

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



ALTERRA

WAGENINGEN UR

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



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

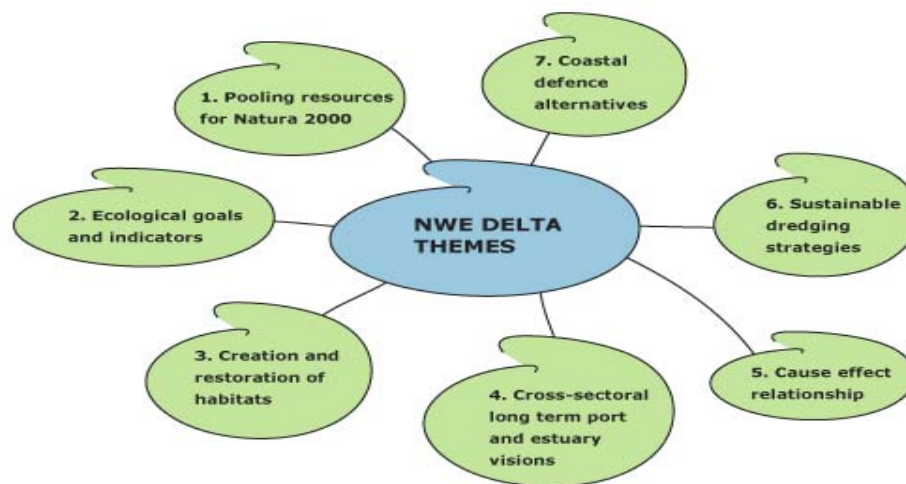
Sustainable
Dredging
Strategies

Coastal Morphology
and Coastal
Defences in Vicinit

Home · Intro · Partners · **THEMES** · Project management · News · Links · FAQ · Contact

Extranet log in

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: **I**mperative **R**easons of **O**verriding **P**ublic **I**nterest
- 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



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



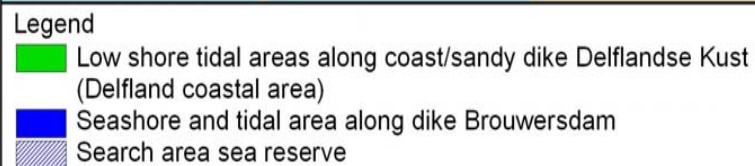
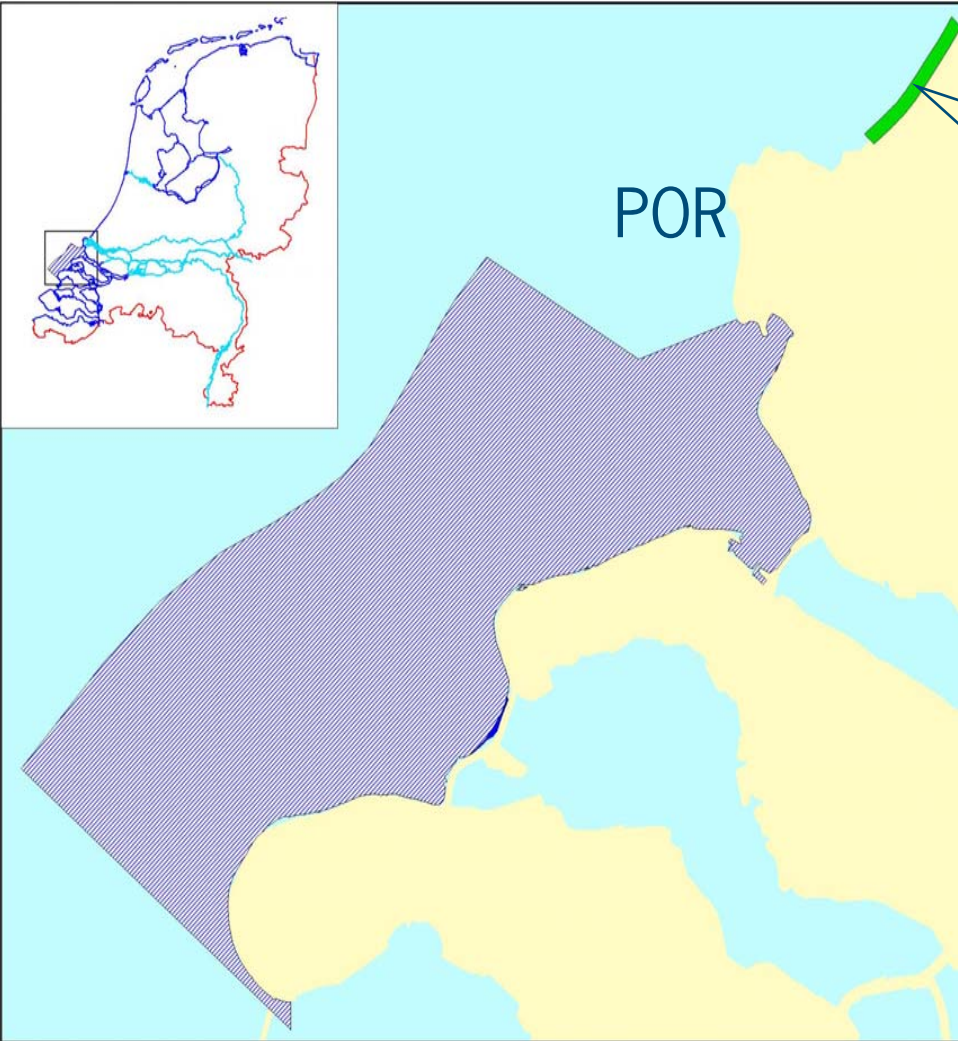
6 Compensation

