EUROPEAN UNION

HORIZON-MISS-2024-OCEAN-**01-01**

European Blue Parks – Offshore marine protected areas

SEAMPHONI

Strengthening Ecosystem-based Assessment and Monitoring for Protected Habitats in Offshore areas and Newly Identified MPAs

EU CONTRIBUTION
€11.1 million

COORDINATING BENEFICIARY
UNIVERSITAT POLITECNICA DE CATALUNYA

PARTICIPATING COUNTRIES
ES, DE, IE, DK, NO, PT, BE, AT, SK, FR, TR, BQ

SEAMPHONI is dedicated to improving the visibility and protection of Europe's offshore marine areas, which remain largely unmonitored due to the high cost and limited scope of traditional vessel-based approaches. The project brings together three innovative monitoring technologies — environmental DNA (eDNA), acoustics, and imaging — to develop an Intelligent Marine Digital Twin, interoperable with the European Digital Twin Ocean.

By adapting these tools for offshore use, SEAMPHONI aims to deliver faster, more continuous biodiversity monitoring and more accurate ecosystem models. This will support better mapping of understudied regions and provide robust data to guide marine protection and restoration efforts.

In addition to technical advancements, SEAMPHONI addresses legal and governance challenges by highlighting regulatory gaps and promoting clearer, more coordinated frameworks. It supports the designation of Particularly Sensitive Sea Areas (PSSAs) and contributes to achieving the 2030 Global Biodiversity Framework targets.

Recognizing the emotional disconnect between society and remote marine ecosystems, SEAMPHONI also explores creative ways to engage the public, using art and storytelling to bring these distant environments into collective awareness.

EU MISSIONS

RESTORE OUR OCEAN & WATERS

HORIZON-MISS-2024-OCEAN-**01-02**

Danube river basin lighthouse – Protection and restoration of migratory fish habitats

DanubeLifelines

Safeguarding Migratory Fish and their Habitats in the Danube River Basin and beyond

EU CONTRIBUTION
€7.79 million

COORDINATING BENEFICIARY
UNIVERSITAET FUER BODENKULTUR WIEN

PARTICIPATING COUNTRIES
AT, NL, HU, DE, RS, UK, RO, ES, BG, SK, SI

DANUBE_lifelines supports the EU Mission 'Restore our Ocean and Waters' by working to protect and restore freshwater ecosystems and biodiversity across the Danube River Basin. The project focuses on generating new knowledge, demonstrating effective restoration measures, and engaging stakeholders in co-creating sustainable solutions.

Targeting improvements in fish migration, habitat quality, and ecological connectivity, the project addresses barriers and pressures on migratory species by implementing nature-based solutions. It emphasizes habitat restoration through actions such as barrier removal and the rehabilitation of migration corridors.

Built on a transboundary, multi-scale approach, DANUBE_lifelines covers key migratory species including Danube salmon, Pontic shad, and sturgeons. A basin-wide perspective ensures that conservation efforts are tailored to the diverse ecological and socio-political contexts of the Upper, Middle, and Lower Danube regions, including the Delta.

Through collaboration with local and national stakeholders, the project delivers practical tools such as the Danube Fish Migration and Connectivity Atlas, identifies conservation hotspots, and evaluates the effectiveness of restoration efforts. It also maps the basin's contribution to the EU target of 25,000 km of free-flowing rivers, and provides an action plan and replicable guidelines to scale up successful solutions.

SWIM

Sustainable Water and Integrated Management of Fish Migration and their Habitats in the Danube River Basin and NW Black Sea

EU CONTRIBUTION
€7.52 million

COORDINATING BENEFICIARY
SVEUCILISTE U ZAGREBU, FAKULTET STROJARSTVA I BRODOGRADNJE

PARTICIPATING COUNTRIES
HR, DE, RO, AT, UA, SK, HU, RS, CZ, ME, BA, PT, TR, CH

The SWIM project supports the EU Mission "Restore our Ocean and Waters" by aiming to restore, protect, and enhance habitats for migratory fish in the Danube River Basin and the Northwestern Black Sea. Through 13 targeted activities across 7 pilot sites, SWIM introduces innovative, sustainable, and scalable solutions to improve habitat connectivity, water quality, and overall ecosystem health.

