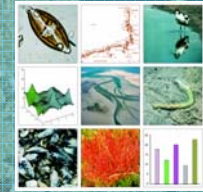


TMAP ad-hoc group FISH Hamburg 29 – 30 March 2006



Introduction

Harald Marencic

Common Wadden Sea Secretariat



Trilateral Wadden Sea Cooperation

Since 1978, the Netherlands, Germany and Denmark have been cooperating to conserve and protect the Wadden Sea as a an ecological entity.

Guiding principle

“to achieve, as far as possible, a natural and sustainable ecosystem in which natural processes proceed in an undisturbed way”.



Trilateral Wadden Sea Cooperation



Joint Declaration

“to consult each other in order to coordinate their activities and measures to implement (international and EC) legal instruments with regard to the comprehensive protection of the Wadden Sea region as a whole including its fauna (marine, terrestrial and avian) and flora”

Ministerial Declaration Schiermonnikoog 2005

“We agreethat coordinated and consistent implementation of EC Directives is needed and should be one of the core elements of the Wadden Sea Cooperation”

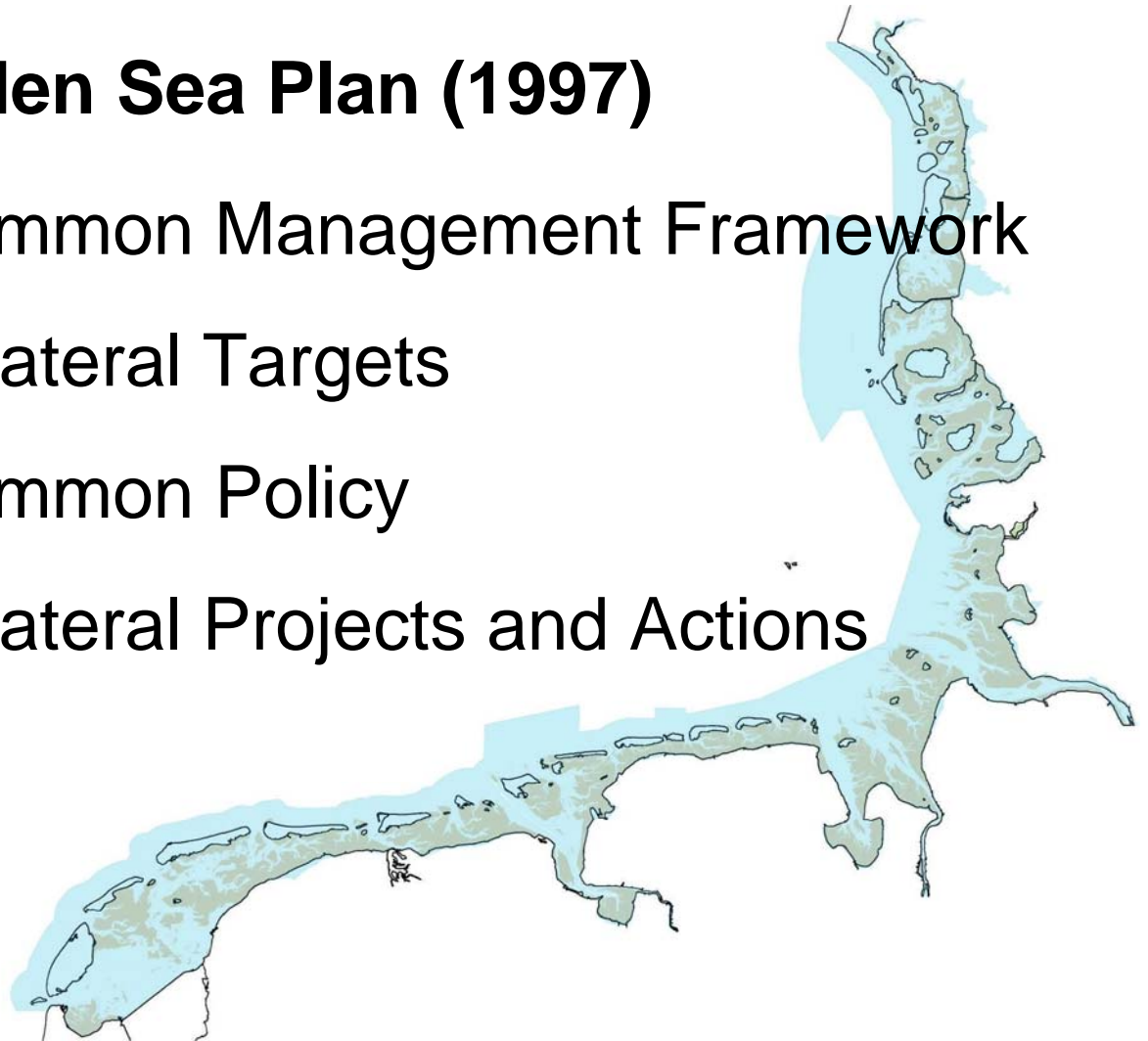


Trilateral Wadden Sea Cooperation

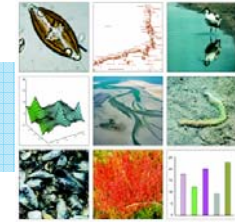


Wadden Sea Plan (1997)

- Common Management Framework
- Trilateral Targets
- Common Policy
- Trilateral Projects and Actions



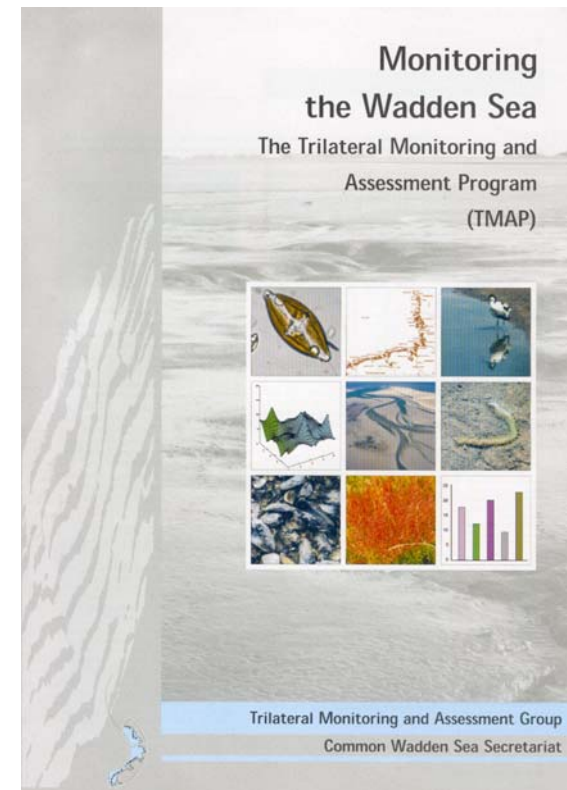
Trilateral Wadden Sea Monitoring Program



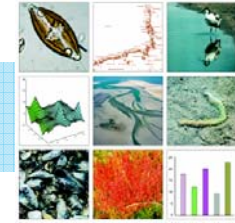
Trilateral Monitoring and Assessment Program (TMAP)

Aim of the TMAP

- To provide a scientific assessment of the status of the entire Wadden Sea ecosystem
- To assess the status of implementation of the trilateral „Targets“ of the Wadden Sea Plan



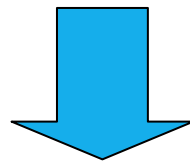
Wadden Sea Quality Status Report 2004



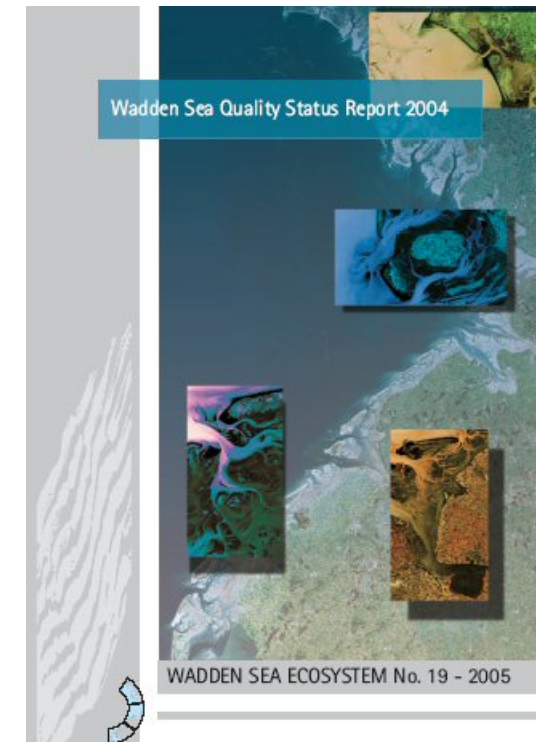
Trilateral Monitoring and Assessment Program (TMAP)

