

Comparison from practices of EIA in 4 different Member States focused on Natura 2000 & NL coastal region

Ameland (ECONAT2000)

February 2008

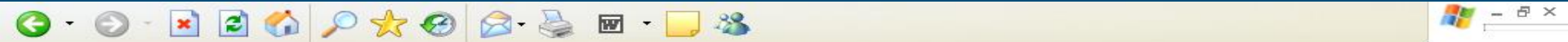
Pieter Slim



Comparison from practices EIA/BHDs in FR, BE, UK & NL



Research was done by EU project 'NEW! Delta': "Ports and Nature, Striking a New Balance"



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THEMES:

Pooling Resources for Natura 2000

Establishment of Ecological Goals and Indicators

Creation and Restoration of Coastal and Estuarine

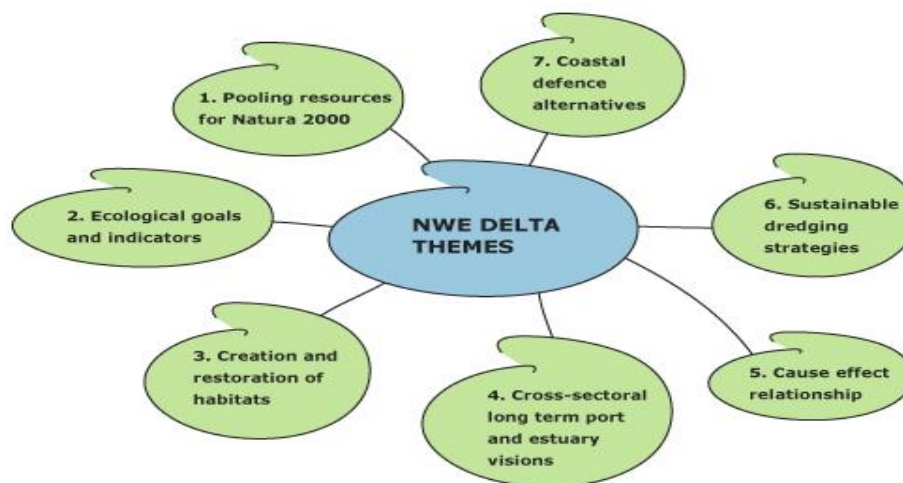
Cross-Sectoral Long Term Port and Estuary Visions

Cause Effect Relationship

Sustainable Dredging Strategies

Coastal Morphology and Coastal Defences in Vicinit

NEW! Delta Themes



www.newdelta.org

'Pooling Resources for Natura 2000'

- Research partner cases EU legislation > Natura 2000
- Question list for NEW! Delta partners
- Individual meeting with partners
- Meeting experts from European Commission
- Meeting experts from National Ministries

Conclusions

Important benchmarks & common practices were:

- 1 Stakeholders involvement
- 2 Significant effects
- 3 Alternative solutions
- 4 MITIGATION
- 5 'IROPI'
- 6 COMPENSATION
- 7 Monitoring

Additional:

External effects, Cumulative effects

1 Stakeholders involvement

- HD 92/43 Art 6§3: opinion of the general public
- Directive 85/337: public consultation is necessary
- Århus Convention 98: public participation in decision-making & access in environmental matters
- EU Water Framework Directive: public participation is identified

2 Significant effects, incl. precautionary principle, cumulative effects

■ HD 92/43 Art 6§3

- objective context
- coherent network
- precautionary principle
- possible cumulative effects

