



Nature Based Solutions (NbS) for Climate Resilient Coastal Landscapes in Terschelling



NBRACER
Nature Based Solutions
for Atlantic Regional Climate Resilience

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1. Background

- Climate Change increases the **frequency and intensity** of storm surges.
- Coastal landscapes are vulnerable to **flooding and erosion**.
- Changes in morphology generate pressure on **coastal groundwater systems**.

Objective: Evaluate the efficiency of NbS in enhancing climate resilience in coastal ecosystems. The assessment will consider the interactions between coastal surface processes and subsurface groundwater dynamics.

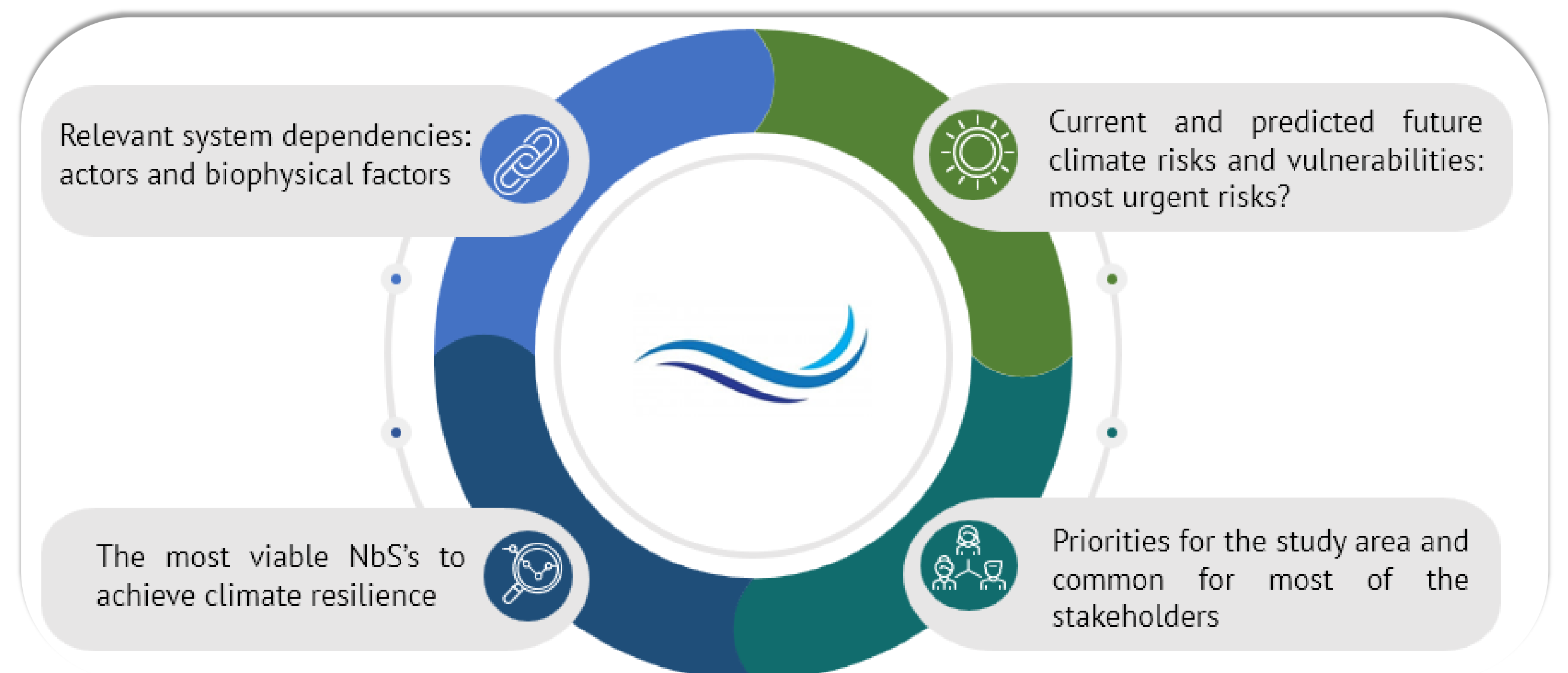
3. Coastal – Groundwater Interactions

- Coastal erosion and sea level rise can increase **salinization risk**
- Dunes play a key role as **buffers for freshwater availability**
- Solutions in the coast can also affect the groundwaters system's **resilience**
- Systems interactions** are key to implement solutions for climate resilience