- 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

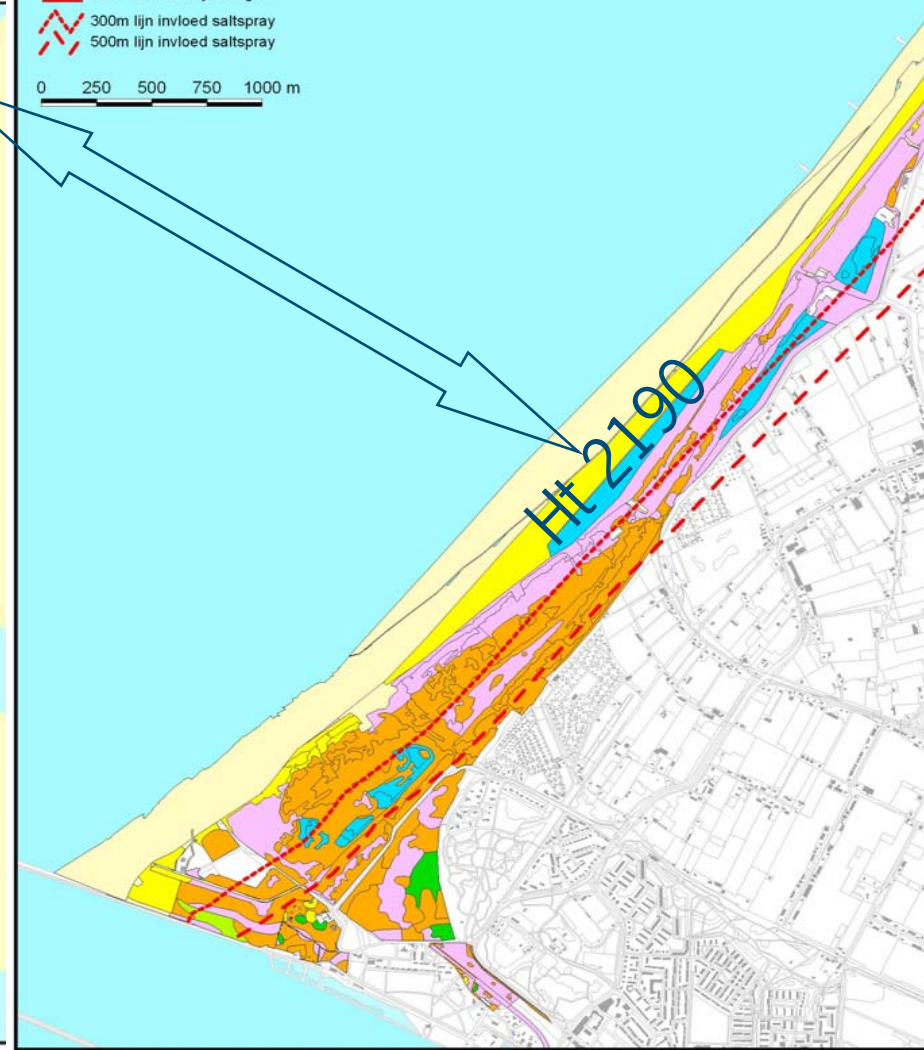
6 Compensation



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

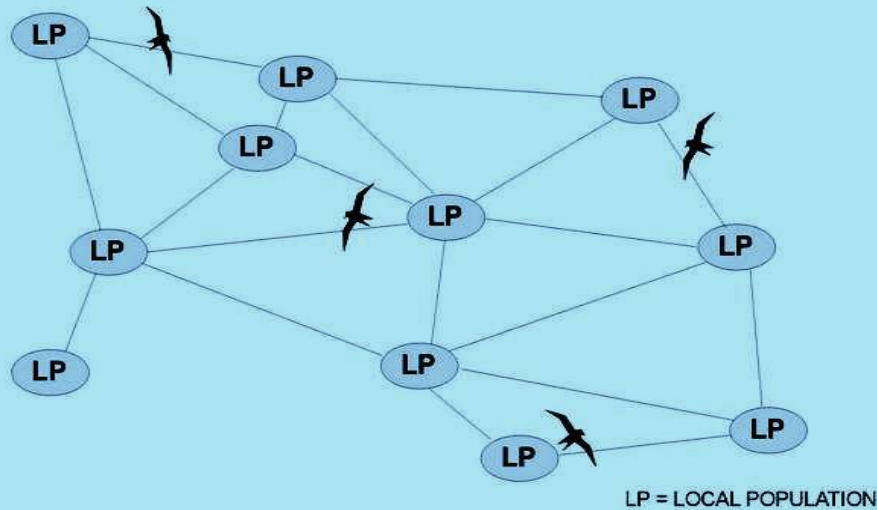
0 250 500 750 1000 m



