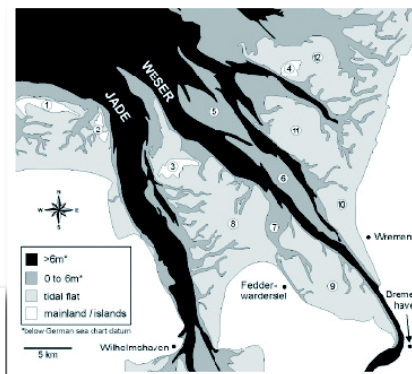


TIDE Estuaries: Elbe, Humber, Scheldt & Weser

*Kick-Off Conference in Antwerp
18th February 2010*

Four Estuaries... ... One Project

Scheldt | NL, BE



Weser | DE

Elbe | DE



Humber | GB

Similar Challenges

- Increasing sediment transport, requiring more maintenance dredging and improved sediment management



Similar Challenges



- Endangered estuarine ecosystem functions: flood regulation, coastal protection, water purification, plant and animal habitats



Similar Challenges

- Increasingly challenging legal and global economic framework:
 - EU Directives (Birds and Habitat, Water Framework)
 - Economic prosperity and big port development
- Climate change



TIDE Objective

To turn integrated management and planning into a reality in these four estuaries

TIDE Financing

- 3.7 m EUR, supported by 50% by ERDF financed INTERREG IV B North Sea Programme
- Implemented between January 2010 and December 2012





18. February 2010

TIDE Partners

Scheldt | NL, BE

Rijkswaterstaat
Flemish Authorities, Department of Mobility and Public Works
Antwerp Port Authority
University of Antwerp

Elbe | DE

Hamburg Port Authority (Lead Partner)
Lower Saxony Water Management, Coastal Defence and Nature Conservation Agency

Weser | DE

Lower Saxony Water Management, Coastal Defence and Nature Conservation Agency
Free Hanseatic City of Bremen
University of Bremen

Humber | GB

Institute of Estuarine & Coastal Studies, Hull
Environment Agency

TIDE Approach

- Account for ecological, economic and societal needs
- Interlink multiple processes, efforts and investments already taking place
- Use knowledge and solutions generated in previous projects (HARBASINS, SedNet, New!Delta)
- Link to existing management plans and EU Directives

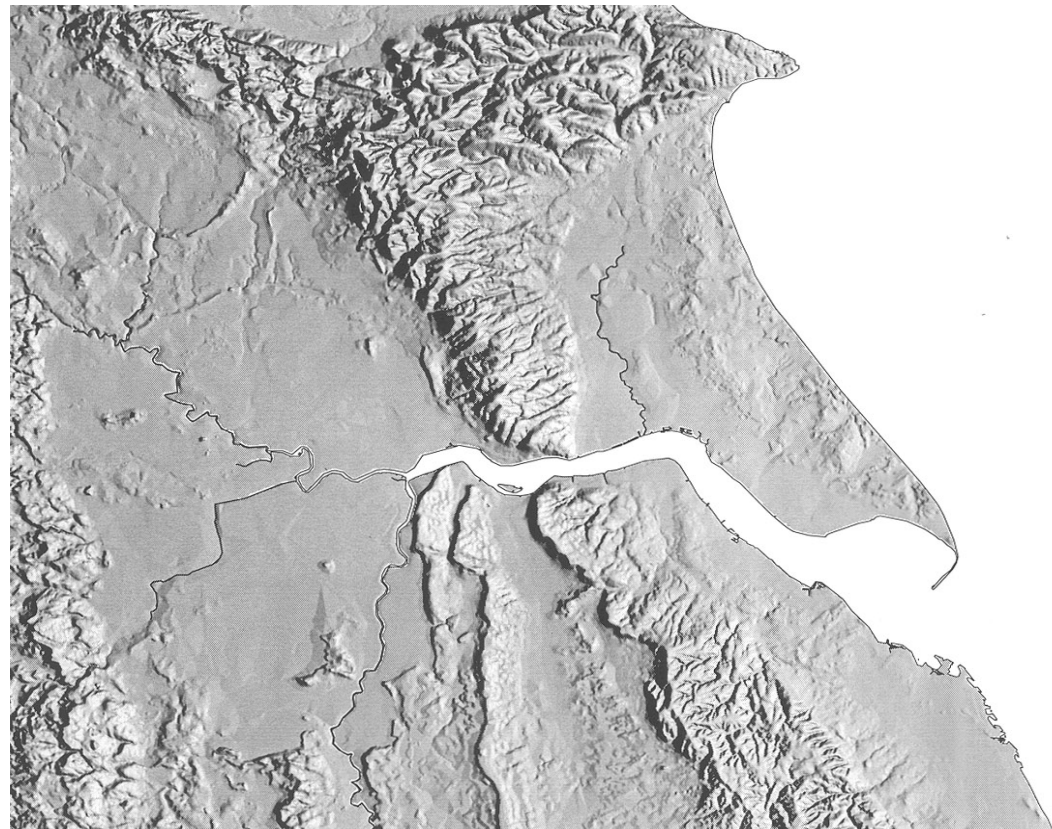
Elbe Estuary



- Port of Hamburg,
3rd largest in Europe
- Lower Saxonian Ports
(Cuxhaven, Brunsbüttel, Stade)
- 141 km length
- over 90% Natura 2000
- strong tidal pumping
- 3D hydromorphological Model
- Pilot Projects:
Sediment Trap and
new Flooding Area

