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A PROactive approach for COmmunities to enAble Societal Transformation

D4.2 – Supporting guidelines for the PRO-COAST framework application in the case studies

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BACKGROUND: ABOUT THE PRO-COAST PROJECT

The PRO-COAST project was launched to address the issue of biodiversity loss in European coastal ecosystems. Around 40% of Europeans live within 100km of the coast, relying directly on ecosystem services that are threatened by both quantitative and qualitative losses. Groups already facing socioeconomic vulnerabilities are likely to be disproportionately affected. PRO-COAST aims to empower local communities to support the restoration and maintenance of biodiversity and ecosystem services across Europe, integrating local knowledge into practice and policymaking. The project coordinates the efforts of 20 partners across 14 countries working in 9 unique areas on 10 case studies. These case studies cover multiple conservation approaches across various coastal ecosystems, testing different governance models and social incentives to engage local actors in adopting technologies and actions for biodiversity conservation.

An important element of PRO-COAST is its holistic, interdisciplinary approach, based on a conceptual framework that treats social-ecological systems as interconnected. By mapping relationships between ecosystem components and uncovering feedback dynamics, the project seeks to identify leverage points for transformative change. PRO-COAST promotes integrated bottom-up decision-making, recognizing that environmental issues cannot be separated from social, economic, and political factors. Through extensive citizen engagement guided by state-of-the-art conservation science, the project aims to build community capacity for biodiversity management, providing scalable solutions that balance conservation needs with local socioeconomic priorities. Now in its central stage, PRO-COAST hopes to inform adaptive, participatory approaches to governance that avoid biodiversity losses and ensure sustainable, equitable access to coastal resources. This document informs that process in the ongoing 10 case studies, in which volunteer-based efforts will continue beyond the project, aided by a Community Sustainability Platform that will be maintained, also to scale-out the lessons learned massively, until 2033.

LINKS WITH OTHER PROJECT ACTIVITIES

This deliverable brings together the results of Tasks 4.2 and 4.3 within Work Package 4 (WP4), establishing strong connections with WP2, WP3, WP5, and WP6 to ensure a coherent and synergistic approach to addressing socio-ecological challenges.

The work builds on the progress made in WP2, particularly Task 2.4, by using the conceptual framework and stakeholder typologies developed therein to map stakeholders across the case studies. In parallel, WP3 contributes key data on biodiversity and ecosystem services to help contextualize the locally collected information. Additionally, the Conservation and Human Use Index developed under WP3 will be validated within the case studies.

The results of Tasks 4.2 and 4.3 provide a robust knowledge base that directly informs the design of inclusive and targeted community engagement strategies in WP5 and WP6. In this context, WP6 is actively supporting the engagement of key stakeholders over the next 18 months through workshops and personalized coaching sessions, as well as identifying the most appropriate collaborative tools for future online use. By translating local experiences and needs into actionable and replicable strategies, WP6 promotes resilience and long-term commitment among stakeholders involved in current and future community projects.

Stakeholder roles, relationships, and influence within each Socio-Ecological System (SES) have been mapped using detailed analysis, with particular attention paid to those actors positioned at the margins of the system (who may exert disproportionate influence or be especially vulnerable to the dynamics under

study). This understanding is essential for guiding effective, transformative, and inclusive participatory processes, aligned with the overall objectives of the project.

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ABBREVIATONS AND ACRONYMS

ACRONYMS	DESCRIPTION
A	Actors
CS	Case Study
GS	Governance Systems
I	Interactions
NGOs	Non-Governmental Organisations
NPWS	National Parks and Wildlife Service.
O	Outcomes
RS	Resource Systems
RU	Resource Units
SCC	Sligo County Council
SES	Socio-Ecological System
WP	Work Package

1 OBJECTIVES. PURPOSE OF THESE GUIDELINES

The objective of this document is to integrate the outcomes of Tasks 4.2 and 4.3, with the purpose of developing practical guidelines that support transformative change in ecosystem management. These guidelines are based on the identification and analysis of key stakeholders, as well as the identification and evaluation of local information sources in each case study.

Task 4.2 builds on the findings from Task 2.4 and aims to map transformative communities by identifying key stakeholder types, analysing existing networks, and conducting comprehensive stakeholder analysis. This includes evaluating roles, relationships, and influence within Socio-Ecological Systems (SES), with particular emphasis on marginalized stakeholders whose impact may be underrecognized.

Task 4.3 compiles a wide range of secondary data sources relevant to each case study. These include academic literature, historical archives, media articles, and social media content, complemented by expert insights to better understand the evolution and dynamics of each SES.

Together, these tasks have provided the basis for:

- Identifying and analysing key stakeholders to understand their capacity to drive meaningful ecosystem management changes.
- Identifying and evaluating all available information sources, including scientific and local knowledge, to support informed decision-making.

All collected information underwent rigorous classification and review to ensure consistency with defined inclusion criteria.

The integration of these results enables the development of robust guidelines that facilitate the practical application of the project framework in each case study. These guidelines aim to enhance stakeholder engagement, ensure the integration of diverse knowledge systems, and support effective and sustainable ecosystem management strategies.

2 GUIDE FOR APPLYING THE FRAMEWORK

2.1 Stakeholder Identification. Definition and Classification.

2.1.1 Identifying stakeholders

Task 4.2 builds on the insights generated in WP6 to map and analyse transformative communities within the socio-ecological systems used in PRO-COAST. By integrating outputs from WP6, such as identified barriers, capacities, and resistance to change, Task 4.2 ensures a context-sensitive and comprehensive approach. This integration enables the development of tailored governance strategies that reflect the specific social and ecological realities of each case study, supporting participatory decision-making, and advancing the objectives of the PRO-COAST framework. This typology of stakeholders is grounded in the broader SES governance framework articulated in **D4.1 Meta-theoretical operational framework for the study and analysis of complex SES**, which identifies governance systems (GS) as key structuring elements influencing actor behavior and system outcomes. Our classification scheme reflects this by mapping stakeholder roles and influence within existing governance architectures and institutional arrangements

2.1.2 Analysing and categorising stakeholders

Analysing and categorising stakeholders is the first step in the engagement process. It is a critical foundation to ensure that stakeholders are approached in a way that fosters meaningful participation and long-term impact. To ensure effective stakeholder engagement and sustainable outcomes, the analysis incorporates a structured approach to mapping stakeholder power and influence through a tailored influence–vulnerability matrix. The steps for creating this matrix are presented in detail in Section 2.1.3.

This matrix evaluates:

- Power: Legal, economic, or social capacity to influence outcomes.
- Vulnerability: The extent to which stakeholders are affected by ecological or socio-economic changes.

This framework helps a Change Agent strategically engage stakeholders at different levels to maximize behaviour change. By using tailored approaches—from awareness-raising to empowerment—it ensures that interventions are not only well-received but also lead to sustainable, long-term impact.

This analysis highlights:

- Supportive stakeholders, who align with project goals.
- Neutral stakeholders, requiring information and awareness.
- Resistant stakeholders, necessitating focused engagement strategies.

Based on their influence and vulnerability, stakeholders are organised into the following groups:

Table 1. Stakeholder classification based on their influence and vulnerability

Inform	Those with low power and low vulnerability who require basic awareness-raising efforts.
Consult	Those with moderate power or interest, whose input enriches the planning process.
Involve	Those with higher vulnerability or active roles in conservation efforts.
Collaborate	Those with significant influence and stakes, requiring active partnership.
Empower	Those with high decision-making authority who can lead transformative initiatives.

2.1.3 Step-by-step guide for creating the influence matrix and integrate feedback loops

Table 2. Actions and key considerations regarding the creation of the influence matrix

	ACTION	KEY CONSIDERATION
1. Identify stakeholders	List all relevant stakeholders. Categorise them into government, private sector, NGOs, local communities, academia, etc	Ensure no key group is overlooked. Use stakeholder mapping techniques to gather initial insights.
2. Assess power and influence	Evaluate each stakeholder's ability to shape project outcomes	Consider legal authority, financial capacity, political influence, and social reach.

3. Assess vulnerability	Determine the degree to which stakeholders are affected by ecological or socio-economic changes.	Identify those highly dependent on ecosystem services or those at risk of economic shifts due to project decisions.
4. Map stakeholders on the Power-Vulnerability matrix	Place stakeholders on a two-axis grid: Power (X-axis: Low to high) and Vulnerability (Y-axis: Low to High)	This visual representation helps prioritise engagements strategies based on stakeholder position.
5. Integrating feedback loops	Identify key relationships and major interactions between stakeholders	Feedback loops are further explained in section 2.1.6. Briefly, reinforcing loops amplify changes, while balancing loops stabilize the system. Integrating these loops helps clarify how stakeholder actions influence SES resilience.
6. Classify stakeholders into engagement groups	Place stakeholders to one of the following categories: Inform, consult, involve, collaborate, empower.	Ensure alignment between stakeholders needs and engagement approaches.
7. Develop tailored engagement strategies	Define specific communications and involvement actions for each group.	Use targeted approaches: e.g., awareness campaigns for Inform, workshops for Consult, and co-management for Collaborate.
8. Regularly update and reassess	Review the matrix periodically to account for changes in power dynamics.	Political, economic, and environmental factors can shift stakeholders influence over time. Ensure flexibility in strategy.

