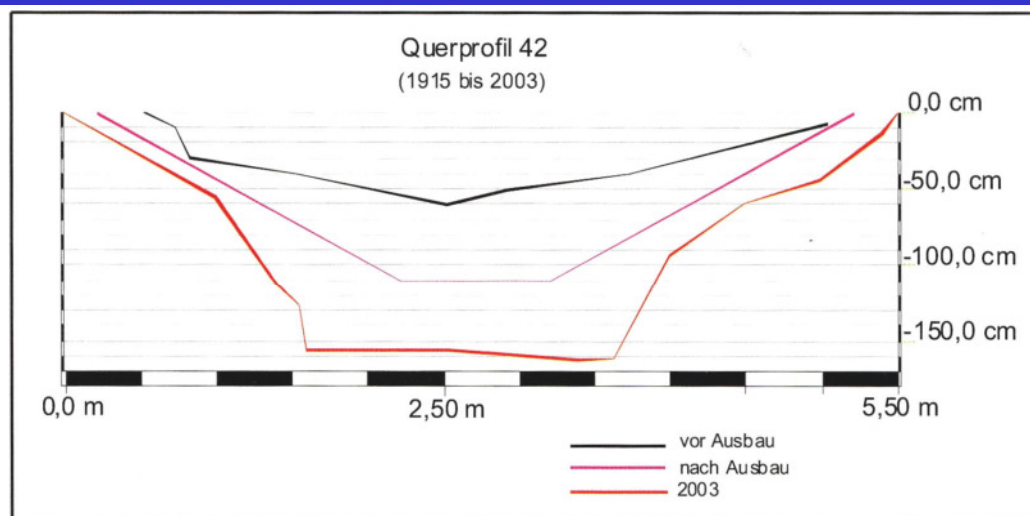


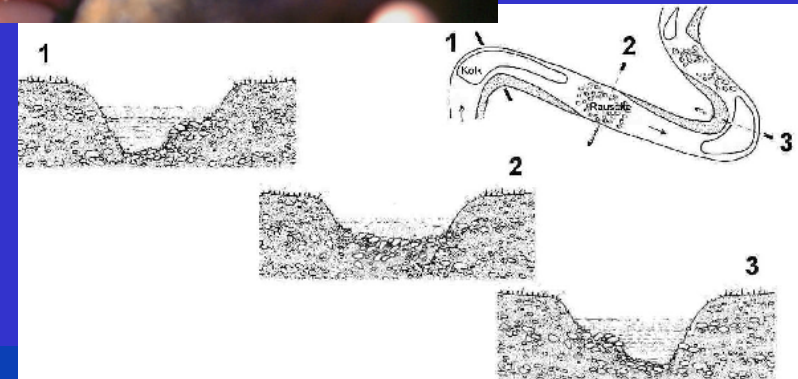
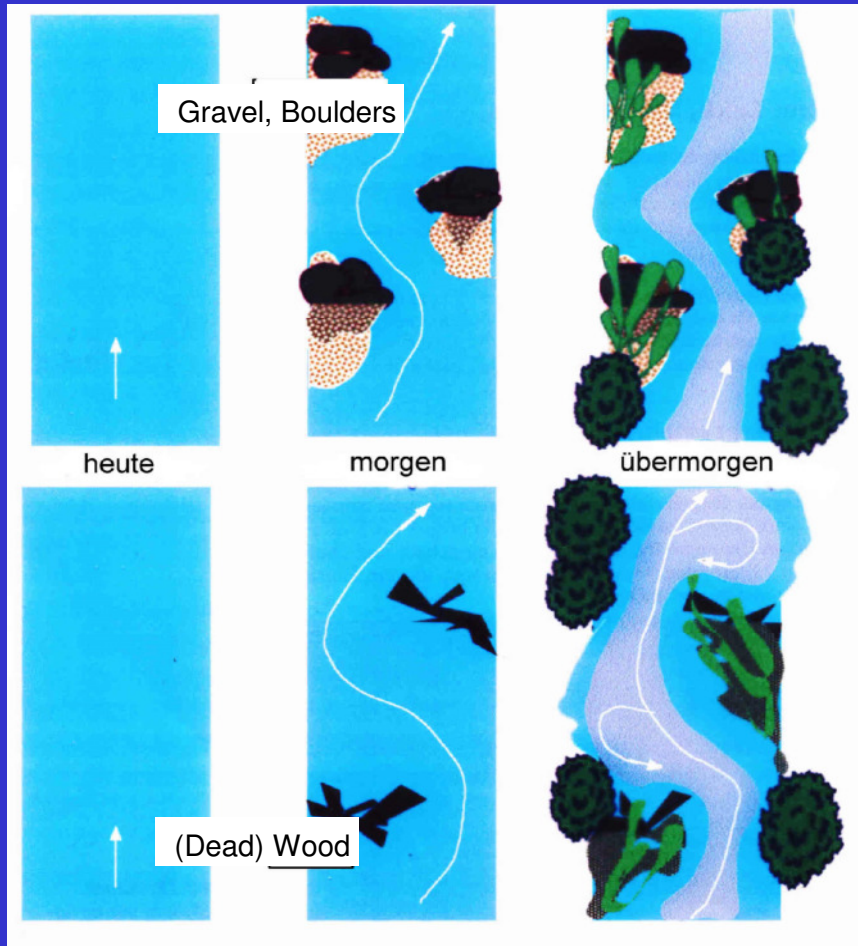
Abb. 31: Querprofilvergleich – 1915, nach 1915, 2003