■ Directive 85/337

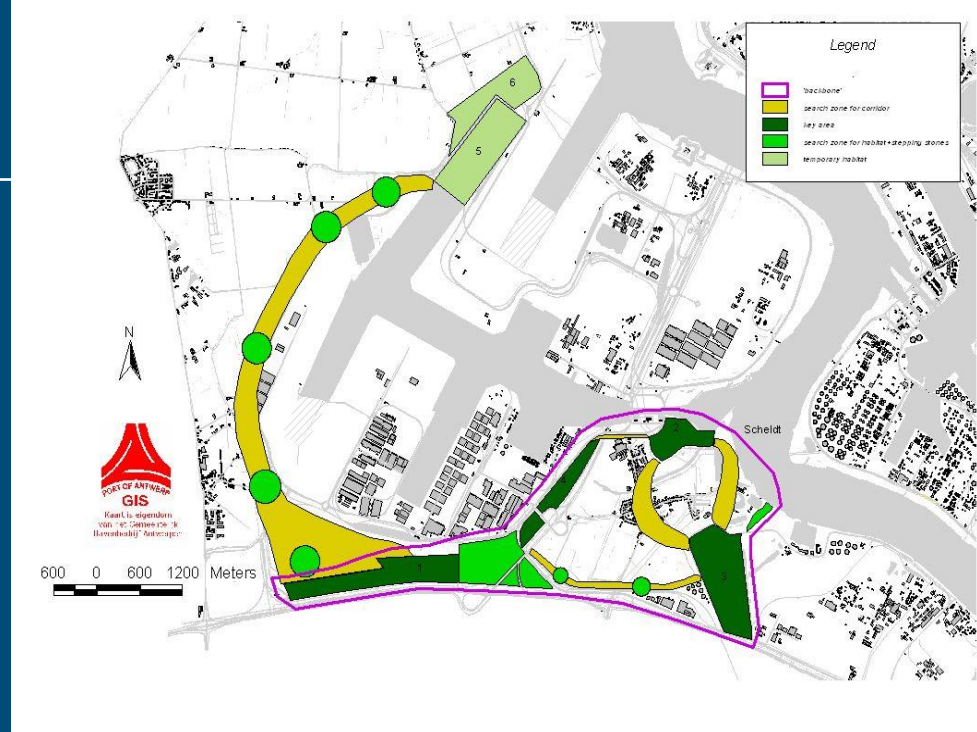
- likely to have significant effect (depending situation)
5% species loss?
1% area loss?

3 Alternative solutions

- Projects or plans with adverse effects on Natura 2000 site can only proceed, as objectively concluded that no alternative solutions exist
- Alternatives solutions: alternative locations, processes, different scales or designs
- Reference parameters for comparison: integrity of the site, of its ecological functions
- In this phase: economic criteria can not overrule ecological criteria

4 MITIGATION

- Extension Port of Antwerp (BE): ecological connecting zones guaranteeing favourable status of HDprotected Natterjack Toad



Bufo calamita: photograph F. Ottburg

5 'IROPI'

- HD 92/43 Art 6§3: Imperative Reasons of Overriding Public Interest
- Member State has the power to elaborate its national policies
- Supported with evidence
 - demonstrable public or environmental need
 - improving public health and safety
 - safeguarding human life and property
- No commonly accepted method



Prioritaire zwakke schakels



Disaster flooding S-W part of The Netherlands, 1953, 1835 casualties > coastal defence: 'Deltaplan'
 Climate change > sea level rise > improving coastal defence 2006: 'Zwakke schakels'

6 COMPENSATION

- Compensation only after 3) Alternative solutions 4) MITIGATION & 5) 'IROPI'
- Overall coherence Natura 2000 network
- As near as possible to original location
- Same biogeographical region
- To be realised before project/plan carried out
- With respect to existing natural values on that new place!
- Better: avoid necessity compensatory measures!

6 Compensation

- Safety as the goal,
Nature as the means
- Natural processes for a
flexible ecosystem
- Habitat development:
sustainable populations
in a dynamic landscape
- An attractive landscape for
tourism and recreational
activities



6 Compensation

- With respect to existing natural values on that new place!
- The Sand lizard lives in the most dynamic part of the dunes, was already ones practically wiped out
- Choice: respect actual habitat and create new!



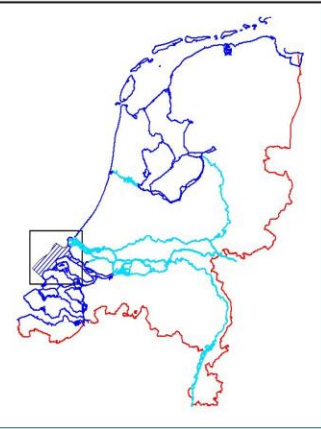
Lacerta agilis: photograph F. Ottburg

6 Compensation

PMR compensatie (voorkeursalternatief na 20 jaar)

