Coastal and Marine Conservation in the Netherlands

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Natural values in coastal zones of Europe

Map 7 Coastal zone protected by Natura2000 sites (2005)

Map 8 Coastal zone with Natura2000 land/sea connections, by NUTS3 regions

Coastal flood prone areas (pink) in the North Sea Region
Seadefence policy of the Netherlands

Waterboards: flood risk norms
Research
costal processes / coastal dynamics

Figuur 4. Overzicht van meetsystemen (bron: Rijkswaterstaat).
RAPPORT DELTACOMMISSIE 2008

De opdracht...

De Deltacommissie is door de regering gevraagd advies uit te brengen over de bescherming van Nederland tegen de gevolgen van klimaatverandering. Daarbij gaat het om de vraag hoe Nederland zo ingericht kan worden dat het ook op de zeer lange termijn klimaatbestendig is, veilig tegen overstromingen, en een aantrekkelijke plaats is en blijft om te leven; wonen, werken, recreëren en investeren.

...en de invulling

Daarbij was de vraag breder te kijken dan naar (water)veiligheid alleen. In de visie is daarom ook gelet op samenhang met wonen en werken, landbouw, natuur, recreatie, landschap, infrastructuur en energie. Veiligheid en duurzaamheid zijn de twee pijlers voor de strategie van de komende eeuwen. Naast bescherming tegen het water, benadrukt en benoemt het advies de kansen voor de Nederlandse samenleving.

Waterveiligheid

In het advies speelt ‘waterveiligheid’ een cruciale rol. Hierbij gaat het om de bescherming tegen overstromingen en het veiligstellen van de zoutwatervoorziening. Het zekerstellen van waterveiligheid voorkomt slachtoffers en maatschappelijke ontwrichting, het voorkomt schade aan economie, landschap, natuur, cultuur en reputatie.

Duurzame kansen

De aanbevelingen van de commissie leggen de nadruk op het kunnen mee-ontwikkelen met klimaatverandering en andere ecologische processen, ze zijn kosteneffectief en hebben een maatschappelijke meerwaarde. De aanbevelingen zijn flexibel en geleidelijk te realiseren en bevatten handelingsperspectief voor de korte termijn. Met de uitvoering ervan is Nederland in staat de effecten van klimaatverandering beter op te vangen en nieuwe kansen te creëren. De voorgestelde ingrepen in het advies moeten duurzaam zijn: bij de uitvoering ervan moet efficiënt gebruik worden gemaakt van water, energie en andere grondstoffen, zodanig dat de kwaliteit van de leefomgeving niet alleen behouden blijft maar zelfs wordt verbeterd.
Coastal erosion
Beach nourishment

(1991 – 2001)
Spatial planning based on the properties of the water systems
Zoning of beach activities
Proposal for new planning designations (SW Netherlands)

No take zone
No other activities
Long term view of coastline management in the NL
Coastal and marine law in the Netherlands

Figuur 15
Wettelijke kaders
Natura 2000, Habitats and Birds Directives Areas
Map 5.4  Illegal operational oil discharges in designated European MARPOL 73/78 special sea areas (2000–2004)

Note: This map covers the North, Baltic, Mediterranean and Black Seas only. In the North and Baltic Seas, illegal operational oil discharges were detected by aerial surveillance. In the Mediterranean and Black Seas, these have been detected by radar satellite images (i.e. 'probable' spills), but not been cross-validated by aerial surveillance. Further, the varying extent of surveillance in different seas may lead to over or under representing the degree of pollution.

Intensity bottom trawling / boomkorvisserij
Traffic regulations
Coastal and marine management in the Netherlands

- Coast: of main interest

- Marine: slow process of conservation designations
  no hands-on management authority

- Role of NGO’s very important
  » Designations
  » Management
2.2 North Sea MPA network 2008 - Habitats Directive. Progress of national governments and additional NGO proposals

2.1 North Sea MPA network 2008 - Habitats Directive. Progress of national governments
Supportive information

2.6 North Sea MPA network 2009 - Habitats Directive. Reefs. Supportive information
"submarine structures made by leaking gases"

Definition of the habitat

Submarine structures consist of sandstone slabs, pavements, and pillars up to 4 m high, formed by aggregation of carbonate cement resulting from microbial oxidation of gas emissions, mainly methane. The formations are interspersed with gas vents that intermittently release gas. The methane most likely originates from the microbial decomposition of fossil plant materials.

The first type of submarine structures is known as "bubbling reefs". These formations support a zonation of diverse benthic communities consisting of algae and/or invertebrate specialists of hard marine substrates different to that of the surrounding habitat. Animals seeking shelter in the numerous caves further enhance the biodiversity. A variety of sublittoral topographic features are included in this habitat such as: overhangs, vertical pillars and stratified leaf-like structures with numerous caves.

The second type are carbonate structures within "pockmarks". "Pockmarks" are depressions in soft sediment seafloor areas, up to 45 m deep and a few hundred meters wide. Not all pockmarks are formed by leaking gases and of those formed by leaking gases, many do not contain substantial carbonate structures and are therefore not included in this habitat. Benthic communities consist of invertebrate specialists of hard marine substrates and are different from the surrounding (usually) muddy habitat. The diversity of the infauna community in the muddy slope surrounding the "pockmark" may also be high.

2.9 North Sea MPA network 2009 - Habitats Directive. Structures made by leaking gases. Supportive Information
1.6 Blue Belts

Blue Belts are meant to be specially managed areas which not necessarily have to be designated as MPAs, but are comparable to IUCN category IV-VI management zones (Dudley 2008, see Annex for explanation).

The criteria used for placing the Blue Belts were:
- Representation and connectivity - by ranging from the coasts offshore, from shallow to deep water, they include as much habitat heterogeneity as possible and provide an ecological link between the habitats represented in individual MPAs; and
- Importance for OSPAR listed species and habitats.

The Blue Belts extend the representativity of habitats encompassed beyond the criteria used for designating the MPAs. Therefore, they bridge the gap between the selective demands for the conservation of individual species and habitats as formulated by the EU Habitats Directive, and the more generalistic view expressed by OSPAR (Recommendation 2003/3) and the Convention on Biological Diversity (CBD) to establish an ecologically coherent, representative network of MPAs covering all waters.

We want the Blue Belts to be priority areas for the conservation of species and habitats towards achieving a “Good Environmental Status” of the North Sea:
- **Buffer zones** around the designated MPAs;
- Priority areas for delivering transboundary spatial planning and MPA management;
- Best environmental practice zones; and
- Priority areas for delivery of good environmental status.

Blue belts:
- **connectivity**
- OSPAR species and habitats
- **buffer zones**
- spatial planning
- best environmental practice
Coastal and Marine Conservation in the Netherlands?

- Still a long way to go

- Role of NGO’s crucial (knowledge, policies, public support)

- Terrestrial based management organisations should take on the responsibility for coastal and marine areas