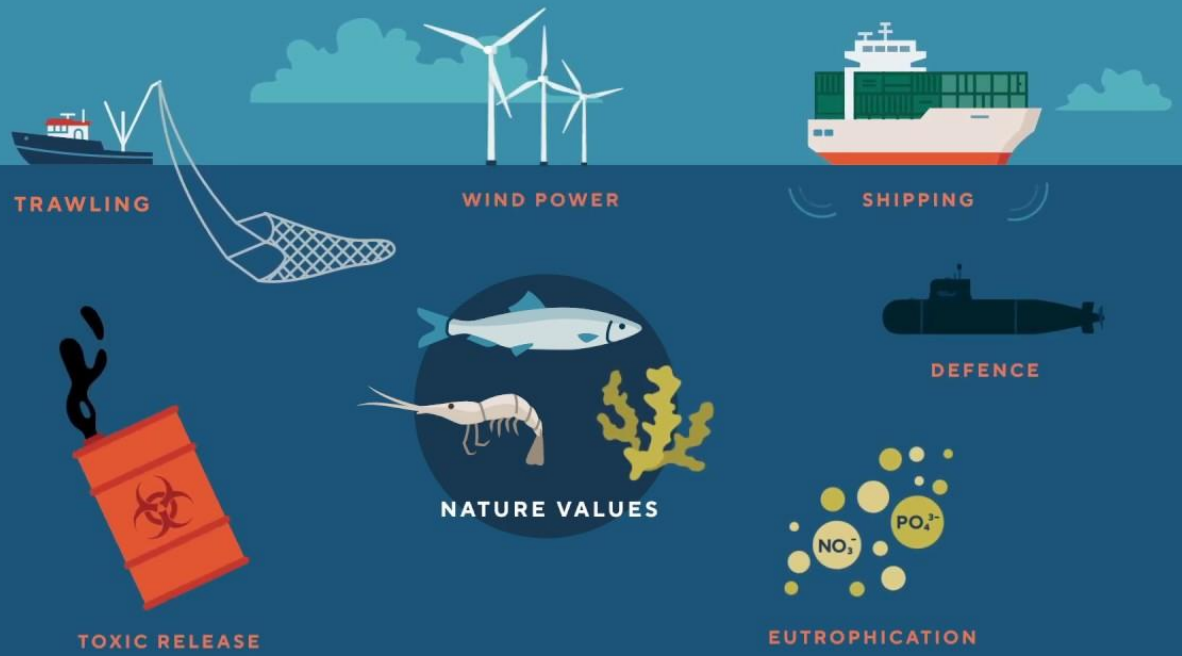


Thematic session: Restoration and nature-based solutions

ASCOBANS Technical Workshop to develop guidelines for cetacean-friendly MSP, 28th June 2023

Prof. Dr. Aline Kühl-Stenzel, WG Chair

Restoration goals of the Global Biodiversity Framework

Target 2. 30% of degraded areas are under effective restoration

- Ensure that **by 2030 at least 30% of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration**, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