- 2110 - strandvlakte en embryonale duinen
- 2120 - witte duinen
- 2130 - grijze duinen
- 2160 - duindoornstruweel
- 2180 - beboste duinen
- 2190 - vochtige duinvallei
- 6430 - voedselrijke ruigte
- 300m lijn invloed saltspray
- 500m lijn invloed saltspray

0 250 500 750 1000 m



POR

HT 2190

Legend

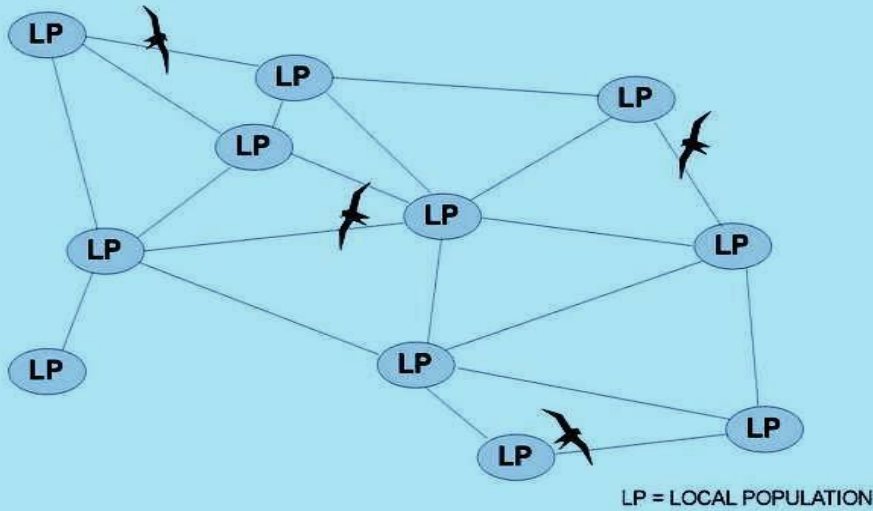
- Low shore tidal areas along coast/sandy dike Delflandse Kust (Delfland coastal area)
- Seashore and tidal area along dike Brouwersdam
- Search area sea reserve



