Deltares

enabling delta life

Kennis- en Innovatieprogramma
Marker Wadden

Nature-based Solutions for Climate Change Mitigation

Dr. B.K. van Wesenbeeck

bregje.vanwesenbeeck@deltares.nl

@BregjevW

bregjevanwesenbeeck

Climate change mitigation and adaptation

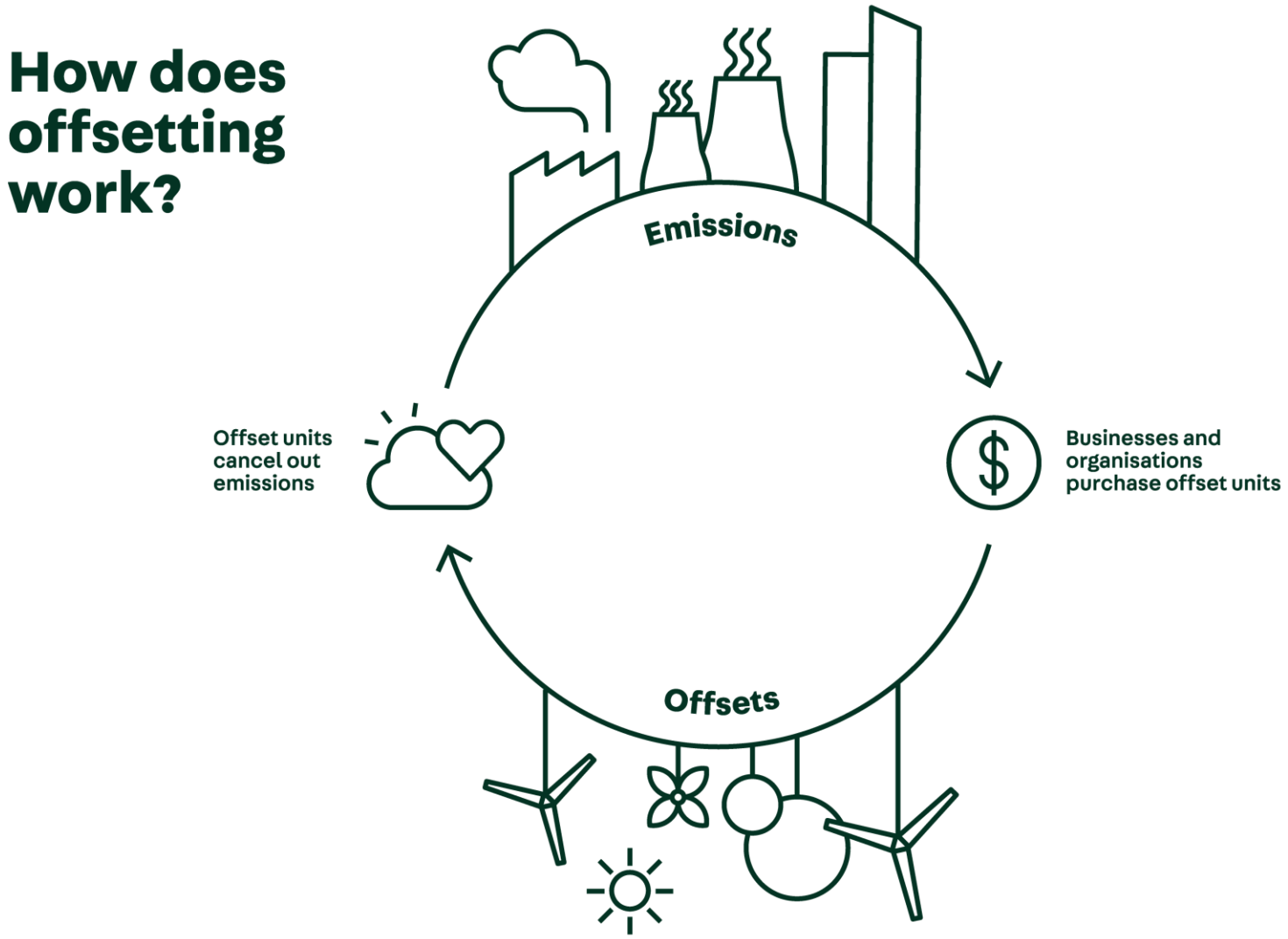
- Climate change mitigation: avoiding and reducing emissions of heat-trapping greenhouse gases into the atmosphere to prevent the planet from warming
- Climate change adaptation: altering behavior and systems to protect people, assets, and the environment from climate change effects