Recommendations for

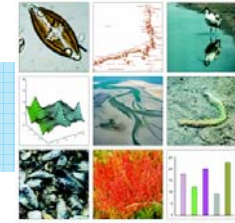
- Monitoring and Research
- Policy and Management



**Input to the Trilateral Governmental
Conference on 3 November 2005**



Wadden Sea Quality Status Report 2004



Chapter 8.6 Fish

Ralf Vorberg, Loes Bolle, Zwanette Jager, Thomas Neudecker

- **Overview monitoring**
- **Data analysis (trends, spatial) for 23 species**
- **Recommendations for monitoring and research**



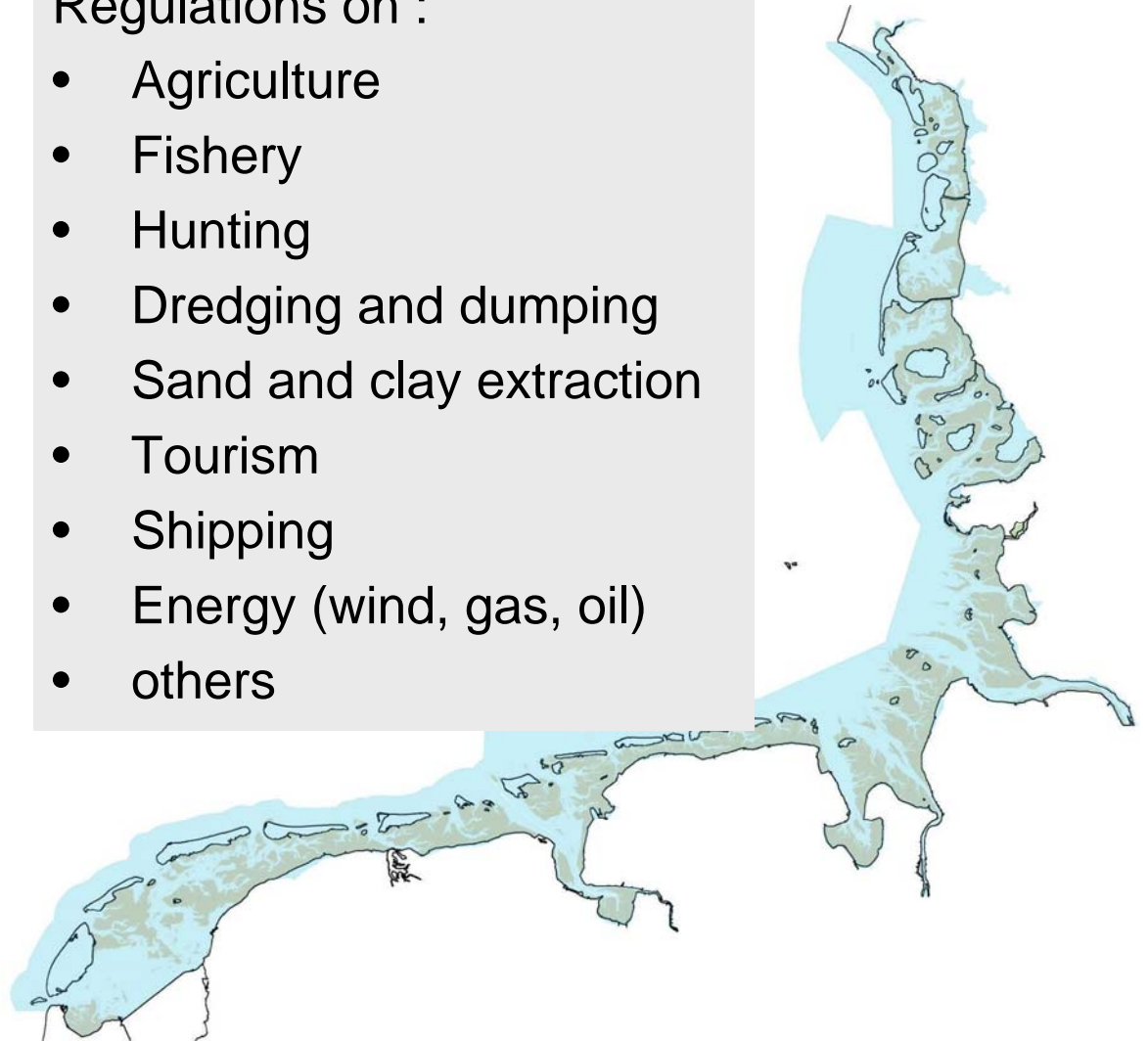
Trilateral Wadden Sea Plan

Targets:

