

Morphodynamics of low-energy rivers

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Challenge

Many low-energy rivers are currently being restored. How morphodynamic will these rivers be when bank protection measures are being removed? Can we predict their lateral activity and channel pattern? We provide new insights on their morphodynamics to guide river restoration projects.

Innovative components

- Conceptual models on the planform evolution of different types of low-energy rivers.
- Channel pattern prediction tool.

For whom and where?

For organizations and project managers working on the restoration of low-energy rivers.

Application development and findings

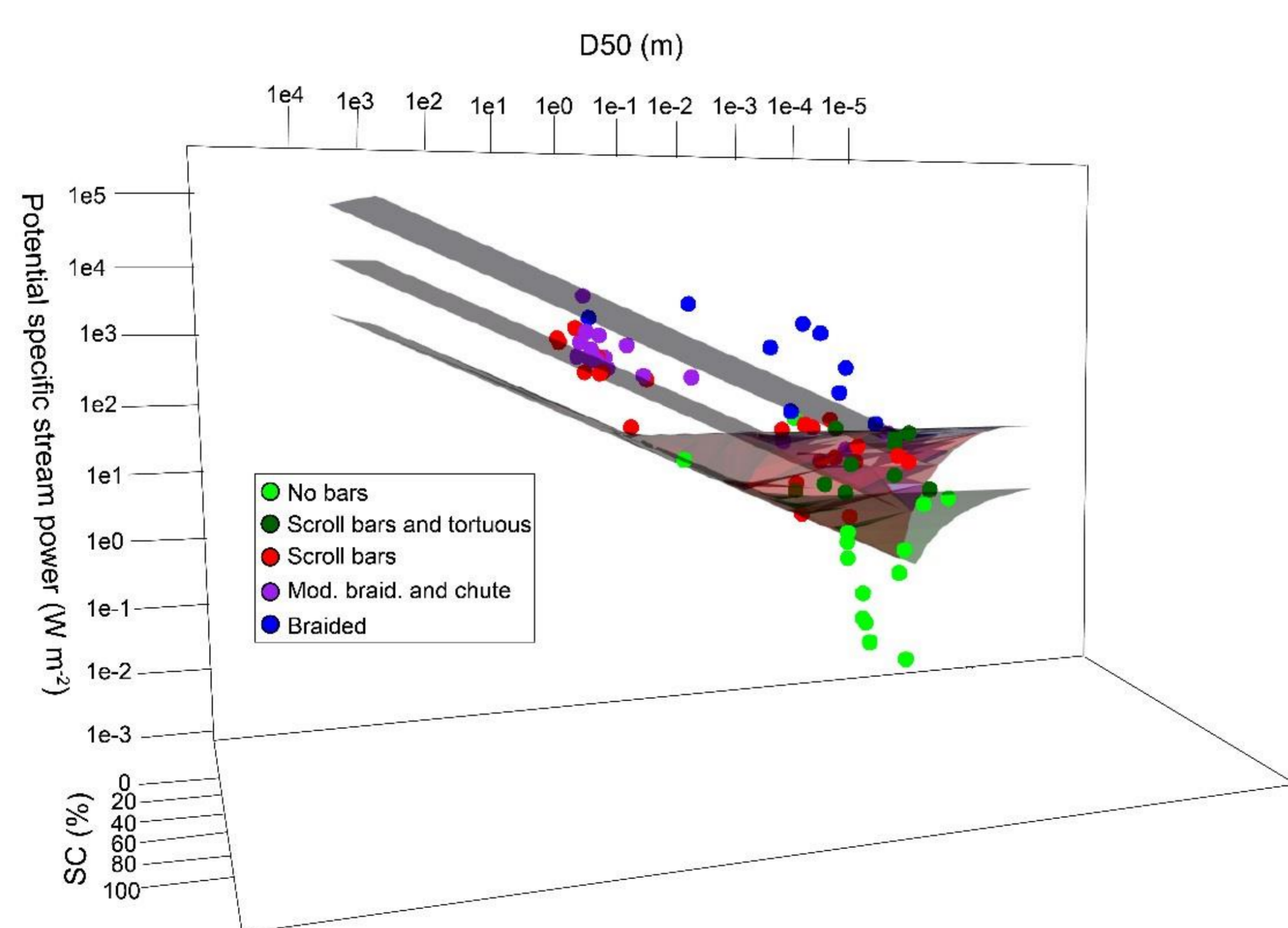
- Floodplain architecture is key to the morphodynamics.
- Land use and climate change affect the morphodynamics of low-energy rivers.
- Tool to predict the channel pattern of rivers.