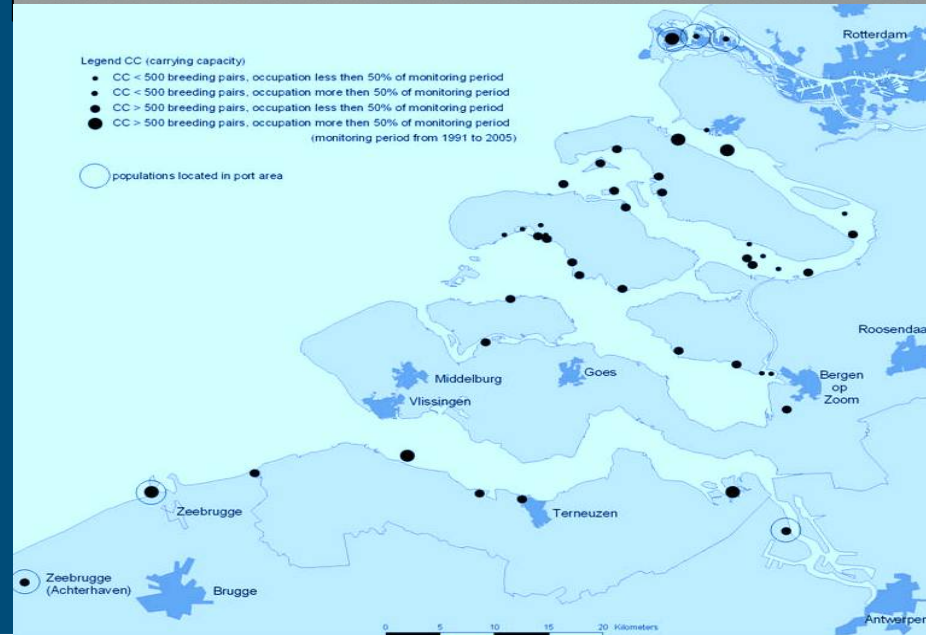
Compensation dune slacks

6 Compensation

METAPOPULATION



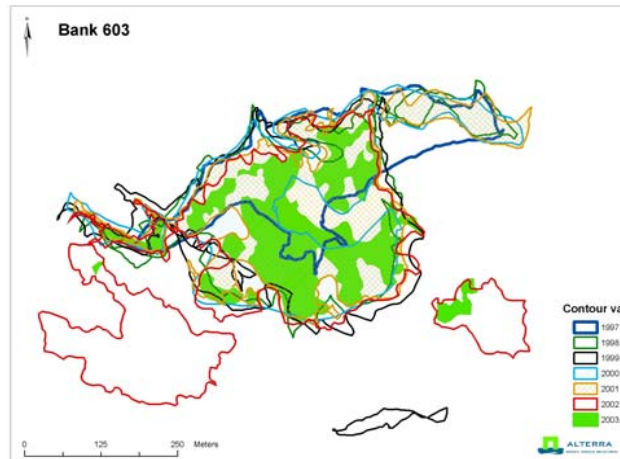
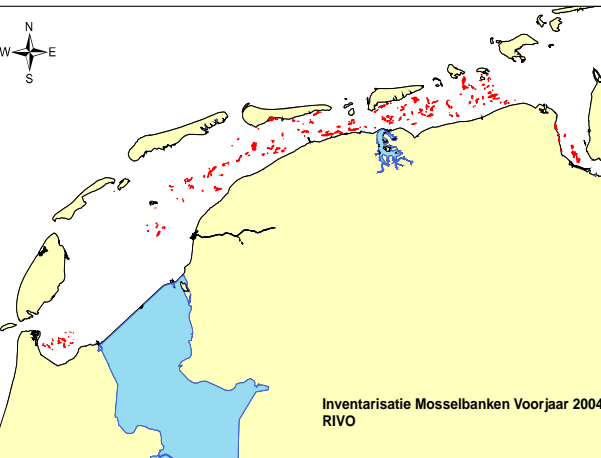
Metapopulation is a set of local populations connected by dispersing animals



