From sand to land

ZANDMOTOR
DELFLANDSE KUST

The Sand Engine

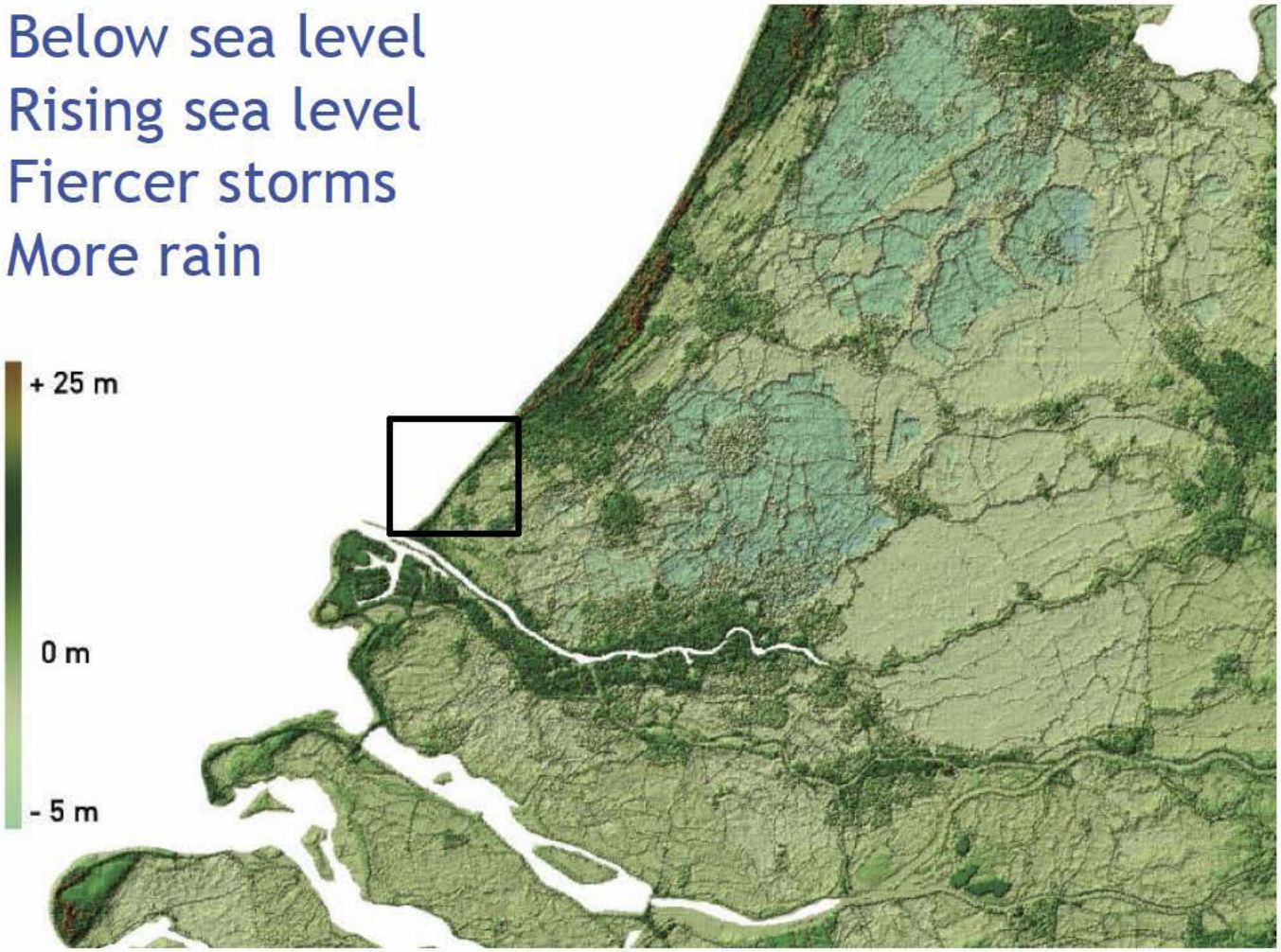
18 January 2011

Martin Baptist, EcoShape

Brief history

Province of Zuid-Holland

Below sea level
Rising sea level
Fiercer storms
More rain



Location Delfland

Sand nourishments

Types: beach / foreshore / mega-nourishment