- Landscape and Culture
- Water and Sediment
- Salt Marshes
- Tidal Area (tidal flats and subtidal gullies)
- Beaches and Dunes
- Estuaries
- Offshore Zone
- Birds
- Marine Mammals

Regulations on :

- Agriculture
- Fishery
- Hunting
- Dredging and dumping
- Sand and clay extraction
- Tourism
- Shipping
- Energy (wind, gas, oil)
- others



Wadden Sea Targets: Tidal Area

- A natural dynamic situation in the Tidal Area.

Monitoring of morphology

- An increased area of geomorphologically and biologically undisturbed tidal flats and subtidal areas.

Monitoring of sediment composition and zoobenthos [and fish ?]

- An increased area of, and a more natural distribution and development of natural mussel beds, *Sabellaria* reefs and *Zostera* fields.

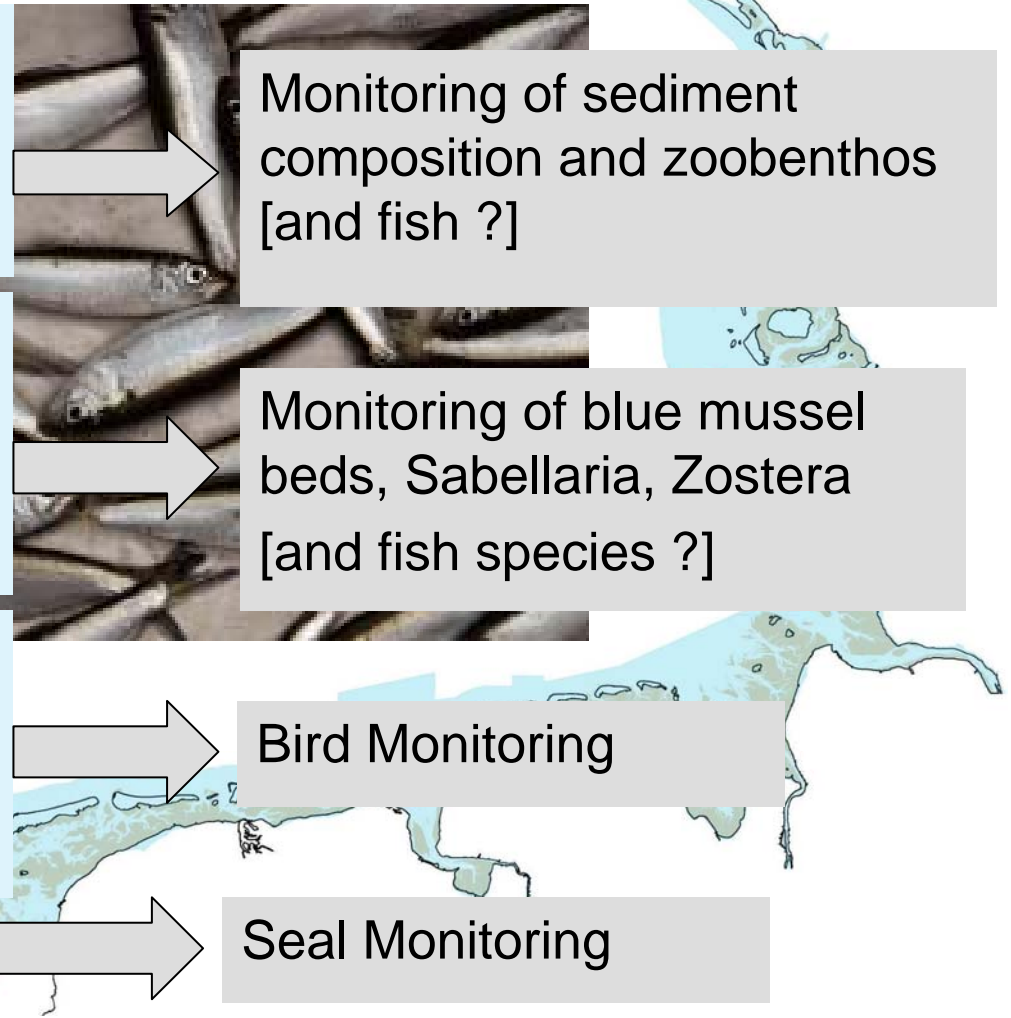
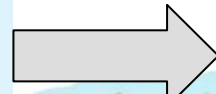
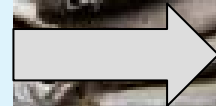
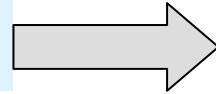
Monitoring of blue mussel beds, *Sabellaria*, *Zostera* [and fish species ?]