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

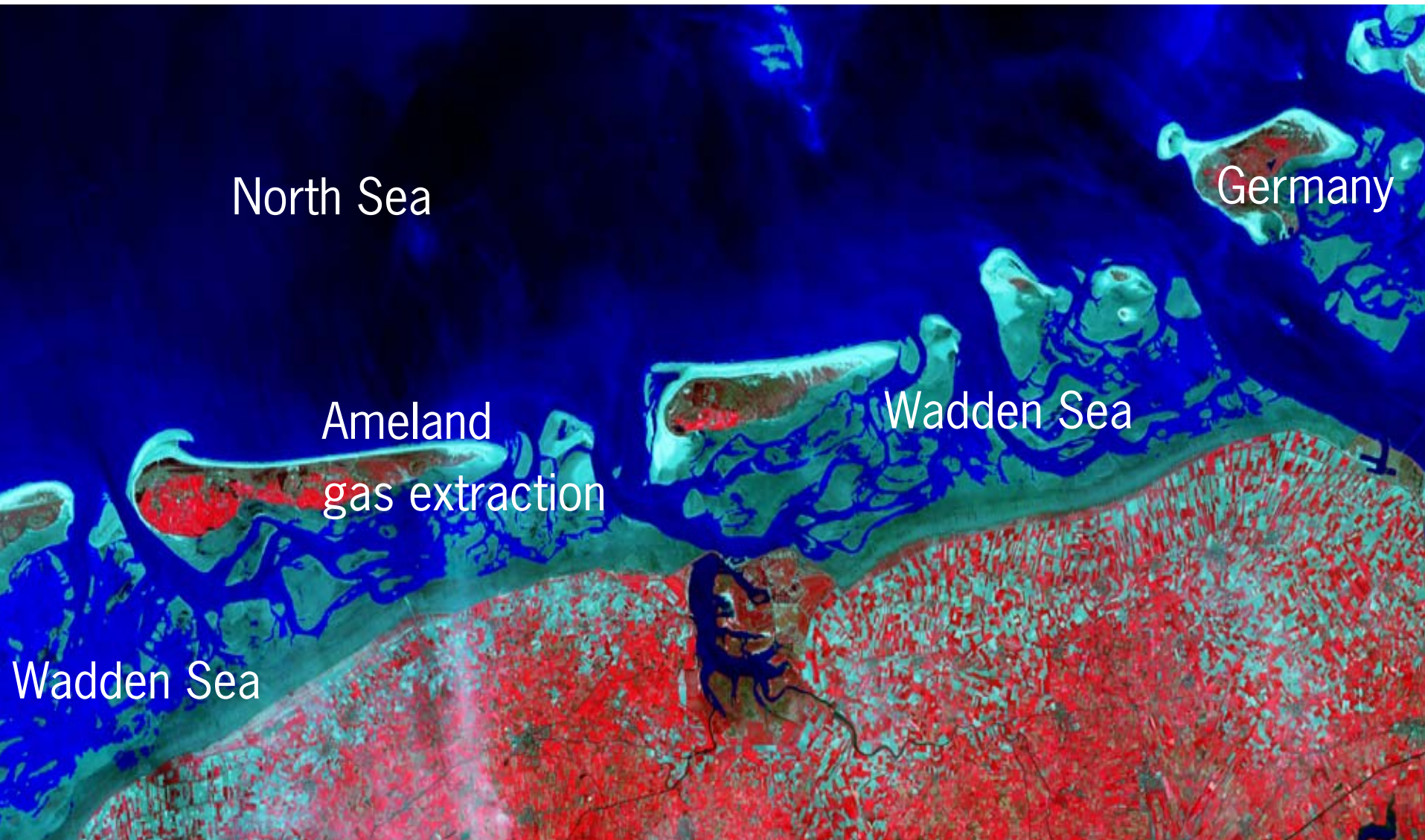
7 Monitoring for A) Favourable status



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

