

Emigration of European silver eel from a polder system into the Schelde estuary



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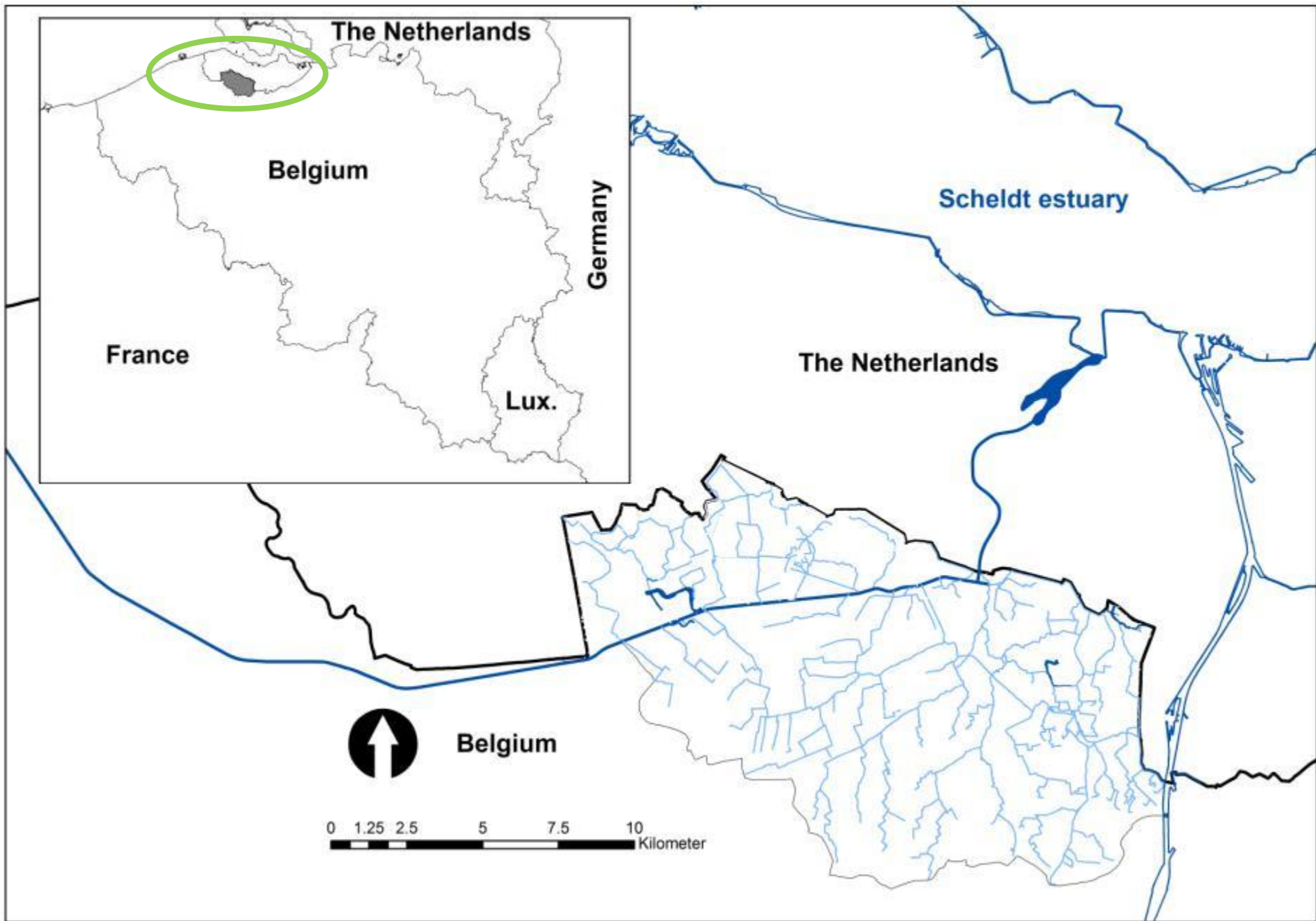
INSTITUUT
NATUUR- EN BOSONDERZOEK



**Take me down
to the paradise city**

**where the eels are green
and their skin is slippery**

...