Building on the outcomes of previous initiatives — such as MEASURES, WE PASS, SIMONA, and Danube Lighthouse projects — SWIM advances practical restoration through complementary technologies. These include fish passages, ex-situ restocking, hatchery recovery, lateral reconnections, and digital tools integrated with the MEASURES Info System and the Digital Twin Ocean (DTO).

At the heart of SWIM is a strong focus on transnational cooperation. Through the SWIM Alliance, stakeholders from government, academia, civil society, and local communities co-design solutions to ensure long-term impact and public support. This collaborative model strengthens biodiversity, boosts ecosystem services, and promotes the socio-economic well-being of local communities.

SWIM's integrated, multi-disciplinary approach not only contributes to EU environmental goals but also offers a blueprint for aquatic ecosystem restoration across Europe and beyond.

HORIZON-MISS-2024-OCEAN-**01-03**

Atlantic and Arctic sea basin lighthouse, Mediterranean Sea basin lighthouse, Baltic and North Sea basin lighthouse - Reducing the environmental impacts of fisheries on marine species and habitats

ECO-CATCH

Sustainable fisheries for the Baltic/North Sea basin

EU CONTRIBUTION
€8.5 million

COORDINATING BENEFICIARY
TECHNICAL UNIVERSITY OF DENMARK DTU

PARTICIPATING COUNTRIES
DK, NO, BE, DE, SE, UK, LU, FI, NL

ECO-CATCH addresses the urgent need for effective bycatch and habitat protection measures in Baltic and North Sea fisheries, where current mitigation tools fall short of the EU Biodiversity Strategy 2030 goals. The project aims to mature and deploy ten innovative technologies — including digital tools, Bycatch Reduction Devices (BRDs), and alternative fishing gears — bringing them to high readiness levels (TRL 7–8).

Core innovations include real-time AI detectors installed in trawls and on vessels, providing data to Wheelhouse Visualisers that help fishers optimize catch efficiency while avoiding sensitive habitats. Where BRDs are less effective, alternative gears will offer cost-effective solutions that maintain commercial viability.

After an initial three-year R&D phase, the final two years will focus on large-scale demonstration and commercial exploitation. Technologies will be tested in real-world conditions, integrated into existing production lines, and adopted by four pilot fleets using new business models. Six SMEs in the consortium will drive market uptake, while streamlined certification processes will support broader scalability and replicability across regions.

With €400,000 in reserve funds, ECO-CATCH will collaborate with sister projects and remain flexible to overcome commercialization challenges during the demonstration phase.

Spanning the entire fisheries value chain, the consortium's expertise — from gear development to policy advising — ensures strong long-term impact. ECO-CATCH will help the fishing industry contribute directly to the EU Green Deal target of protecting 30% of marine areas and to the UN SDG 14.4 on eliminating destructive fishing practices.

MarineGuardian

Advancing Sustainable Fisheries and Marine Ecosystem Conservation in the Atlantic and Arctic Sea basin

EU CONTRIBUTION
€8.05 million

COORDINATING BENEFICIARY
MATIS OHF

PARTICIPATING COUNTRIES
IS, CA, DK, ES, FO, NO, PT, UK

MarineGuardian aims to reduce the environmental impact of fisheries in line with EU marine policies and the 2030 Biodiversity Strategy. With overexploited fish stocks and widespread seabed damage — mainly from bottom trawling — the project focuses on practical, scalable solutions.

It will deliver new technologies to reduce bycatch, tools to improve fishing practices, decision-support systems to protect ecosystems, and improved data sharing for sustainability reporting. These solutions will be co-developed with fishers and policymakers and tested in six case studies to ensure real-world impact.

By combining innovation and cross-sector collaboration, MarineGuardian supports the transition to sustainable, economically viable fisheries across Europe.

HORIZON-MISS-2024-OCEAN-**01-04**

Science for Community – Building the marine Citizen Science data network of the future to valorise data coming from the ocean and increase engagement

CS-MACH1
MArine Citizen science data Horizon

EU CONTRIBUTION
€1.88 million

COORDINATING BENEFICIARY
FONDAZIONE CENTRO EURO-MEDITERRANEOSUI CAMBIAMENTI CLIMATICI

PARTICIPATING COUNTRIES
IT, SE, NL, FR, BE, ES, UK, AM, DE, MT

CS-MACH1 aims to break down barriers to citizen science in the marine sector by creating a Marine Citizen Science Data Network (MCSDN). This network will bring together citizen scientists, community leaders, tech developers, data experts, and researchers to enable accessible, trusted, and FAIR data sharing.