UNITED NATIONS DECADE ON ECOSYSTEM RESTORATION 2021-2030

ADD WARNING SIGN

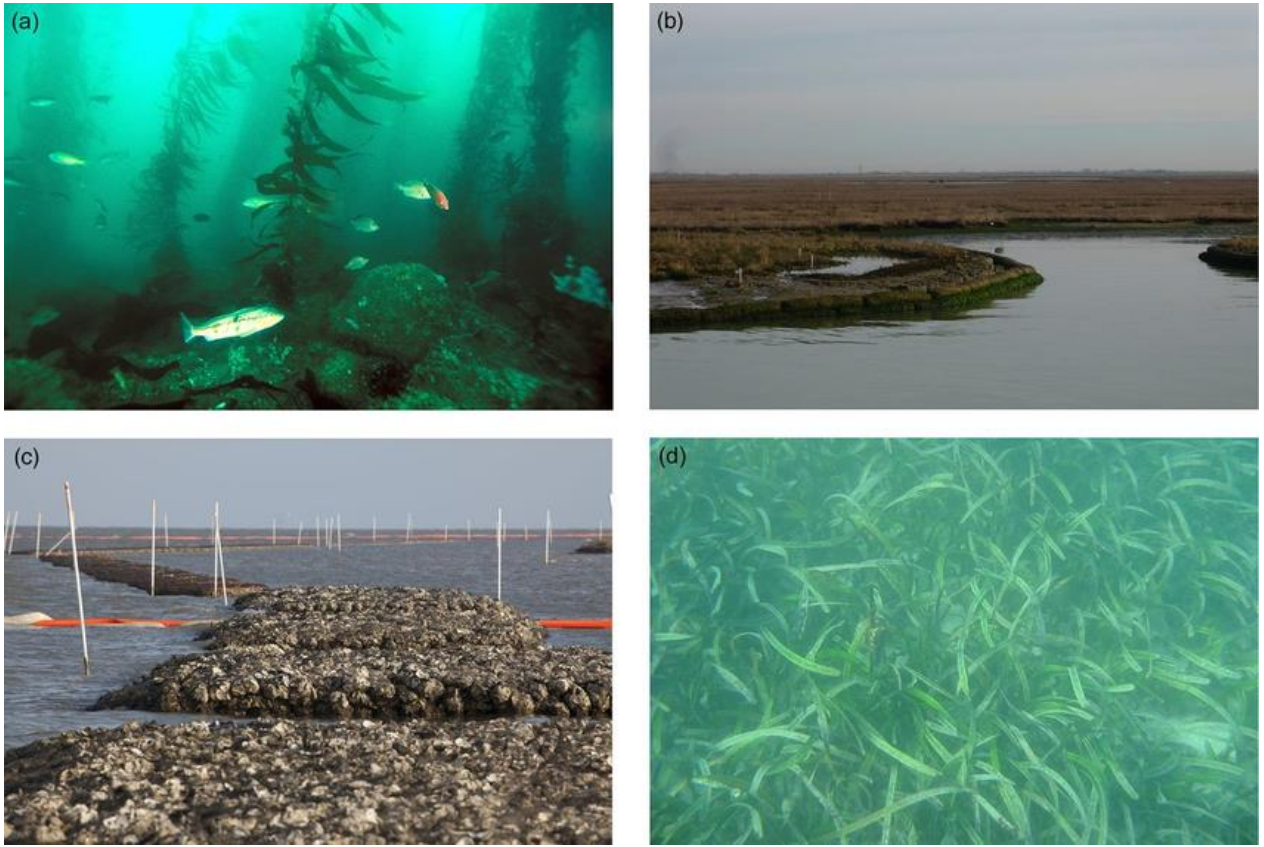
Passive versus active restoration

Drivers of marine restoration

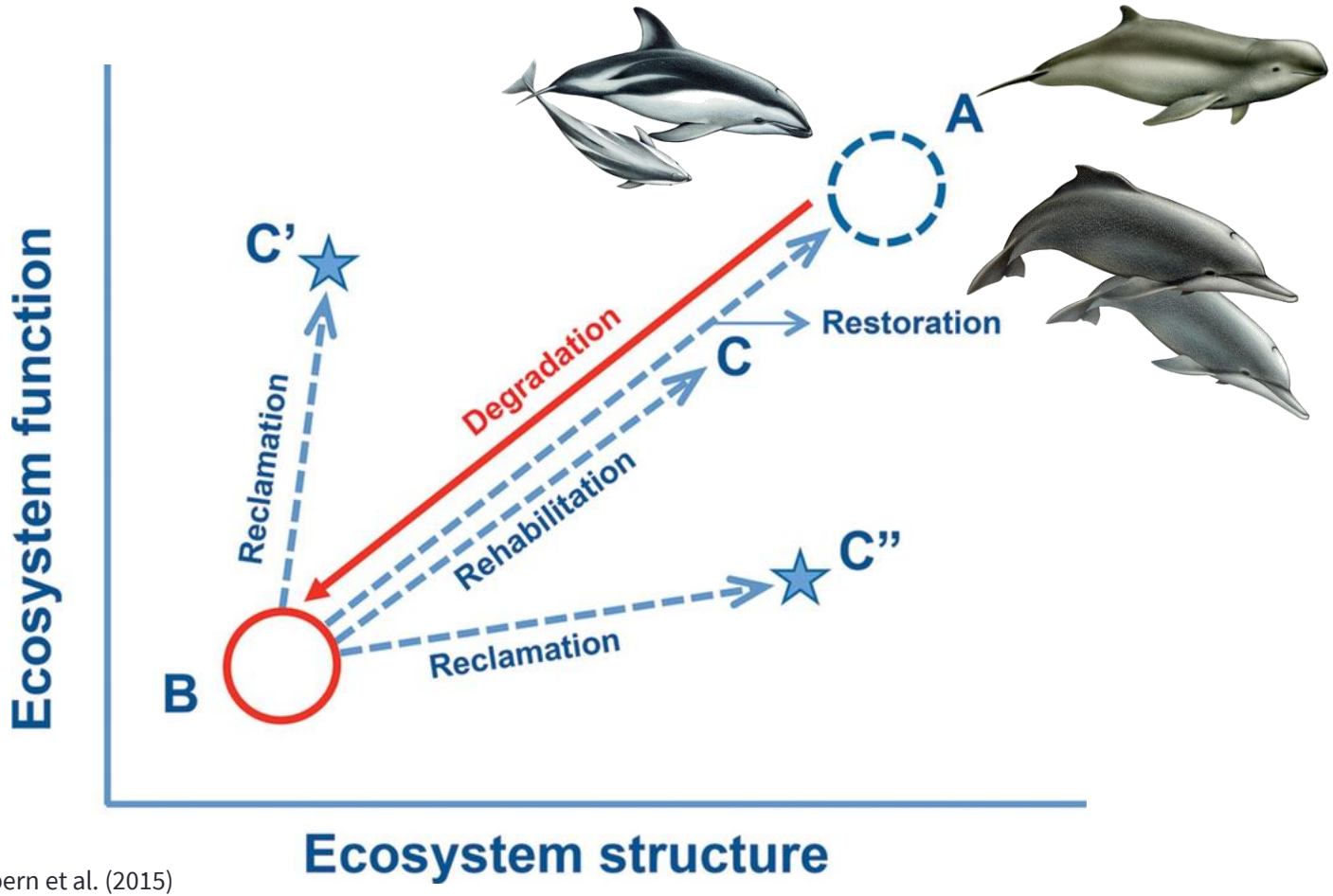
