

Wadden Sea Protection and Management

Strategic Assessment

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Common Wadden Sea Secretariat



Wadden Sea

- The World's Largest Tidal Barrier Island System
- Vast Bare Sand and Mud Flats
- 10 – 12 million Birds for Foraging and Resting
- Shared by NL - D - DK



Trilateral Wadden Sea Cooperation

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

1982/2010 Joint Declaration on the Protection of the Wadden Sea

1987 Common Wadden Sea Secretariat

1993 Monitoring Programme TMAP

1997/2010 Wadden Sea Plan



Wadden Sea World Heritage

Outstanding Universal Value (OUV)

1. Criteria OUV:

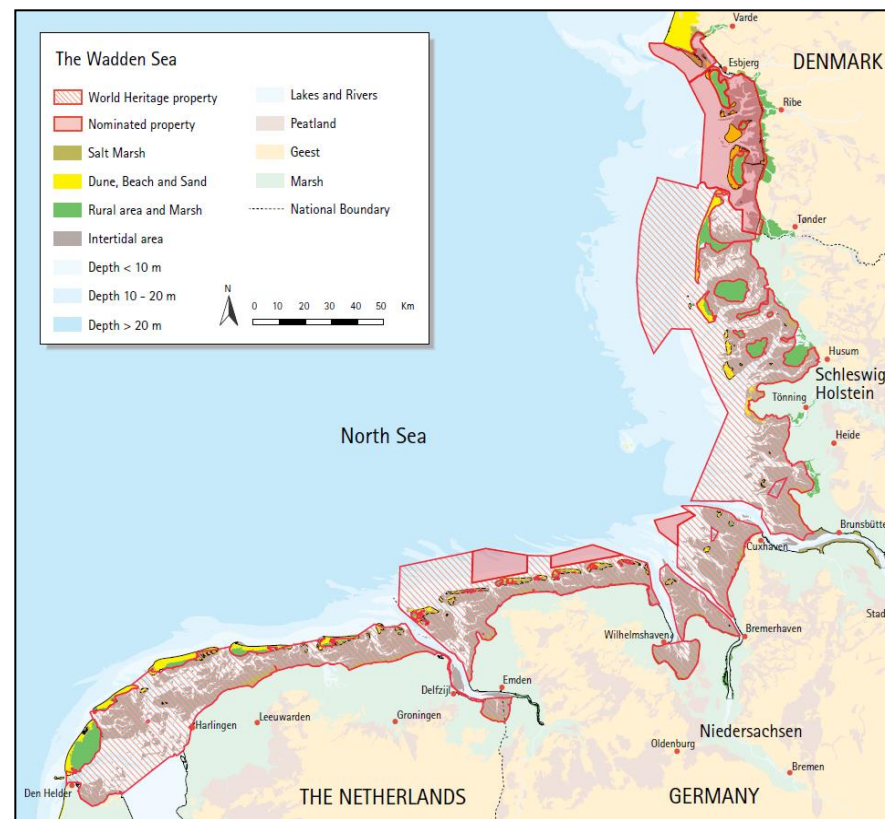
viii: geology, ix: ecological processes,
x: biodiversity

2. Integrity:

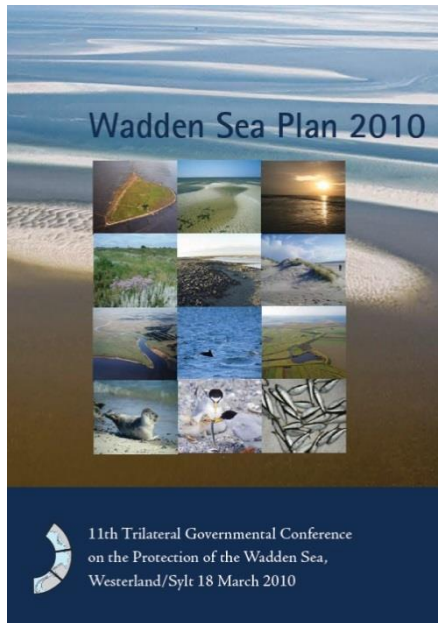
10,000 km² represents all habitats,
species and processes