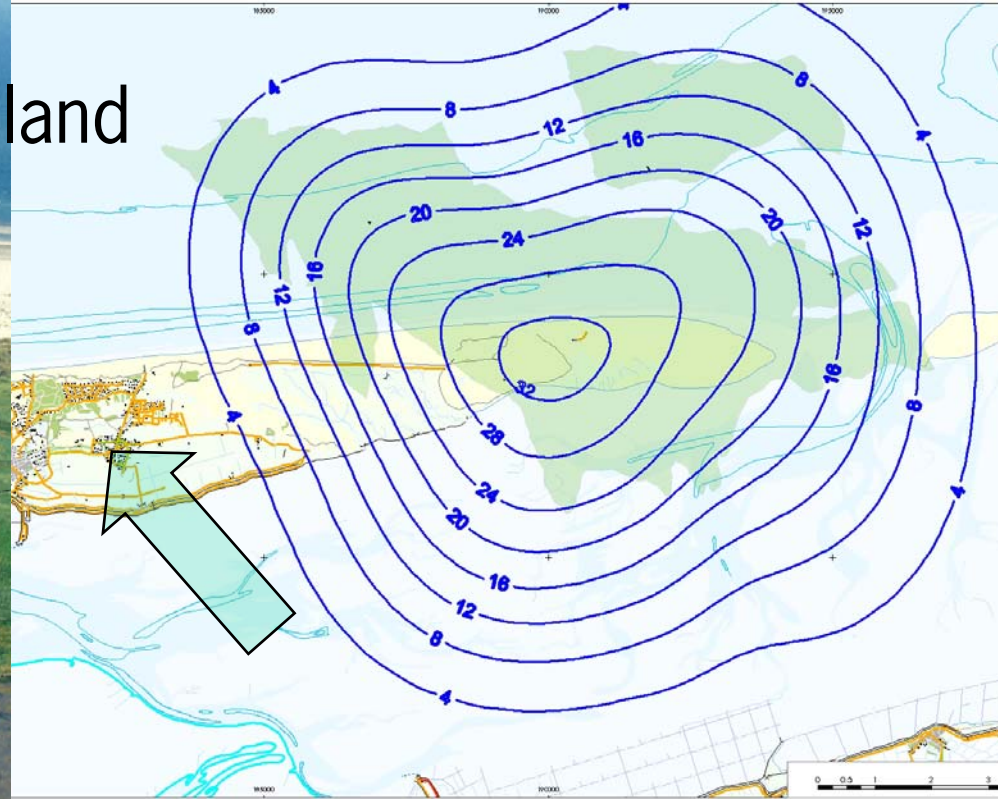
7 Monitoring for B) Evaluating Mitigation & Compensation



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

Speciale beschermingszones (E.G. Vogelrichtlijn)

