

Tool Testing in Action

A Closer Look at Our MPA Sites



2025



ABOUT BLUE4ALL



Blue4All is a Horizon Europe Mission Ocean project dedicated to addressing marine conservation and restoration challenges across Europe. In collaboration with MPA managers and stakeholders from 14 MPAs (Living Labs), the project is testing and developing practical tools to support the protection and recovery of the marine environment in a socially just way. The tools are brought together in a user-friendly Blueprint Platform to support the design and management of effective, efficient, and resilient MPAs and MPA networks.

From spring 2025 to fall 2026, Blue4All researchers have been actively testing these tools - such as software based decision support tools, workshops, awareness campaigns, Excel-based resources, and guidebooks - by applying them to different Living Labs across Europe. The following publication summarizes the main tools that were tested and the specific activities that took place in each of these Living Labs.



LIVING LABS

MEDITERRANEAN

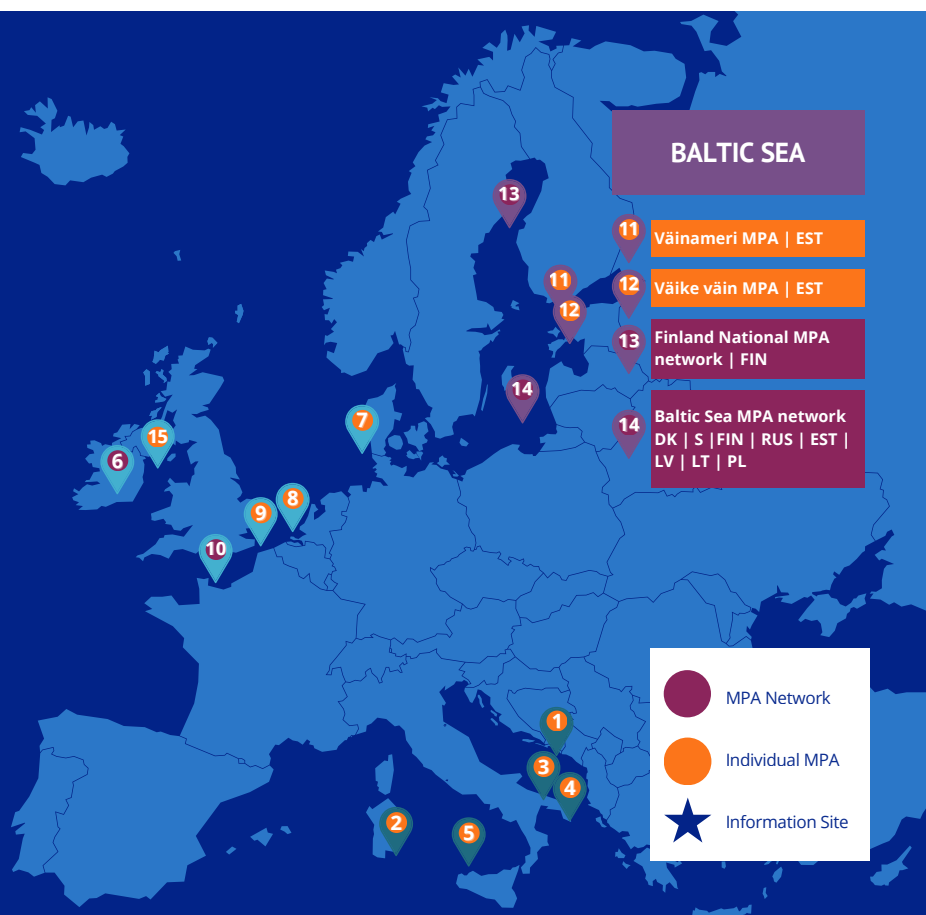
- 1 Platamuni, Katič and Stari Ulcinj | MNE
- 2 Capo Carbonara | IT
- 3 Torre Guaceto | IT
- 4 MPA Otranto Leuca | IT
- 5 Area Naturale Marina Protetta Capo Gallo - Isola delle Femmine | IT