IPCC 6th assessment

- Effects of climate change visibile
- Besides mitigation we can adapt
- We need to transform our infrastructural systems
- Larger role for nature (investment in nature can result in 30% of emission reduction)

Deltares

Carbon credits or carbon offsetting



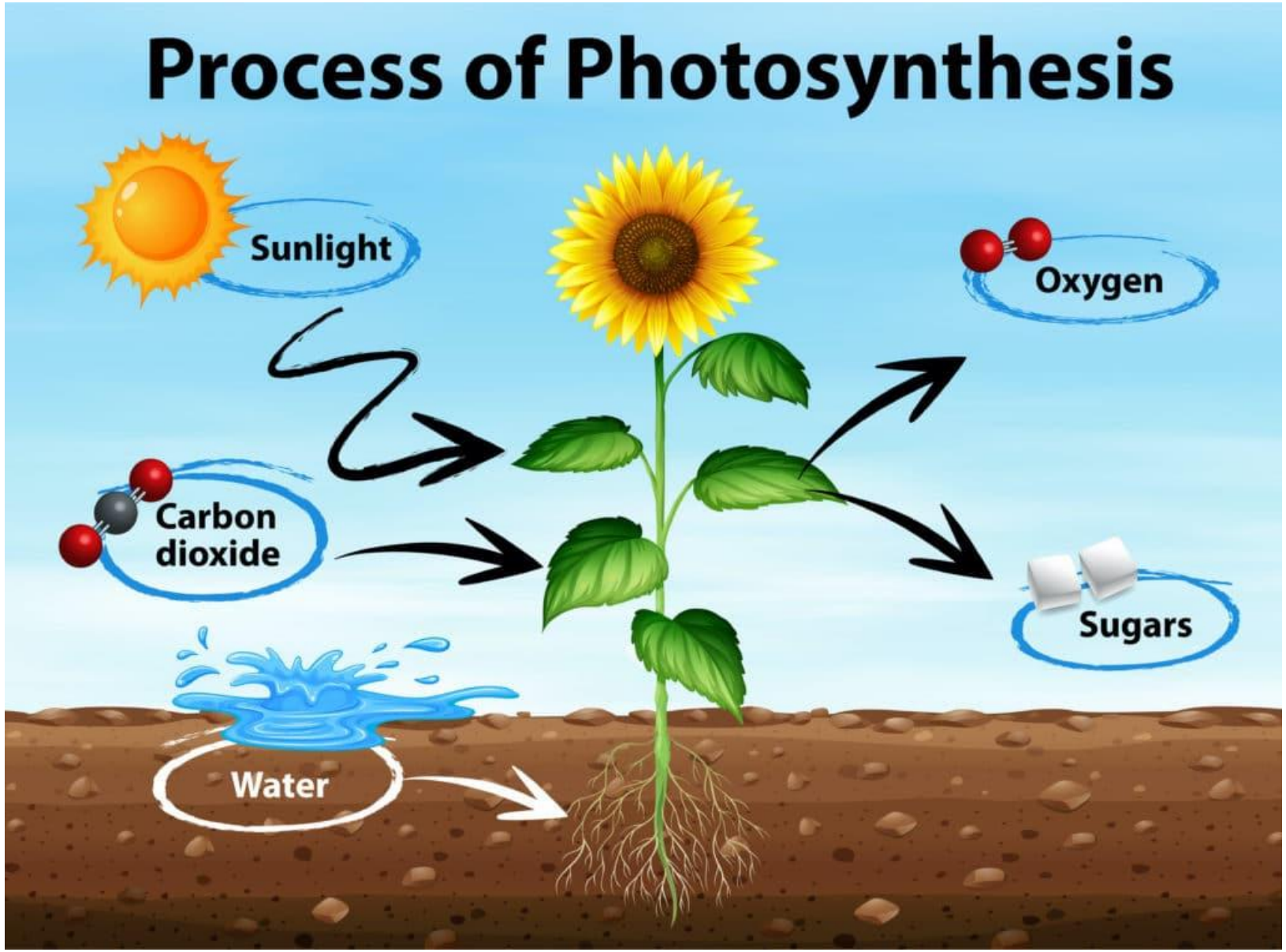
Deltares

Ecosystems most efficient for carbon storage

