



Project Marker Wadden:

Implementation of lessons learned in water management & citizen science

12 oktober 2022, Marker Wadden Conference

Conveners:

Jeroen Veraart

Arjan van der Veen

Sara Eeman





Programme

- Introduction (5 min)
- Useful insights for Water Management (Jeroen Veraart) (15 min)
- Citizen science at Marker Wadden (Arjan van der Veen) (15 min)
- Reflection (Sara Eeman) (10 min)
- Discussion (30 min)
 - Water management
 - Citizen science



Who are we



Jeroen Veraart, Wageningen Environmental Research

- Researcher Water Management & Climate Change, boundary spanner between science & policy



Sara Eeman, Aveco de Bondt

- Program manager resilient water systems, WG leader Water & Biodiversity Water Europe



Arjan van der Veen, Municipality Lelystad

- Urban ecologist, chair national section Insects Monitoring KNNV

Project Marker Wadden: governance lessons for water management

KIMA Marker Wadden Conference, Amsterdam, the Netherlands

12 October, 2022, Jeroen Veraart



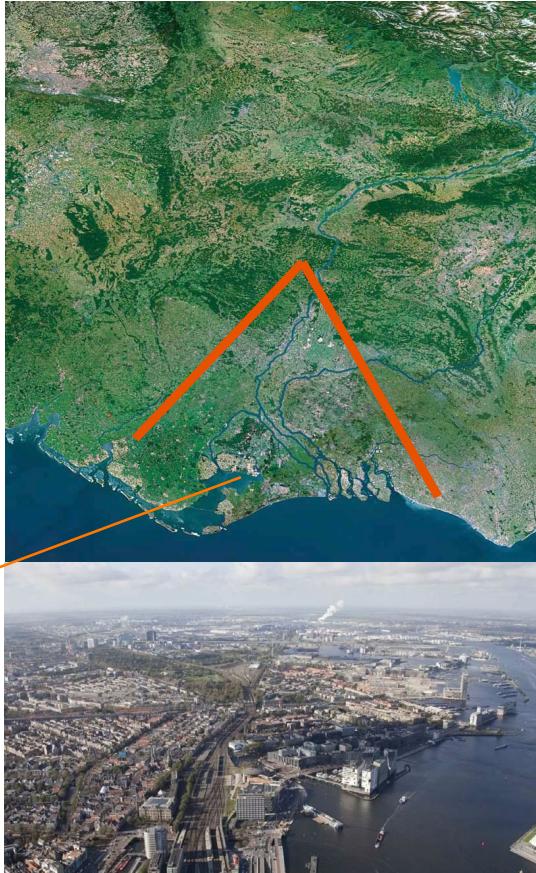
The storyline of the presentation

- Project Marker Wadden in a broader context
- Long term developments & policies
- The governance history of project Marker Wadden
- Innovative aspects
- Recommendations for implementation in NL & Europe

