



# Fish Migration: a Dutch Point of View

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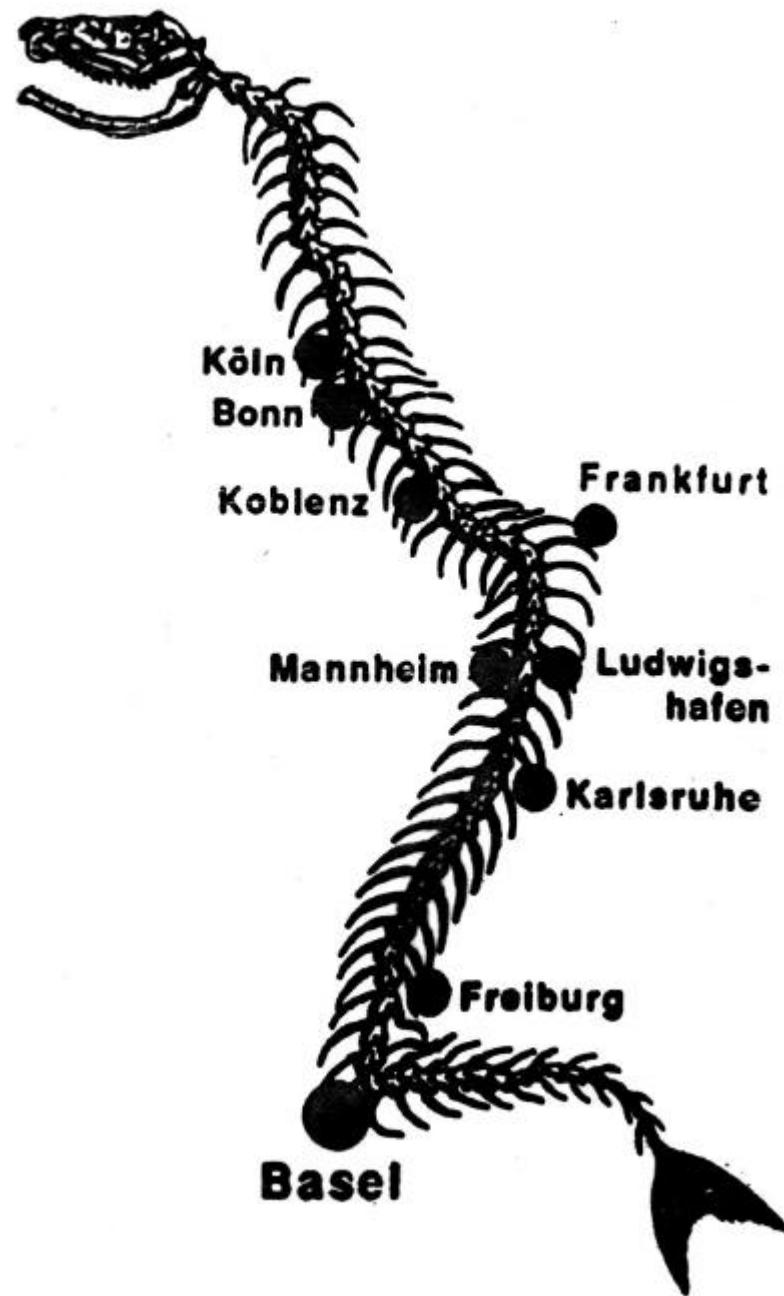
The Netherlands

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# Life cycle migratory fish: role of the Netherlands



- Transition sea - river
- (Spawning) habitat
- Migration route



# Transition sea - river

- Open: Nieuwe Waterweg
- Closed:
  - Haringvliet: Adjusted sluice management: “De Kier” / “Sluices Ajar” (2008)
  - Lake IJsselmeer: Study on fresh – saltwater transition zone at the Afsluitdijk-dam