2.1.4 Recommendations for implementation

In order to operationalize the findings of the stakeholder analysis, several implementation-oriented recommendations are outlined below. Building on this structured process, the resulting engagement strategies are not only well-informed, but also practical, inclusive, and responsive to dynamic socio-ecological systems.

1. Align all mapping activities with the SES Framework principles of inclusivity, transparency, and adaptability.
2. Incorporate local knowledge and cultural considerations to strengthen trust and collaboration.
3. Regularly update stakeholder maps and engagement strategies to reflect evolving contexts and feedback.

2.1.5 How to align SES variables

The Socio-Ecological System (SES) Framework provides a comprehensive structure to analyse the interactions between social and ecological elements, ensuring stakeholder mapping is grounded in

systemic understanding. Key SES variables—Resource Systems (RS), Resource Units (RU), Governance Systems (GS), Actors (A), Interactions (I), and Outcomes (O)—are integral to this process. For instance, coastal ecosystems (RS) are examined to identify stakeholders such as local councils and tourism operators. Similarly, governance structures (GS) shape stakeholder dynamics, highlighting the roles of municipalities and NGOs in conservation efforts.

The SES framework's first-tier variables, such as Social, Economic, and Political Settings (S), and Related Ecosystems (ECO), add granularity to the mapping. Practical integration involves mapping stakeholders against SES subsystems, visualising interactions through network analyses, and aligning power-vulnerability metrics with SES variables. Tracking outcomes, such as improved governance or enhanced biodiversity, ensures adaptive strategies remain effective and context-specific. This approach ensures a dynamic and holistic perspective in stakeholder mapping, supporting the sustainability goals of the PRO-COAST framework. Building on the meta-theoretical framework developed in D4.1, particular emphasis is placed on the governance system (GS) and its intersections with actors (A), interactions (I), and outcomes (O). This deliverable operationalizes that conceptual model through the influence–vulnerability matrix, which reveals how governance mechanisms shape both the power structures and the exposure of different stakeholders within SES dynamics.

2.1.6 How to integrate feedback loops

Integrating feedback loops into stakeholder mapping enriches the understanding of dynamic interactions between social and ecological components within the SES framework. Feedback loops highlight how decisions and actions influence system stability and resilience. Two types of loops are central to this approach: reinforcing loops amplify changes, potentially driving growth or collapse, while balancing loops counteract changes, promoting stability.

To integrate feedback loops, it is essential to identify key relationships between stakeholders and their impacts on the system. Stakeholders can be categorised as drivers initiating actions, amplifiers or dampeners influencing outcomes, or affected groups responding to system changes. By visualising feedback loops and incorporating adaptive management, stakeholder mapping aligns actions with long-term sustainability goals, ensuring robust and resilient socio-ecological systems.

2.2 Identification of information sources

2.2.1 Guidelines for identifying information sources

As a preliminary step, criteria for inclusion and exclusion of information sources will be established to ensure relevance, quality, and consistency of collected information. Information sources will be selected if they:

- ✓ Specifically address the case study's topic or problem.
- ✓ Are peer-reviewed academic publications.
- ✓ Are official reports from governmental, international, or recognized organizations (such as NGOs)
- ✓ Come from local experts with relevant experience and in-depth knowledge of the study area, whose contribution is essential for data collection and local-level decision-making. While their contributions should be duly acknowledged (particularly in integrating local knowledge) it is also crucial to recognize that intensive data collection processes are not easily scalable. Future efforts must consider what is realistically feasible for volunteers, potentially supported by peer-reviewed academic publications that can serve as generic resources or fallback references, especially for broader regional applications.
- ✓ Cover the specific geographic region of the case studies and address local, regional, national,

or international contexts.

- ✓ All these information sources must be publicly available or accessible through authorized means to facilitate data collection.

Conversely, sources will be excluded if they:

- × Are irrelevant to the case study topic.
- × Are outdated and do not reflect recent changes in the study context.
- × Do not cover the specific geographic regions of the case studies.
- × Are not applicable within the SES (Social-Ecological System) context.
- × Cannot be accessed legally or with authorization.

2.2.2 Datasets originated in the project

Within the project framework, various datasets are being generated across the different work packages. These internal data sources represent a fundamental resource for the analysis of the case studies, as they are specifically designed to directly address the project's objectives and ensure coherence with the needs of the various work packages.

The procedure for this task included bibliographic research aimed at producing literature reviews, as part of tasks 2.1, 3.2, and 4.1. The information for this bibliographic search to conduct literature reviews was obtained from databases such as Scopus, Google Scholar, ScienceDirect, Cordis, LIFE, public local platforms, national reports, and other online sources.

2.2.3 Identification of local knowledge

In order to identify the different local sources of information from all the case studies (CS), the CS leaders were asked to provide information covering the following categories of local knowledge they were using.

- CS name: This identifies each case study within the project, providing a unique name or identifier to ensure clear differentiation and proper tracking of the studies
- Information category: This categorizes the nature of the data or knowledge being used.
- Type of information/Local knowledge: This section helps clarify what type(s) of information or knowledge is being collected for each case study.
- Source/Person: This provides details of the origins of the data or knowledge being collected.
- Information scale: This defines the context of data or knowledge based on its coverage. It can be based on the Geographic Scale, which indicates its spatial level (national, regional, or global), or the Organizational Scale, which identifies the type of entity producing the information (government, academia, community, or international organizations).
- Scale/Reach level: This serves to specify the scale or reach of the information source or key local knowledge, providing context about the geographic or organizational scope of the data or expertise being collected.
- Description/Notes: This section provides additional context or background about the data sources or contributors. It is useful for describing the expertise of contributors, the type of data available, or any other relevant notes to better understand the collected information.
- Link to source (if possible): This serves as a quick-access reference to the original source of information.
- Citation (if applicable): This ensures proper acknowledgment of the original sources, providing bibliographic details or standardized citations (e.g., APA or MLA) for transparency and credibility.

Some of these categories came with different options, shown in Table 3, among which the CS leaders could choose based on the source of information provided.

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Table 3. Categories of local information sources

Case Study (*This source of information applies to all the CS, and includes Datasets generated by the PRO-COAST consortium.)										
CS1-Comino island	CS2-Apulia	CS3-Strunjan	CS4-Boka Kotorska bay	CS5-Sligo	CS6-Arne Parish	CS7.a-Kildn	CS7.b-Ghost Fishing	CS8-Kloogaranna Laulasmaa	CS9-Corbu	All CS*
Information Category										
Primary data: Existing data, collected by researchers, government agencies, or organizations.					Secondary data: Insights, expertise or traditional knowledge specific to the local context.					
Type of information/Local knowledge										
Academic publications: Research articles, studies, conferences, presenting scholarly findings, analyses, theories, methodologies, or experimental results.			Government reports: Official reports, environmental impact assessments, containing data, analyses, policies, regulations, or recommendations on various topics		Historical archives: Records stored in national wildlife databases, feasibility studies done at the request of practitioners.			Policy documents: Official documents, guidelines, or statements outlining government policies, regulations, laws, or directives on specific issues or sectors		
Statistical dataset: Structured collections of numerical data, statistics, metrics, or indicators related to various aspects of a topic, sector, or phenomenon			Community stakeholders: Local knowledge and perspectives from affected communities, covering environmental challenges, cultural practices, and grassroots solutions		Indigenous elders/Communities: Traditional knowledge, cultural practices, ecological wisdom, and heritage passed down through generations within indigenous communities			Local experts/Researchers: Experts with specialized knowledge in local environmental, social, or economic aspects, often in ecology, sociology, economics, or anthropology		
Fishermen or hunters/Fishermen's or hunters' associations: Fishermen and hunters, along with their associations, holding knowledge of local ecosystems, wildlife, conservation, and sustainable resource management.			NGOs/Non-profit organizations: Non-governmental organizations (NGOs) or non-profit organizations (NPOs) operating at the local level, focusing on environmental conservation, community development, social justice, or advocacy		Citizens generated data			Other		
Type of scale										
Geographic scale: Classification of information based on geographical boundaries, including national, regional, local/community, and global levels.					Organizational scale: Classification of information based on its source, including government bodies, academic institutions, community organizations, and international entities.					
Scale/reach level										
National: Information or knowledge that covers an entire nation or country		Regional: Information or knowledge specific to a particular region or geographical area within a country or continent		Local/Community: Information or knowledge relevant to a specific local area, community, or locality.		Government/Policy: Information or knowledge generated or managed by government bodies, policymakers, or regulatory agencies.		Academic/Research institutions: Information or knowledge produced through academic research, studies, or scholarly publications.		