- 1 Alde Feanen
- 2 Bargerpeen
- 3 Beiboerch
- 4 Doelen
- 5 Deurnese Peel
- 6 Zwenemator
- 7 Deagelrieder
- 8 Engerme, Goudmeir, Ijnser
- 9 Engbterdijkveeren
- 10 Fochtkeerveen
- 11 Fenne Dwaalenreuk
- 12 Grote Peel
- 13 Hamert
- 14 Karpins
- 15 Kl van Hurveen
- 16 Volherakmer
- 17 Kwade Hoek
- 18 Lepelarysplassen
- 19 Marispeel
- 20 Meuweggebied
- 21 Naardermeer
- 22 Nieuwekoop
- 23 Oosterschelde-Markizatoemer
- 24 Oostvaardersplassen
- 25 Oostersche Land van Saething
- 26 Waldeense
- 27 Weerribben
- 28 Weerbloezen
- 29 Zwaarte Meer
- 30 Zwin



landbouw, natuurbeheer
en visserij

0 10 20 30 40 50 60 70 80 90 100

Cartografie:
dienst landelijk gebied, Utrecht

dienst landelijk gebied
voor ontwikkeling en beheer

datum 5 - 4 - 2000

Legenda

- eerder aangemelde gebieden (646761,3 ha)
- uitbreiding van eerder aangemelde gebieden (744800,0 ha)
- nieuw aangemelde gebieden (29599,4 ha)
- (gedeeltelijk) vervallen aanmelding (48268,0 ha)

Totaal aan te melden 750840,8 ha



External effects

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

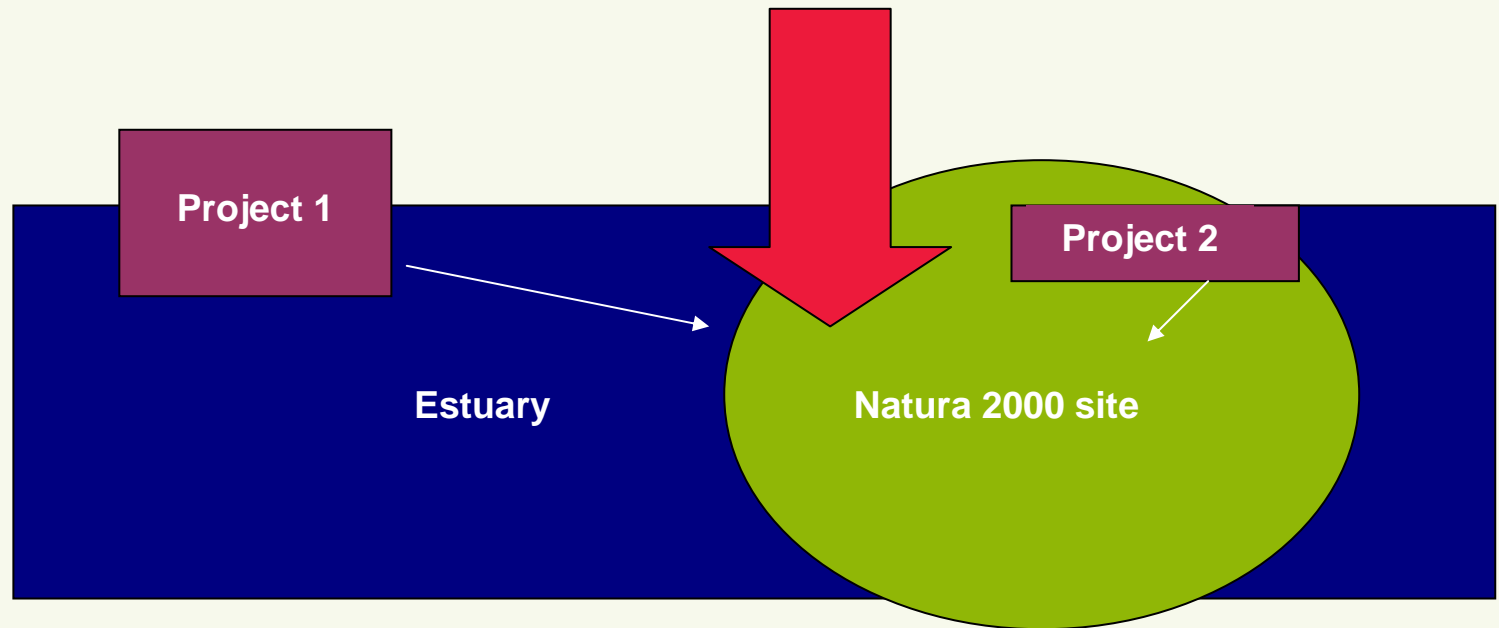


Cumulative effects

- 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

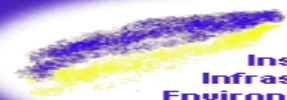


Types of cumulation

- ▼ 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

<http://www.alterra.wur.nl/UK/>

pieter.slim@wur.nl