Zeichnung: K. Grabowsky, 2004



Heavy external, as well as internal erosion produces masses of material to be dredged elsewhere.

In search of an alternative - We have to restore our waters.



Compulsatory participants ?

- Landowner (farmer, ...)
- Maintenance association (farmers, ...)
- Water Authority – „ok“

Other: active participants (neighbourhood, environmental groups), sponsors, specific boards and / or communities to be informed ...

→ → Gentle maintenance

Do you see what you see?

- In focus: In-stream-Restoration

Stakeholder Participation



One stone in a
brook

is better

than ten ashore . . .



Acting in between Mantra, Metrics and Mania

[Catchment Conciousness, Malcolm Newson (2010)]

Urban Example: Trout 2010, Hamburg



Stakeholder Participation with about 80 adopt-a-brook groups resulted in

- Restoration of the river bed, re-induced turbulence
- Re-gaining of the former trout brooks in the middle of the city
- „Trout 2010“ = Best Practice-project, adapted for Hamburg WFD-Programs

Rural Example - Habitat Restoration is just Fun !



- Have a look for 75 t of gravel,
- Then: for 75 „Waldfeen (Fairies of the woods)“ and „Naturburschen (Nature Lads)“
- Hold healthy food and beverages available ...



Habitat Restoration and Fun - Results



- Narrowing of the channel by adding characteristic material of the landscape
- Rheophilic organisms re-appear

Habitat Restoration and Results



Sea Trout, about 12 spawning beds in one riffle



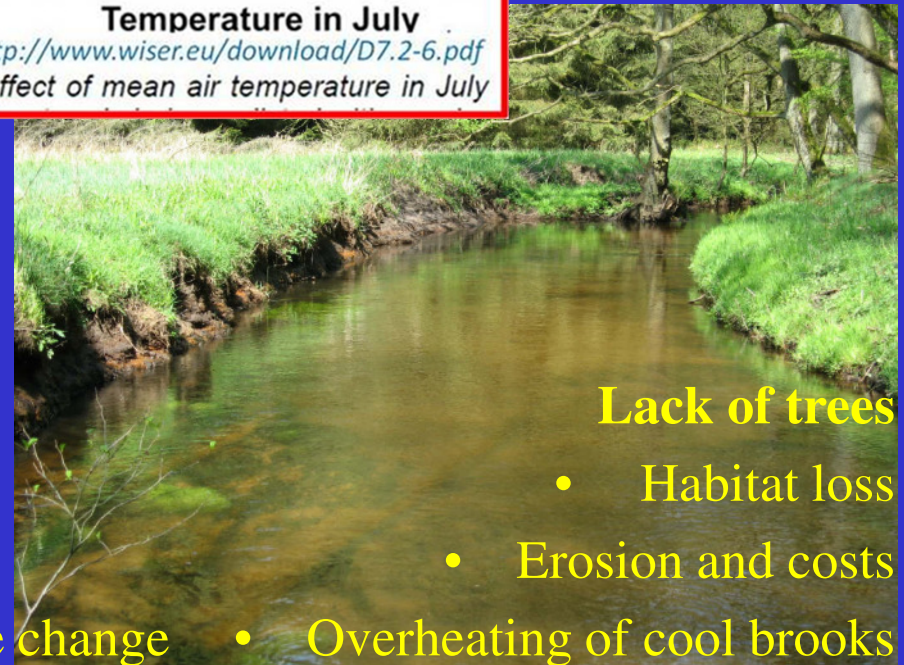
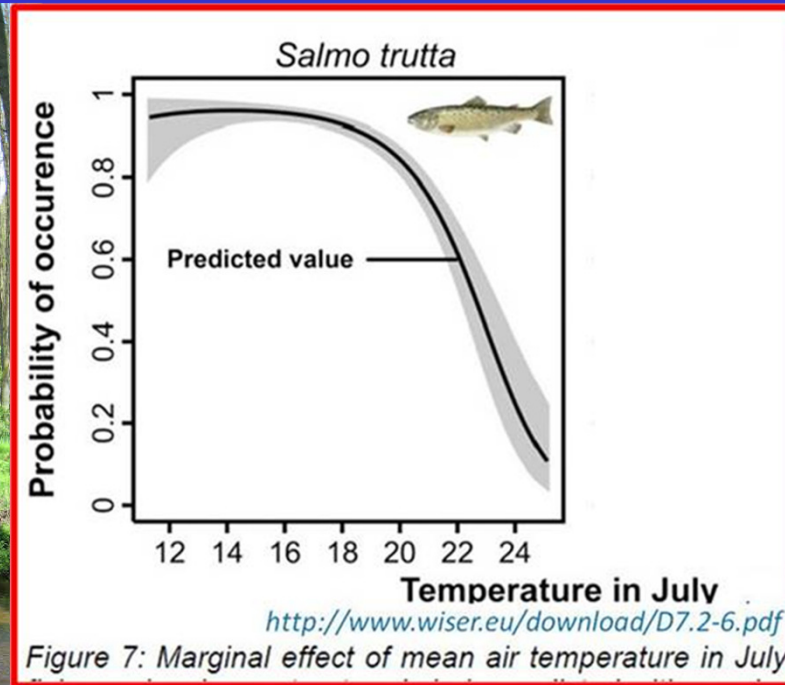
River Lamprey, spawning