3. Appropriate Protection and Management

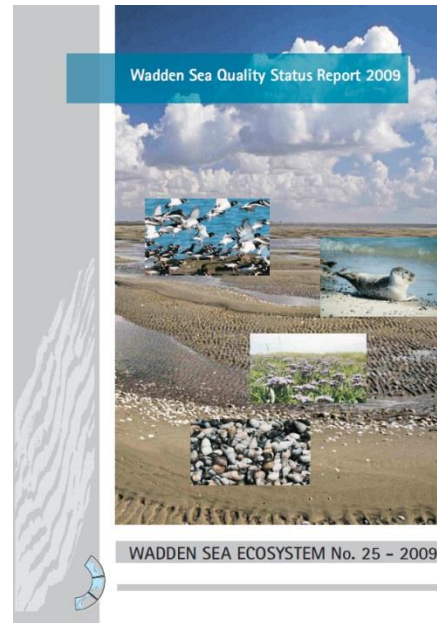
National Parks/nature reserves,
Wadden Sea Plan, Monitoring
(TMAP)



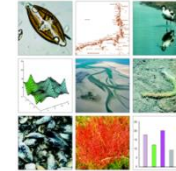
Trilateral Wadden Sea Cooperation



Wadden Sea Plan



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Trilateral
Monitoring and
Assessment
Program (TMAP)



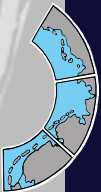
Trilateral Wadden Sea Plan

Ecological 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
- Fish

Regulations on :

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



Tidal Area – “Ecological Targets”

1. Natural dynamic situation in the tidal area.
2. An increased area of geomorphological and biologically undisturbed tidal flats and subtidal areas.
3. A natural size, distribution and development of natural mussel beds, *Sabellaria* reefs and seagrass fields.
4. Viable stocks and natural reproduction capacity of marine mammals, conservation of habitat quality,
5. Numbers and distribution of birds, natural breeding success, connectivity between habitats, as well as breeding, feeding, moulting and roosting sites,
6. Fish: Viable stocks and natural reproduction, occurrence and abundance, habitat quality, connectivity