NORTH EAST ATLANTIC

- 6 Irish MPA network expansion | IRL
- 7 Danish Wadden Sea | DK
- 8 SBZ 1-3 | BE
- 9 Vlaamse Banken | BE
- 10 French Network Natura 2000 Channel
- 15 Dundalk Bay MPA | IRL

BALTIC SEA

- 11 Väinameri MPA | EST
- 12 Väike väin MPA | EST
- 13 Finland National MPA network | FIN
- 14 Baltic Sea MPA network DK | S | FIN | RUS | EST | LV | LT | PL



- MPA Network
- Individual MPA
- Information Site



PLATAMUNI, KATIĆ, STARI ULCINJ



BLUE4ALL LIVING LAB

Location

Adriatic coast of Montenegro (south-east of the Bay of Kotor, near Bar Budva, Bar and Ulcinj)

Designation

Nature Park

Main Pressures

Coastal development, anchoring in sensitive habitats, fishing, mass tourism, marine and land-based pollution, the spread of invasive species



Public Awareness and Engagement

Local communities are still in the acceptance phase and need targeted education and outreach activities.

Strengthen Institutional Capacity

There is a shortage of trained staff and experience in MPA implementation and enforcement.

BLUE4ALL TOOL TESTING

Sustainable Tourism Dialogue: Reducing Jet-Ski Impacts in MPAs

Focus: Examining tourist awareness of the impact jet-ski water recreation activities and proposing measures to mitigate these impacts.

Activities: Questionnaires; Result presentation at travelling exhibition; Workshops and discussions with MPA advisory bodies; Mitigation measures proposition meeting with tourism operators, measures specific to the impacts of personal watercrafts on the marine ecosystem

OUTCOMES



TOURISM
PERCEPTION
INSIGHTS



PARTICIPATORY
MANAGEMENT
PROPOSALS



EDUCATION AND
OUTREACH



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CAPO CARBONARA

BLUE4ALL LIVING LAB

Location

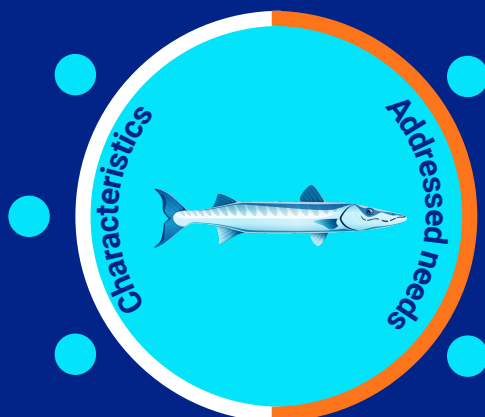
South-eastern Sardinia,
Italy - Mediterranean Sea

Designation

National MPA
and Natura 2000

Key Stakeholders

Tourism sector, the
municipality, fishermen,
researchers



Zoning and Spatial Clarity

Need to revise the current
MPA zoning through a
participatory process,
supported by clear, accessible
maps and guidance for users

Secure Sustainable Financing

Diversification of funding
sources and greater financial
planning capacity at the MPA
level

BLUE4ALL TOOL TESTING

Financial Planning Tools – Guideline MPA Business Planning & Blue4All Finance Planner

Focus: Determining the financial health of the
MPA, choosing suitable financing
mechanisms, and developing a financial
strategy

Activities: Consultation with MPA
management, development of a guidebook
and Excel tool for financial planning,
completion of tools by MPA managers based
on site-specific context

Participatory Rezoning for Balanced MPA Design

Focus: Ensuring that revisions of protection
zones are both environmentally sound and
socially acceptable, using a participatory
stakeholder approach. Balancing ecological
priorities with socio-economic and political
considerations.

