

BLUE4ALL FACTSHEETS



# Tool Testing in Action

*A closer look at our MPA sites  
across Europe*



2025

# ABOUT BLUE4ALL

Blue4All is a **Horizon Europe Mission Ocean project** that addresses **marine conservation and restoration challenges** across Europe. In collaboration with MPA managers and stakeholders from **15 MPAs (Living Labs)**, the project is developing and testing **practical tools** to support the **protection and recovery of the marine environment in a socially just way**. These tools are brought together in an accessible online platform, the **MPA Solutions Hub**, which supports the planning and management of effective, efficient, and resilient MPAs and MPA networks.

Between spring 2024 and autumn 2025, Blue4All researchers tested a wide range of these tools in real-world settings across Europe. These included decision-support software, interactive workshops, awareness-raising campaigns, Excel-based resources, and practical methodologies. This publication provides an overview of the **key tools developed and tested**, along with the activities carried out in each Living Lab.



## LIVING LABS

### MEDITERRANEAN

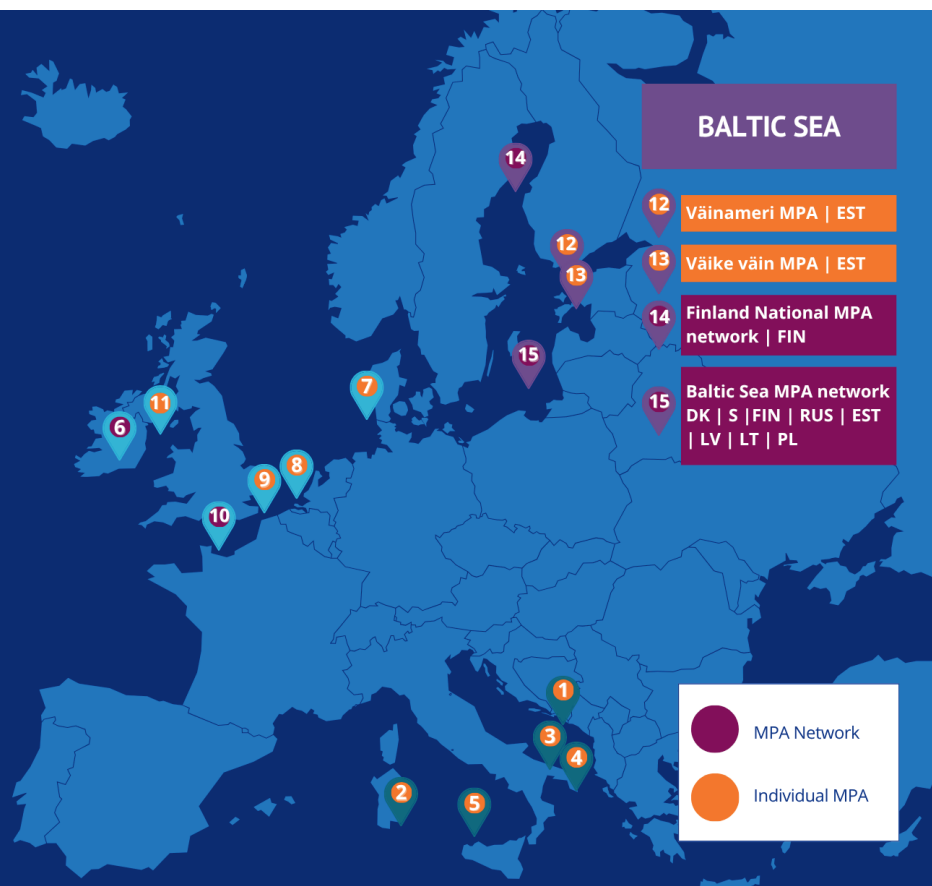
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# Platamuni, Katič, and Stari Ulcinj

## 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:** Assessing tourist awareness of the environmental impacts of jet ski activities and identifying measures to reduce these impacts

**Activities:** Online and in-person questionnaires; presentation of results to stakeholders; workshops and discussions with MPA advisory bodies; and meetings with tourism operators to develop and propose mitigation measures

## OUTCOMES



TOURISM  
PERCEPTION  
INSIGHTS



PARTICIPATORY  
MANAGEMENT  
PROPOSALS



EDUCATION AND  
OUTREACH



# Capo Carbonara

## BLUE4ALL LIVING LAB



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### Location

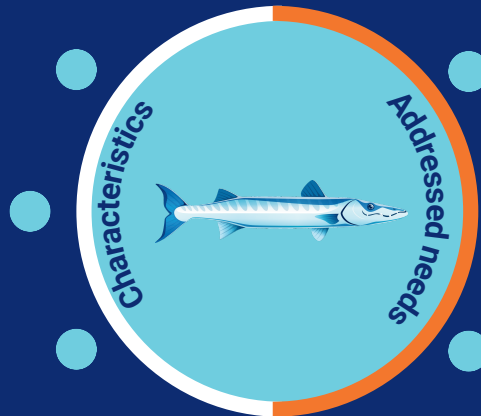
South-eastern Sardinia,  
Italy - Mediterranean Sea

### 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 – Guidelines 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; utilisation of the tools by MPA management 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; the development of a proposed new MPA zonation.