3 RECOMMENDATIONS FOR IMPROVING STAKEHOLDER ENGAGEMENT AND CASE STUDY IMPLEMENTATION

3.1 Improving communication and engagement

Effective communication in biodiversity projects such as PRO-Coast is often hindered by several interrelated challenges: limited training in science communication, low engagement on social media, and a persistent gap between scientific accuracy and public accessibility. These barriers reduce both the visibility and the impact of project activities.

A significant portion of researchers lack an active online presence. In the case of PRO-Coast, only 55% of researchers and scientists have some form of social media presence, and only 15% actively engage with their audience. Moreover, half of the participating organizations have inactive or blocked social media accounts, indicating a lack of strategic communication planning and stakeholder interaction.

This issue is compounded by the fact that many in the scientific community still view communication as secondary to their core research tasks. As a result, their messages often fail to reach or resonate with a broader audience, leaving room for misinformation and superficial narratives to dominate the discourse. Conversely, communicators without scientific training may be more effective at simplifying messages but often lack the rigor and accuracy required for complex ecological topics.

To bridge this divide, several key actions are recommended:

- **Training and Capacity Building**: Equip researchers with communication skills, including storytelling, message framing, and use of digital tools. This empowers them to disseminate scientific findings clearly and engagingly.
- **Promote Fact-Checking and Critical Thinking**: Encourage a culture of accountability in online content. This can be achieved through collaborative campaigns, curated content, and partnerships with trusted information outlets.
- **Enhance Digital Storytelling**: Use multimedia tools (e.g., photos, videos, interactive graphics) to make biodiversity and ecosystem services more relatable to the general public. Despite having dynamic content, many PRO-Coast case studies have shown very limited interaction, with only seven participants having shared or liked related content.
- **Develop Local Multipliers**: Establish a network of community-level communication focal points who can co-create and distribute content locally, increasing relevance and reach.
- **Adopt a Push–Pull Communication Strategy**: Communication should be a two-way street, while central teams push core messages, case studies and stakeholders must also generate localized content and feedback loops to ensure responsiveness and participation.
- **Align with PRO-Coast Vision and Strategy**: Ensure all communication efforts, from institutional messaging to case study updates, are clearly aligned with the project's overarching goals, reducing fragmentation, and reinforcing a coherent project identity.
- **Strengthen Interdisciplinary Collaboration**: Effective communication also depends on internal synergies. Greater collaboration between sociologists and environmental scientists will lead to richer narratives that better capture the human dimensions of ecosystem change.

By implementing these measures, PRO-Coast and similar initiatives can close the gap between science and society, fostering stronger connections with stakeholders, improving visibility, and ultimately enhancing the effectiveness and sustainability of biodiversity and ecosystem-based projects.

3.2 Strengthening Case Study design and implementation

A well-structured case study within a biodiversity and ecosystem project should comprehensively integrate socio-economic and environmental relevance, stakeholder mapping, ecosystem service assessments, and an overview of existing governance structures. These elements are essential for understanding the multifaceted value of the case study area for both nature and society, as well as for guiding sustainable management strategies.

Case studies should begin by identifying the current users of the ecosystem and the benefits they derive, as this provides critical insight into how the site contributes to local well-being, economies, and biodiversity. Mapping stakeholders (including their interests, power dynamics, and responsibilities) is key to recognizing synergies and potential conflicts, and to ensuring inclusive and effective management approaches.

Incorporating local knowledge, often derived from direct experience and overlooked in formal assessments, is vital for gaining a complete picture of the area's dynamics. Equally important is the evaluation of ecosystem services such as recreation, tourism, and biodiversity, as well as the identification of environmental risks (both structural and behavioural) such as habitat degradation, pollution, and unsustainable land use practices.

Common challenges faced during the development of case studies include:

- Limited data availability, particularly due to scarce prior studies or a lack of monitoring.
- Conflicting stakeholder interests, such as tensions between conservation goals and commercial activities.
- Low engagement from certain groups, including farmers or tourism operators.
- Insufficient information on tourism dynamics and local economic links.
- Gaps in environmental awareness among some stakeholder groups.

To address these barriers, a multi-pronged strategy is needed:

- **Active communication with local authorities and institutional stakeholders** is crucial. For instance, engaging county councils, environmental agencies (e.g., NPWS), and NGOs ensures broader ownership of the process.
- **Participatory workshops** have proven highly effective in building trust and fostering active stakeholder involvement. Techniques such as breakout groups, role-playing, or challenge mapping allow participants to move from passive attendance to meaningful contribution.
- **Transparency and feedback integration** are essential to maintaining engagement. Stakeholders are more likely to continue participating if they see how their insights are incorporated into project actions and decisions.
- **Action-oriented outcomes from workshops** (such as assigning roles, setting deadlines, and communicating next steps) help transform discussion into implementation and strengthen long-term commitment.

Transparent decision-making processes not only build trust but also help clarify responsibilities, align expectations, and encourage co-creation of solutions. This ensures that case studies are not static reports, but dynamic frameworks that can adapt to evolving challenges and stakeholder needs.

4 CASE STUDY RESULTS

4.1 Stakeholder identification

This section presents the main findings obtained through the mapping and analysis of stakeholders involved in the different case studies. It includes the stakeholder identification, key results related to power, vulnerability, levels of influence, barriers, and potential resistance in conservation and environmental governance processes. To facilitate the readability and organization of the document, the classification of stakeholders according to the power–vulnerability matrix has been moved to Annex 1, where it is detailed for each case study.

4.1.1 CS1-Comino Island (Malta)

This section presents the main findings obtained through the mapping and analysis of stakeholders involved in the different case studies. It includes the stakeholder identification, key results related to power, vulnerability, levels of influence, barriers, and potential resistance in conservation and environmental governance processes. To facilitate the readability and organization of the document, the classification of stakeholders according to the power–vulnerability matrix has been moved to Annex 1, where it is detailed for each case study.

The following is a list of key stakeholders identified in Comino Island, Malta:

- Environment Ministry and relevant managing authorities.
- Malta Tourism Authority.
- Tour/Boat Operators.
- Beach services operators.
- Ministry of Gozo and Local Council.
- Tourists (local and non).
- Media (Awareness-raising and public engagement)

4.1.1.1 Influences, barriers and resistance

Stakeholder dynamics on Comino Island exhibit a spectrum of influences, barriers, and potential resistance to environmental conservation efforts. Key supporters of the PRO-COAST objectives include NGOs, members of the public, activist groups, academia, and residents, all of whom share a vested interest in conservation. Meanwhile, neutral stakeholders, such as the Malta Tourism Authority, tourists, and business operators, require greater awareness and engagement to foster support. However, some resistance is anticipated from larger commercial operators, particularly those managing large vessels and party boats, as well as beach services and certain segments of the tourism industry whose economic interests may conflict with conservation measures.

The main barriers to achieving effective environmental governance on Comino Island are multi-faceted. Firstly, while NATURA 2000 provides a legal framework for protection, enforcement remains inadequate, leading to regulatory gaps and ineffective implementation. Secondly, economic interests often conflict with conservation objectives, particularly within the tourism sector, where business operators prioritise short-term financial gains over long-term sustainability. Thirdly, awareness among tourists and commercial operators regarding ecological degradation remains insufficient, necessitating targeted education and

outreach efforts. Lastly, political and economic pressures frequently shape environmental decision-making, leading to compromises that may not align with conservation priorities.

4.1.1.2 Stakeholder Engagement Strategy

Table 4. Stakeholders and engagement proposed approaches for CS1.

Strategy	Key Stakeholders	Proposed Approaches
Inform	Media	Press releases, awareness campaigns
Consult	NGOs, Activists, Residents	Surveys, community meetings
Involve	Tourists, Transport operators	Interactive workshops, environmental volunteering
Collaborate	Hotels, Tourism authority, Local government	Joint planning committees, sustainability agreements
Empower	National government, Tourism authority	Delegated decision-making, conservation policies

4.1.2 CS2. Protected area of Aquatina di Frigole-Apulia (Italy)

The Case Study 2 (CS2) focuses on the Aquatina di Frigole Protected Area. Aquatina di Frigole is a protected area under the NATURA 2000 Network (IT9150003), located along the Adriatic coast of the Salento Peninsula in southeastern Apulia, Italy. This area represents an ecological zone rich in species and habitat biodiversity and faces environmental pressures at different scales. It serves as a focal point for scientific research, biodiversity conservation, and sustainable management practices.

This area integrates many local socio-economic activities (e.g., small-scale fisheries, beach resorts, bars, restaurants, schools, NGOs, etc.). Due to conservation efforts for the Aquatina di Frigole Coastal Lagoon and the beach, it now represents a high-cultural-value area for the local community. It is subject to regional, national, and international regulations for species and habitat biodiversity conservation. To improve conservation efforts and facilitate biodiversity monitoring and research, the area is managed by the University of Salento. Specifically, the Research Centre for Fisheries and Aquaculture under DiSTeBA (Department of Biological and Environmental Sciences and Technologies), located within the protected area, serves as a scientific hub for studying and managing ecological integrity, as well as developing new biodiversity monitoring and conservation tools and strategies.