Activities: Technical review, internal
consultation with the municipality,
stakeholder workshops and consultations





TORRE GUACETO

BLUE4ALL LIVING LAB

Location

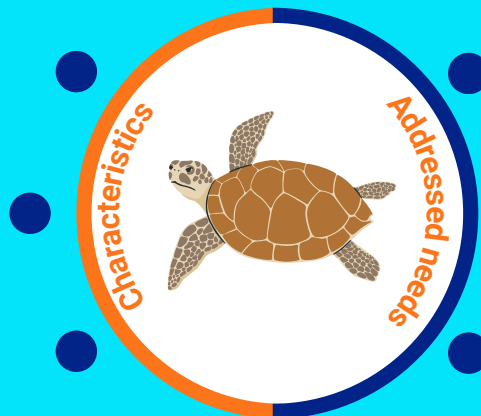
Apulia region, southern
Adriatic Sea, near Brindisi,
Italy

Designation

National MPA,
Natura 2000

Key Stakeholders

Fishermen, NGOs,
academics, cooperative
representatives, MPA
officials



Challenges of the MPA Expansion

Discussing ways to improve both social and conservation outcomes of the MPA expansion for actors such as recreational fishers and tourist operators

Dealing with Illegal Activities

Improving governance and equity in MPA management processes to help deal with challenges such as illegal fishing

BLUE4ALL TOOL TESTING

SAGE - Site-level Assessment of Governance and Equity

Focus: Enabling site-level actors to improve governance and equity of their conservation work to enhance both social and conservation outcomes; assessing perceptions of equity, stakeholder engagement and governance perceptions within the MPA management process through bottom-up approach

Activities: Stakeholder mapping, stakeholder surveys and interviews, analysis, workshops, knowledge sharing.

Financial Planning Tools - Guideline for MPA Business Planning & Blue4All Finance Planner

Focus: Determining the financial health of the MPA, choosing suitable financing mechanisms, and developing a financial strategy

Activities: Consultation with MPA management, development of a guidebook and Excel tool for financial planning, completion of tools by MPA managers based on site-specific context





OTRANTO LEUCA



BLUE4ALL LIVING LAB

Location

Puglia, Italy -
Mediterranean Sea

Designation

MPA still in establishment
process

Key Stakeholders

Diving and boat operating
sectors, tourists



Stakeholder Awareness and Involvement

Need to strengthen local
understanding of the ecological
and socio-economic benefits of
the MPA and to actively involve
stakeholders in the
establishment process.

Develop Zoning and Governance Frameworks

There is a need to formalise the
MPA perimeter, zoning,
governance structure, and
management regulations
through participatory
processes.

BLUE4ALL TOOL TESTING

Stakeholder Engagement Framework

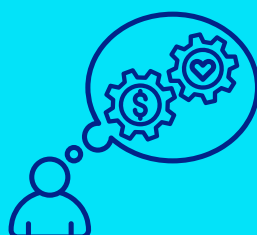
Focus: Understanding the awareness, perceptions, and expectations of key stakeholders in Otranto Municipality to support effective stakeholder engagement and the long-term success of the MPA.

Activities: Tourism-stakeholder mapping, semi-structured interviews, informative seminar, tourist survey

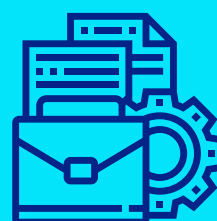
KEY CHALLENGES



**Early-Stage
Planning**



**Diverging
Expectations**



**Administrative
Complexity**



**Tourism-
Conservation Balance**



CAPO GALLO - ISOLA DELLE FEMMINE

BLUE4ALL LIVING LAB



Location
Northwestern coast of
Sicily, near Palermo,
Mediterranean Sea

Designation
National MPA and
Natura 2000

**Key Stakeholders
Addressed**
Tour operators,
tourists



User Perceptions and Compliance

Users' motivations for non-compliance and their views on the MPA need clarification

Tourism Stakeholder Awareness

Raising awareness among tourism stakeholders about the existence and goals of the MPA

BLUE4ALL TOOL TESTING

Understanding Perceptions and Compliance Patterns

Focus: Exploring user perceptions of the MPA, reasons for non-compliance, and enhancing public understanding of its relevance. Its focus is on tourism stakeholders, specifically scuba diving and boat operators and tourists.