- Favorable conditions for migrating and breeding birds (food availability, breeding success, roosting and moulting areas, escape distances).

Bird Monitoring

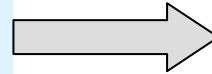
- Viable stocks and natural reproduction capacity of seals

Seal Monitoring



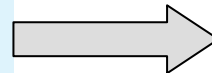
Wadden Sea Targets: Estuaries

- Protection of valuable parts of the estuaries.



SPA / SACs

- Maintaining and, as far as possible, restoring the river banks in their natural state



Good ecological status /
potential (WFD):
Fish as quality element



Habitats Directive

Favorable Conservation Status (FCS) – Reporting in 2007

Marine Habitats:

Sandbanks 1110

Estuaries 1130

Mudflats 1140

Lagoons 1150

Bights 1160

Reefs 1170

Salt marsh types

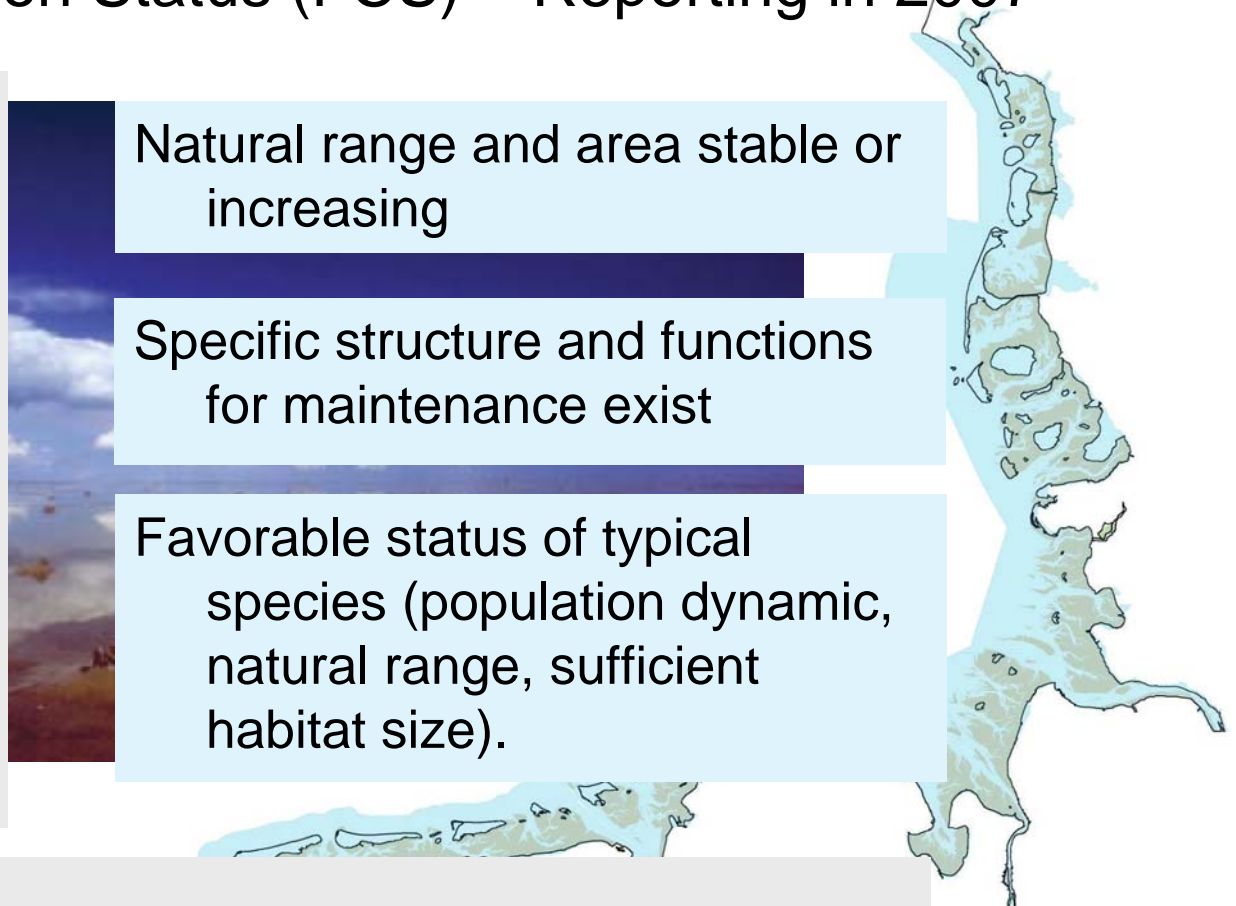
Natural range and area stable or increasing