To identify the main pressures acting on the Aquatina di Frigole Protected Area and to determine best practices for improving conservation, the case study focuses on two main sub-areas:

- **NATURA 2000 Site**: The core of the Case Study is the Aquatina di Frigole NATURA 2000 Site, a protected area rich in species and habitat biodiversity, including coastal lagoons and dune systems. This area is of critical ecological importance, protected under the EU Habitats Directive due to its unique Mediterranean coastal habitats and species.
- **Surrounding Area:** The case study also encompasses the broader socio-economic landscape surrounding the NATURA 2000 site. This includes local communities, tourism infrastructure, beach resorts, small-scale fisheries, agriculture, etc. These socio-economic activities are tightly linked to the natural environment, influencing the sustainability of the protected site.

The case study framework integrates ecological and human dimensions, mapping environmental challenges such as dune degradation, coastal exploitation, marine litter, and climate change. It assesses

how these factors interact at different scales and emphasizes proactive stakeholder involvement—including local citizens, policymakers, and researchers—to develop sustainable management strategies for both ecological health and socio-economic activities.

At the local scale, the case study addresses direct environmental pressures from human activities in the immediate surroundings of the NATURA 2000 site. These pressures primarily arise from tourism, agriculture, and small-scale fisheries, which interact with fragile coastal ecosystems.

At the macro-regional scale, the Case Study addresses broader environmental pressures affecting the entire region, particularly through interactions with the Adriatic and Ionian Seas. These include marine and lagoon litter, ecosystem degradation, and biodiversity loss.

At the global scale, the Case Study is influenced by worldwide environmental pressures and drivers of change, such as non-indigenous species and climate change, which have long-term impacts on ecosystems within and around the NATURA 2000 site.

In line with PRO-COAST objectives, the Socio-Environmental System Framework applied in the Aquatina di Frigole Protected Area adopts a proactive, multi-scale approach to integrate scientific research, stakeholder involvement, and innovative monitoring technologies. The aim is to ensure sustainable management and conservation of this ecologically important site while addressing local, regional, and global challenges. The framework's core revolves around advanced scientific research focused on key environmental issues.

The following is a list of key stakeholders identified in Aquatina di Frigole, Italy:

- National Government (Policy oversight and regulatory authority).
- Local Government (Implementation authority and management).
- Academic Institutions (University of Salento and other research entities).
- Private Sector (Tourism operators, local businesses).
- Non-Governmental Organisations (NGOs) and Civil Society Groups (Environmental conservation organisations).
- Citizens (Local residents and seasonal visitors).
- Media (Awareness-raising and public engagement).

4.1.2.1 Influences, barriers and resistance

The framework emphasizes multi-scale management, addressing pressures at local, macro-regional, and global scales. At the local scale, efforts focus on mitigating tourism pressures, dune conservation, and reducing marine/lagoon litter through planning and stakeholder engagement. At the macro-regional scale, the framework tackles plastics and pollutants entering via the Adriatic and Ionian Seas. Globally, strategies address climate change impacts and non-indigenous species.

This approach fosters collaborative decision-making, enabling stakeholders to co-develop sustainable strategies. A key innovation is the use of DNA-based technologies to enhance biodiversity assessments and detect environmental changes early. These technologies establish a detailed biodiversity baseline, aiding in tracking non-indigenous species, assessing fish population health, and detecting climate-driven shifts in species composition.

A major PRO-COAST goal is promoting environmental education and local community participation in conservation. Key initiatives include:

- **School visits and training programs for students** at all educational levels to foster connections between younger generations and nature.
- **Citizen science networks**: Residents contribute local ecological knowledge, participate in biodiversity sampling, beach clean-ups, and bird-watching initiatives.
- **Awareness campaigns**: Educational nature trails and modern tools (e.g., podcasts) broaden

outreach.

Stakeholders in Aquatina di Frigole demonstrate diverse interests and levels of influence in biodiversity conservation initiatives. The University of Salento, along with NGOs and research institutions, plays a leading role in promoting conservation and sustainable management of the area. However, economic dependency on tourism and the absence of stringent regulatory enforcement pose significant challenges.

The principal barriers to conservation include:

- Weak enforcement of environmental regulations – existing policies are in place but are not adequately implemented.
- Economic dependence on tourism – environmental sustainability must be balanced with economic viability.
- Limited public awareness – a lack of understanding regarding biodiversity conservation among residents and visitors.
- Unregulated activities in the lagoon – including illegal fishing, unauthorised water sports, and waste disposal.

Resistance primarily stems from economic actors reliant on tourism and fishing, as stricter environmental regulations could potentially affect their revenue streams. In this context, education and awareness-raising initiatives are critical in aligning stakeholder interests with conservation objectives.

4.1.2.2 Stakeholder Engagement Strategy

Based on the power-vulnerability matrix, the following engagement strategy is proposed:

Table 5. Stakeholders and engagement proposed approaches for CS2

Strategy	Key stakeholders	Proposed approaches
Inform	Media	Public campaigns, dissemination of information
Consult	NGOs, Residents, Academia	Focus groups, policy discussions
Involve	Tourists, Business operators	Eco-tourism initiatives, conservation workshops
Collaborate	Local government, Travel agencies	Joint sustainability frameworks, regulatory adjustments
Empower	National government, Environmental agencies	Policy-driven enforcement, legislative actions

In conclusion, the framework applied in the Aquatina di Frigole Protected Area case study represents a comprehensive and innovative approach to coastal ecosystem management. By integrating advanced research tools, multi-scale environmental management, and community engagement, the framework seeks to protect and enhance biodiversity while addressing the complex challenges posed by human activities, climate change, and global environmental pressures.

4.1.3 CS3. Area of Strunjan (Slovenia)

The aim of the case study in the Strunjan area is wildlife monitoring, focusing in particular on selected mammal and bird species that are source of conflict with local farmers and landowners. The observational data will be used to estimate species richness and population densities. Wildlife monitoring and data collection are conducted using various methods, primarily camera traps and the existing citizen science application SRNA, which will be significantly upgraded as part of this project (e.g., new species included; for hunters added link to the portal for reporting collected eDNA). With the support of the local community, we are investigating how conflicts with wildlife impact the livelihoods of farmers, landowners, and other local residents. We will also address the issue of illegal landfills as potential hotspots for increased wildlife activity due to the availability of additional food sources. One of the project's key goals is to raise public awareness and lay the groundwork for a cleaner, more sustainable waste management.

The following is a list of key stakeholders identified in the Area of Strunjan, Slovenia:

- National Government (Policy and regulatory oversight, including the Ministry of the Environment, Climate and Energy).
- Local Government (Municipality of Piran – management and local policy implementation).
- Landscape Park Strunjan (Local conservation authority responsible for biodiversity protection).
- Academic Institutions (University of Primorska and associated research groups).
- Private Sector (Local businesses, particularly in tourism and agriculture).
- Non-Governmental Organisations (NGOs) (Environmental and wildlife conservation organisations, including the Hunting Association of Slovenia).
- Residents (Local farmers, landowners, and permanent inhabitants).
- Tourists and Seasonal Visitors (Frequent visitors whose activities impact conservation efforts).
- Media (Awareness-raising and public engagement).

4.1.3.1 Influences, barriers and resistance

Stakeholders in the Area of Strunjan present different degrees of influence and involvement in biodiversity conservation. Landscape Park Strunjan plays a pivotal role in ensuring environmental protection, working closely with NGOs, academia, and local authorities. However, economic and social pressures—particularly those from tourism and agriculture—create barriers to effective conservation implementation.

The main barriers to biodiversity conservation in Strunjan include:

- Fragmented governance – Various stakeholders operate under different jurisdictions, leading to coordination challenges.
- Economic reliance on tourism – High tourist footfall supports the economy but also leads to environmental degradation.
- Conflicts between agriculture and conservation – Farmers face restrictions due to biodiversity protection measures.
- Limited funding for conservation initiatives – Insufficient financial resources affect the park’s ability to enforce protection strategies.
- Uncontrolled visitor access – Increased tourism exacerbates pollution and habitat degradation.

Resistance primarily comes from economic sectors that depend on land-use activities that may not align with conservation priorities. Farmers, for example, may resist regulations that impose restrictions on their land use, while some tourism operators may be reluctant to comply with environmental limitations affecting visitor numbers.

4.1.3.2 Stakeholder Engagement Strategy

Based on the power-vulnerability matrix, the following engagement strategy is proposed:

Table 6. Stakeholders and engagement proposed approaches for CS3

Strategy	Key stakeholders	Proposed approaches
Inform	Tourists, Media	Public campaigns, visitor information points, educational programmes
Consult	Local government, Residents	Policy discussions, feedback mechanisms, public consultations
Involve	Farmers, Private Sector	Sustainable agriculture and eco-tourism initiatives, collaborative planning
Collaborate	NGOs, Academic institutions	Joint research projects, biodiversity monitoring, conservation workshops
Empower	National Government, Park authority	Strengthening policy implementation, increasing funding for conservation

4.1.4 CS4. Boka Kotorska Bay (Montenegro)

The case study examines the environmental and socio- economic consequences of cruise tourism in Boka Kotor Bay, a UNESCO World Heritage site known for its natural beauty and cultural significance. The purpose of this study is to systematically review and analyse the current research on tourism impacts on Kotor city and raise awareness to key stakeholders how the increasing number of cruise ships and tourists visiting the bay has led to significant environmental degradation and associated human well-being.