- Offsetting/compensation linked to infrastructure development
- Coastal protection
- Erosion control
- Carbon sequestration
- Water filtration
- Other land-sea interactions (e.g. pollution)
- Food provisioning
- Recreational opportunities
- Cultural values
- … (lots of ecosystem services)

Why we need to act ASAP (e.g. projected sealevel rise for 2100)…

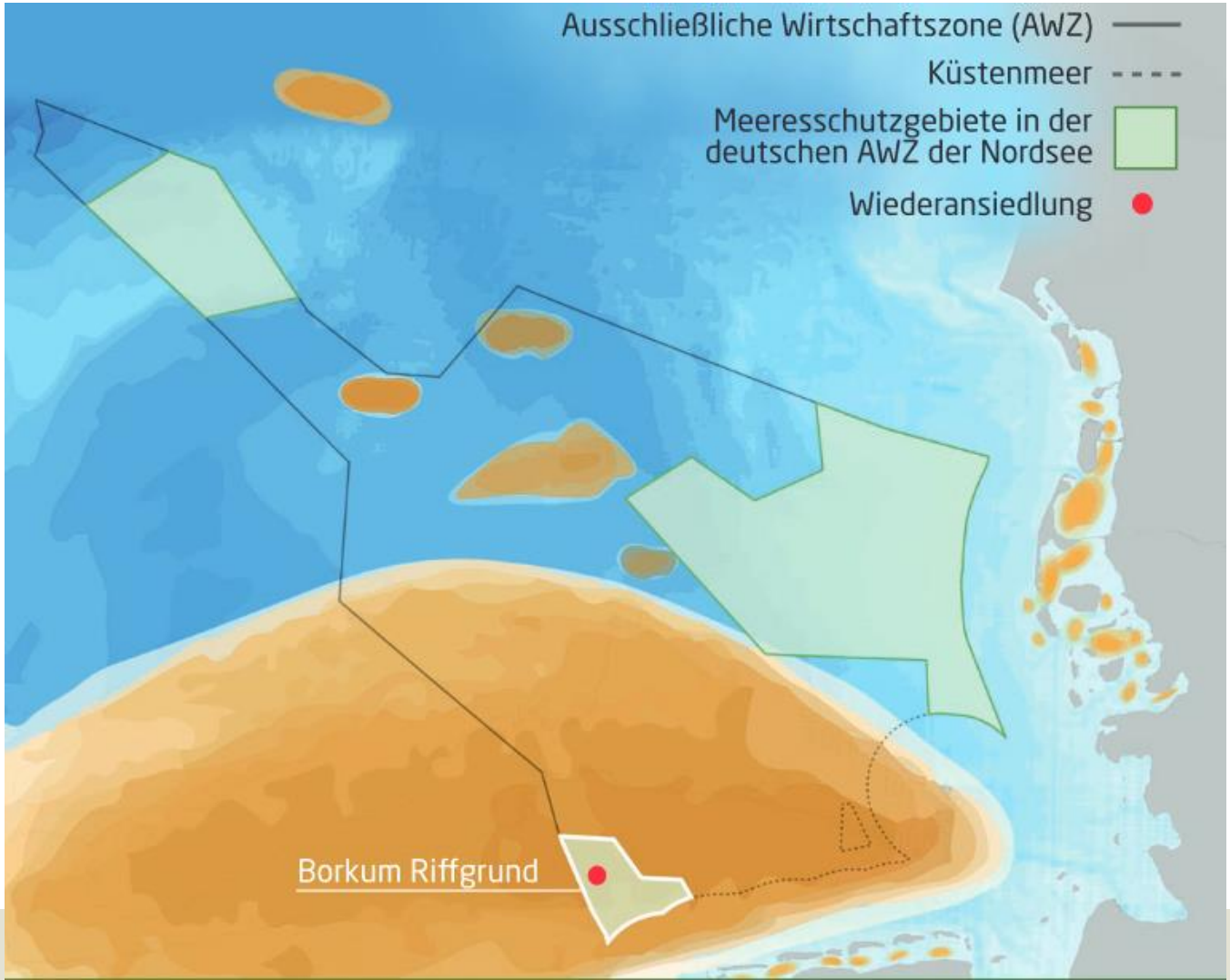
Taken from: https://sealevelrise.hcu-hamburg.de/.