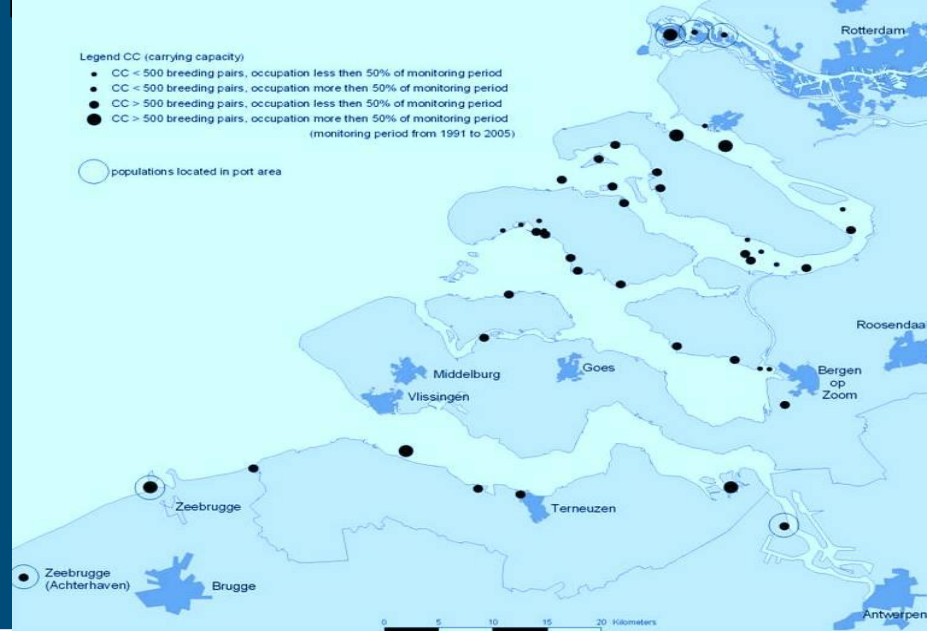
Compensation dune slacks

6 Compensation

METAPOPULATION



Metapopulation is a set of local populations connected by dispersing animals

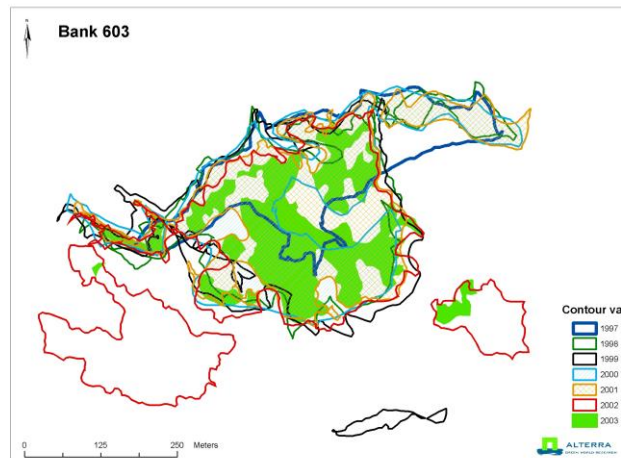
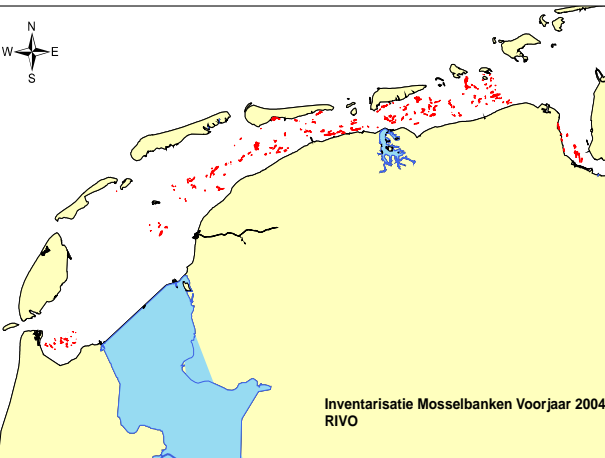


7 Monitoring habitats & species

- A) Obligation for Favourable status:
 - actual conservation status and its trends on various levels
 - reported to the Commission to be comparable and compatible for analysis on EU scale
 - information available on publicly and easily accessible electronic databases on their own initiative