The following is a list of key stakeholders identified in Boka Kotorska Bay, Montenegro:

- National and local government bodies responsible for tourism, environment, and transportation policies (Ministry of Tourism, Ecology, Sustainable Development and Northern Region Development, Ministry of Transport and Maritime Affairs, Ministry of Agriculture, Forestry and Water Management, Municipality of Kotor etc.).
- Port Authorities.
- Local Communities (Residents and businesses in Kotor city whose livelihoods and environments are directly impacted).
- Academic and Research Institutions (Institute of Marine Biology, Maritime Faculty, Faculty of Tourism and Hospitality).
- Environmental NGOs.
- Media (Awareness-raising and public engagement).
- Cruise Line Companies, tourism operator and agency.
- Tourists (cruise passengers, whose choices and behaviours can significantly influence environmental impacts).

4.1.4.1 Influences, barriers and resistance

Stakeholders in Boka Kotorska Bay exhibit varied interests and levels of influence in addressing biodiversity conservation challenges. Local governance structures, academia, and NGOs demonstrate a strong commitment to conservation efforts, promoting sustainable tourism and environmental protection. Meanwhile, commercial interests, including cruise operators and local business owners, often prioritise economic benefits, necessitating strategic engagement to align their activities with conservation goals.

Resistance primarily emerges from stakeholders whose business models depend on high-intensity tourism, requiring extensive dialogue to foster sustainable alternatives.

The principal barriers to effective conservation include weak regulatory enforcement, economic dependency on unsustainable tourism practices, and limited public awareness regarding biodiversity loss. Additionally, balancing the interests of local communities, businesses, and environmental objectives remains a challenge, requiring adaptive governance and multi-stakeholder collaboration.

4.1.4.2 Stakeholder Engagement Strategy

Table 7. Stakeholders and engagement proposed approaches for CS4

Strategy	**Key stakeholders**	**Proposed approaches**
Inform	Media	Public campaigns, informational broadcasts
Consult	NGOs, Residents, Academia	Focus groups, policy discussions
Involve	Tourists, Business operators	Eco-tourism initiatives, conservation workshops
Collaborate	Local government, Travel agencies	Joint sustainability frameworks, regulatory adjustments
Empower	National government, Environmental agencies	Policy-driven enforcement, legislative actions

4.1.5 CS5. Streedagh beach, Sligo (Ireland)

The project in Streedagh beach is investigating on the restoration of sand dunes erosion through engagement of local community groups; awareness campaign and surveys of stakeholders regarding their awareness of sand dune protection measures, willingness to comply and value of ecosystems. These efforts need a high level of cooperation from the identified key local stakeholders including:

- Beach user: Local visitors, surfers.
- Government: Sligo County Council (SCC) (The local Government), national Parks and Wildlife Service (NPWS) (Government authority mandated to managing the Irish State's nature conservation responsibilities and the national parks).
- NGO's: The Clean Coasts (promotes protection and care for coastline, seas, ocean, and marine life), Grange, Co. Sligo Tidy Towns (active group carrying scheduled clean up including at Streedagh beach) , Spanish Armada Society (preserving and promoting the history of the Spanish Armada's presence in Ireland, Streedagh being a key interest).
- Farmers/Landowners: Farmers (traditional sheep farmers), landowners (private landowners managing large parcels at the beach).
- Business operators: Island View Riding Stables (business in horse riding for beach visitors), Atlantic Sheepdogs (promotes traditional Irish sheep farming practices to beach visitors).
- Academia: Atlantic Technological University (ATU, SCORE project).
- Media (Public engagement and awareness).

4.1.5.1 Influences, barriers and resistance

Stakeholders in Streedagh Beach exhibit a range of influences on conservation efforts, with differing levels of power and vulnerability. Local government entities, including the SCC and the NPWS, hold significant regulatory power but require community engagement to ensure effective policy implementation. Farmers and landowners are among the most vulnerable groups, as their livelihoods are directly affected by biodiversity loss and land use regulations. NGOs and environmental activists play a crucial role in raising awareness and advocating for sustainable coastal management, though they may encounter resistance from economic stakeholders reliant on tourism.

The key barriers to effective stakeholder engagement include resistance that may arise from landowners and visitors due to perceived restrictions or disruptions to their usual activities by the restoration initiatives. Conflicts between conservation goals and economic interests, particularly among some landowners who double in visitors related businesses fearing financial losses due to stricter environmental regulations. Additionally, there is a lack of awareness among some stakeholders, particularly beach visitors, who may not fully grasp the significance of biodiversity protection. Political considerations also play a role, as policy decisions may be influenced by upcoming elections and the necessity of balancing economic growth with environmental sustainability.

4.1.5.2 Stakeholder Engagement Strategy

Table 8. Stakeholders and engagement proposed approaches for CS5

Strategy	Key stakeholders	Proposed approaches
Inform	Media, General Public, appropriate local Advocacy Groups	Awareness campaigns, public forums, social media outreach
Consult	Academia (e.g. SCORE project)	Scientific studies, stakeholder meetings
Involve	Landowners, visitors, business owners, farmers.	Outreach and training workshops, collaborative management programmes
Collaborate	NGO's	Joint restoration planning, participatory decision-making
Empower	NPWS, SCC	Scientific reports for policy reviews

4.1.6 CS6. Arne Parish (United Kingdom)

The project in Arne Parish is investigating whether conditions can be met for the restoration of the native red squirrel locally after its replacement by the alien grey squirrel. Unlike the red squirrel, the North American grey squirrel strips bark from native trees, which can destroy plantings intended to sequester carbon. Guided by removal of alien species from smaller islands, this elimination of a damage-causing invasive would be a two-stage process. The first stage requires removal of the grey squirrel on large landholdings to a level at which squirrelpox virus transmission from grey squirrels (which have good immunity) to red squirrels (in which the virus is lethal) becomes unimportant. This needs a high level of cooperation from landowners and hunters. The second "mop-up" stage needs strong support from the

whole local rural population to facilitate the removal of remaining grey squirrels (e.g. by reporting sightings). The following is a list of key stakeholders identified for this restoration in Arne Parish, UK:

- Landowners (Private landowners managing large estates).
- Local Population (Indigenous residents and newly-settled residents, especially those working in nature - gardeners, farmers, foresters).
- Academia (Conservation scientists, some who worked for research institutions).
- Interest Groups (Individuals interested in conservation, Natural England (government conservation body), experts interested in squirrel conservation).
- Local Government at NUTS4 (County) and NUTS5 (Parish) Council levels.
- Animal Rights Activists (Advocates for ethical wildlife treatment).
- Media (Public engagement and awareness).
- Hunters (Stakeholders with interests in land and wildlife management).

4.1.6.1 Influences, barriers and resistance

Stakeholder dynamics in Arne Parish reflect a diverse range of perspectives regarding biodiversity conservation. For the specified project on squirrels, landowners possess the highest decision-making power as their opposition would stop the project. Support from hunters is also essential. Indigenous and newly-settled residents working in nature display high motivation for conservation but may have conflicting views on how best to manage wild species. Academia and conservation interest groups contribute essential research and advocacy and serve as an example for other residents.

Barriers to this conservation effort would include resistance from landowners due perceived inconvenience, and concerns from animal rights groups regarding ethical considerations in species management. Furthermore, limited public awareness and misinformation regarding conservation strategies can hinder broad community support. Although removal of grey squirrels is facilitated by law, restoring red squirrels is potentially subject to barriers.

4.1.6.2 Stakeholder Engagement Strategy

Table 9. Stakeholders and engagement proposed approaches for CS6

Strategy	Key stakeholders	Proposed approaches
Inform	Media, General Public, appropriate local Advocacy Groups	Awareness campaigns, public forums, social media outreach
Consult	Academia, Natural England, Local Government	Scientific studies, stakeholder meetings, policy reviews
Involve	Landowners, Farmers, Foresters, Conservation Groups	Training workshops, collaborative management programmes
Collaborate	Local Community, Parish Council	Joint conservation planning, participatory decision-making
Empower	Hunters, Local Environmental Bodies	Regulatory influence, biodiversity stewardship partnerships

4.1.7 CS7.a. Eidsvika-Kildn (Norway)

The case of Eidsvika-Kildn aims to follow the public discourse about the proposed cruise-ship terminal as well as the relevant political and administrative framework in which this land-use conflict is embedded. A local group of nature-protecters and local residients mobilised to oppose to the proposed cruise-ship terminal. Planned actions are to support this group and empower them to achieve their goals: raising public awareness about the case and the ecological value of the are, claim transparency from the entrepeneurs and politics in the decision making process and eventually protect the habitat of many coastal species to be object to the cruise ship terminal.