Status for day-to-day practice

Rivers are not just a line in the landscape, but the floodplain architecture is essential for the understanding of future river morphodynamics. More attention should be given to subsurface mapping prior to river restoration.

Next steps

Determine the boundary between river channels and dispersed wetland systems.

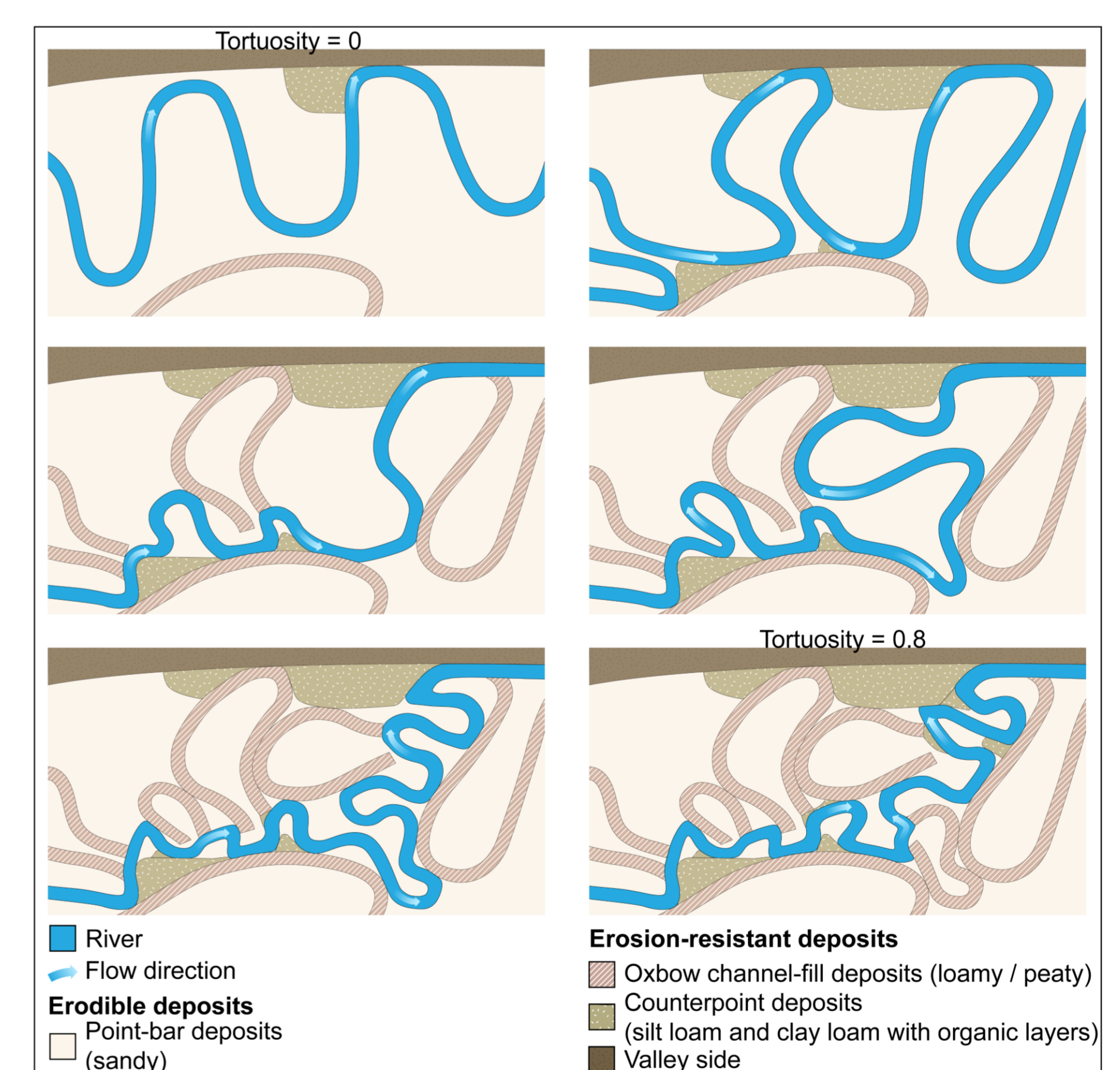


Newly developed tool to predict the channel pattern of rivers.



Palaeogeographic research

Our approach



Conceptual model showing self-constraining of low-energy rivers

Interested?

Email to: jasper.candel@wur.nl
Explore more in the Regional water systems [project description](#)