- B) Evaluating Mitigation & Compensation

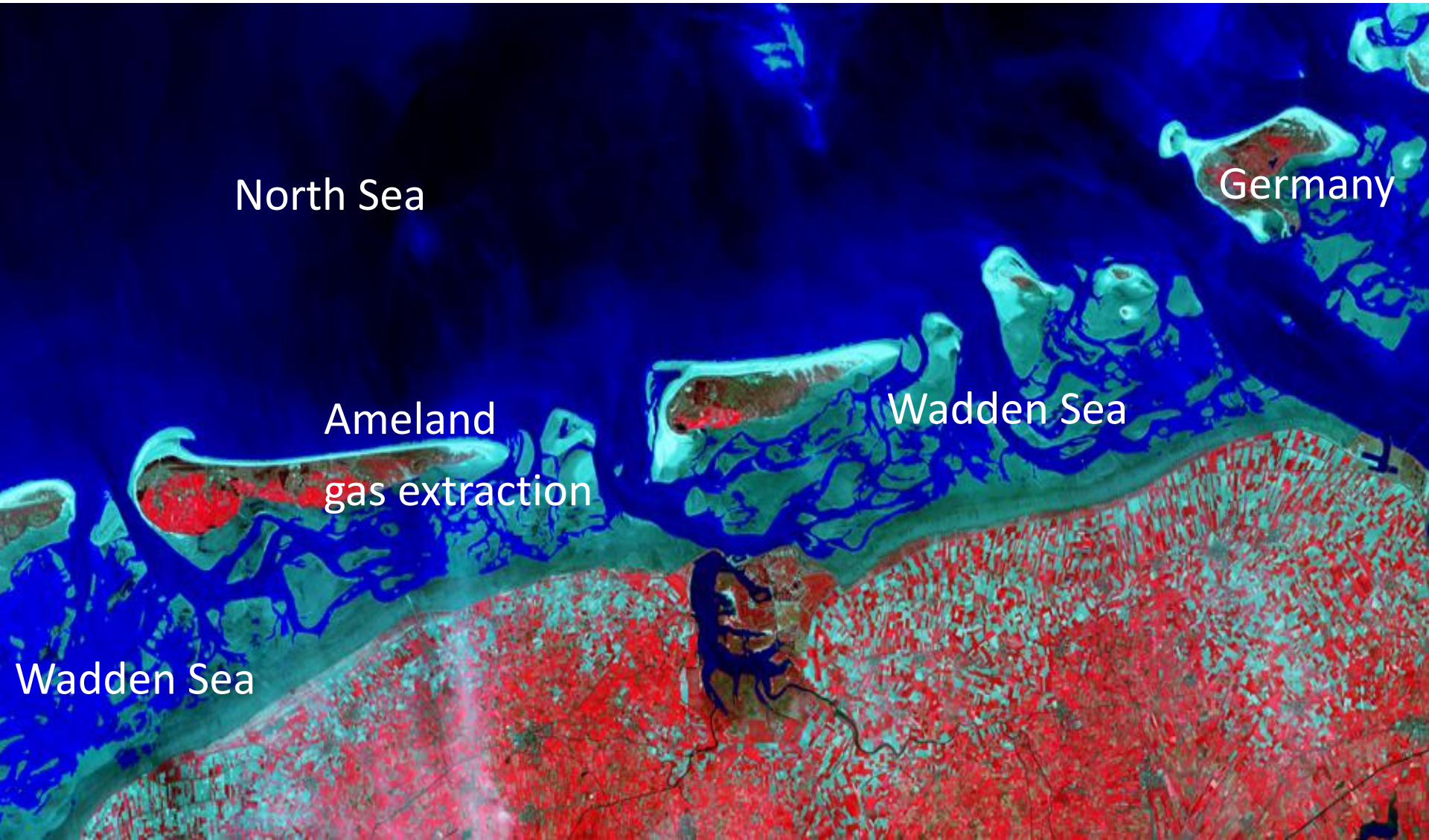
7 Monitoring for A) Favourable status



Conservation status of mussel beds favourable:

- Distribution throughout SAC (occurs in all suitable places)
- Minimum area size of habitat type is present or exceeded
- % covered by mussels is average or good
- Natural processes (like spatfall) safeguard occurrence on the long term

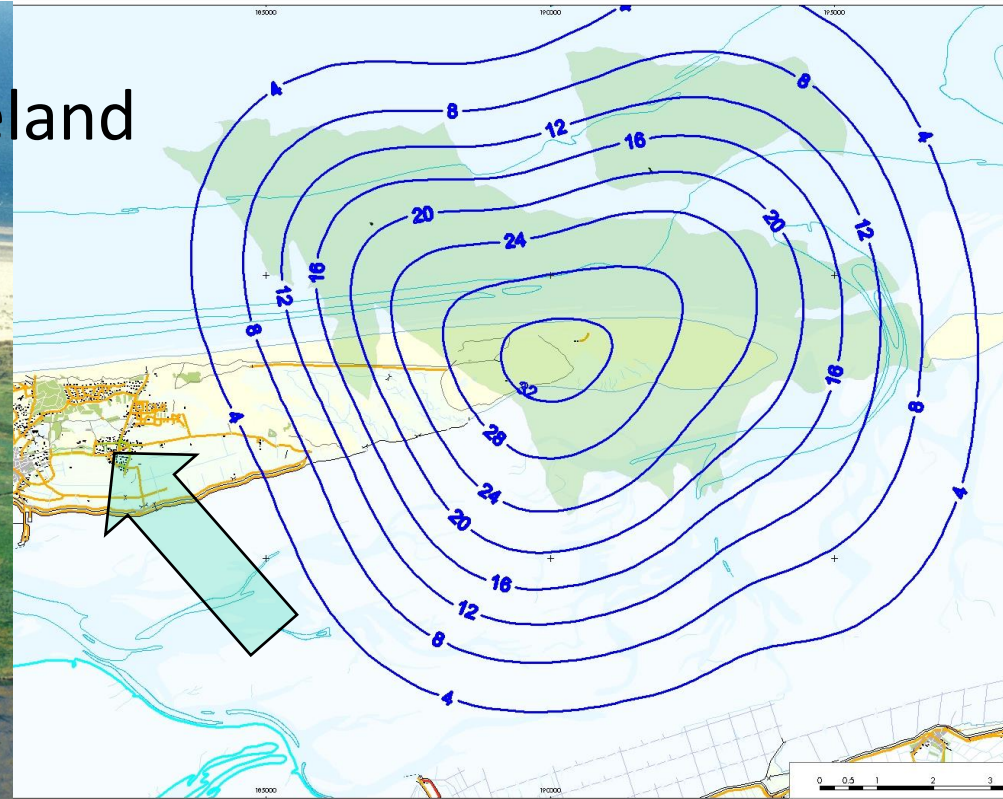
7 Monitoring for B) Evaluating Mitigation & Compensation