Aim of the Sand Engine pilot

Short term

Innovation

Knowledge development and dissemination

More efficient coastal maintenance

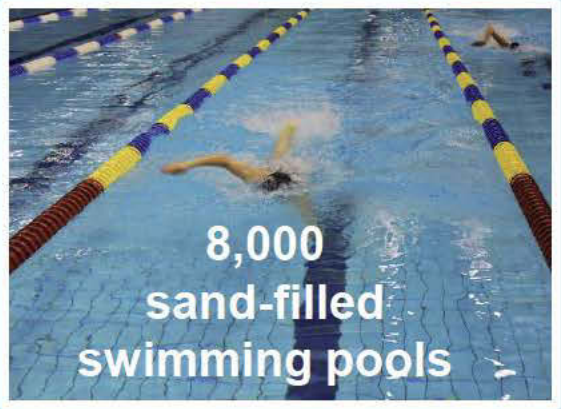
Room for nature and recreation

Long term

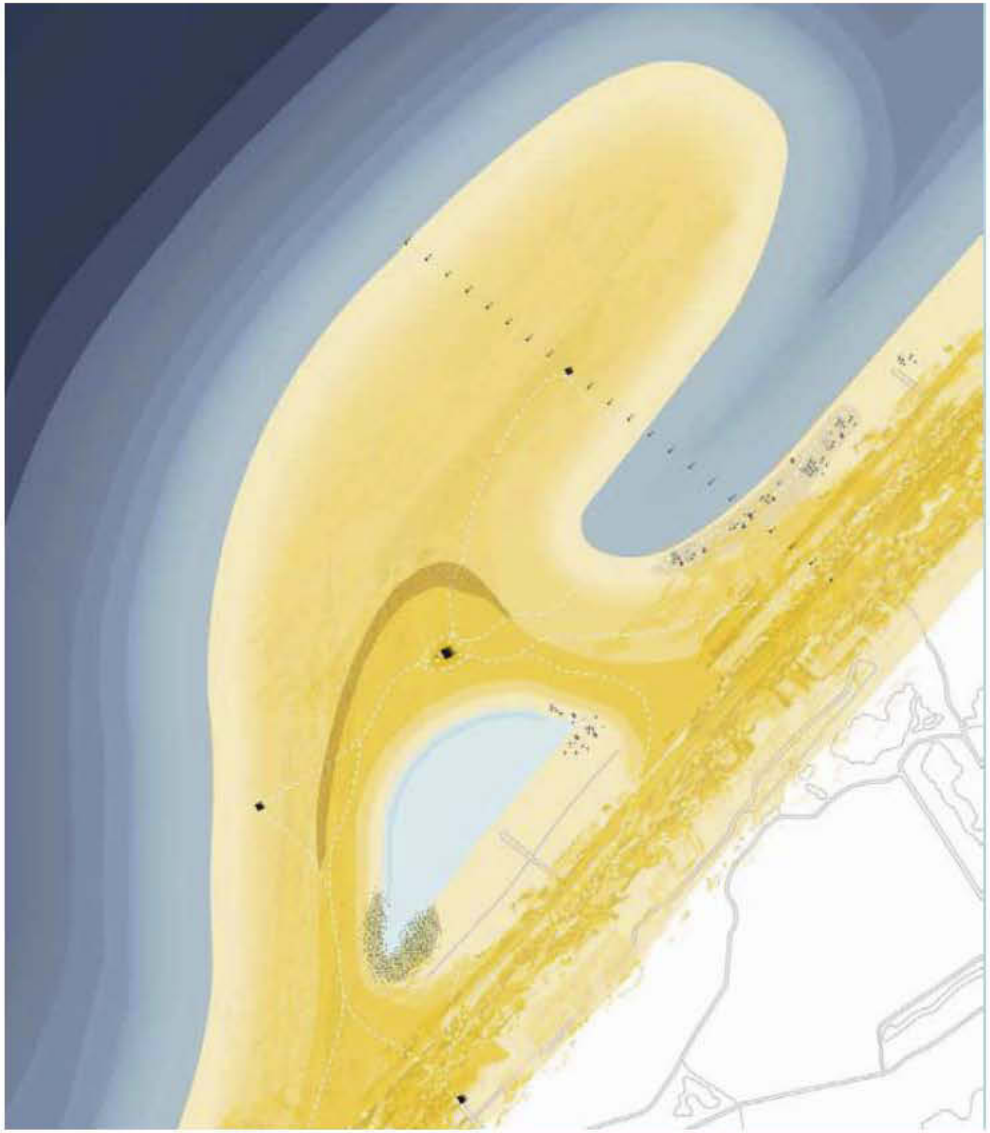
Protect nature and environment in the Randstand