Taken from: Halpern, Benjamin & Reed, Daniel & Orth, Robert & Kendrick, Gary & Beck, Michael & Belmaker, Jonathan & Krause, Gesche & Edgar, Graham & Airoldi, Laura & Brokovich, Eran & France, Robert & Shashar, Nadav & Blaeij, Arianne & Stambler, Noga & Salameh, Pierre & Shechter, Mordechai & Nelson, Peter. (2015). Upgrading Marine Ecosystem Restoration Using Ecological–Social Concepts. BioScience. 66. biv171. 10.1093/biosci/biv171.

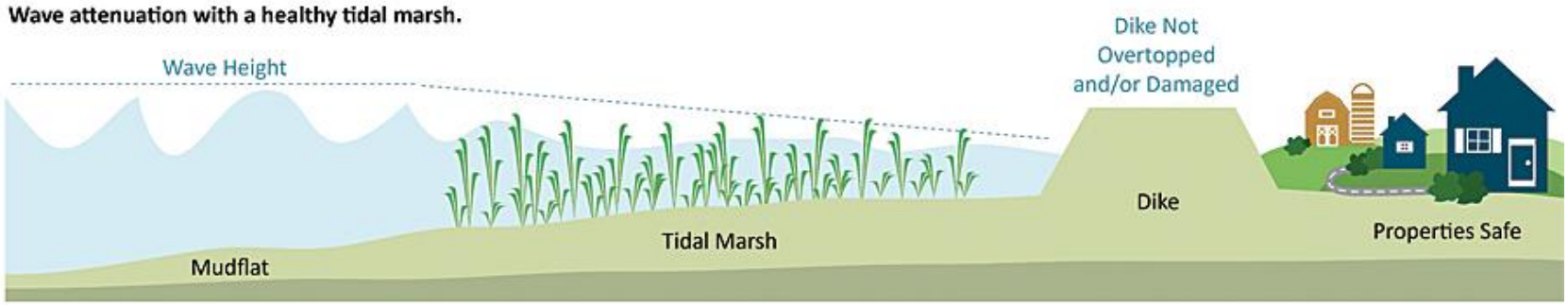


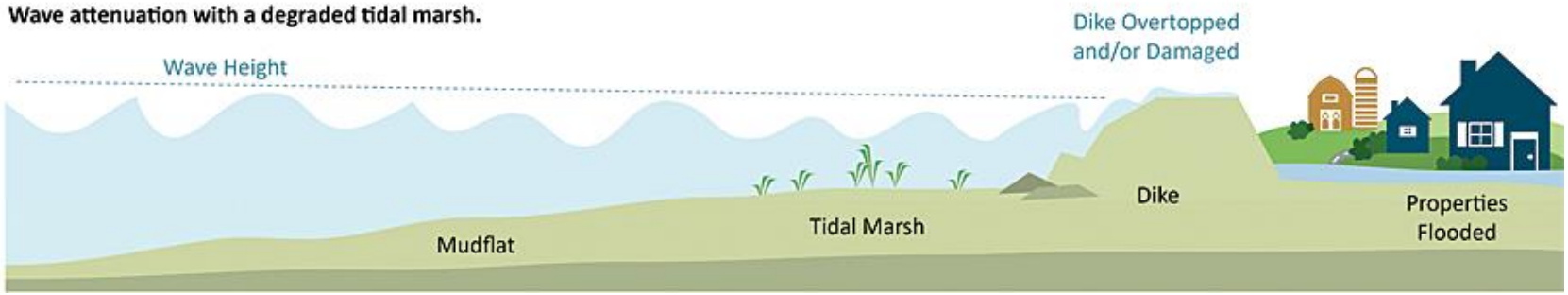
Taken from: Halpern et al. (2015)



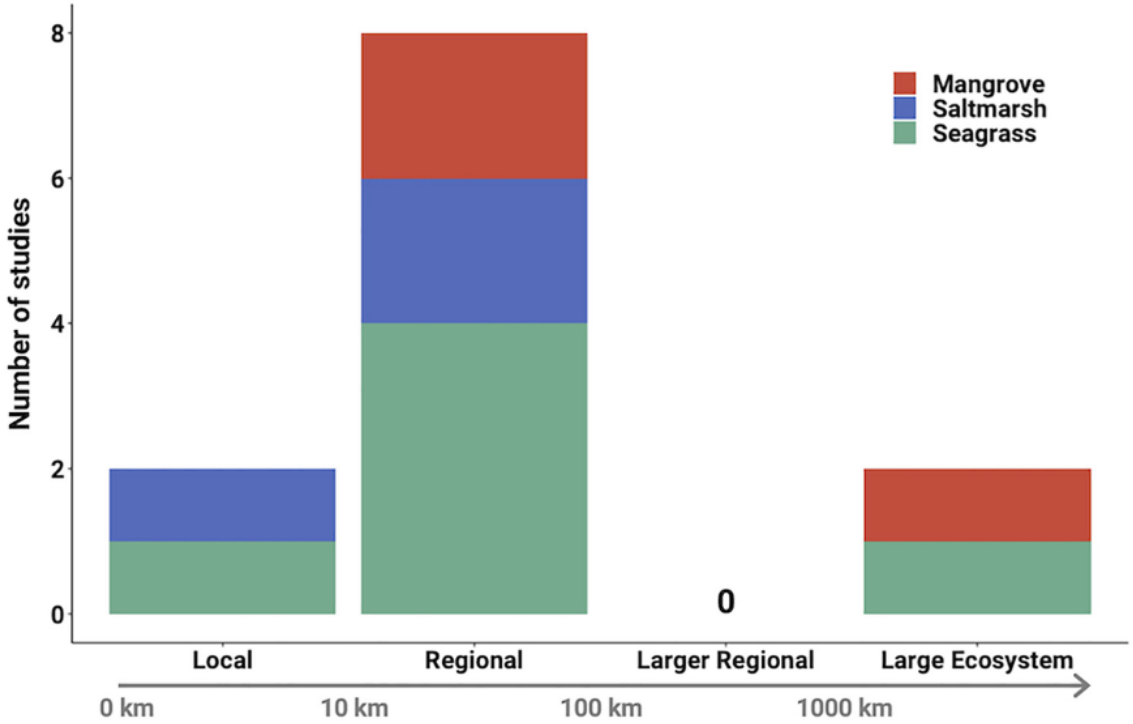
Taken from:
Piscatorial Atlas (Olsen, 1883)

Most marine restoration currently takes place along the coast…





And increasingly at larger scale…



Taken from: Lester, Sarah & Dubel, Alexandra & Hernan, Gema & McHenry, Jennifer & Rassweiler, Andrew. (2020). Spatial Planning Principles for Marine Ecosystem Restoration. Frontiers in Marine Science. 7. 328. 10.3389/fmars.2020.00328.

For discussion:
why does MSP currently only rarely include zones/measures for nature restoration?

(when we are in parallel constantly looking for areas for offsetting)