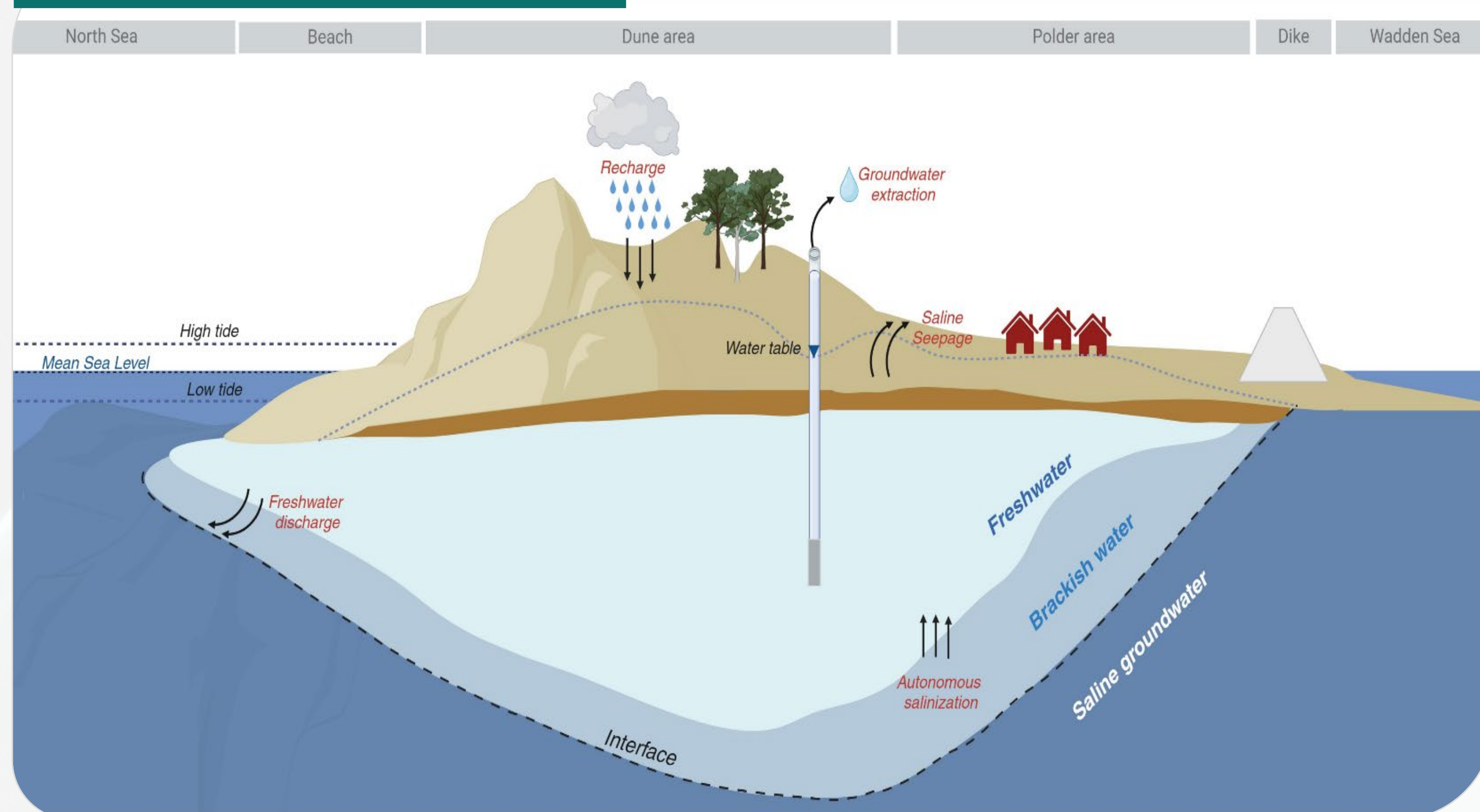
2. Achieving Climate Resilience

What **priorities (challenges and objectives)** do stakeholders identify as crucial for achieving climate resilience in the study area?