“The Sand Engine”

20 million cubic metres sand = 100 hectares land



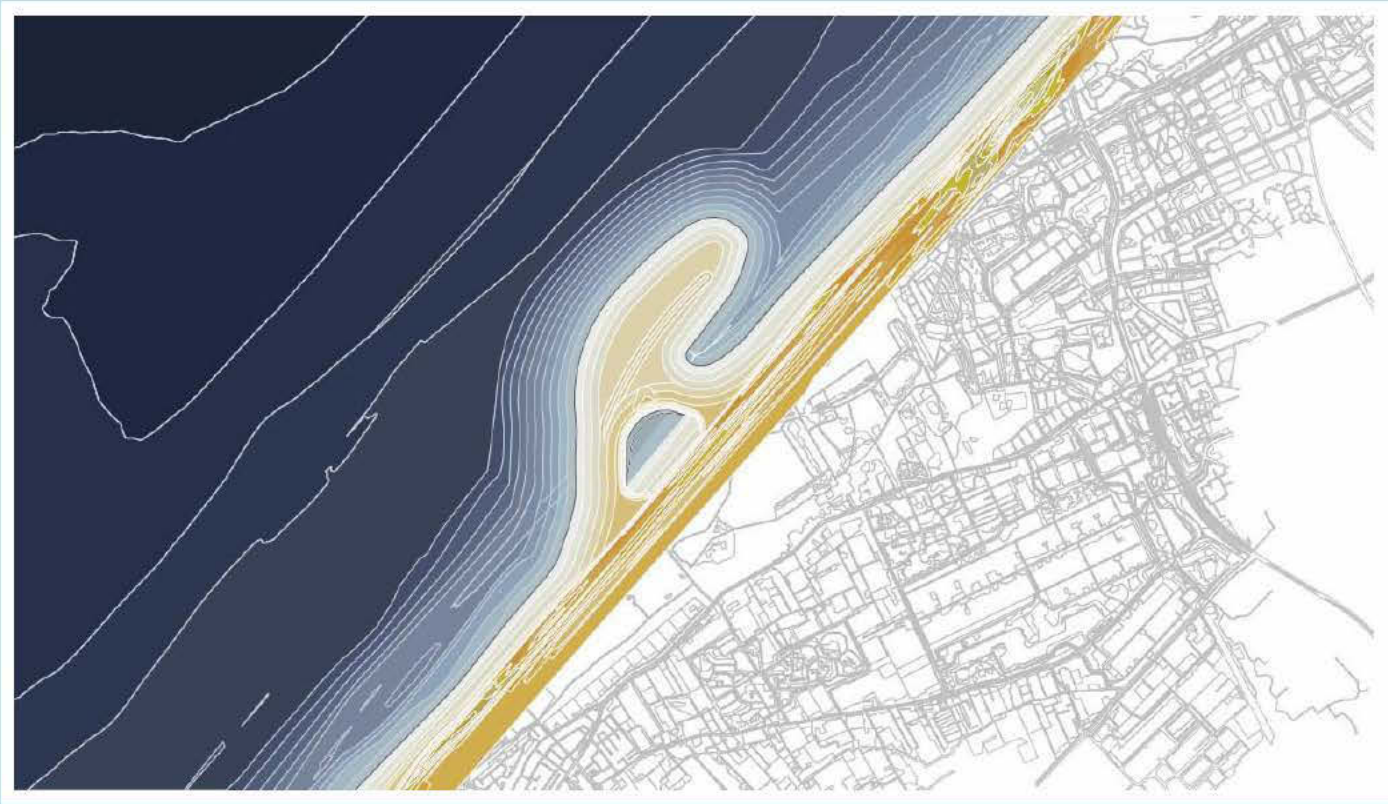
Design Sand Engine



1. Diverse habitats
2. Recreation
3. Flood safety

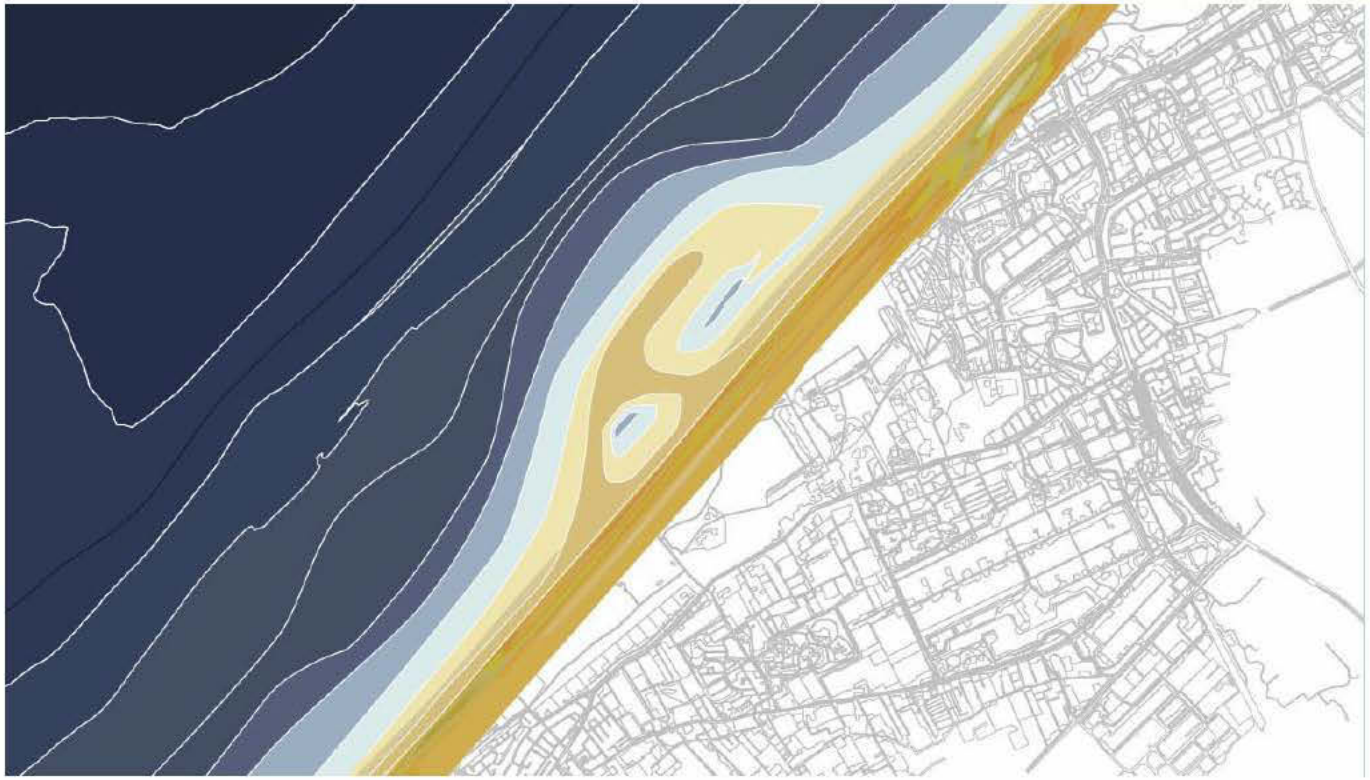
Morphology

Start of construction



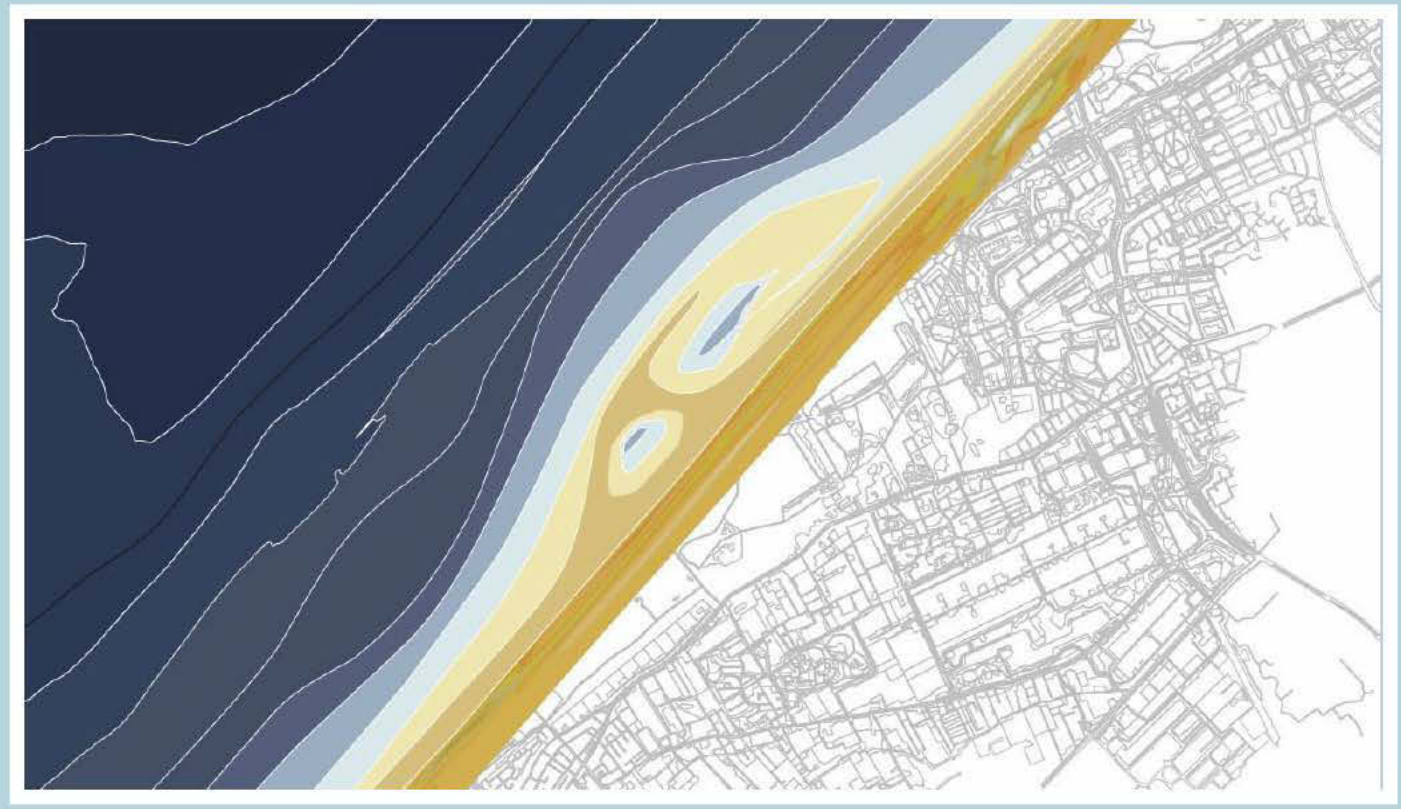
Morphology

After 5 years



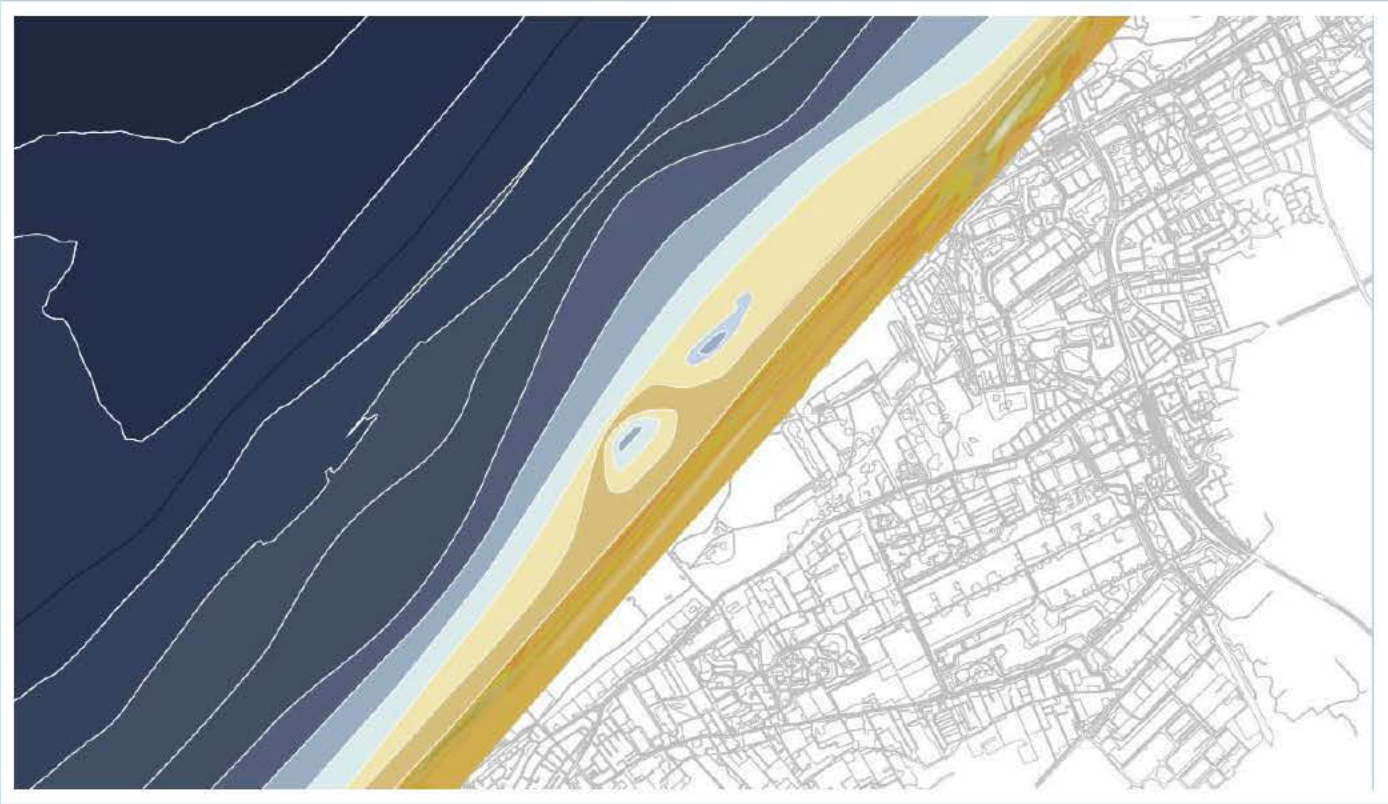
Morphology

After 10 years



Morphology

