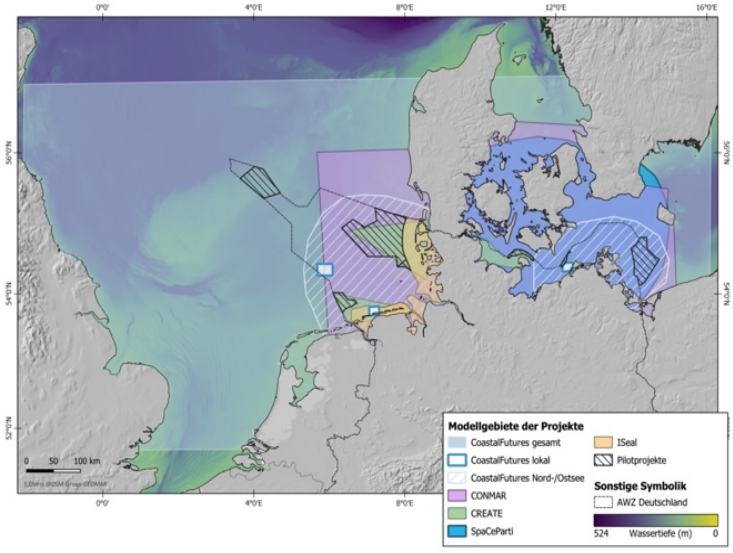


sustainMare

DAM Research Mission sustainMare

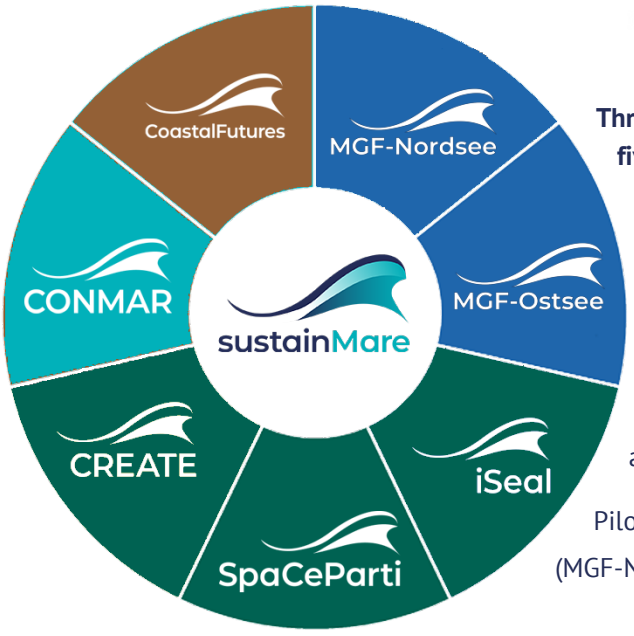
Our coasts and seas are unique ecosystems, but are subject to increasing utilization pressures. Oceans and coastal areas are used as a source of food, energy and raw materials, as a transport route and for tourism. “Blue Economy” is one of the fastest growing economic sectors worldwide. These pressures, 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) explores the potential ecological, economic, and social impacts of the utilization and pollution of marine areas. The mission aims to provide society and decision-makers in politics, business, and administration with the necessary information base and to develop socially reflective options for designing use and protection concepts. Additionally, it seeks to inform the public about the impacts of human activities and pressures on ecosystems, as well as possible future developments and management options. Since 2025, the focus has shifted towards advancing assessment procedures and co-developing innovative solutions for national implementations to ensure a healthy ecosystem, promote Blue Growth, and support the Green Economy in German waters, in alignment with the MSFD 3rd cycle and beyond.



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)

DAM GERMAN MARINE RESEARCH ALLIANCE

With funding from the:

Federal Ministry of Research, Technology and Space

Freie Hansestadt Bremen

Hamburg Behörde für Wissenschaft, Forschung, Gleichstellung und Bezirke

MV Mecklenburg-Vorpommern

Niedersächsisches Ministerium für Wissenschaft und Kultur

SH Schleswig-Holstein Ministerium für Bildung, Wissenschaft und Kultur

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1 Mission – 7 Projects

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. They started a year earlier (March 2021), so that the second project phase already ended in February 2026.

Collaborative projects

- Real-World-Labs in the North and Baltic Sea
- Innovative Monitoring Techniques for Biodiversity Assessments, Seafloor Integrity, Water Quality Monitoring and Marine Protected Area Connectivity
- Analysis of Governance Structures and Social Acceptance plus development of marine education

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

- North Sea – Wadden Sea
- Real-World-Labs National Parks Niedersächsisches and Schleswig-Holsteinisches Wattenmeer
- Assessing the impacts of multiple stressors on biodiversity, functionality und trophic interaction

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

- Holistic modeling tools for the analysis and assessment of marine energy, sediment management, climate change and fisheries
- Establishing transdisciplinary dialog forums with stakeholders for a common understanding of the system
- Development and evaluation of future scenarios, protection and utilization concepts together with authorities and stakeholders

The collaborative projects started at 01. December 2021, the first phase lasted for three years. The seconded phase, funded with ca. 19 Mio. € by the German Ministry for Research, Technology and Space will end in November 2027.