Activities: Surveys targeting tourists and tourism operators, informational posters and leaflets distributed on-site

Financial Planning Tools - Guideline for MPA Business Planning & Blue4All Finance Planner

Focus: Determining the financial health of the MPA, choosing suitable financing mechanisms, and developing a financial strategy

Activities: Consultation with MPA management, development of a guidebook and Excel tool for financial planning, completion of tools by MPA managers based on site-specific context



IRISH MPA NETWORK

BLUE4ALL LIVING LAB

Location

East coast of Ireland – part of the Irish Sea and the Celtic Sea

Designation

MPA network expansion still in the process; MPAs are not currently defined in Irish law; designation as national park

Main Human Activities

Fishing, Maritime Traffic, Infrastructure Development



Legal Framework and institutional clarity

MPAs are not currently recognised in Irish law, creating a significant gap in governance and formal engagement.

Cumulative Impacts

Need to assess combined pressures on ecosystems.

Stakeholder Engagement

No meaningful stakeholder collaboration has occurred to date in site identification or design.

BLUE4ALL TOOL TESTING

PlanWise4Blue – Cumulative Impact Assessment of Selected Nature Values

Focus: Assessing cumulative impacts of human activities and pressures on nature values

Activities: Data layers collection and assessment, ecological sensitivity analyses, refinement of the geographical scope of the analysis, selection of nature values, human activities and pressures, and impact scenarios evaluated

STEP BY STEP APPROACH



DATA
COLLECTION AND
REVIEW



SCOPING AND
REFINEMENT



IMPLEMENTATION
PLANWISE4BLUE
TOOL



STAKEHOLDER
FEEDBACK AND
REVIEW



FINALISATION
AND
DISSEMINATION



DUNDALK BAY



BLUE4ALL INFORMATION SITE

Location

Irish estuary near the border with Northern Ireland - part of the Irish Sea

Designation

Natura 2000, Ramsar-protected site, OSPAR site, and expected to be incorporated into a national MPA network in the future

Key Stakeholders

Local government, national government, ORE, fisheries, environmental interest groups, community groups



Stakeholder Understanding

Understanding of priorities for future management and engaging with stakeholder groups as a basis for sustained engagement on MPA management

Inter-Stakeholder Engagement

A platform for engagement between stakeholders - to share ideas and concerns related to the current and future management of the bay

BLUE4ALL TOOL TESTING

Survey on MSP and MPAs

Focus: Investigating links between values, place attachment, and the perceived community impact of policy

Activities: Surveys around the bay

Facilitated Discussion Groups

Focus: Understanding individual stakeholders and facilitating inter-stakeholder engagement

Activities: Discussion groups with stakeholders

FINDINGS - Surveys

- Values, place attachment and the anticipated impact of policy changes on the community shape people's responses to new policy proposals
- These factors should be considered during the MPA designation process

FINDINGS - Discussion Groups

Phase 1 - Individual Perspectives

- Unclear governance structure
- Limited stakeholder consultation to date
- Untapped collaboration potential

Phase 2 - Shared Dialogues

- Sector-focused mindsets
- Need for coordination mechanism



DANISH WADDENSEA

BLUE4ALL LIVING LAB

Location

South-western Denmark – part of the larger Wadden Sea UNESCO World Heritage Site

Designation

Natura 2000 site, National Park (Nationalpark Vadehavet), Danish Nature and Wildlife Reserve, Ramsar site, and UNESCO World Heritage

Focus Species

Dwarf eelgrass (*Zostera noltii*), dark-bellied brent goose (*Branta bernicla bernicla*)



Funding for Conservation and Research Activities

Need to holistically communicate the value of nature to inform investment decisions.

Cumulative Effects

Need to assess combined pressures on ecosystems.

Ecosystem Service Mapping

Need for maps of important ecosystem services for spatial planning.