Estuaries and delta's

- Low-lying areas
- alluvial deposits
- Fertile soils
- Urban Settlements

*A novel ecosystem
in a disconnected
Estuary, but still a
nature based
solution*



Picture: © Port of Amsterdam



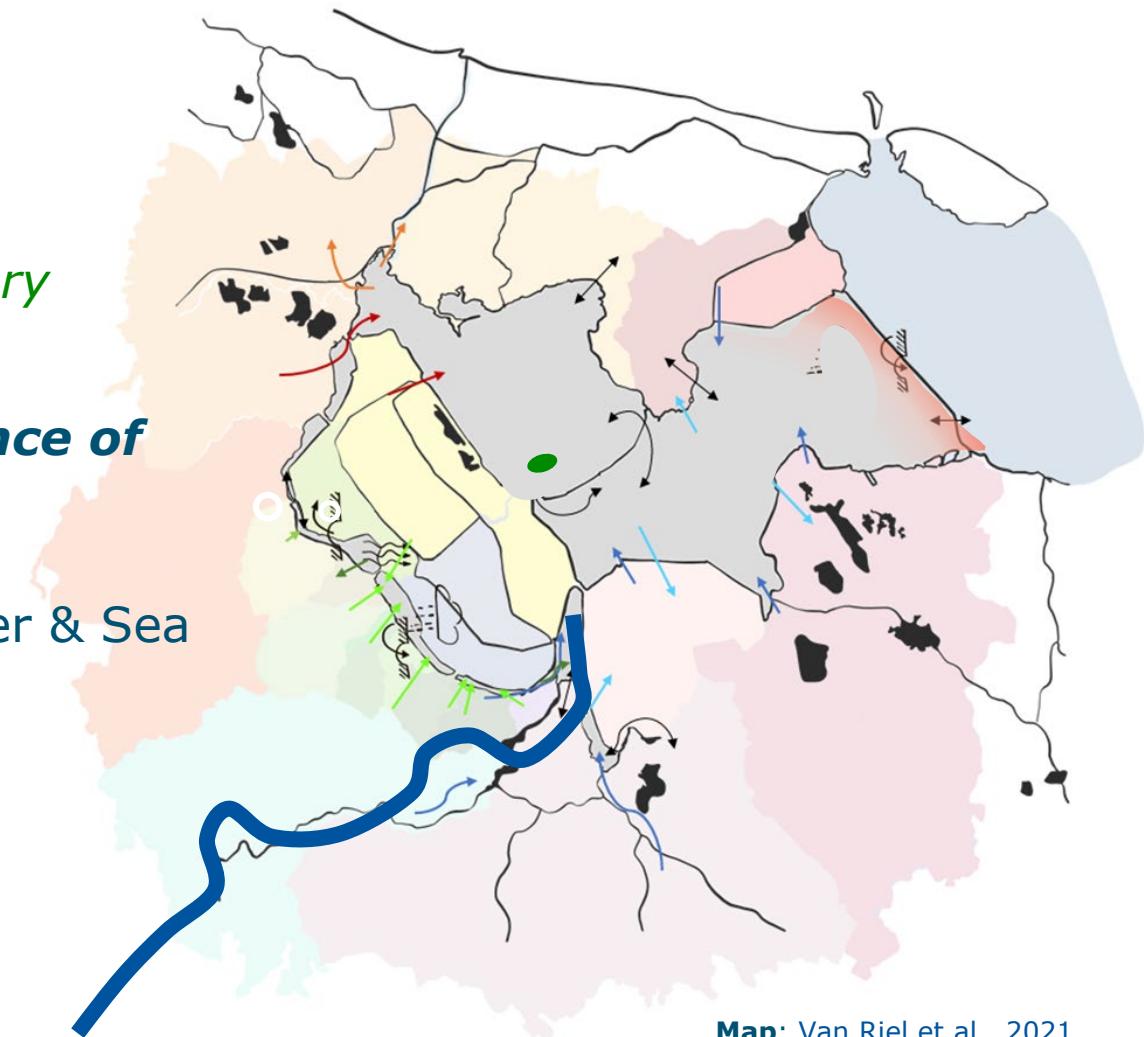
Picture: Britannica

Marker Wadden

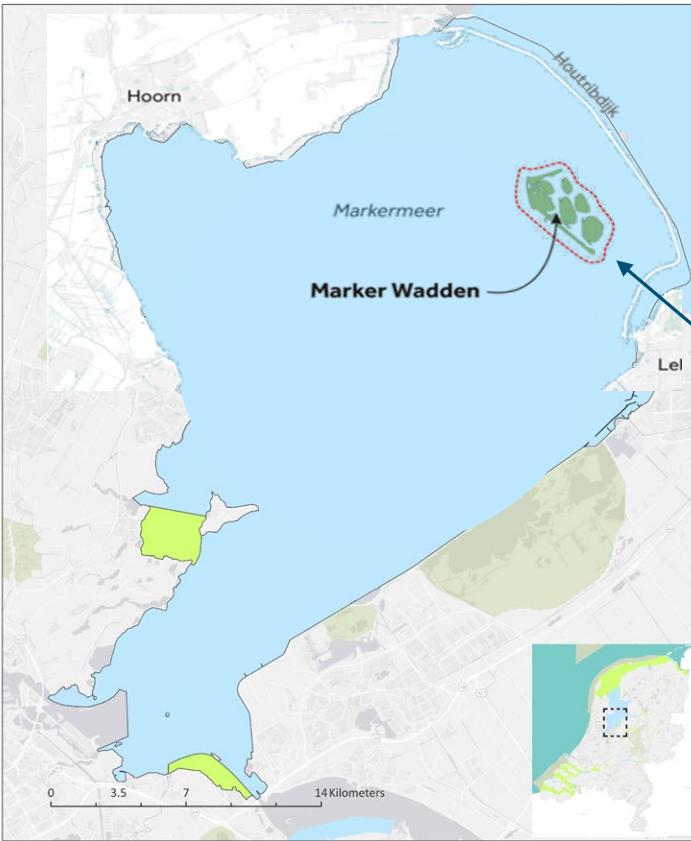
A **novel** ecosystem
in a **disconnected** estuary

Also because governance of

- Lake water levels
- Connectivity Land, River & Sea
- Economic development
- Nature?