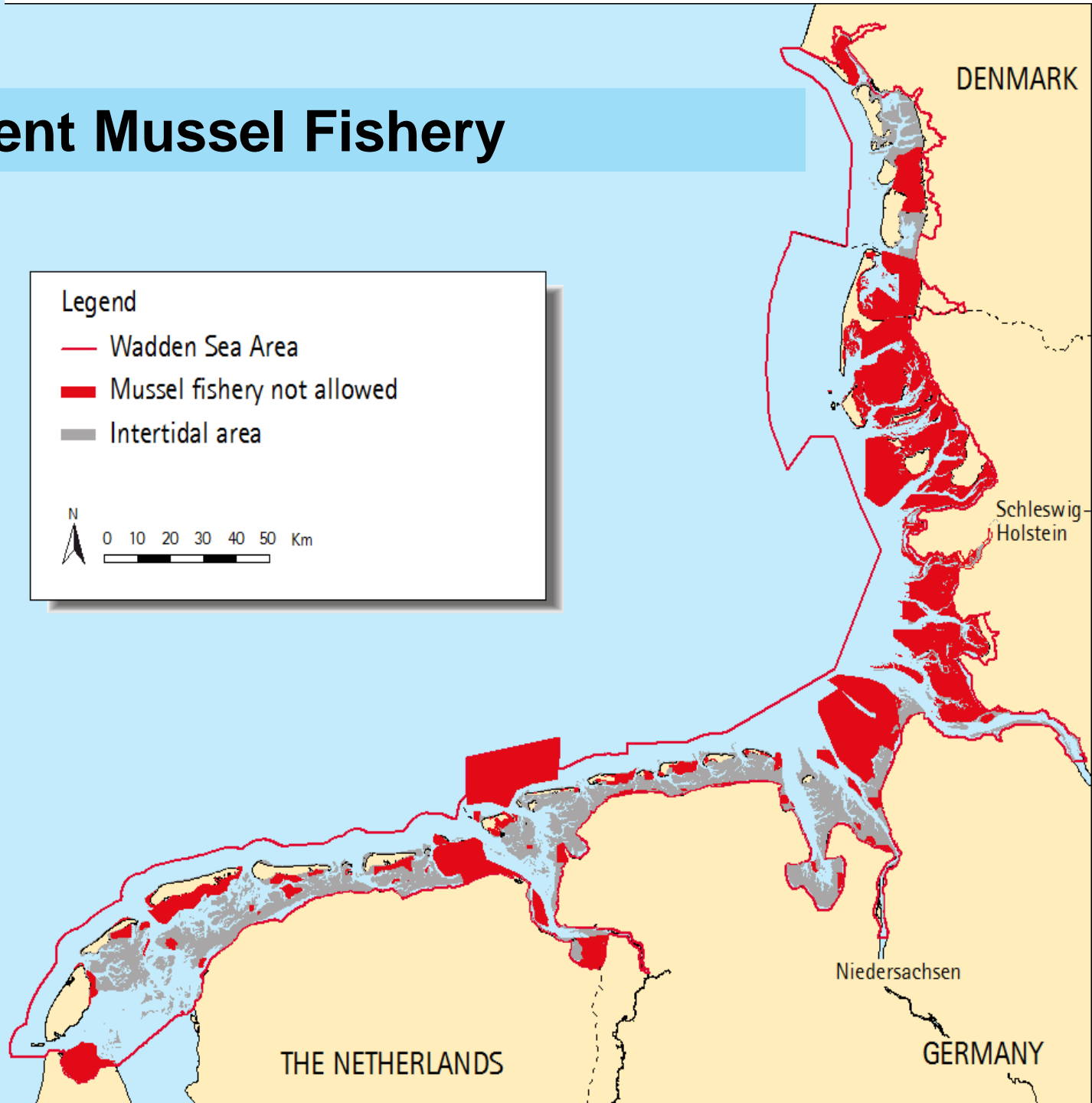
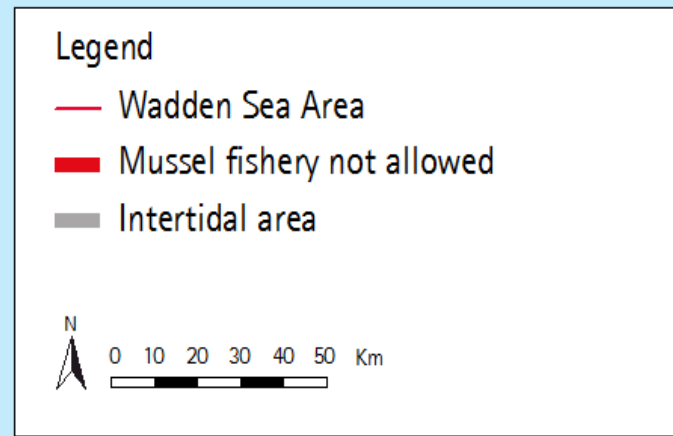


Tidal Area – Trilateral Policy and Management

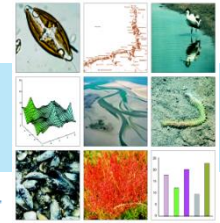
1. Coastal defense: enlargement of dikes outside, sand nourishment instead of dikes
2. Shipping (PSSA), harbors and industry (no new structures)
3. Closure for wind turbines (but: cables, external),
4. No mineral extraction,
5. No mussel fishery on stable beds (high biodiv), food reservation policy for birds
6. Tourism: visitor guidance system, spatial or temporal closure of sensitive habitats
7. Site protection, disturbance (farming, wind energy, air traffic, military activities), pollution reduction