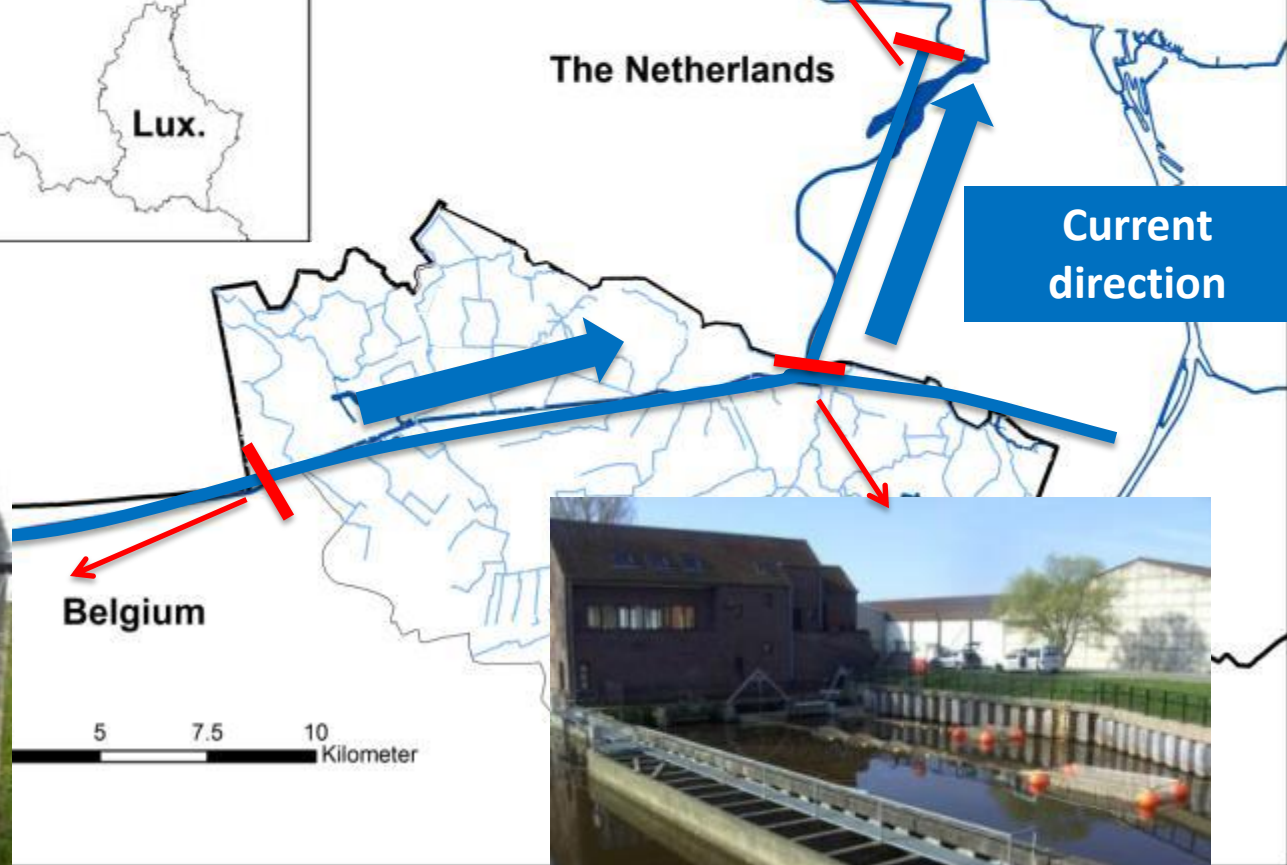
Valuable habitats



**However, we do
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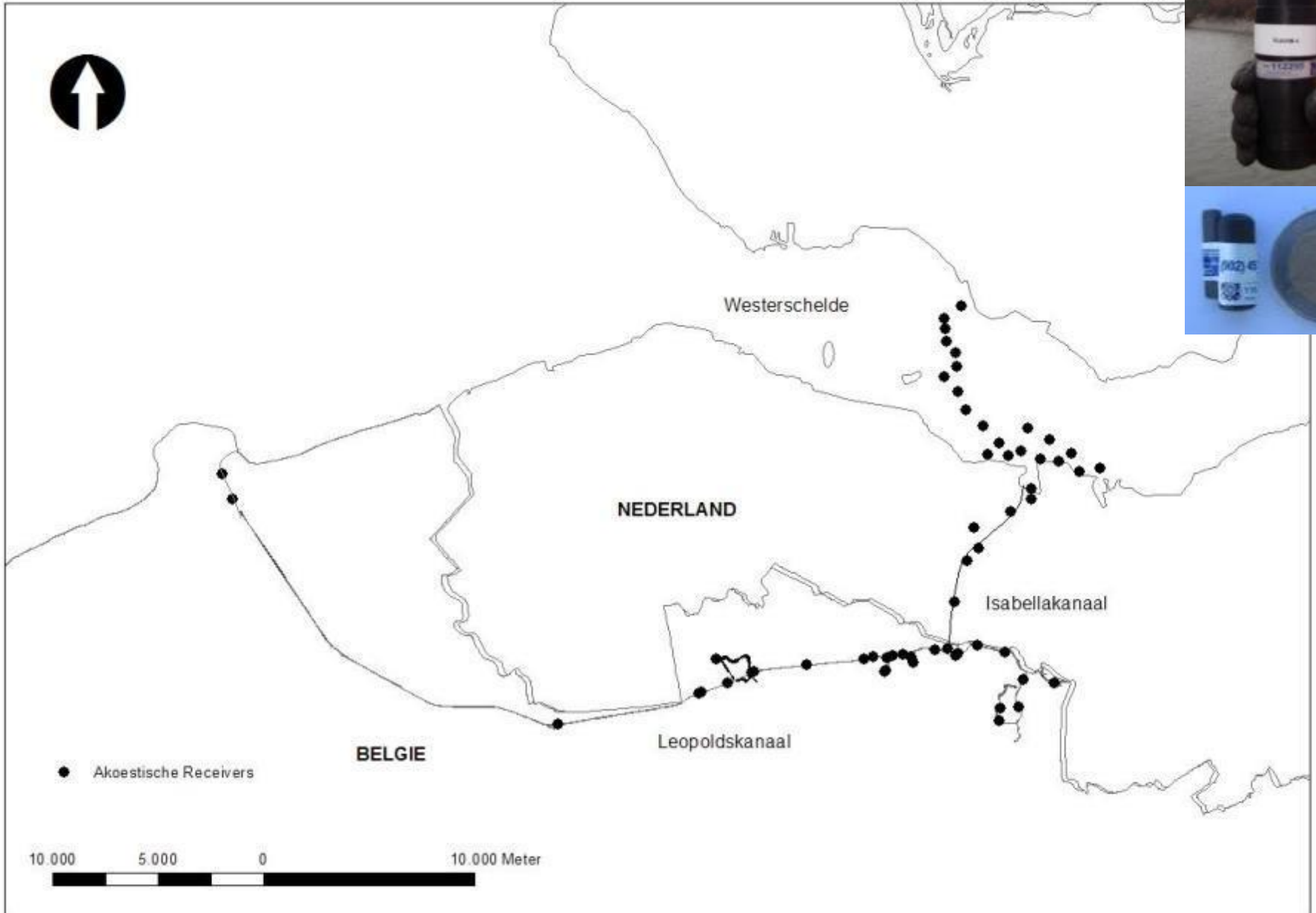


Objectives

- **Impact of migration barriers on eel behaviour?**
 - **Migration routes?**
 - **Search behaviour?**
 - **Delay?**