The project will develop standards, protocols, and training to support the integration of citizen science data into EU platforms like EMODnet. Real-world use cases will demonstrate the value of the MCSDN, while activities like Digital Twin Ocean model validation and policy workshops will showcase its scientific and societal impact.

A long-term roadmap will ensure lasting benefits and help expand citizen science participation across Europe's marine environments.

HORIZON-MISS-2024-OCEAN-**01-05**

Our Blue Future – Co-designing a future vision of a restored ocean and water system in the EU by 2030 and 2050

INSPIRI
Imaginative Narratives and Scenarios for insPIring Restoration and Innovation for European seas and water systems

EU CONTRIBUTION
€2.96 million

COORDINATING BENEFICIARY
ZNANSTVENO-RAZISKOVALNO SREDISCE KOPER

PARTICIPATING COUNTRIES
SI, SE, ES, AT, FR, IT, RO

INSPIRI supports the European Green Deal and the Mission "Restore Our Ocean and Waters" by tackling governance barriers such as mistrust, limited public engagement, and weak policy action. Using the Nature Futures Framework, the project will co-create positive, shared visions for EU waters through participatory case studies across the four Mission Lighthouse regions.

These visions will inform scenario modelling and back-casting, guiding Transformation Labs where regional stakeholders shape actionable pathways toward sustainable water futures. INSPIRI will also develop powerful scientific and artistic visualizations for 2030 and 2050 to inspire meaningful change.

By combining science, policy, and art, INSPIRI aims to empower stakeholders and the public to support ambitious, long-term goals for healthy, resilient European waters — contributing to the European Digital Twin of the Ocean.

HORIZON-MISS-2024-OCEAN-**02-01**

Community-led actions to restore our ocean, seas and waters

BAB
BlueActionBANOS

EU CONTRIBUTION
€12.5 million

COORDINATING BENEFICIARY
SUBMARINER NETWORK FOR BLUE GROWTH EWIV

PARTICIPATING COUNTRIES
DE, PL, ES, BE, SE, DK, FI, LV, EE, LT, NO, NL

BlueActionBANOS (BAB) supports the EU's "Restore Our Ocean and Waters by 2030" initiative and the European Green Deal by driving biodiversity conservation, pollution reduction, and the transition to a climate-neutral blue economy. The overarching objective of BlueActionBANOS (BAB) is to facilitate the successful transition from Phase 1 to Phase 2 of the Mission Ocean, where solutions piloted in the early stages are scaled up and deployed across a broader spectrum within the Baltic and North Sea Lighthouse Area. To that end, BAB aims to mobilise and provide practical and easily accessible support to a diverse set of established or emerging communities of actors to implement innovative and impactful actions and measures to restore our ocean, seas and waters. BAB will achieve this by providing targeted financial assistance, technical guidance, and strategic knowledge-sharing, equipping communities with the tools and resources they need to address complex environmental challenges and drive sustainable transformation at local, regional, and national levels.

BlueActionAA
Empowering Community-Led Action in the Atlantic & Arctic

EU CONTRIBUTION
€12.5 million

COORDINATING BENEFICIARY
MARINE INSTITUTE

PARTICIPATING COUNTRIES
IE, PT, FR, NO, ES, DK

Empowering Community Led Action in the Atlantic & Arctic (ACT-AA) aims to mobilize communities across the Atlantic and Arctic regions to restore and protect marine and freshwater ecosystems, advancing the EU Mission "Restore our Ocean and Waters by 2030." The project offers financial support through cascading grants, technical assistance, and capacity-building to enable effective, sustainable community-led actions.

Expected outcomes include measurable progress toward mission goals, support for implementing ecosystem legislation, increased community engagement, and improved local readiness for innovative restoration solutions. By harnessing local knowledge and fostering long-term commitment, ACT-AA contributes significantly to the European Green Deal's biodiversity, pollution, and climate targets.

SoS2LearnDBS
Source to Sea: Leveraging community knowledge and action for restoring the Danube River basin and the Black Sea region

EU CONTRIBUTION
€12.5 million

COORDINATING BENEFICIARY
INOVA+ - INNOVATION SERVICES, SA

PARTICIPATING COUNTRIES
PT, DE, BG, HR, RO, AT, ES, RS, HU

SoS2LearnDBS promotes community-led restoration of marine and freshwater ecosystems in the Danube River basin and Black Sea region through a multi-pillar approach. By enhancing water literacy and fostering cooperative learning, the project empowers local stakeholders to apply innovative technological, nature-based, social, cultural, regulatory, financial, and governance solutions.