7 Monitoring for B) Evaluating Mitigation & Compensation



Ameland



- 1986 gas extraction started
- 2003 assessed soil subsidence 27 cm
- 2020 predicted soil subsidence 31-37 cm

7 Monitoring habitats & species

important rules of thumb

- Permanent programme without additions, persistent, long time series
- Flexibility for new insights, for additional events, etc.
- External supervisors

External effects

Speciale beschermingszones (E.G. Vogelrichtlijn)

aan deze kaart kunnen geen rechten worden ontleend

- 1 Alde Feanen
- 2 Bangerhoeve
- 3 Bieshoek
- 4 Deelen
- 5 Dourneuse Peel
- 6 Zwaanswaar
- 7 Dwingelderveld
- 8 Eemmeer, Goolmeer, IJmeer
- 9 Engberdijkveenen
- 10 Fochteloerveen
- 11 Friese IJsselmerkust
- 12 Grote Peel
- 13 Hamert
- 14 Kampina
- 15 Kil van Hurwenen
- 16 Volkersamer
- 17 Kwade Hoek
- 18 Lepelaarplassen
- 19 Marispeel
- 20 Meirweggebied
- 21 Naardermeer
- 22 Nieuwkoopse Plassen
- 23 Oosterschelde-Markiezaatmeer
- 24 Oostvaardersplassen
- 25 Verdrooken Land van Saeflinge
- 26 Waddenzee
- 27 Weerribben
- 28 Zwaansoorn
- 29 Zwarte Meer
- 30 Zwin



- 31 Drechts Friese Woud
- 32 Flessum-Vogelhoeke/Morra
- 33 Grote Wadden
- 34 Lauwersmeer
- 35 Leekstermeergebied
- 36 Duchtgaasterbekken e.o.
- 37 Sneekmeer, Coentertjeter poelen en Terkaplesterpoelen
- 38 Van Oordt's Merken e.o.
- 39 Waddenzee/Wadden, Noordzeekustzone, Breebaart
- 40 Witte en Zwarte Bekken en Oudhof
- 41 Zuidlaardermeergebied
- 42 Drontermeer
- 43 Ellandspolder
- 44 IJmeer
- 45 IJbeem
- 46 IJbeem, arkenstien en IJbeem
- 47 IJbeem en Vosse
- 48 IJbeem
- 49 Oosterschelde
- 50 Vlakke Meeren
- 51 Waddenzee en Nuldernaar
- 52 Wormer- en IJperveld
- 53 Arkenbeem
- 54 De Wadden
- 55 Gelderse Poort

- 56 IJssel
- 57 Neder-Bijl
- 58 Sallandse Heuvelrug
- 59 Veluwe
- 60 Waal
- 61 Zwarte Water en Overijsselse Vecht gebiedelijk
- 62 Boezems Rinderdijk
- 63 Broekvelden/Vietenbroek
- 64 De Wijk
- 65 Donkse Laagten
- 66 Grewelingen
- 67 Hattingliet
- 68 Hollands Diep
- 69 Oudevald van Stijen
- 70 Oudevald van Stijen
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EU LBD (SPAs)

Kaart aangemelde Habitatrichtlijngebieden

schaal 1:1 000 000

- Legende
- eerder aangemelde gebieden (646761,3 ha)
 - uittrekking van eerder aangemelde gebieden (744850 ha)
 - nieuw aangemelde gebieden (23995,4 ha)
 - (gepland) vernieuwde aanmelding (48288,8 ha)
- Totaal aan te melden 750840,8 ha



EU HD (SACs)

