sustainMare

DAM Research Mission sustainMare

Our coasts and seas are unique ecosystems, but also subject to increasing utilization pressures. Oceans and coastal areas are used as a source of food, energy and raw materials, as a transport route and for tourism. "Blue Economy" is one of the fastest growing economic sectors worldwide. These pressures, but also long-term pressures from human-induced climate change, are leading to changes in ecosystems and ecological risks that are as yet poorly understood.

The research mission "Protection and Sustainable Use of Marine Areas" sustainMare of the German Alliance for Marine Research (DAM) investigates the potential ecological, economic and social impacts of the use of and pressures on marine areas. The aim of the mission is to provide society and decision-makers in politics, business and administration with the necessary information base and to develop socially reflected options for the design of use and protection concepts. Furthermore, it will inform the public about impacts of human uses and pressures on ecosystems as well as possible future developments and management options.

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Target area North and Baltic Sea

The research mission's study areas are in the North Sea and Baltic Sea, with a focus on German coastal waters and the German exclusive economic zone (EEZ).



Three Themes – five projects and two pilot projects

I. Concepts to reduce the impacts of man-made pressures and uses on marine ecosystems and biodiversity (iSeal, SpaCeParti, CREATE)

II. Concepts for the prevention of marine pollution (CONMAR)

III. Model-based investigation of future use scenarios and analysis of possible management options (CoastalFutures)

Pilot projects: bottom trawling in Marine Protected Areas (MGF-Nordsee and MGF-Ostsee)





Pilot projects

The two pilot projects MGF-North Sea and MGF-Baltic Sea investigate the effects of excluding bottom trawling in marine protected areas in the North Sea and Baltic Sea. MGF stands for "mobile bottom trawling" as opposed to, for example, bottom-set gillnet fishing. The projects already entered a second phase.

Collaborative projects



- Selected coastal regions in the North and Baltic Sea
- Reallabs in Eckernförde Bight, Sylt Outer Reef and Borkum Riffgrund
- Resolving conflicts of use and sustainable protection of biodiversity

SpaCeParti

- Western Baltic Sea
- Reallabs in Stein-Wendtorf and Wismar Bight
- Structural change in coastal fisheries, sustainable fishery, consideration of protection and exploitation interests



- North Sea Wadden Sea
- Reallabs in National Parks Niedersächsisches and Schleswig-Holsteinisches Wattenmeer
- Assessing the impact of multiple stressors on biodiversity, functionality und trophic interactions



North and Baltic Sea

- Focus on ammunitions in German coastal waters
- Prioritization of munitions contaminated areas, monitoring and management concepts; Co-Design, Co-Development and Co-Evaluation with stakeholders

CoastalFutures

North and Baltic Sea Area

- Modelling tools to support management, climate change impacts and utilization in energy, fisheries, agriculture and sediment management sectors
- Development and assessment of future scenarios and conservation concepts together with authorities and stakeholders

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