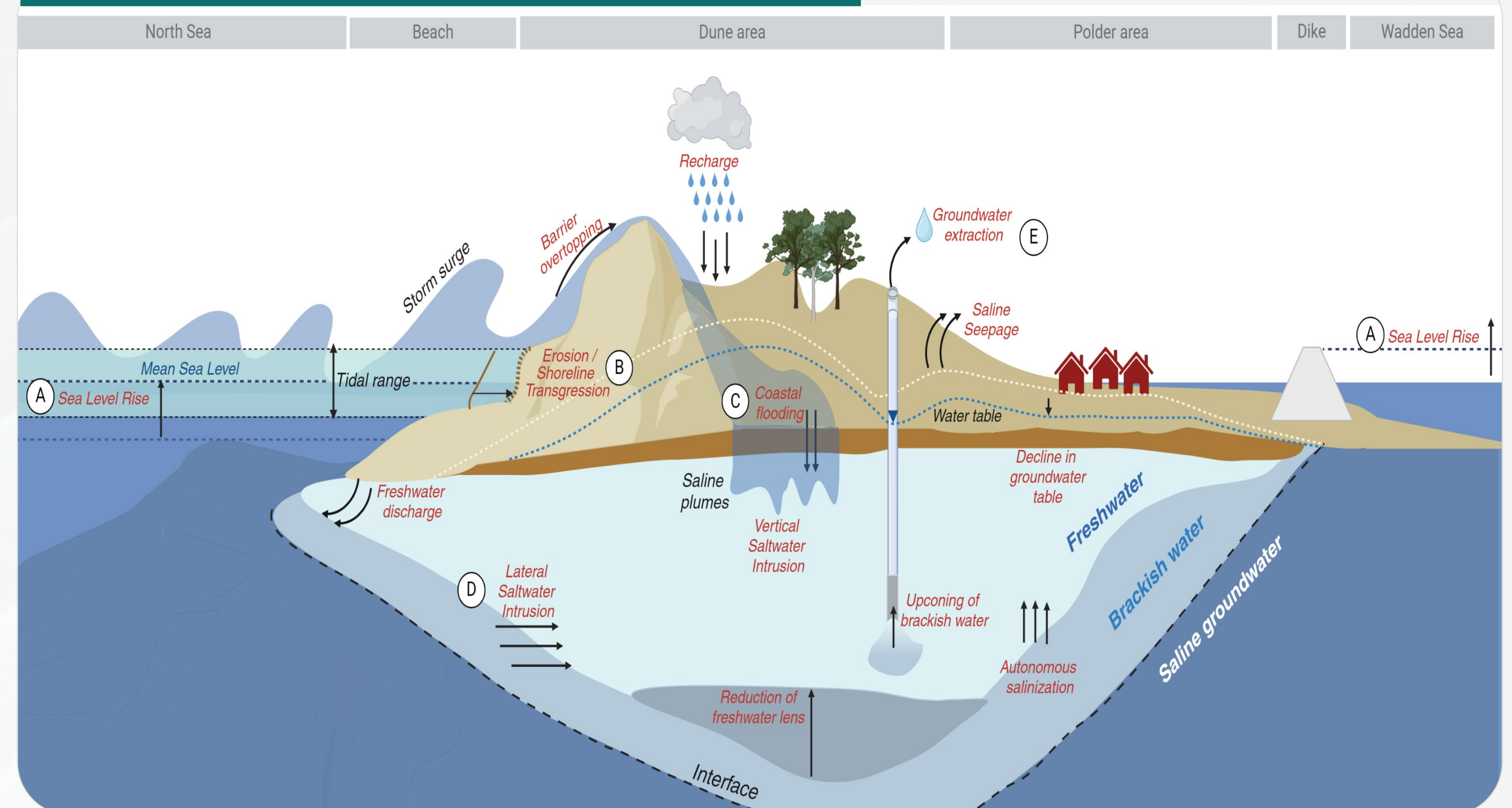
- Freshwater auto-sufficiency
- Adapting to drier summers and wetter winters



4. Climate Today (2025)



5. Climate in the Future (2100)



6. Nature Based Solutions

Use natural processes and ecosystems.

Improve biodiversity, recreation, water quality, local livelihoods.

Long-term resilience and adaptation to climate change

Reduce flooding, drought, erosion, and salinization.



7. NBRACER



6 European Countries



8 Atlantic Regions



31 Project Partners

- Mission on Adaptation to Climate Change
- Transformation towards **climate resilient regions**
- Demonstrating and replicating** regions
- Promote an ecosystem perspective.