BLUE4ALL TOOL TESTING

PlanWise4Blue – Cumulative Effects Assessment

Focus: Assessing the cumulative effects of human pressures on eelgrass ecosystems

Activities: Target species selection, dataset collection and harmonisation, software-based analysis in collaboration with local experts

Participatory Mapping of Ecosystem Services

Focus: Mapping and valuing social and cultural ecosystem services, especially related to birdwatching and nature appreciation.

Activities: Co-development of a visitor survey, fieldwork with locals and tourists, spatial analysis using GIS.

Expert-based Ecosystem Service Assessment

for Social-Ecological System Communication and Support of Decision-Making

Focus: Modelling interlinkages between pressures, ecosystem components, functions, and services related to dwarf eelgrass and brent geese in a visually attractive way, using Sankey Diagrams.

Activities: Expert identification and interviews, compilation of preliminary pressure to service linkages, expert-based scoring and validation workshops, and building the Sankey Diagrams





VLAAMSE BANKEN

BLUE4ALL LIVING LAB

Location

South-western Belgium –
southern bight of the
North Sea

Designation

Special Area of Conservation
(SAC) – Natura 2000 site

Existing Restoration Efforts

Restoration of historical reefs
of the European flat oyster
(*Ostrea edulis*)



Stakeholder Ownership and Support

Recognized need to build a
stronger sense of ownership
and understanding among
users regarding the purpose
and value of MPAs.

Restoration Objectives and Measures

Need for targeted guidance on
appropriate restoration actions
and how they relate to species
and habitat recovery.

BLUE4ALL TOOL TESTING

Ecosystem Service Valuation - Restoration of Oyster Reefs

Focus: Identification and valuation of ecosystem services linked to oyster reef restoration, with the aim of including differing stakeholder perspectives and providing clear, communicable arguments for conservation.

Activities: Data collection from existing studies to apply value transfer methods; Semi-structured interviews with experts, practitioners, policymakers, fisheries representatives, and marine conservationists; Production of a video presenting the work of the tool



FRENCH MPA NETWORK

BLUE4ALL LIVING LAB



Location
North East Atlantic (English Channel), France

Designation
Natura 2000 sites

Key Stakeholders Addressed
Shellfish farmers, tourists, local communities and elected officials



Human Impact
Better understanding and communication of (in)direct human impacts on the MPA

Awareness and Acceptance Raising
Improved outreach is necessary to ensure stakeholders are informed about the conservation purpose and ecological importance of MPAs.

Stakeholder Communication
Recognised need for more frequent and effective communication between MPA managers, economic stakeholders, citizens, and local elected representatives

BLUE4ALL TOOL TESTING

NEAT - Non-indigenous species Effect Assessment and mapping Tool

Focus: Assessing the environmental impact of invasive species across the entire MPA network

Activities: Data collection and alien species selection, participatory mapping, systematic literature review, species distribution modelling, expert assessment

Ecological Issues Awareness in Tourism

Tested in the MPA Littoral Seine-Marine

Focus: Raising awareness of ecological issues of the MPA in the tourism sector to reduce pressure on the MPA and increase acceptance of the MPA.

Activities: Questionnaires with rating/ranking and contingent valuation, data harvesting and information sharing

Ecological Issues Awareness in Aquaculture

Tested in the MPA Littoral Seine-Marine

Focus: Raising awareness of ecological issues of MPAs in the aquaculture sector to reduce the pressure on the MPA and increase acceptance of the MPA.

Activities: Data collection for best-worst scaling

MPA Awareness Tool

Tested in the MPA Littoral Seine-Marine

Focus: Eliciting perceptions and raising awareness and acceptance of the MPA among local elected government representatives and residents

Activities: Surveys, interviews with elected officials, workshops



VÄINAMERI & VÄIKE VÄIN

BLUE4ALL LIVING LAB



Location

Estonian part
of the Baltic Sea

Designation

National MPA
and Natura 2000 sites under
the EU Habitats and Birds
Directives

Main Pressures

Eutrophication, habitat
degradation, fishing, maritime
traffic, infrastructure development,
tourism, dredging and dumping



Data Availability and Accessibility

Monitoring data are dispersed
across platforms and often
inaccessible or inconsistent,
hindering informed decision-
making.