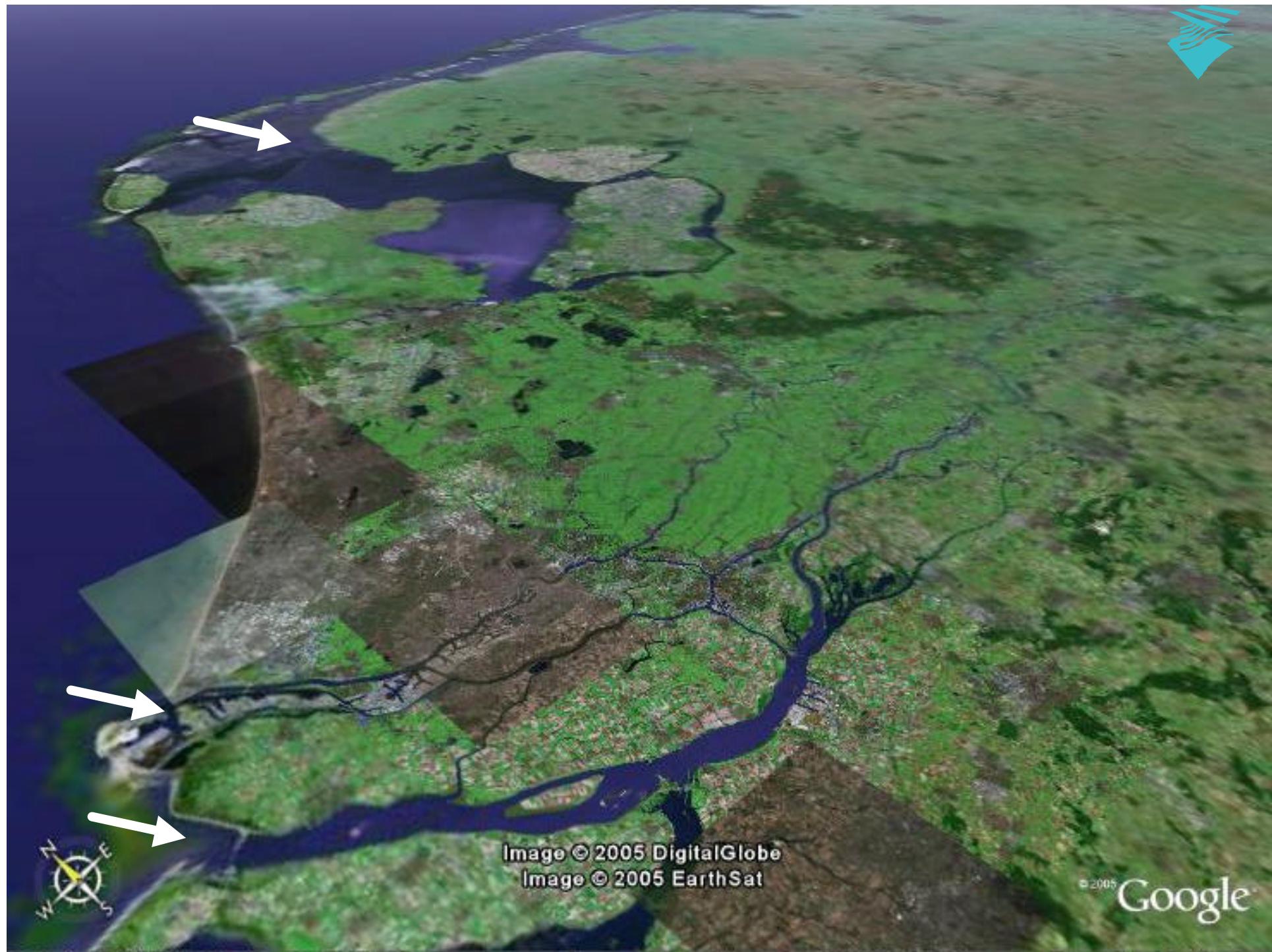


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# Ecological rehabilitation

- Nature riparian zones
- Flood plain projects:
  - Side channels / oxbow lakes;
  - Floodplain lakes
- “Room for the River” /  
EU Water Framework Directive









# Fish ways

- Fish ways Nederrijn/Lek:
  - Driel (realised 2001)
  - Amerongen and Hagestein (realised 2004)
- Monitoring programme (started in 2005)















# Fishing Ban on Salmonids

- European (EU): outside 6 miles zone
- National: since 2000
  - Inland waters
  - Coastal zone till 6 miles
  - Coastal waters