After 20 years



Monitoring goals

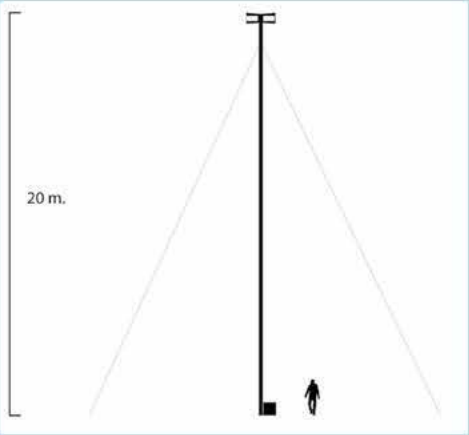
Gather information for good and safe management

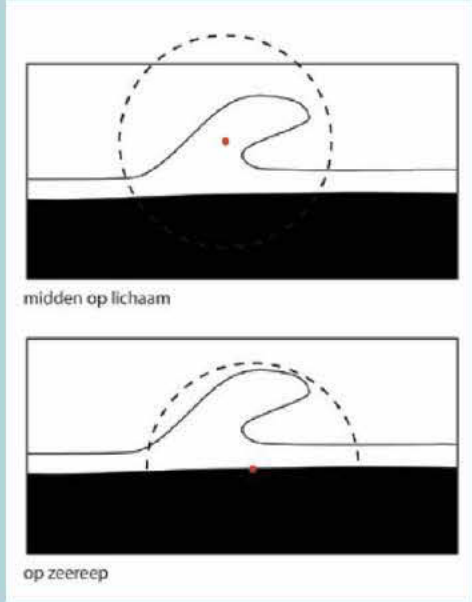
Fulfil permit conditions

Investigate whether the EIA targets are being achieved:

1. Natural dune expansion
2. Knowledge development and innovation
3. Attractive recreational and natural environment

Monitoring: approach





- Climate and waves
- Profile of foreshore, beach and dune
- Sediment composition
- Groundwater levels
- Sand and salt spray
- Beach and dune vegetation
- Benthos, fish, sea birds and sea mammals
- Recreation and swimmers' safety
- Management and risk control

Organisation

Projectbureau Pilot Zandmotor Delflandse Kust
(Project Bureau Sand Engine Delfland Coast)

provincie ZUID HOLLAND

Rijkswaterstaat
Ministerie van Verkeer en Waterstaat

The Zandmotor is part of the programme Kustvisie Zuid-Holland and initiative of the Province of Zuid-Holland and Rijkswaterstaat.

www.kustvisiezuidholland.nl

Partners

ZANDMOTOR
DELFLANDSE KUST

GEMEENTE WESTLAND

Gemeente Den Haag

DEELGEMEENTE HoekvanHolland

Hoogheemraadschap van Delfland

REDDINGSBRIGADE

WNF

Zuid-Hollands Landschap

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