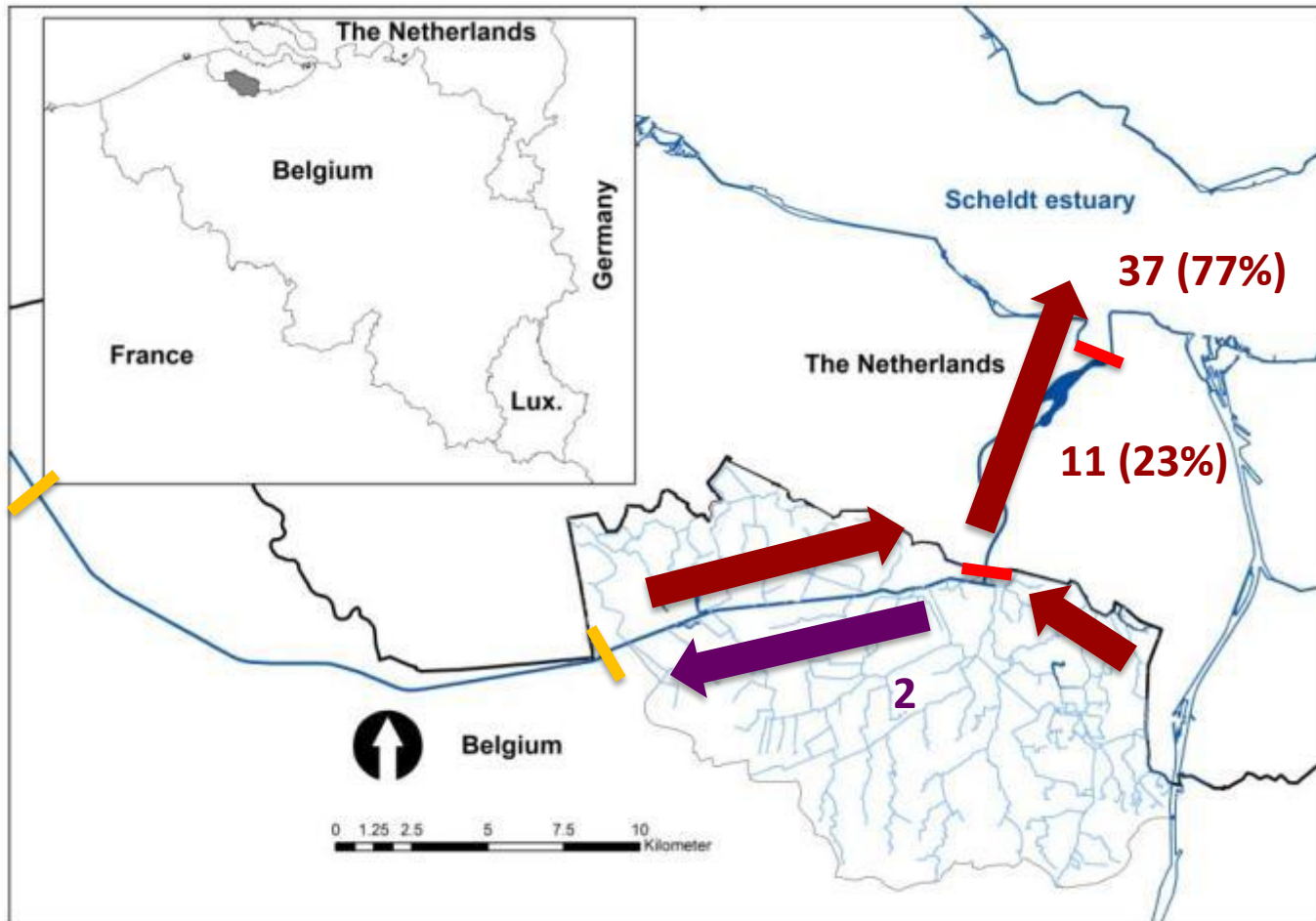
- **Potential solutions?**

Methods



Results

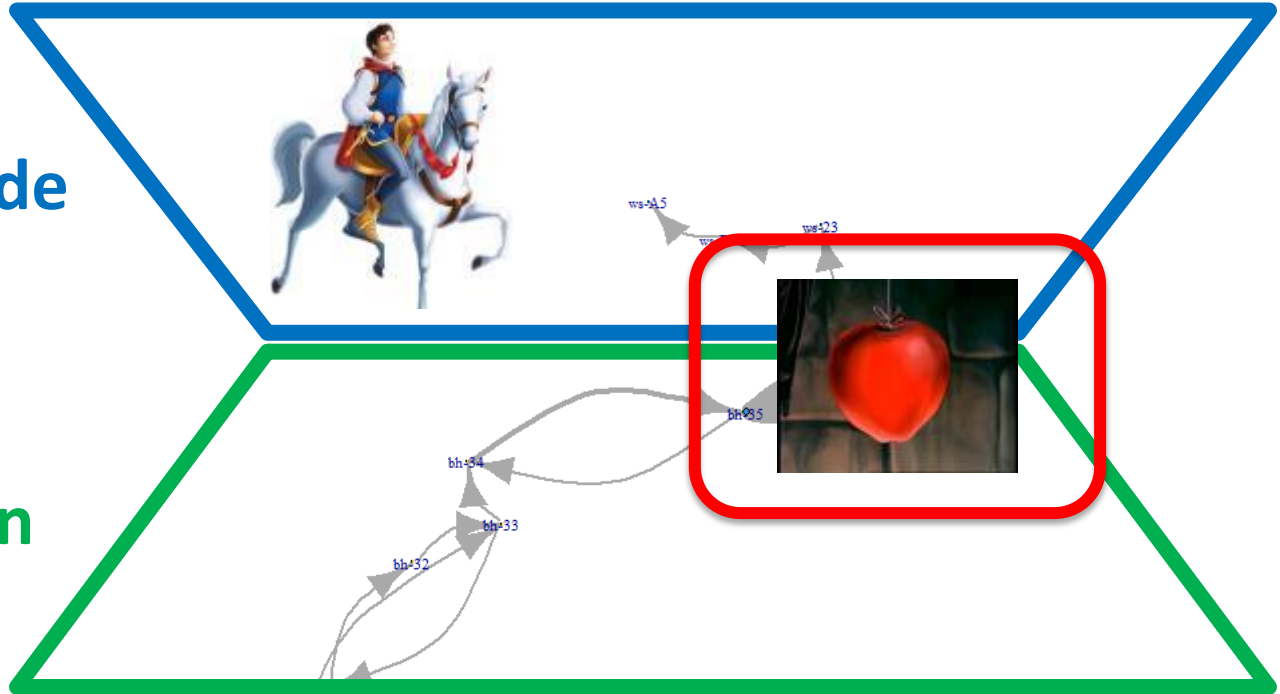
- Different migration routes



Results

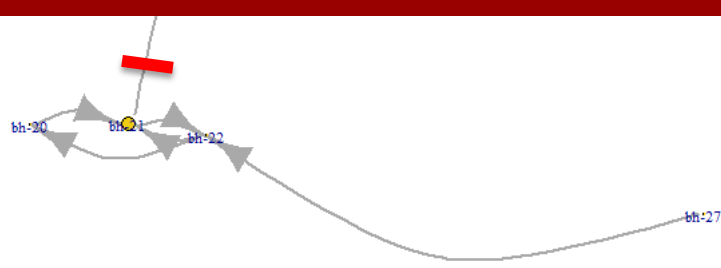
- Trajectories → Network analysis

Westerschelde



Braakman

Polder



Conclusions

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 - **Desorientation – searching behaviour**
 - **Unsuccessful migration attempts**
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- **Fish-friendly pumping stations?**



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- **Main route: Scheldt Estuary (48 eels)**
- **22 (46%) did not reach the North Sea!**
- **barriers:**
 - **Desorientation – searching behaviour**
 - **Unsuccessful migration attempts**
 - **Delays**
- **Fish-friendly pumping stations?**
- **Solution:**
 - **Change hydrology**
 - **Stimulate gravitational flow**
 - ❖ **Environmental windows**





Thank you!



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