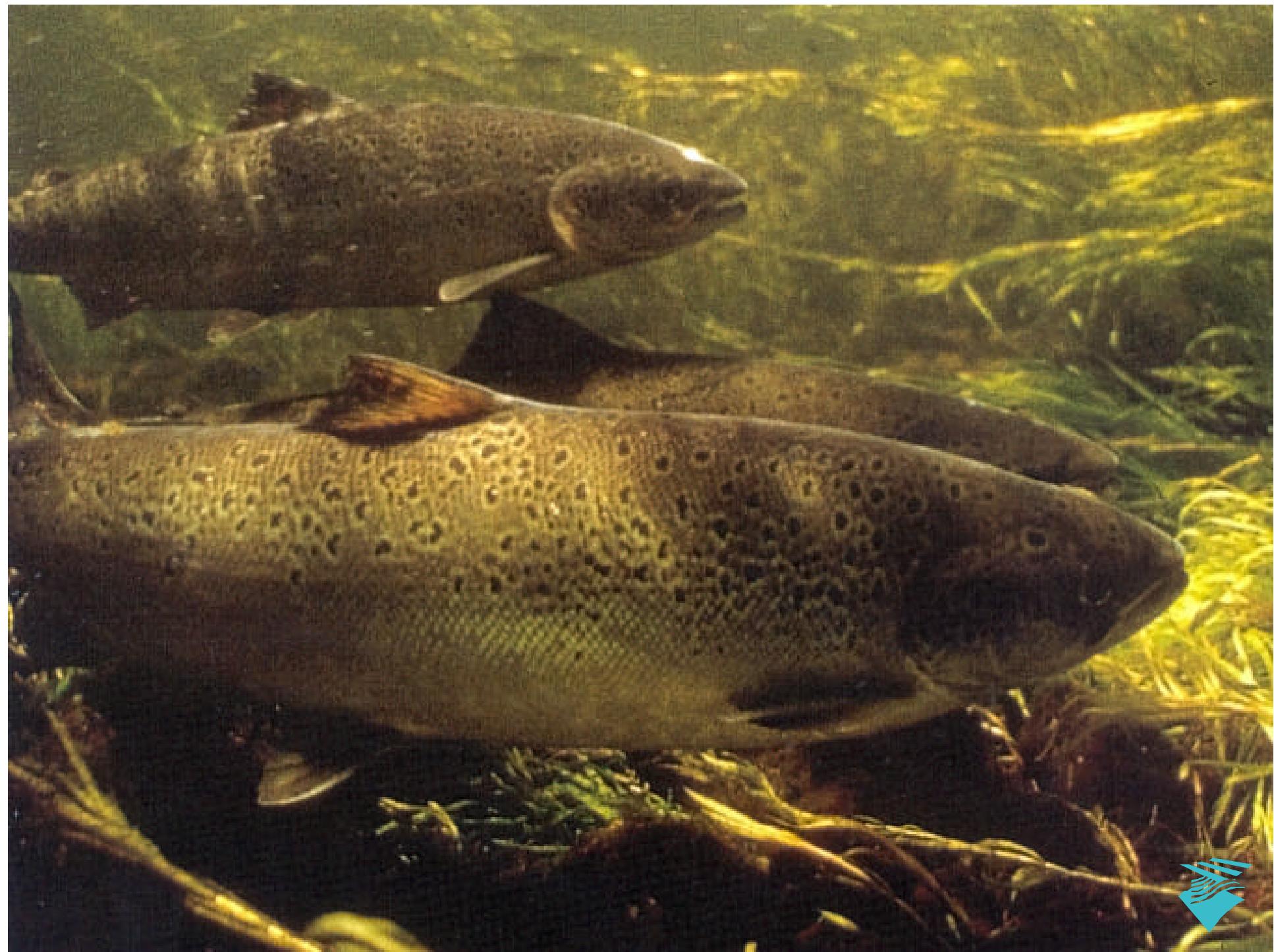




# Summary

- Open transitions river – sea partly restored
- Restoration hydro morphologic gradients by rehabilitation measures
- Free migration through Dutch Rhine branches
- Sea lamprey and river lamprey: recovered, sustainable populations
- Twaite shad spawning in delta Rhine and Meuse
- Migration of Salmon and Sea trout is successful







24 fish species  
 > 11000 individuals  
 > 900 Sea lamprey and Lampern