Sea Trout, male, 83 cm

- The river positions the material by own dynamics
- Rheophilic organisms re-appear

One main topic left - We need the trees.



Trees are most important features for

- Habitat development
- Erosion control
- Last, but not least: Adaptation in climate change

Lack of trees

- Habitat loss
- Erosion and costs
- Overheating of cool brooks

We need the trees.



Trees are most important features for

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Thank you very much !

Danish Examples, translated ...

Life-long learning – practised:

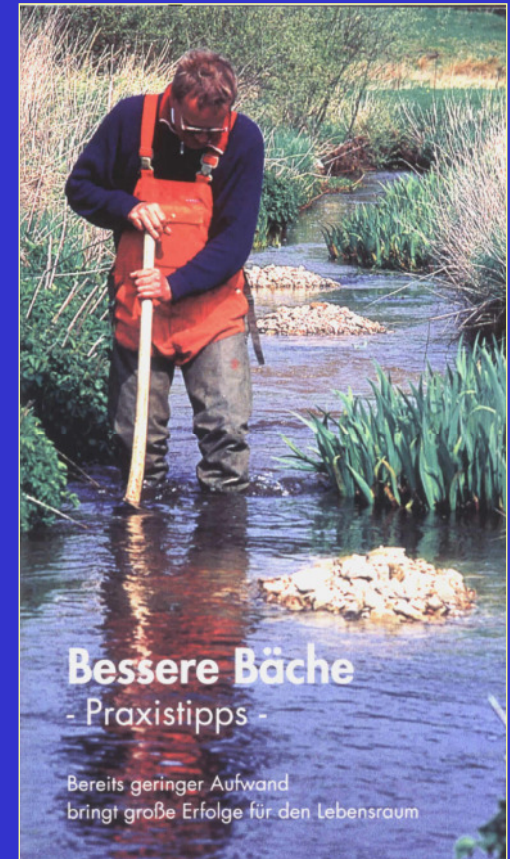
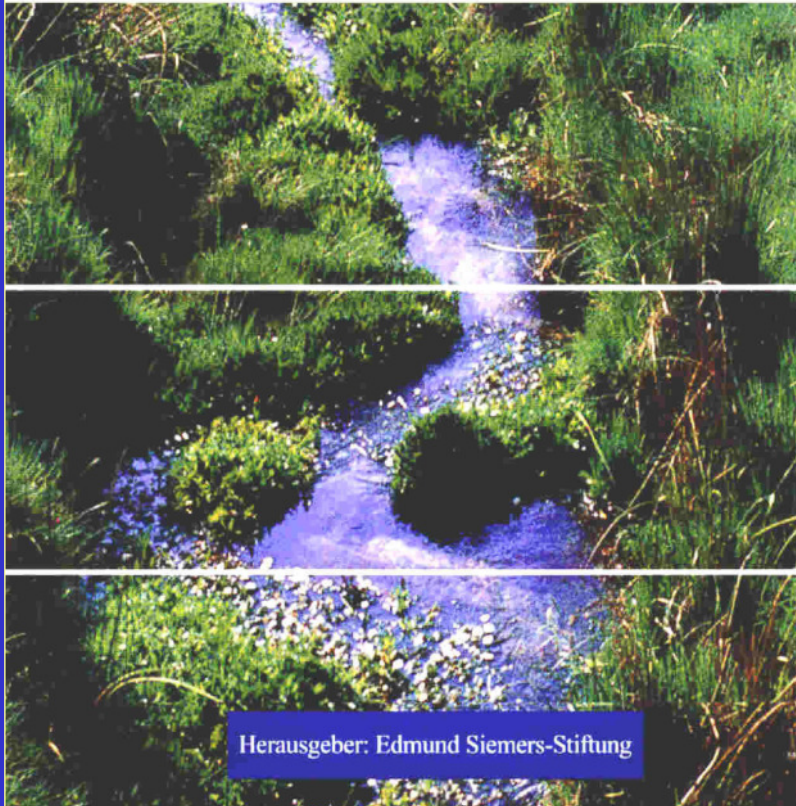
Education materials available