Natura 2000 & Lake Marken



Natuurdoelen in het Markermeer & IJmeer uitgesplitst naar ecotopen met indicatie van de landelijke staat van instandhouding van VR+HR doelen (Kleuren, afgeleid uit Royal HaskoningDHV uit, 2017)

Legenda

Natura 2000 donut diagram

HR

VR

VR + HR

Overige natura 2000 gebieden

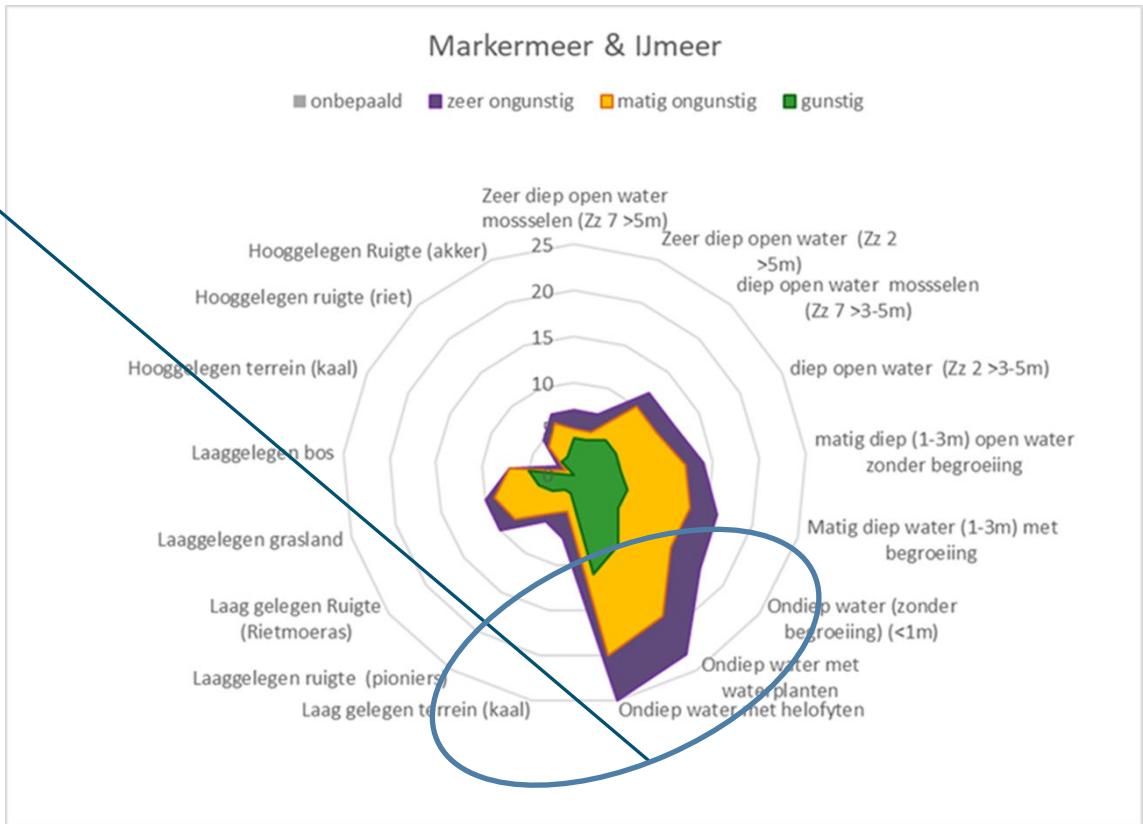
Kleur indicatie radarplot

Gunstig

Matig ongunstig

Zeer ongunstig

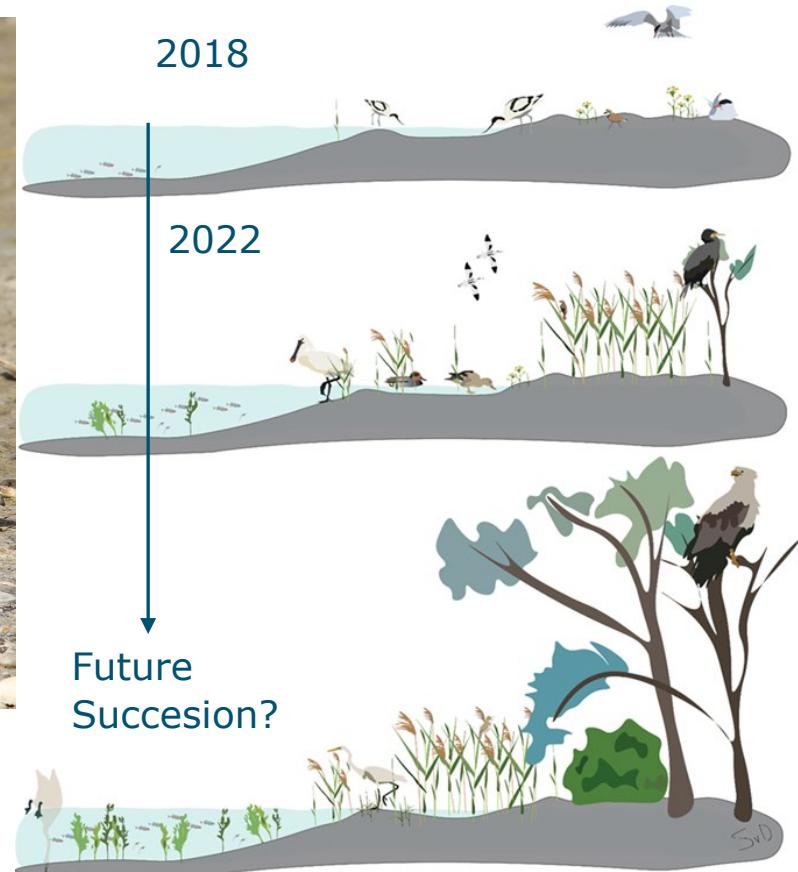
Onbepaald



Additional values of a bird paradise