Costal



Urban



Rural

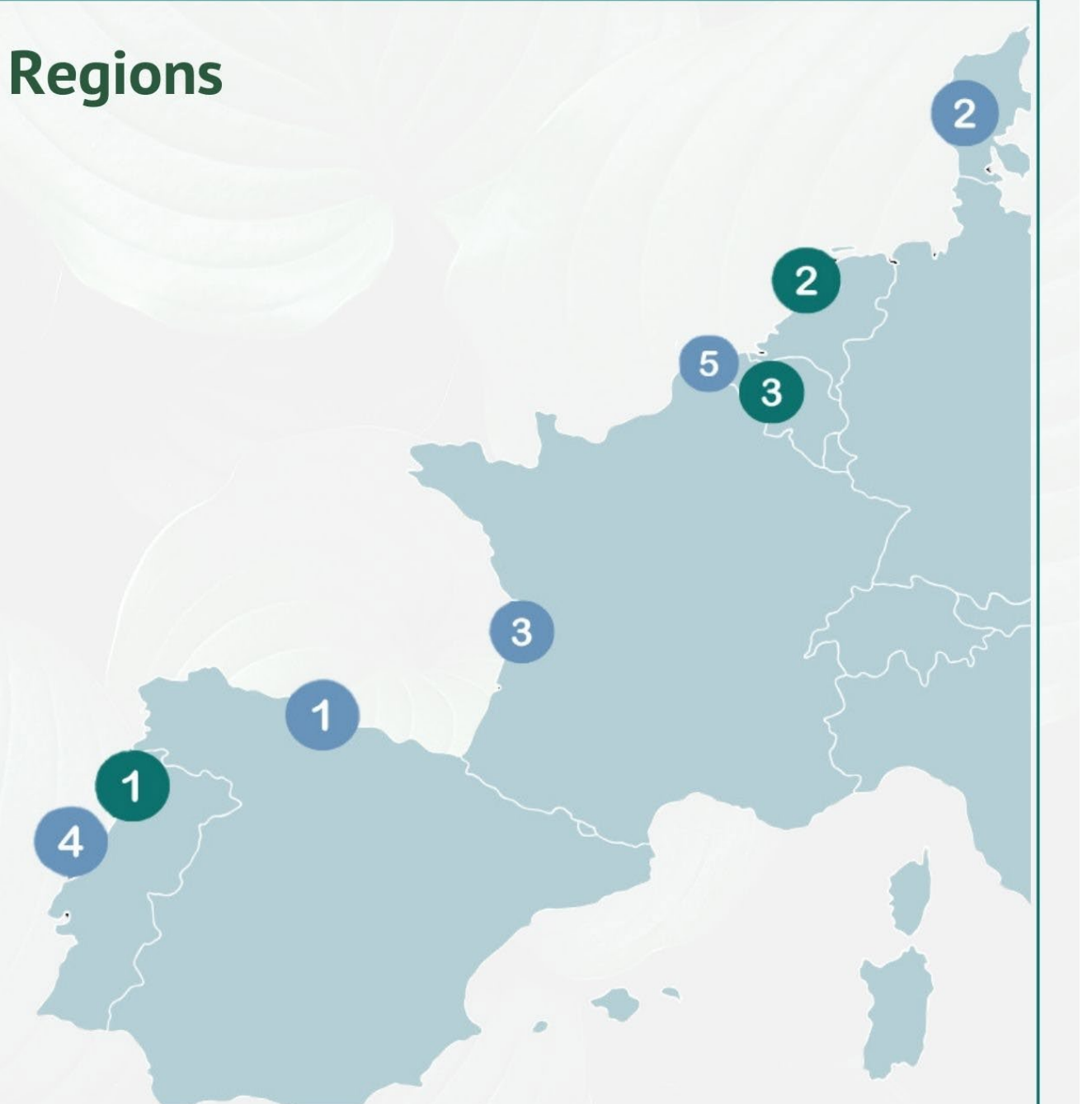
NBRACER Atlantic Regions

DEMONSTRATING REGIONS

- 1 CANTABRIA
- 2 CENTRAL DENMARK
- 3 NOUVELLE-AQUITAINE
- 4 PORTO MUNICIPALITY
- 5 WEST-FLANDERS

REPLICATING REGIONS

- 1 CÁVADO
- 2 PROVINCIE FRYSLÂN
- 3 EAST-FLANDERS



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