Specific structure and functions for maintenance exist

Favorable status of typical species (population dynamic, natural range, sufficient habitat size).

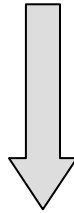
Annex II species:

twaite shad, houting, salmon, river lamprey



Wadden Sea Targets

No specific „Fish Target“ in the Wadden Sea Plan

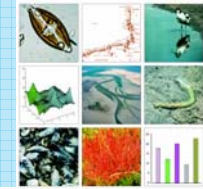


Wadden Sea Plan Update 2007 – 2009

- Fish Targets and Monitoring
- Experiences WFD
- Integration WFD-HD (and Marine Dir.)
- Intergration Rivers – Estuaries – Coastal Area - EEZ



Objectives Fish Ad-hoc Group



- To support the TMAP Revision process:
A consistent Wadden Sea monitoring approach for the Wadden Sea Targets, EC Birds- and Habitats Directive, and other relevant agreements.
- To enhance the comparability and consistency of Wadden Sea fish monitoring based on the QSR experiences.



Trilateral Wadden Sea Harmonization

**Habitat Directive Areas:
Denmark, Germany and The Netherlands**

**Our Task:
Consistent approach in
the Wadden Sea Area**

GES/P / FCS
monitoring
specified by DK

GES/P / FCS
monitoring
specified by D

GES/P FCS specified
by NL

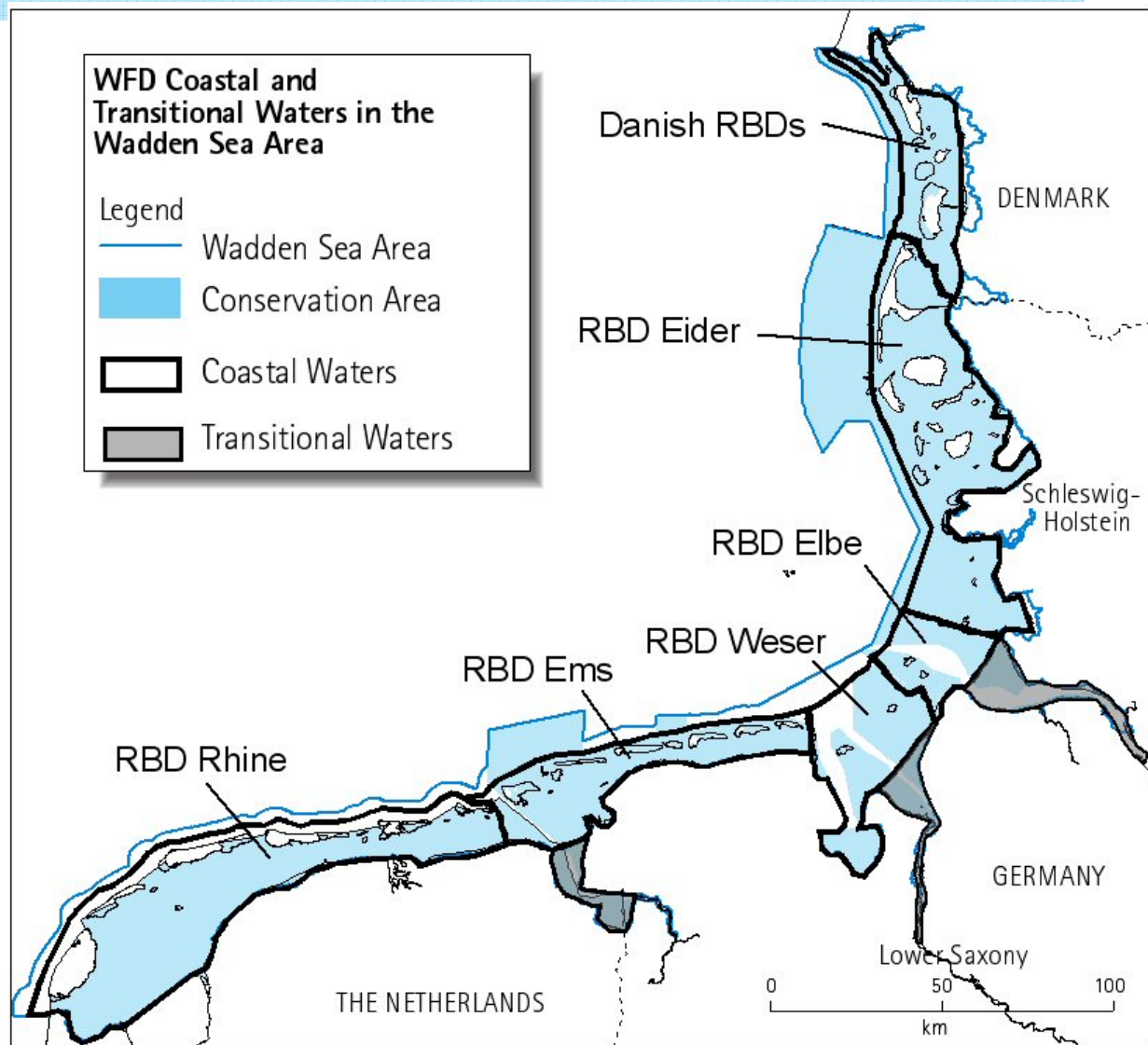




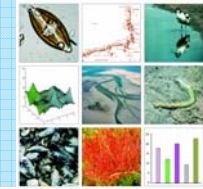
Delimitations RBD Wadden Sea

River Basin Districts (RBD) in the Wadden Sea

(coastal and transitional waters, up to 1 sm)
(inland areas and Helgoland not included)



Tasks Fish Ad-hoc Group (ToR)



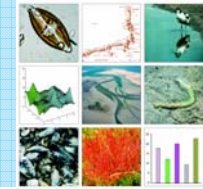
1. proposals to **integrate specific targets on fish** in the Wadden Sea Plan in order to structure the fish monitoring,
2. review the existing **demersal fish survey** programs (sufficient spatial coverage, comparability of methods; indication of costs and priorities),