Humber Estuary

- Ports of Grimsby, Immingham, Goole & Hull
- 14% of UK Trade
- 121 km length
- Drains 20% of UK
- EU Protected Sites
- Many sectoral Management Plans
- 1500t Sediments moved by each tide
- 5th Most Important UK Site for Wetland Birds



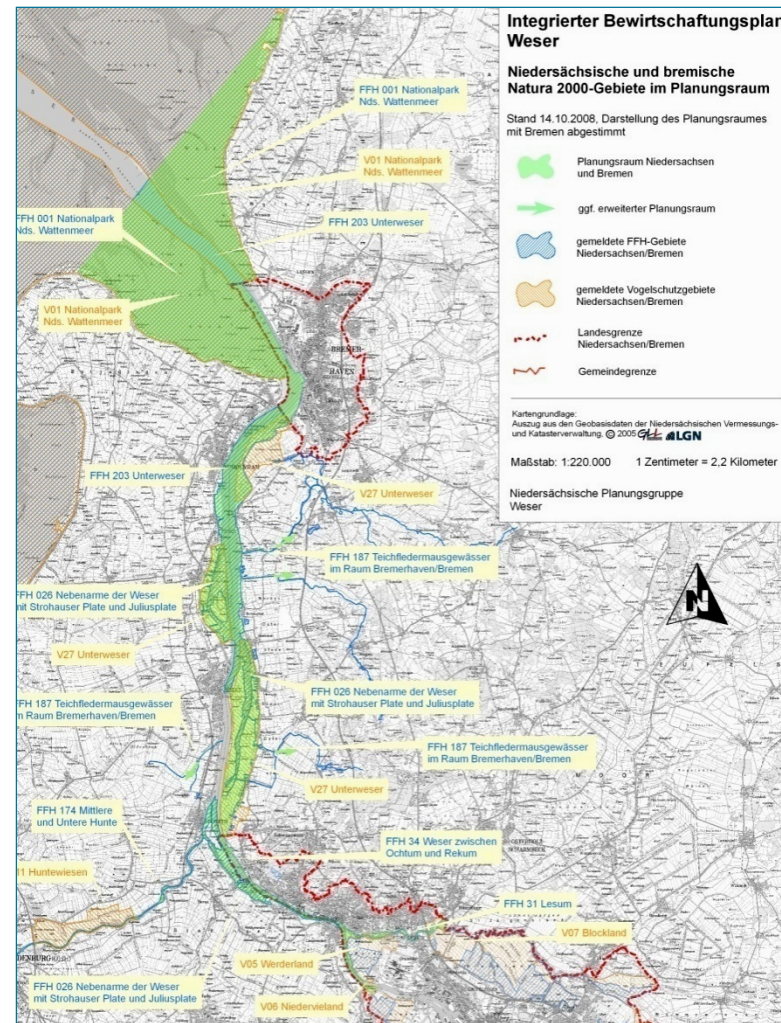
Scheldt Estuary

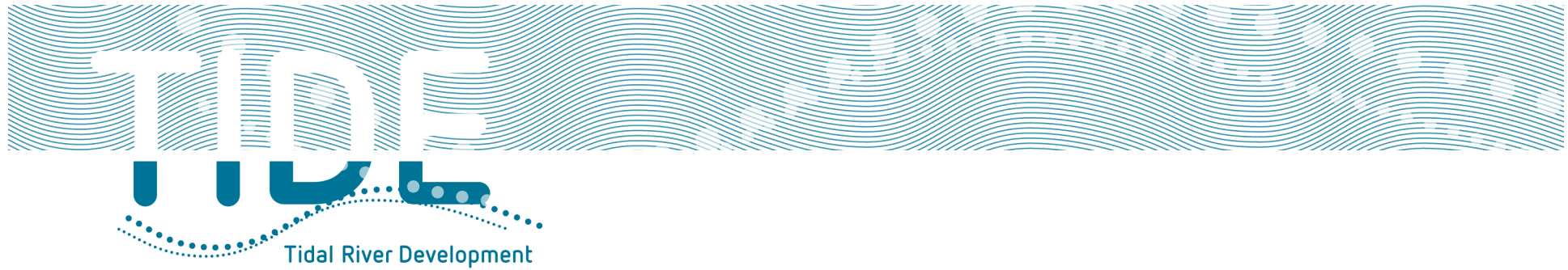


- Port of Antwerp, 2nd largest in Europe
- 160 km length
- EU Protected Sites
- Many sectoral Management Plans
- Integrated Plan (Package Deal)

Weser Estuary

- Port of Bremerhaven, 2nd largest in Germany
- Port of Bremen
- 90 km length
- EU Protected Sites
- Integrated Management Plan by 2010





TIDE Fields of Integration

- **Accessibility (Navigation, Sedimentmanagement)**
- **Safety (Flood Risk Protection)**
- **Nature (Natura 2000, WFD)**