The project supports strategic planning and adaptive management to align restoration efforts with EU environmental goals. It provides cascade funding and technical assistance to communities, emphasizing practical skills and social innovation for scalable impact. Funded initiatives will directly contribute to Mission Ocean targets, including biodiversity protection, pollution prevention, and advancing a carbon-neutral blue economy.

SoS2LearnDBS incorporates a strong monitoring framework and uses digital engagement tools to maximize impact. Coordinated with EU platforms and Lighthouse projects, it is positioned to drive meaningful, lasting change in Europe's aquatic ecosystems by 2030.

TASC-RestoreMed
Technical assistance and support to communities of actors for the Mission Restore our ocean and waters by 2030 for the Mediterranean basin

EU CONTRIBUTION
€12.5 million

COORDINATING BENEFICIARY
HELLENIC CENTRE FOR MARINE RESEARCH

PARTICIPATING COUNTRIES
EL, PT, ES, CY, SI, BE, IE, IT

TASC-RestoreMed supports the EU Mission "Restore Our Seas and Waters by 2030" by advancing transformative change through the Blue Doughnut concept. The programme offers €9 million in funding via an FSTP scheme to scale up innovative solutions and develop Transition Agendas — local and regional roadmaps guiding deployment and legislative adaptation across the Mediterranean Basin.

An open call invites strong consortia with impactful projects, ensuring transparent and fair selection. TASC-RestoreMed provides tailored technical support on policy, funding access, business planning, impact assessment, and networking, all consolidated in the RestoreMedTOOLS platform.

The programme assists member states and stakeholders in implementing EU marine and freshwater legislation to meet biodiversity, pollution, and climate targets under the European Green Deal. A dynamic communication strategy promotes the initiative and maximizes visibility for funded projects.

HORIZON-MISS-2024-OCEAN-**02-02**

Support for the Coalition of waterfront cities, regions and islands for Mission Ocean and Waters

CO-WATERS
Coalition of Waterfront Cities, Regions and Islands

EU CONTRIBUTION
€3.99 million

COORDINATING BENEFICIARY
NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

PARTICIPATING COUNTRIES
NO, NL, BE, DE, FR, EL, ES, IT, BG

CO-WATERS bridges the first and second phases of the Mission Ocean and Waters by building a strong Coalition of waterfront cities, regions, islands, and supporting partners such as universities, NGOs, and investors. The project offers tailored networking, knowledge exchange, training, and advisory services to help members adopt systemic approaches, engage citizens, and access funding for their transition journeys.

In partnership with the EU Mission Ocean and Waters Secretariat, CO-WATERS will develop and pilot the MOW Label, providing streamlined support for applicants to ensure an efficient process that respects their limited resources. The project aligns closely with EU initiatives, mission frameworks, and investor networks to maximize impact and coherence across the community.

HORIZON-MISS-2024-OCEAN-**IBA**

Support public infrastructure for the European Digital Twin Ocean

EDITO 2
EUropean DIgital Twin Ocean phase 2

EU CONTRIBUTION
€13.99 million

COORDINATING BENEFICIARY
MERCATOR OCEAN

PARTICIPATING COUNTRIES
FR, BE

EDITO is entering Phase 2 with the goal of becoming the main platform for co-creating the European Digital Twin Ocean (EU DTO), supporting the EU's mission to "Restore our Ocean and Waters." It aims to provide decision-makers, researchers, and communities with powerful tools and accessible knowledge.

Phase 1 proved EDITO's potential by integrating diverse data and working with major initiatives like EMODnet and Copernicus Marine Service.

Building on this, EDITO Phase 2 will will improve services for researchers and institutions while expanding access for non-experts. Key priorities include scaling cloud infrastructure, unifying high-resolution data into a Core Catalogue, and validating third-party contributions. EDITO aims at increasing community engagement through EU projects, open calls, hackathons, and innovation challenges.

Aligned with global efforts like the UN DITTO Programme and Destination Earth, EDITO will also support regional "local twins" to meet specific ecosystem and climate needs.

By 2030, EDITO aims to be a fully operational, user-friendly platform that sets the global standard for digital ocean solutions.

EU MISSIONS
RESTORE OUR OCEAN & WATERS