3. increase the value of the current fish monitoring programs by trilateral tuning and **harmonization of methods**, gear, sampling sites and sampling times,
4. proposal to improve the information and monitoring on **pelagic** and **diadromous** species,
5. possibilities in improvement of **management and protection of fish** in the Wadden Sea and adjacent offshore areas and estuaries,
6. to exchange results of research with regard to **autoecology of non-commercial fish species** in the Wadden Sea.



Report to TMAG until June 2006



Program Fish Ad-hoc Group



1. Welcome and introduction (9.3, 13:00)

Zwanette Jager (Chair) Welcome and introduction

Harald Marencic: Trilateral Wadden Sea Plan and the EC Directives

Jörg Petersen: Conclusions and recommendations from the QSR 2004

2. Status and analysis: 13:30 – 16:00 (15' + 10' discussion)

Zwanette Jager: WFD Fish Monitoring in estuaries

- - *Break* - -

Loes Bolle: Fish monitoring and demersal young fish survey in the Netherlands

Thomas Neudecker: Demersal young fish survey in Germany

Ralf Vorberg: The TMAP pelagic fish monitoring in the Schleswig-Holstein Wadden Sea

Ilse Simoens: Fish monitoring in Belgian estuaries.

Steve Coates, Steve Colclough: Fish monitoring in estuaries and coastal waters of the UK

- - *Break* - -

3. Proposal monitoring program: 16:00 – 18:00 / second day: 9:00 – 12:00

- Monitoring strategy: “Why, what, where and when”

- Tools: “How”

- Data handling: common GIS database

4. Follow-Up (10.3., 12:00 – 13:00)

- Summary of Results, and organization of follow-up activities (CWSS)

- Next meeting and finalization of report to TMAG (summer 2006)