Management Mussel Fishery

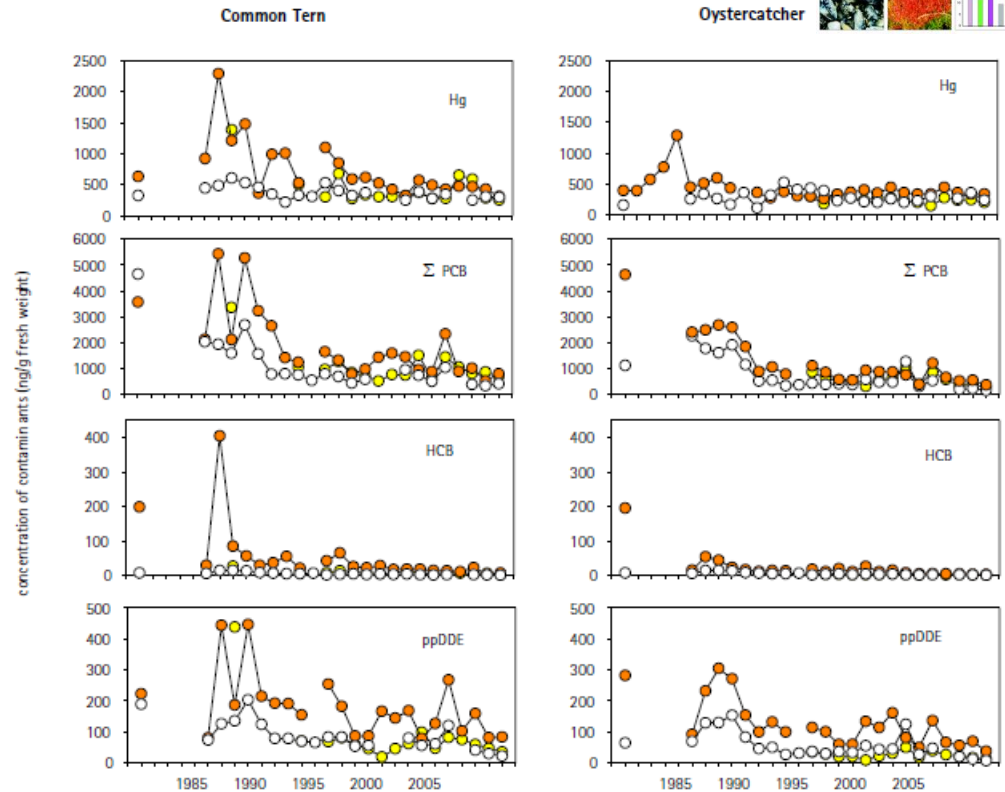


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Contaminants in Bird Eggs – Common Tern & Oystercatcher

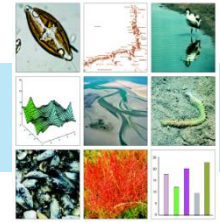
Concentrations are decreasing at most sites and are near or below the target values (EcoQO).