The following is a list of key stakeholders identified in Eidsvika-Kildn, Norway:

- National Government (Norwegian Environmental Agency, Nautical Authority).
- Administrators and planners in the regional tier of government (Vestland Fylke) and representatives of the national executive at the regional level (Statsforvalteren) with powers to overrule local decisions.
- Local Government (Municipality of Askøy, County Government of Vestland), including both elected politicians and administrators in the planning department.
- Private Sector (Tertnes Holding – proposed cruise terminal developer).
- Non-Governmental Organisations (NGOs) (Eidsvika Venner – local activist group, Naturvernforbundet Askøy – local nature protection association).
- Residents (Local community members, land co-owners of Follese Felleskap).
- Media (Awareness-raising and public engagement).

4.1.7.1 Influences, barriers, and resistance

The Eidsvika-Kildn case study revolves around a proposed cruise terminal development, raising concerns about environmental impact, land-use planning, and biodiversity protection. Stakeholders are divided between economic growth (Tertnes Holding, developers) and environmental conservation (NGOs, residents).

The primary barriers to biodiversity conservation and sustainable land use include:

- Planned urbanisation – The development proposal would change land-use classification from agricultural/recreational to commercial infrastructure.
- Environmental risks – Pollution from cruise ships, habitat destruction, and potential CO_2 emissions from disturbed bog ecosystems.
- Governance complexity – Multiple levels of government and conflicting interests slow down decision-making.
- Lack of biodiversity data – No comprehensive ecological assessment of species at risk has been conducted.
- Recreational importance for community members – The area is highly appreciated by local community members for recreational use like hiking, climbing or swimming (enabler of conservation, rather than barrier).

4.1.7.2 Stakeholder Engagement Strategy

Based on the power-vulnerability matrix, the following engagement strategy is proposed:

Table 10. Stakeholders and engagement proposed approaches for CS7.b

Strategy	Key stakeholders	Proposed approaches
Inform	General public, Media	Public awareness campaigns, community meetings, social media work

Consult	NGOs, local and regional government	Interviews and stakeholder dialogues, consulting for different mobilisations strategies
Involve	Nature conservation groups, local residents, Entrepreneurs	Participatory research, dialogues
Collaborate	Environmental Agencies	Analysing their assessments of the site
Empower	NGOs and local residents	Strengthening their strategy to forward their cause and opening opportunities for other NGOs to learn from this case

4.1.8 CS7.b. Ghostfishing (Norway)

The project aims to bring the issue of 'ghost fishing' (meaning lost fishing gear, particularly pots, continues to ensnare animals on the seabed without control) into public awareness targeting recreational fishers, environmental NGOs, and the general public and practically improve the ecological problem of abandoned pots on the seabed that fish without control. Through an operation involving multiple stakeholders (NGOs, small maritime service providers, and divers), a large amount of lost fishing gear is removed from the seabed. To fund the effort, a convincing application — based on a successful pilot phase — was developed and submitted to major environmental funders. The goal was both to secure financial support and to draw attention to this under-addressed environmental issue within the funding arena. A detailed plan and report will be produced during the clean-up operation, with the aim of enabling other actors to replicate the project. This makes the resource-intensive process more accessible and achievable for organizations across Norway — and potentially beyond. Another key goal is to refine the operation following the test phase, in order to improve its overall effectiveness. The project also includes a social media campaign and other outreach efforts to raise awareness about ghost fishing among recreational fishers and the general public. Throughout the process, various stakeholders will be actively involved, with the hope that this initiative will also contribute to the development of stronger policies to prevent ghost fishing. Recovered fishing pots and other fishing gear is repaired and resold.

Provided is a list of key stakeholders identified in the Ghostfishing case in Norway:

- National Government (Directorate of Fisheries – policy and regulatory authority).
- Non-Governmental organisations engaged in maritime pollution.
- Local diving teams.
- Recreational fishers.
- Large-scale funders for environmental causes.
- Media (Awareness-raising and public engagement).

4.1.8.1 Influences, barriers and resistance

Stakeholders in Ghostfishing's case study have varying interests and degrees of influence in addressing ghost fishing and marine conservation. The Directorate of Fisheries plays a crucial role in regulation and enforcement, while NGOs contribute through advocacy, awareness-raising, and practical actions like cleaning the seabed. However, the large number of recreational fishers spread along Norway's extensive coastline (82 000 km in total), combined with the invisibility of lost gear, makes the issue difficult to prevent and clean up. The main barriers to addressing ghost fishing

- Limited policies on ghost fishing – Current regulations primarily focus on practices such as checking pots while they are in use and requiring design features such as release mechanisms that activate after extended exposure to saltwater. However, policies should be expanded to include retailers and introduce mandatory tagging of pots with the owner's information, similar to practices already in place for commercial fishing.
- Limited monitoring – The Directorate of Fisheries created an app on which people can report lost gear. However, all gear that was lost before the establishment of the app remain undetected, and under/non-reporting remains a challenge.
- Economic conflicts –Retailers sell cheap, low-quality pots that are more likely to be lost. Additionally, the financial incentive for fishers to retrieve lost pots is too small to offset the efforts of reporting unless motivation is impacted.
- Limited public awareness – Recreational fishers may not fully understand the ecological impact of lost fishing gear.
- Limited skills and knowledge in reporting lost gear – Not all recreational fishers are aware of the designated app and digitally fluent enough to use it.
- Varying fishing practices – Not all recreational fishers follow best practices when fishing with the pots.
- Funding constraints – NGOs and other environmental groups have limited financial resources to expand clean-up operations to under-water clean ups

4.1.8.2 Stakeholder Engagement Strategy

Table 11. Stakeholders and engagement proposed approaches for CS7.a

Strategy	Key Stakeholders	Proposed Approaches
Inform	Recreational Fishers	Awareness campaigns, public information materials, social media outreach
Consult	Directorate of fisheries	Using the established report system (and provided data) from the Directorate of the fisheries for the operation, providing data and feedback from the operation as well as recommendations for policies, mutual learning
Involve	Retail	Establishing a second-hand gear system (recycling system) with the lost gear as an alternative to buying cheap gear of poor quality from other retailers
Collaborate	Divers	Joint marine clean-up operations, efficiency improvement
Empower	Environmental NGOs	Stakeholder meetings, provisions of report and manual of the operation for other NGOs to adopt

4.1.9 CS8. Kloogaranna-Laulasmaa (Estonia)

In Kloogaranna-Laulasmaa, effective stakeholder engagement has been fostered by understanding and leveraging the interests of diverse societal groups. This has involved conducting an in-depth stakeholder analysis aimed at identifying key actors, their respective interests, and their potential roles in coastal management and conservation processes.

This analysis encompasses local communities, government agencies, businesses, and NGOs. To raise awareness and collect input on coastal management strategies, multiple public engagement tactics have been implemented, such as community forums and workshops. Investment in high-quality public spaces has been prioritized, enhancing accessibility and promoting recreational ecosystem services. A data collection framework has also been established to monitor coastal health and track tourism impacts.

The following is a list of key stakeholders identified in Kloogaranna-Laulasmaa, Estonia:

- National Governance Representatives (Environmental agencies responsible for coastal policies)
- Local Authorities and Municipality (Regional and municipal governance bodies)
- Private Sector (Companies (restaurants, shops, tourism services), Real estate companies (developers and property owners))
- Educational Institutions (Schools and kindergartens focusing on environmental education)
- Civil Sector Organizations (Community NGOs, Sport-action groups, Fishermen (small-scale local fishers))
- Citizens (Seasonal residents (primarily Russian property owners), Permanent residents, Tourists and visitors, General public and media)
- Access Providers (Transport services such as bus and train operators)
- Regional Action Groups (Operating under EU policies)
- Academia (Universities and local development funds supporting research and innovation)
- Media (Awareness-raising and public engagement).

4.1.9.1 Influences, barriers and resistance

Stakeholder interactions in Kloogaranna-Laulasmaa highlight complex relationships between conservation goals, economic activities, and regulatory enforcement. National governance representatives hold significant decision-making power but have lower direct vulnerability as their policies cover broader areas. Local authorities possess more immediate influence on regulations but require national alignment.

The private sector, particularly real estate developers and tourism-dependent businesses, exerts strong economic influence and is among the most vulnerable groups due to reliance on environmental quality. Conservation efforts must balance their interests with biodiversity protection. Community NGOs and environmental groups play an advocacy role but often lack the power to enforce change. Fishermen, a highly vulnerable group, face challenges due to environmental degradation impacting their livelihood, making them crucial stakeholders in conservation discussions.

Key barriers to engagement include economic concerns from private businesses fearing restrictions on tourism development, resistance from real estate companies facing tighter regulations, and a general lack of awareness among some stakeholder groups, including tourists and seasonal residents. Additionally, political challenges emerge in aligning national and local policies with conservation objectives.