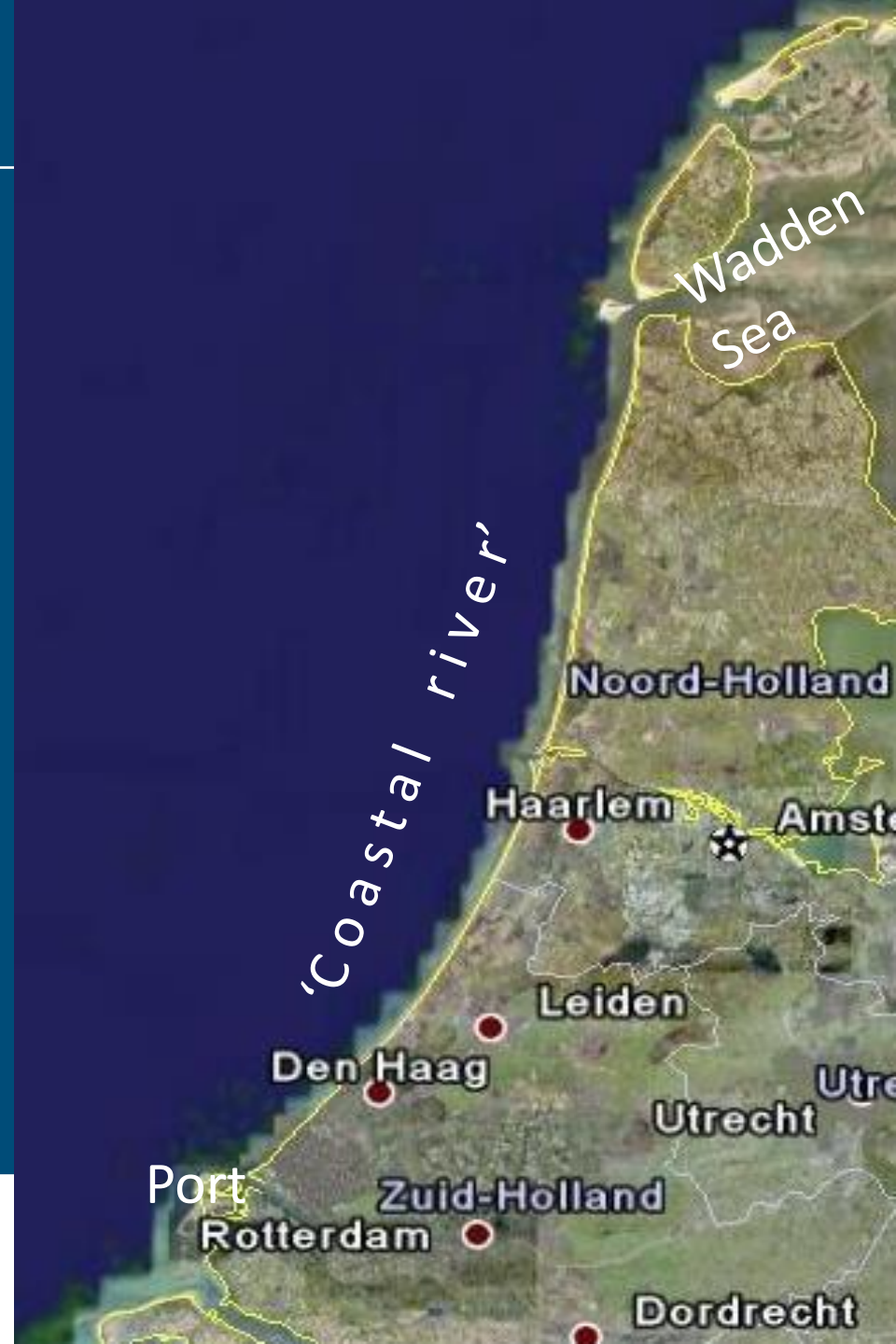
landbouw, natuurbeheer en visserij

Productie en Cartridge
Altarra, Centrum Geo-Informatie mei 2003

Voor nadere informatie de GGD-document.
Voor een toelichting op de inhoud de het GGD-document.