- Tundra
- Seagrass
- Mangrove forests
- Salt marshes
- Tropical forest

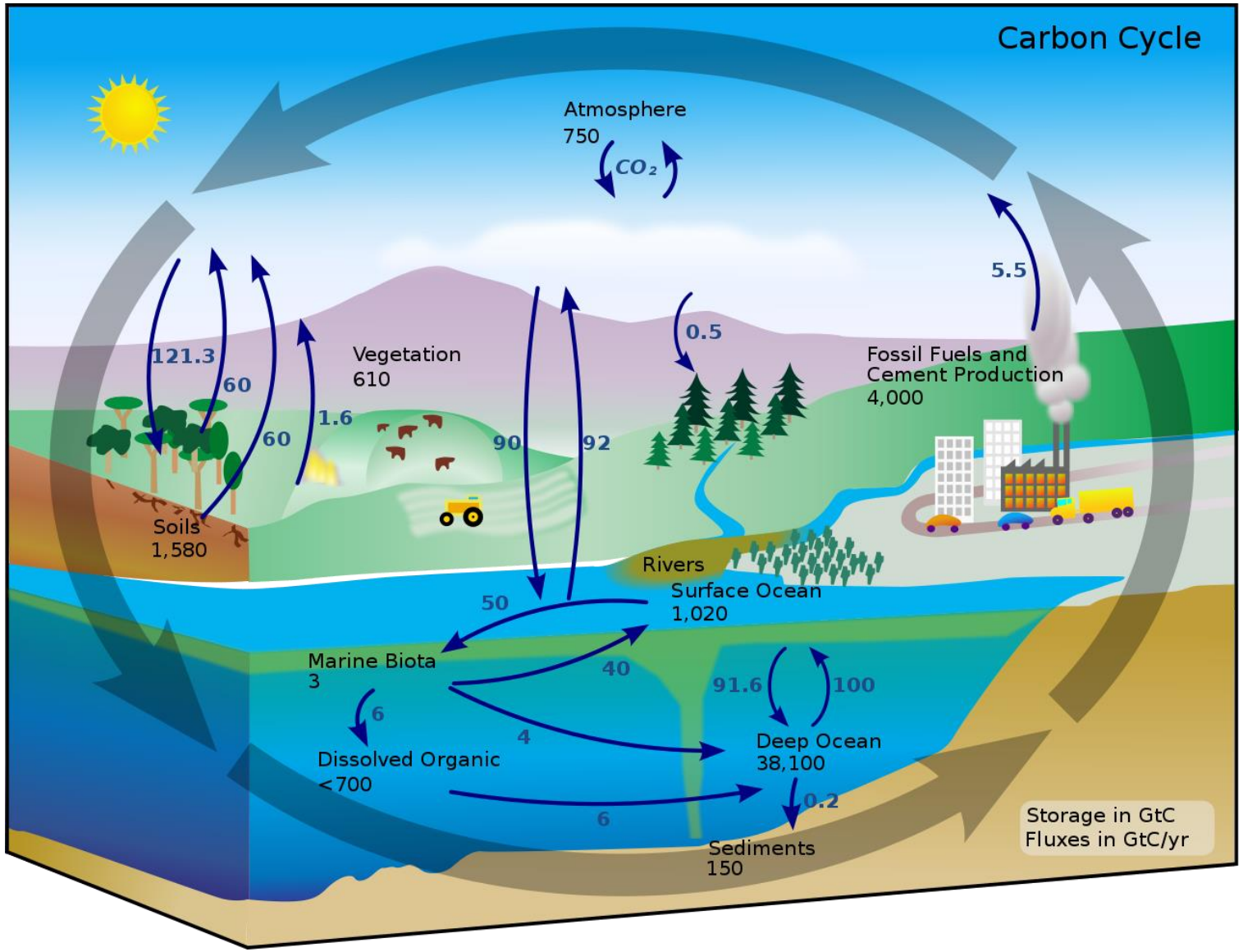
Deltares

Carbon storage in ecosystems



Deltares

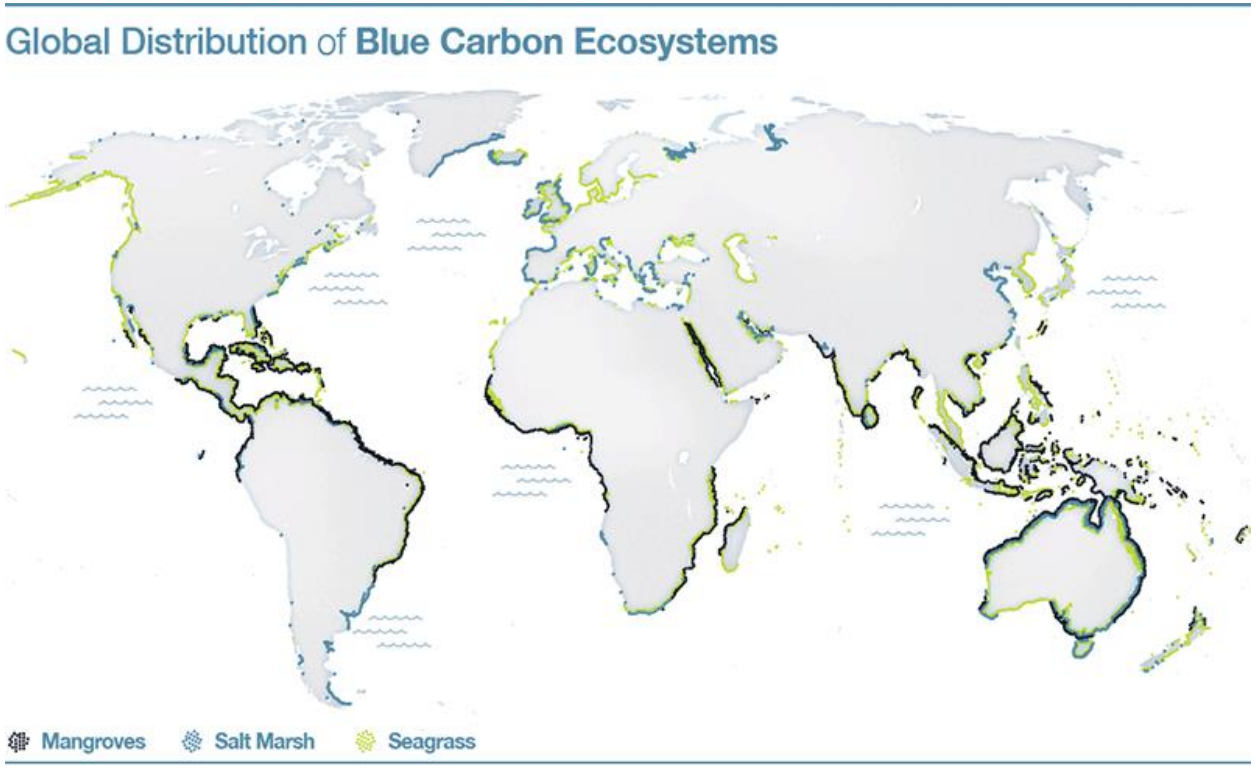
Carbon storage in ecosystems



Deltares

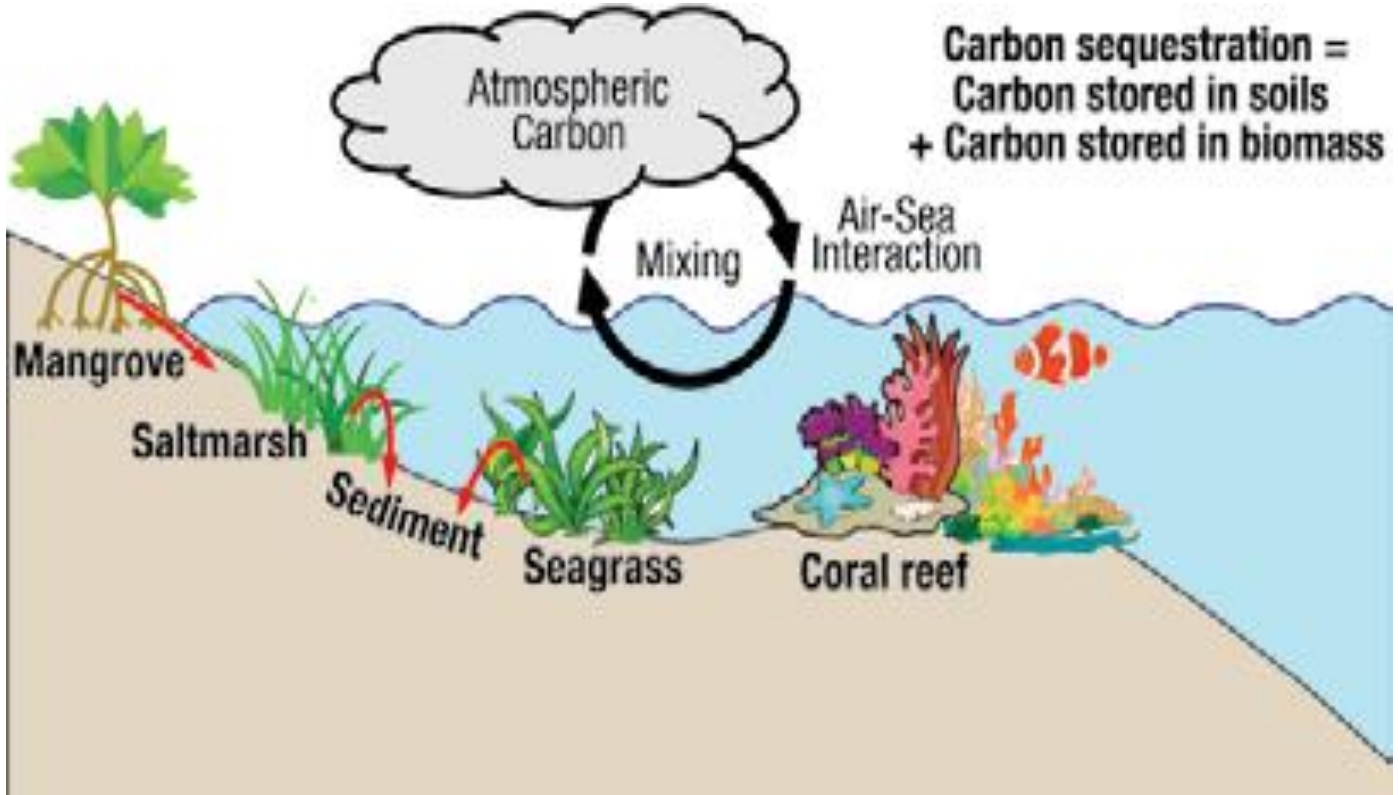
‘Blue’ carbon

- Removal of carbon dioxide from the atmosphere by ocean and coastal ecosystems
- Mangroves, marshes, seagrass and algae
- 2% surface but 50% storage



‘Blue’ carbon

- Removal of carbon dioxide from the atmosphere by ocean and coastal ecosystems
- Mangroves, marshes, seagrass and algae
- 2% surface but 50% storage



Opportunities for NbS and climate change mitigation

- Do we already utilize the full potential of our NbS approaches for Climate Change Mitigation?



- What are the risks with NbS and Climate Change Mitigation?

- Where do we think there are opportunties, or unexplored potential for NbS and CC mitigation?

Contact

www.deltares.nl

@deltares

linkedin.com/company/deltares

info@deltares.nl

@deltares

facebook.com/deltaresNL