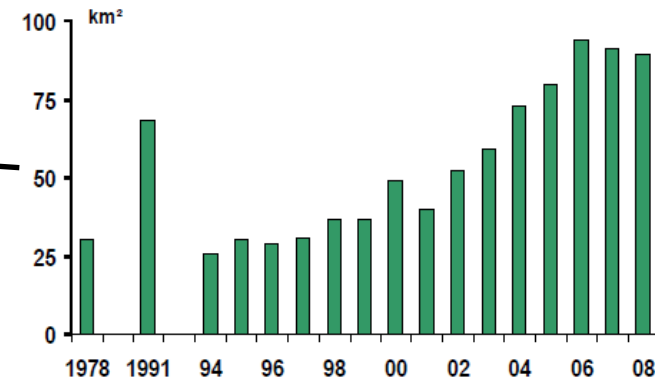
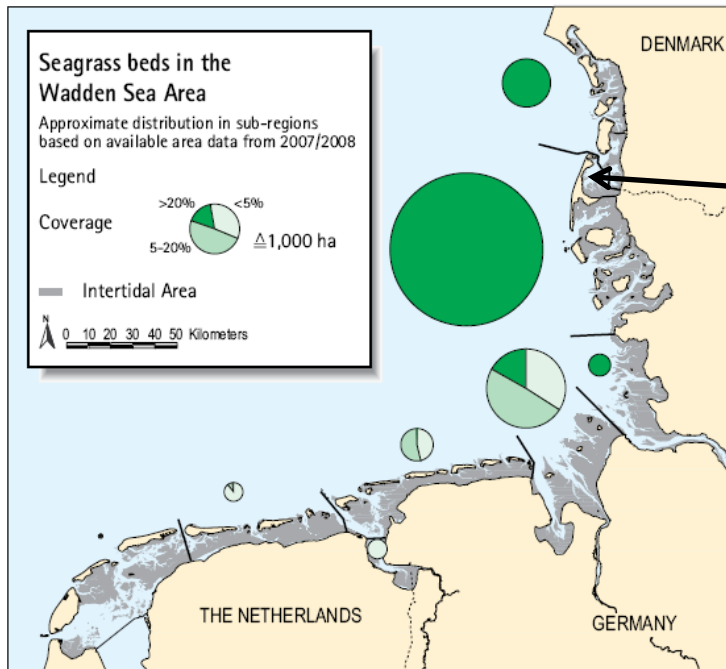
Source: Becker & Dittmann, 2009 (QSR 2009)



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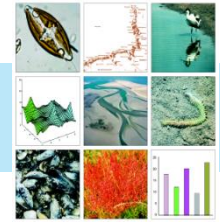
Recovery of seagrass



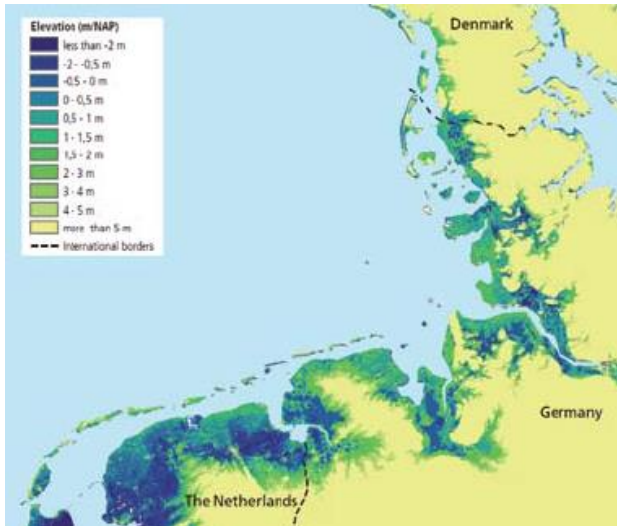
Source: Reise et al. 2009 (QSR 2009)



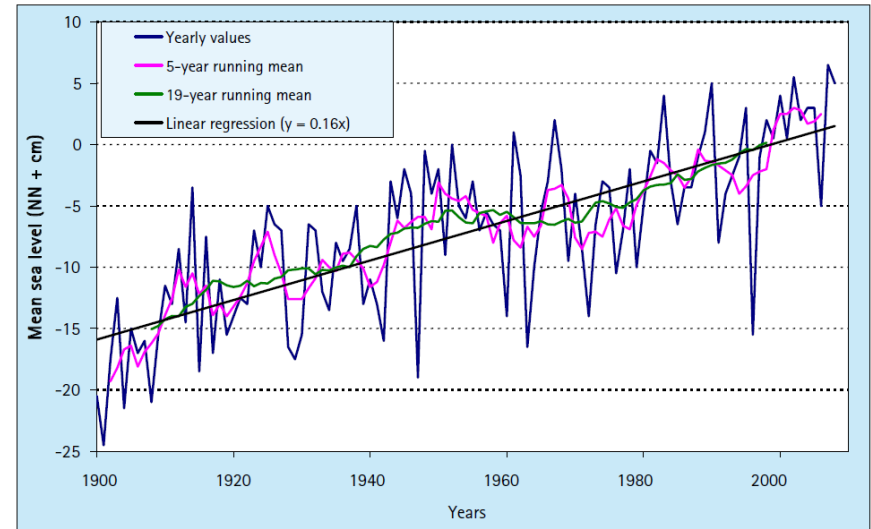
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Adaptation to climate change