Avocet in the bird paradise (Picture: J. de Leeuw, WMR)



Visual: S. van Donk (Wageningen Marine Research)

Long-term developments

Water management

- Water Quality & Biodiversity
- Water safety
- Water supply

Users of land & water

- Agriculture & Fisheries
- Energy Supply
- Housing
- Drinkwater production
- Recreation



Marker Wadden

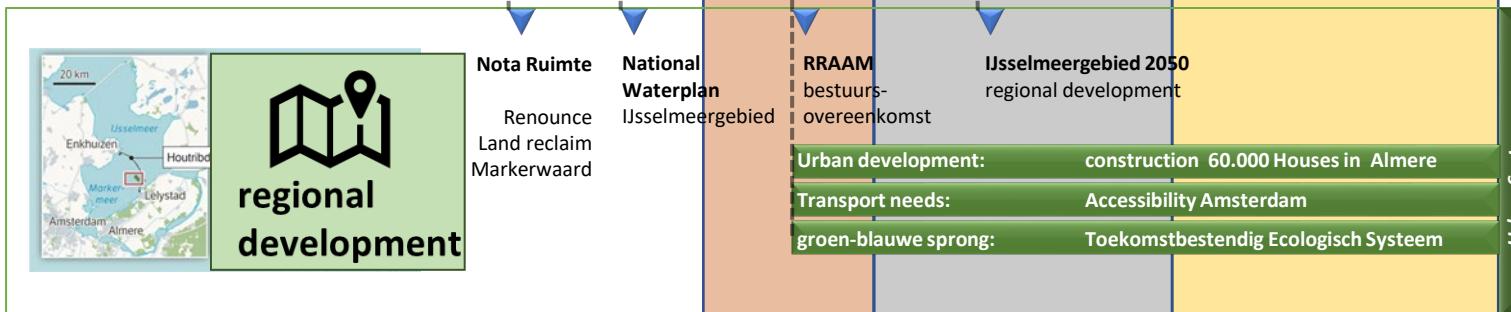
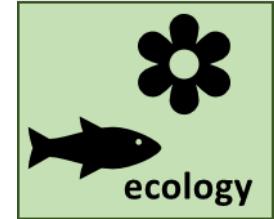
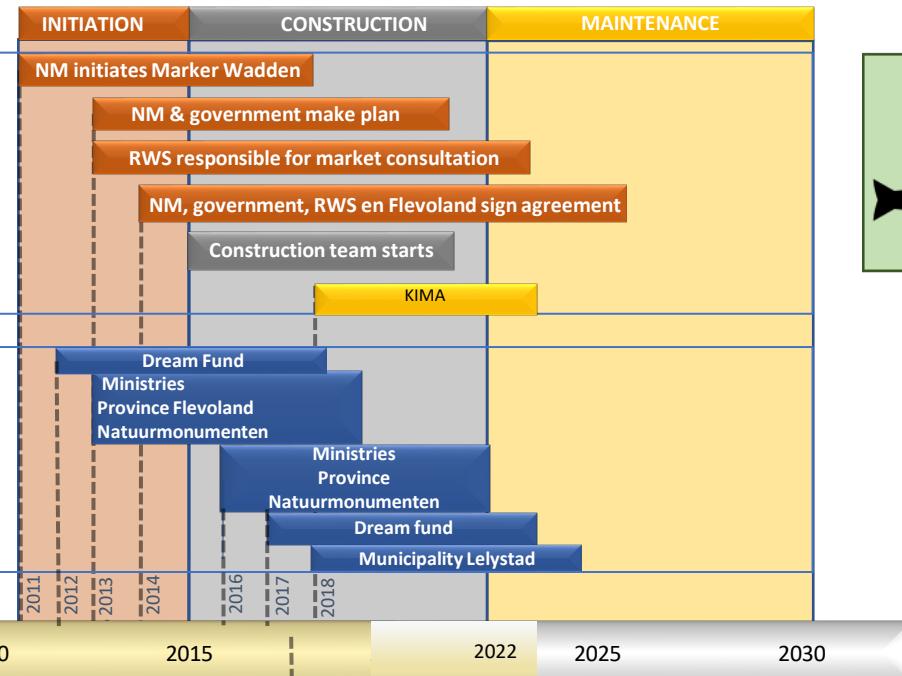
Ambitions