4.1.9.2 Stakeholder Engagement Strategy

Table 12. Stakeholders and engagement proposed approaches for CS8

Strategy	Key stakeholders	Proposed approaches
Inform	Media, General Public, Seasonal Residents, Tourists	Awareness campaigns, media outreach, public forums
Consult	Academia, Regional action groups, Educational Institutions	Research collaborations, stakeholder meetings, surveys
Involve	Community NGOs, Sport-action groups, Permanent residents	Community-led conservation activities, workshops
Collaborate	Local Authorities, Private Businesses, Real estate companies	Joint environmental planning, policy discussions
Empower	National governance, Access providers, Fishermen	Legislative integration, infrastructure development, sustainability incentives

4.1.10 CS9. Corbu (Romania)

The project at Corbu Beach aims to raise public awareness about the importance of the area's rich biodiversity by promoting sustainable development and tourism. As a destination known for its natural beauty, unspoiled coastline, and proximity to protected areas like the Danube Delta Biosphere Reserve, tourism can play a key role in shaping Corbu's economy, infrastructure, environment, and community life. To achieve this, the communication campaign is being developed in close collaboration with local authorities and communities, targeting residents, tourists and local entrepreneurs. The campaign will reach its audience through mass media, on-site informative materials, local workshops, and other educational initiatives.

The following is a list of key stakeholders identified in Corbu Beach, Romania:

- National Government (Ministry of Environment, Waters and Forests – regulatory authority, Ministry of Development, Public Works and Administration).
- Local Government (Corbu Municipality, Constanța County Council, Danube Delta Biosphere Reserve Administration).
- Academic Institutions (University “Ovidius” of Constanța, University “Alexandru Ioan Cuza” of Iași, National Institute for Marine Research and Development “Grigore Antipa”).
- Private Sector (Tourism operators, real estate developers, local businesses).
- Non-Governmental Organisations (NGOs) (Romanian Ornithological Society/BirdLife Romania, Mare Nostrum).
- Residents (Local citizens, schools).
- Tourists and Seasonal Visitors (National and international visitors engaging in ecotourism and leisure activities).
- Media (Awareness-raising and public engagement).

4.1.10.1 Influences, barriers and resistance

Stakeholders in Corbu Beach present varied levels of influence and commitment to biodiversity conservation and sustainable tourism. The Danube Delta Biosphere Reserve Administration and environmental NGOs lead conservation efforts, while local authorities manage development regulations. However, economic activities such as tourism, real estate expansion, pose significant challenges.

The main barriers to conservation efforts include:

- Conflicts between conservation and development – Real estate and tourism expansion often conflict with environmental regulations.
- Uncontrolled tourism – Lack of regulation of visitor numbers and activities leads to habitat degradation.
- Limited environmental monitoring – There is minimal consistent data collection on biodiversity and ecosystem health.
- Fragmented governance – Overlapping jurisdiction of local, regional, and national authorities complicates conservation enforcement.
- Insufficient funding – Conservation programs rely on limited governmental and NGO funding sources.

Resistance comes primarily from the tourism and real estate sectors, where increased environmental regulation may limit business expansion. Additionally, local communities may resist conservation policies if they perceive restrictions on land use or economic opportunities.

4.1.10.2 Stakeholder Engagement Strategy

Table 13. Stakeholders and engagement proposed approaches for CS9

Strategy	Key stakeholders	Proposed approaches
Inform	Tourists, Local residents	Awareness campaigns, eco-friendly tourism initiatives
Consult	Local government, NGOs	Public forums, consultations on zoning regulations
Involve	Local authorities, Private sector, Tourism operators	Sustainable tourism certification, eco-tourism projects
Collaborate	Local authorities, Academic institutions, Danube Delta Biosphere Reserve	Joint research, conservation monitoring, citizen science projects
Empower	National government, Local authorities	Strengthening environmental policies, funding for conservation

4.2 Identification of local knowledge

In this section, the results obtained from the identification of key stakeholders and the various sources of information and local knowledge for all case studies are presented, classified according to Table 3, as explained in the previous section.

To keep this section concise, the full results are available on Zenodo, and the graphs per case study, in Annex 2. This section presents summary graphs.

The contributions per case study seem to show significant variation. For example, CS1, CS2, and CS9 provided 11, 11, and 13 contributions, respectively, while CS3 contributed only five (Figure 1). This will be analyzed further, as the number of contributions includes both local information sources identified in each case study and project-generated sources developed within the PRO-COAST framework. Therefore, the final figures may reflect this combination rather than a count of entirely new or unique entries per case.

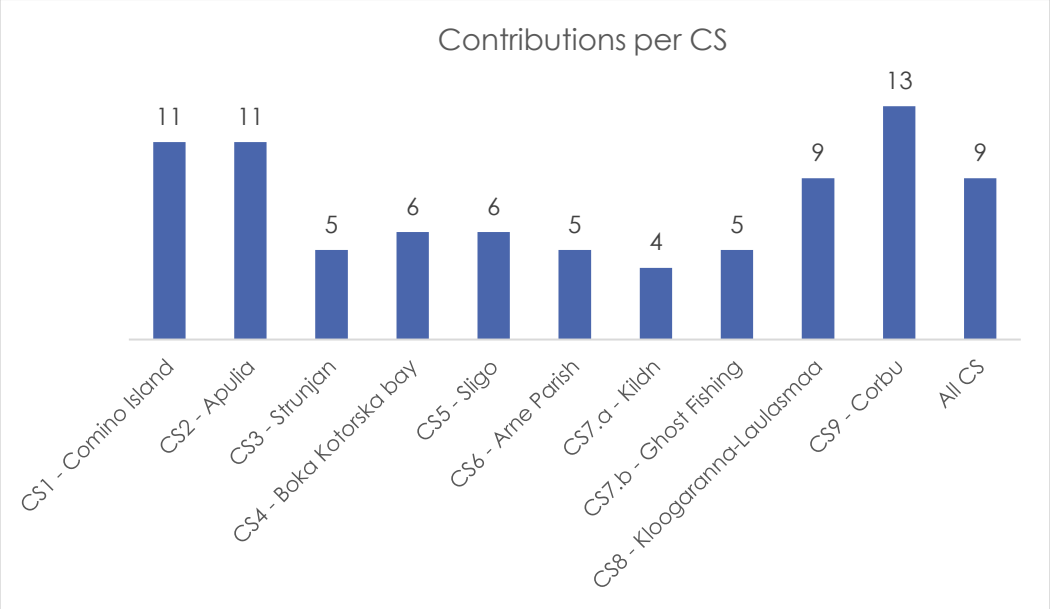


Figure 1. Number of key sources of information from each CS. Numbers include both project-generated and locally identified information sources

In the case of the type of information/local knowledge — the category with the most options to choose from — there was high variability between the different options, with only one contribution under 'historical archives' and 18 under 'other.' The high number in the ‘other’ category indicates that most contributions did not fall within the categories provided (Figure 2).

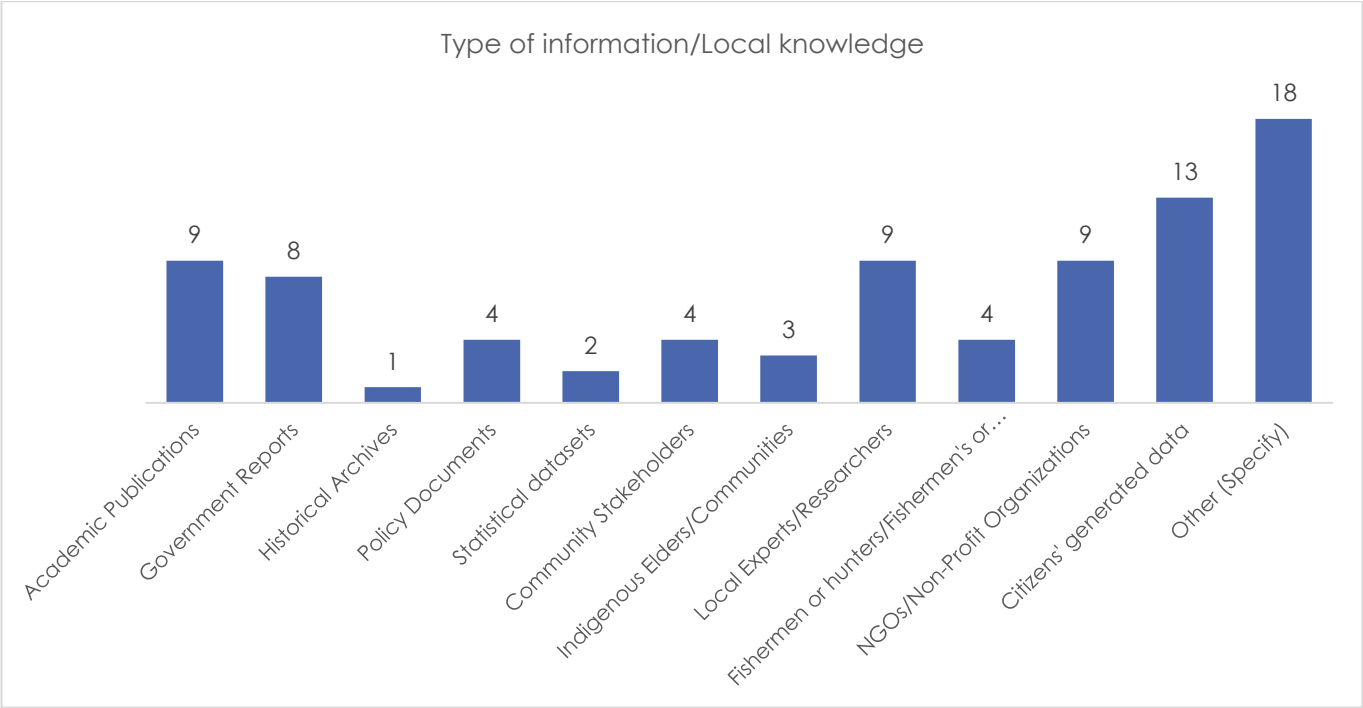


Figure 2. The types of information reported across all the case studies. 'Other' was the largest category, indicating a significant proportion of uncategorized or context-specific sources.