Low-lying areas in the Wadden Sea region



Mean sea level rise in the Wadden Sea 1900 - 2005

Source: Oost et al., 2009 (QSR 2009), CPSL III report 2010



Wadden Sea – Adaptation Strategies



Through a wash-over natural sedimentation on the island of Schiermonnikoog is increased



THERE IS A PLACE – WHERE HEAVEN
AND EARTH SHARE THE SAME STAGE

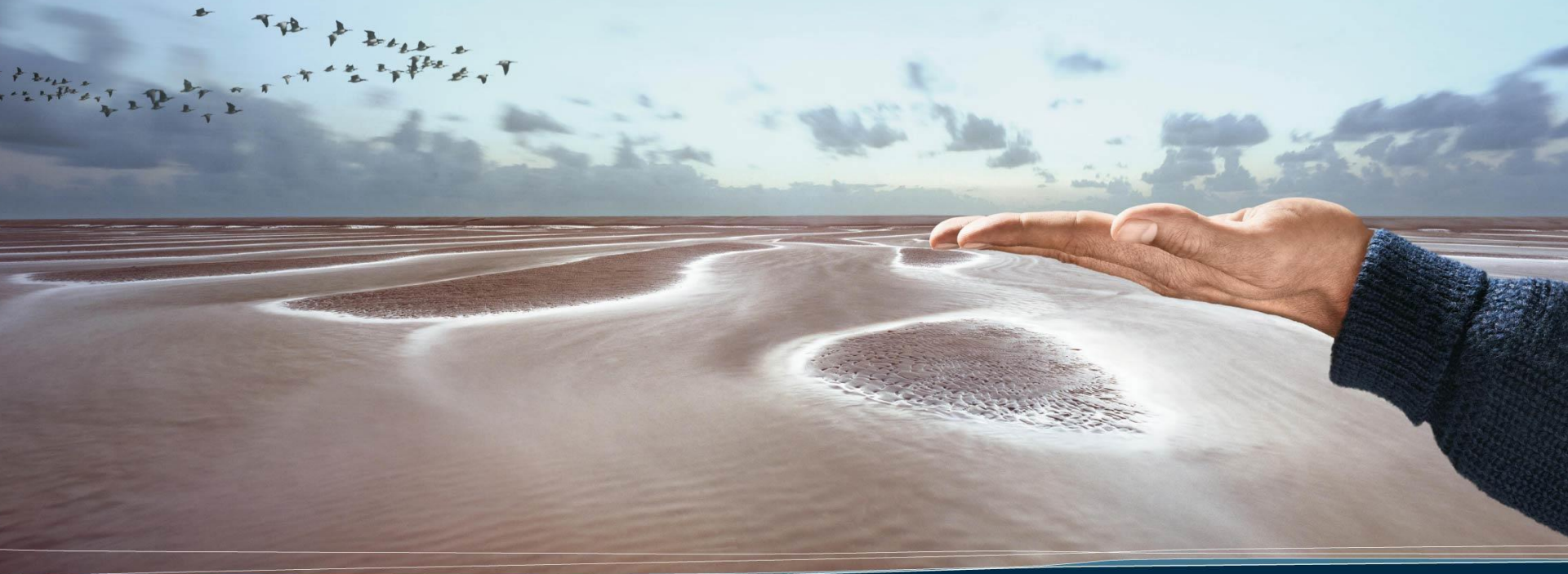


Photo: DDT Web Agency

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