www.salmonidenfreund.de

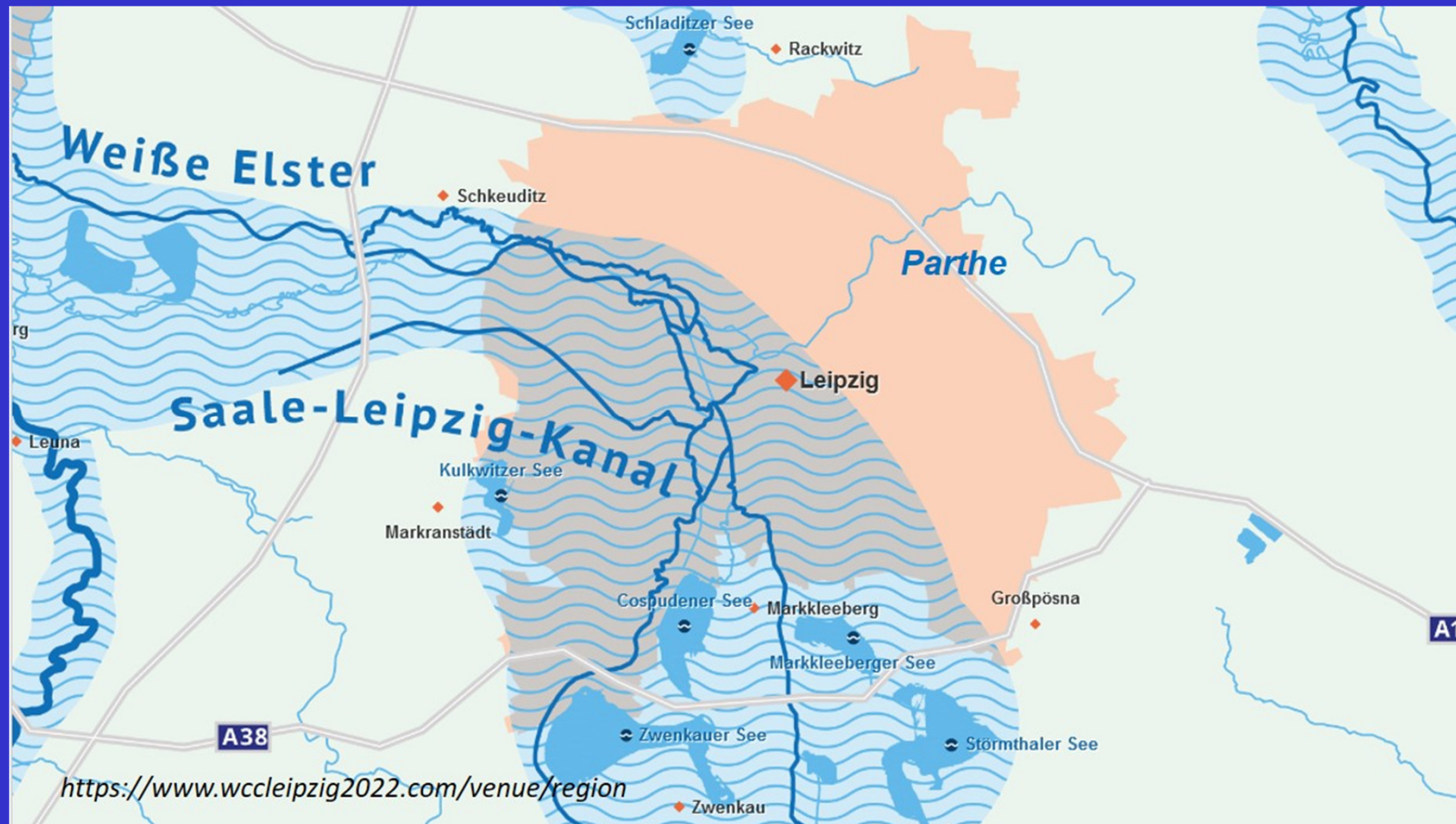
Lebendige Bäche und Flüsse

Praxistipps zur Gewässerunterhaltung und
Revitalisierung von Tieflandgewässern

Bent Lauge Madsen & Ludwig Tent



Why not give Leipzig`s brooks and citizens a chance ?



Perhaps to start with the river Parthe ?