# Torre Guaceto

BLUE4ALL LIVING LAB

## Location

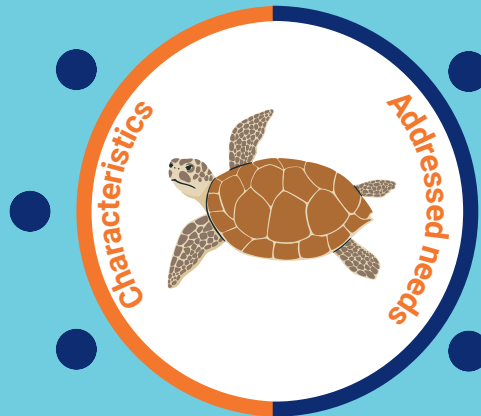
Apulia region, southern Adriatic Sea, near Brindisi, Italy

## 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 a bottom-up approach

**Activities:** Stakeholder mapping; stakeholder surveys and interviews; analysis of the results; workshops; knowledge sharing.

### Financial Planning Tools - Guidelines 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; utilisation of the tools by MPA management 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 surveys

## 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 - Guidelines 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; utilisation of the tools by MPA management based on site-specific context



# 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.

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## 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.





# 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; impact scenarios evaluation

## STEP BY STEP APPROACH

DATA COLLECTION AND REVIEW

SCOPING AND REFINEMENT

IMPLEMENTATION PLANWISE4BLUE TOOL

STAKEHOLDER FEEDBACK AND REVIEW

FINALISATION AND DISSEMINATION



# Dundalk Bay

## BLUE4ALL LIVING LAB

### 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 with stakeholders

### Facilitated Discussion Groups

- **Focus:** Understanding individual stakeholders and facilitating inter-stakeholder engagement
- **Activities:** Discussion groups with stakeholders

### FINDINGS - Surveys

- People's responses to new policy proposals are shaped by their values, their sense of place attachment, and their expectations about how policy changes will affect their community.
- These factors should therefore be carefully 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 Wadden Sea

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## 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; conducting surveys 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; building Sankey Diagrams for visualization of pressure-ecosystem service connections

# French MPA Network

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**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

**MPA Awareness and Acceptance Raising**

*Tested in in the MPA Littoral Seine-Marine*

- **Focus:** Understanding perceptions of the MPA and strengthening awareness and acceptance among local residents and elected representatives.
- **Activities:** Surveys with local communities; interviews with elected officials; participatory workshop

**Ecological Issues Awareness in Aquaculture and Tourism**

*Tested in the MPA Littoral Seine-Marine*

- **Focus:** Raising awareness of ecological issues within the aquaculture and tourism sectors to reduce pressure on the MPA and strengthen acceptance of its management measures.
- **Activities:** Surveys and questionnaires with stakeholders (including ranking and comparison exercises); analysis and sharing of results to inform discussion and awareness-raising



# 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

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## Location

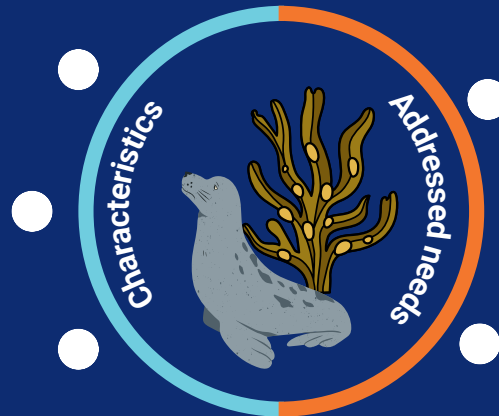
Territorial and offshore waters of Finland, Baltic Sea

## 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

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## Equity and Justice Assessment in Conservation Planning

**Focus:** Assessing equity and justice in conservation planning to improve the legitimacy, transparency, and inclusiveness of MPA planning processes.

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



**New Tool Developed!**



# Baltic Sea MPA Network

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## Location

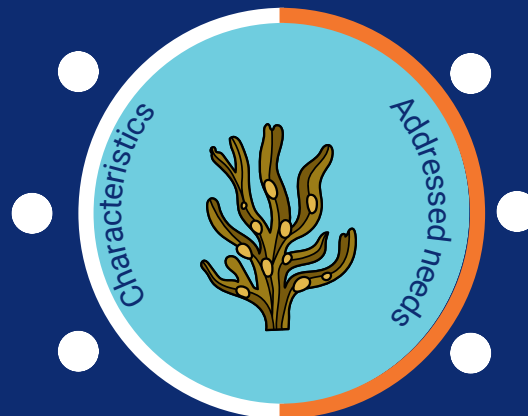
Baltic Sea (DK, S, FIN, EST, LV, LT, PL, D, (RUS)) - MPA Network

## 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:** Assessing equity and justice in conservation planning to support informed decision-making and create opportunities for conflict resolution.
- **Activities:** Stakeholder meetings; interviews; validation process through a consultation document

### PlanWise4Blue – Transnational Approach to the Assessment of Cumulative Threats

- **Focus:** Assessing the combined impacts of human activities on marine ecosystems to define conservation priorities and support more effective spatial planning.
- **Activities:** Selection of key nature values; data collection and integration; stakeholder workshops; and feedback through questionnaires and a consultation document.





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