External effects

- Possible external effect from extension Port of Rotterdam > BHDprotected Wadden Sea?
- Court case: research to be done
- Judgement: no external effects

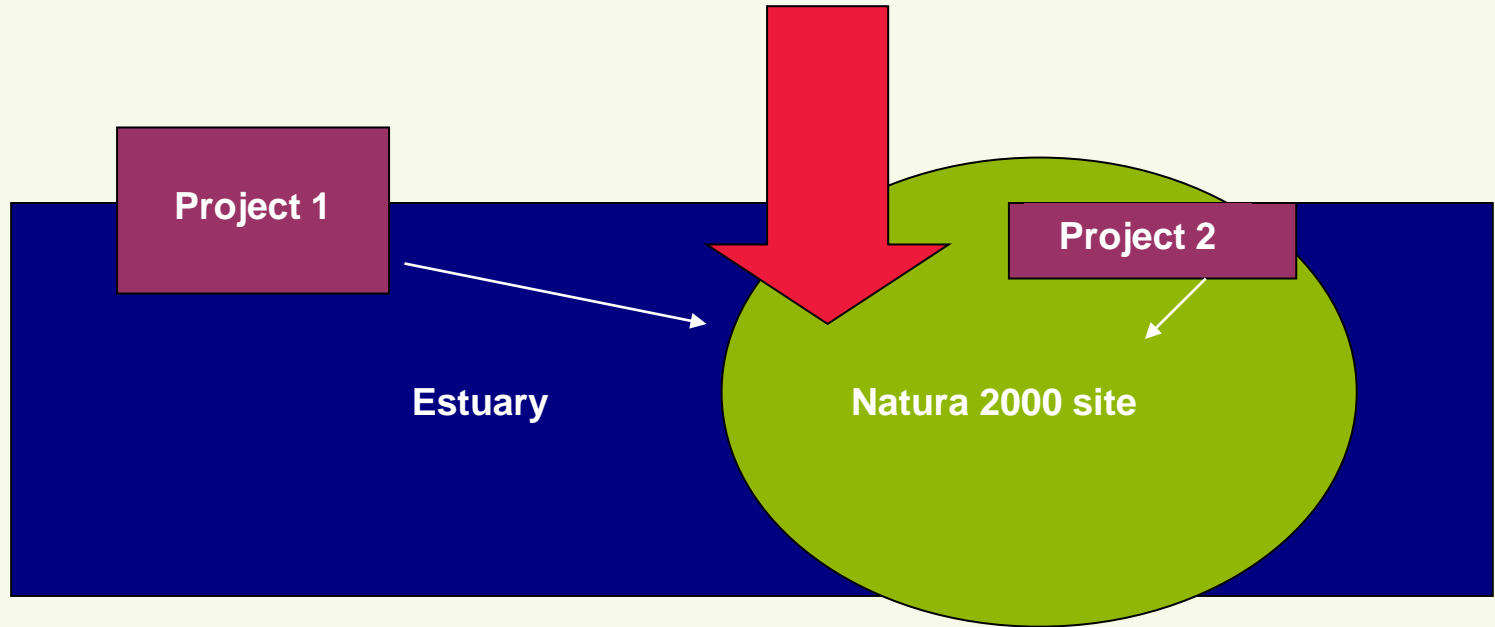


Cumulative effects

- Art. 6 (3) Habitats Directive: 'either individually or in combination with other plans or projects
- The sum of effects from projects inside or around a Natura 2000 site
- Effects, who combined can result in a significant effect



Cumulation



Single project: NO significant effect

Combined projects: DO have a significant effect

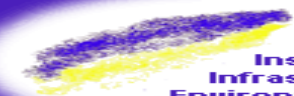


Types of cumulation

- ▼ Cumulation within an activity (several negative impacts inside an activity)
- ▼ Cumulation of space (other activities)
- ▼ Cumulation at points in time

Important issues for cumulation

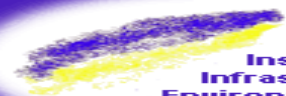
- ▼ Ecological knowledge
- ▼ Boundaries for the assessment
- ▼ Establishing responsibilities
- ▼ Characterising of potential impacts
- ▼ Mitigation options
- ▼ Registration/ database





Cumulation

- ▼ The sum of effects from projects inside or around a Natura 2000 site.



Cumulative effects

EIA coastal defence (IROPI)

- Coastal defence (CD)
- Enlarging Port of Rotterdam (POR)
- Opening sluices former estuary (HV)



Thank You for Your attention!

Contact Alterra

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