Spatial Tools for Management

Clear need for a user-friendly,
web-based mapping tool that
integrates ecological values,
pressures, and activities.

BLUE4ALL TOOL TESTING

PlanWise4Blue – Cumulative Effects Assessment

Focus: Integrating and assessing cumulative and in-combination effects of human activities and pressures to improve spatial planning and conservation-specific decision-making.

Activities: Nature values selection; Data collection and integration; Stakeholder workshops.

KEY CHALLENGES



Onboarding and
Training Requirements



Incomplete or
Incompatible Data
Layers



Technical and
Administrative
Integration Challenges



High Demands on Time
and Expertise



FINNISH MPA NETWORK

BLUE4ALL LIVING LAB

Location

Territorial and offshore waters of Finland, Baltic Sea

Designation

Natura 2000, HELCOM MPA, and several national protected area categories

Flagship Species

Eelgrass (*Zostera marina*),
Bladder wrack (*Fucus vesiculosus*),
Charophytes (*Chara globularis*, and
Ringed seal (*Pusa hispida*)



Network Planning

MPAs established on a case-by-case basis rather than as part of an ecologically coherent network

Stakeholder Engagement

Needed across multiple levels, including governmental, scientific, private, and community stakeholders

BLUE4ALL
TOOL TESTING

Equity and Justice Assessment in Conservation Planning

Focus: Assessment of equity and justice in conservation planning; improving legitimacy, transparency, and inclusiveness in MPA planning processes

Activities: Development of a new national assessment tool, justice deliberation and assessment, stakeholder meeting



New Tool Developed!





BALTIC SEA MPA NETWORK



BLUE4ALL LIVING LAB

Location

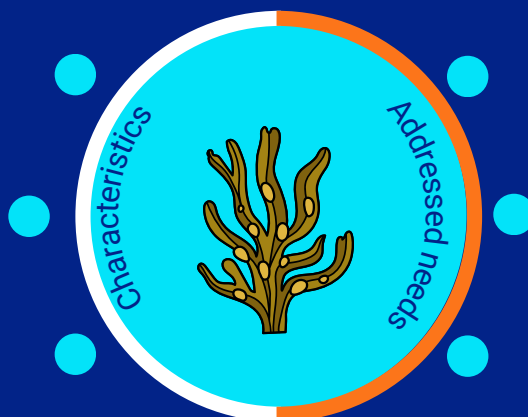
Baltic Sea (DK, S, FIN, EST, LV, LT, PL, D, (RUS)) - MPA Network

Designation

Natura 2000, Ramsar, HELCOM MPAs, UNESCO sites, ESBAs and national nature reserves

Managing Bodies

National environmental agencies (e.g. SwAM, Finnish Environment Institute, BfN), coordinated regionally via HELCOM



Financial Sustainability

Inadequate long-term financial sustainability and under-resourced management processes

Cumulative Impacts

Need for better assessment and management of cumulative human pressures

Monitoring

Insufficient monitoring, data availability, and knowledge-sharing on MPA effectiveness

BLUE4ALL TOOL TESTING

Equity and Justice Assessment

Focus: Assessment of equity and justice in conservation planning, improving informed decision-making and creating opportunities for resolving conflicts

Activities: stakeholder meetings, interviews, validation process through a comment (CMNT) document

PlanWise4Blue – Transnational Approach to the Assessment of Cumulative Threats

Focus: Assessing cumulative and in-combination effects of human activities and pressures, defining relevant conservation targets and incorporating the distribution of human activities and pressures

Activities: Nature values selection, data collection and integration, stakeholder workshops, CMNT document and questionnaires

Financial Planning Tools – Guideline MPA Business Planning & Blue4All Finance Planner

Focus: Determining the financial health of the MPA, choosing suitable financing mechanisms, and developing a financial strategy

Activities: Consultation with MPA management, development of a guidebook and Excel tool for financial planning, completion of tools by MPA managers based on site-specific context

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