- Create a Bird paradise
- Improve Ecosystem
Lake Marken
- Realize Knowledge &
Innovation
- Regional Development





Time line

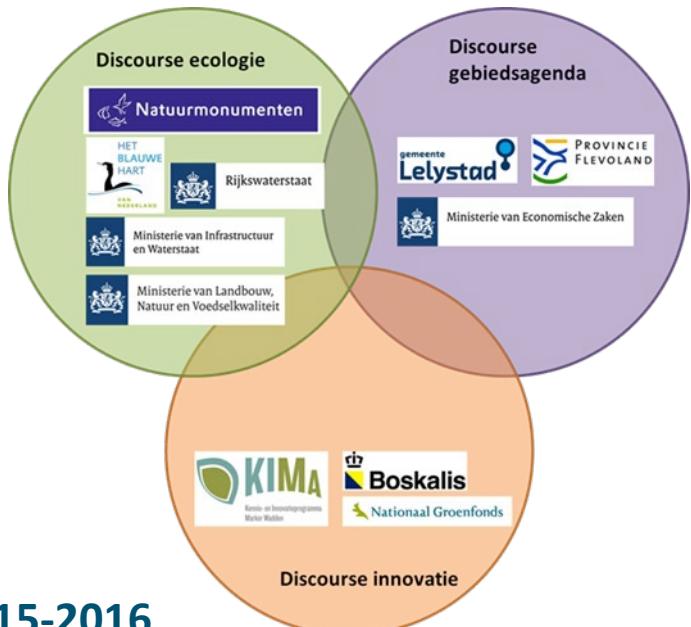


Relationships in time

Planning & building



Completion, follow up & maintance



2015-2016

Mutual Gain - window of opportunity

2022

Mutual Gain - To be sought again!



Innovative aspects

- Land reclamation with primary objective to improve nature
- Cooperation between dredgers, water managers & NGO's
- New knowledge about building islands with soft sediment/mud
- Nature development in a novel ecosystem (NBS)
- Research (**almost**) parallel to construction, points for improvement:
 - Almost parallel
 - Succession requires a follow-up research program
 - Suboptimal financial construction for research
 - Disorganized connection with system-level issues

Implementation of lessons learned in NL

Use MW-lessons for managing project risks:

- Supplementation & disturbance of succession
- Stepwise financing with multiple investors
- Adaptive monitoring on project & system level
- Create mutual gains for research, construction and maintenance of novel ecosystems

Specific Examples for implementation

- Programmatic Approach Delta Nature (PAGW)
- HWBP, WFD, Natura 2000



Pictures: Natuurmonumenten & Rijkswaterstaat

Recommendations for implementation in Europe

Locations in Europe where there is:

- a window of opportunity for Coalition building for biodiversity and economic use
- in terms of setting, e.g. closed estuaries or novel ecosystems it might be difficult to find similar locations.
- Look for cooperation in international networks



European Bank
for Reconstruction and Development



Thank you!

More information

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For further reading:

Willems et al, 2021 [The Public Life Cycle of Marker Wadden](#). (public money and management)

IJff et al., 2021, [Innovatieve Governance voor building with Nature](#) (Tijdschrift Landschap)

Stouten et al, 2022. [Evaluating Knowledge Management Project Marker Wadden](#)

LNV/WUR Research [Ecologie Grote Rijkswateren](#)

MMIP E3 - Duurzame rivieren, meren en intergetijdengebieden (BO-43-118-003 EN BO-43-118-001)

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