Overall, the number of secondary data contributions (56) was double that of primary data contributions (28), (Figure 3).

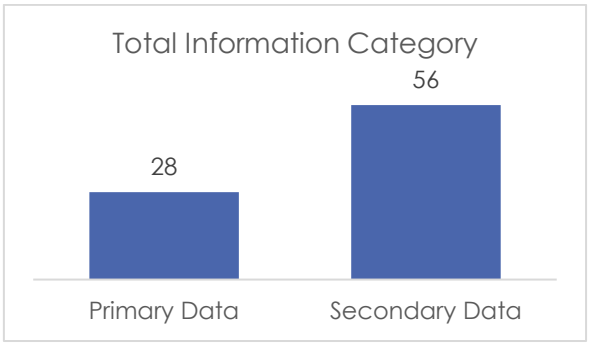


Figure 3. Distribution by information category (Primary vs. Secondary). Secondary data sources were twice as common as primary ones across all case studies.

Geographical scale accounts for 57 contributions, compared to 22 at the organizational scale, and five contributions that were not categorized according to scale (Figure 4).

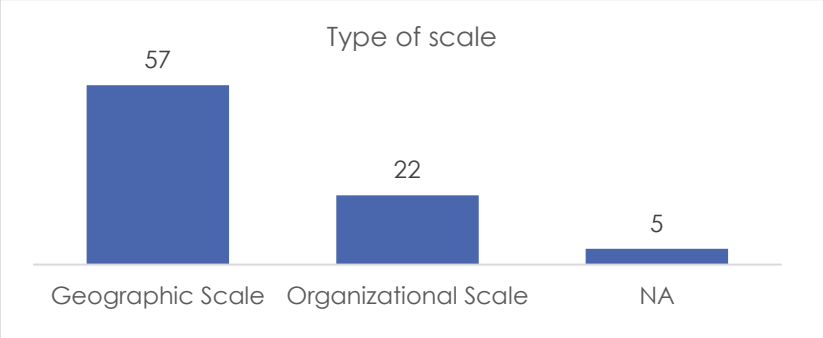


Figure 4. Distribution of sources by type of scale (geographic vs. organizational). Most sources were classified according to geographic scale, while fewer were categorized using organizational scale.

In the Scale/Reach category, 'local/community' received the highest number of contributions (21), followed by 'national,' 'regional,' 'government/policy level,' 'academic/research institutions,' and 'community/local organizations,' all of which had a similar number of contributions. No contributions were recorded from international organizations (Figure 5).

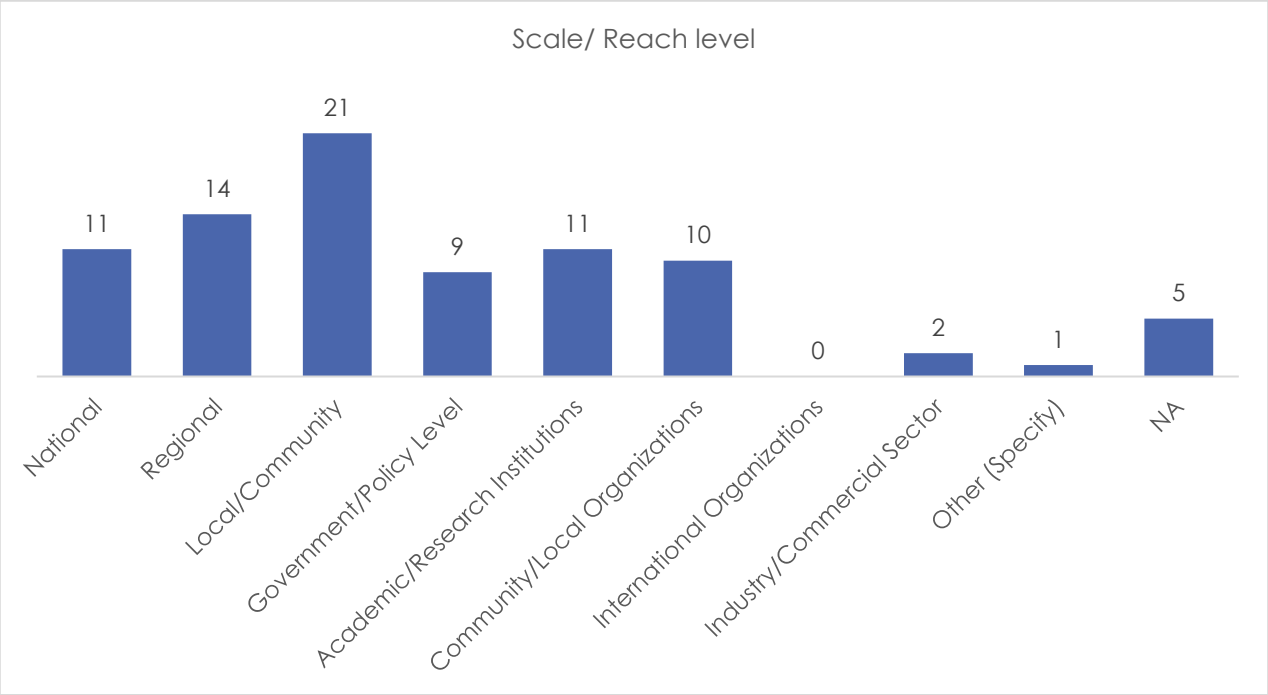


Figure 5. Classification of contributions as project-generated vs. pre-existing sources. The 'local/community' level was the most frequent scale of reference, followed by national, regional, and other organizational levels. No international-level contributions were reported.

Finally, a distinction has been made between information sources that have been generated within the project and those that already existed (Figure 6). Out of the total provided, 23 are project-related contributions, either already produced or planned, while 61 are pre-existing sources. Of the 23 project-related ones, nine are common to all case studies, as they refer to information that will be obtained through tasks from other work packages (for example, interviews with change agents, or experiments conducted in controlled environments or field conditions across the different case studies...)

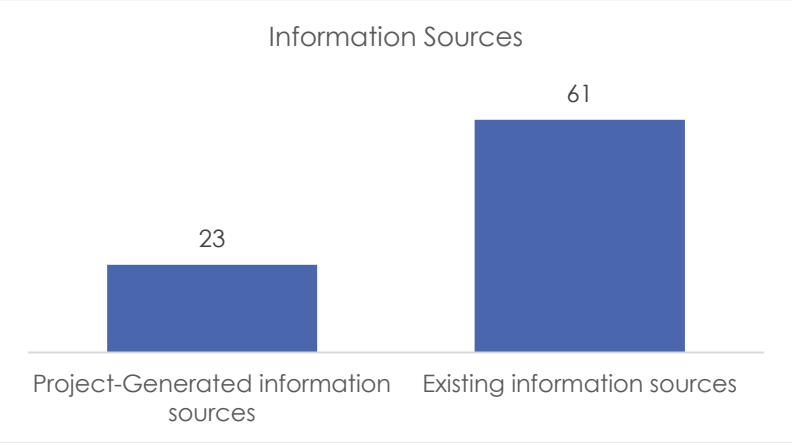


Figure 6. Distribution by scale/reach level of the information sources. A distinction between sources created within the PRO-COAST project and those that pre-existed. Of the 23 project-generated contributions, nine were shared across all case studies.

5 DISCUSSION

Stakeholder engagement has been a fundamental element in the PRO-COAST framework, ensuring that the perspectives of those most affected by biodiversity and ecosystem changes are integrated into decision-making processes. The use of the power–vulnerability matrix across case studies helped classify stakeholders and tailor engagement strategies, ranging from simple awareness-raising to active empowerment. In line with the conceptual integration proposed in D4.1, D4.2 reinforces the importance of governance systems in shaping stakeholder influence and resilience. By translating the GS–A–I–O linkages into operational tools such as the influence–vulnerability matrix, we provide a practical mechanism for embedding governance insights into participatory and adaptive management strategies across the case studies.

A common pattern observed is the imbalance between influence and vulnerability: actors with high decision-making power (e.g., government bodies, landowners) often show lower vulnerability, while highly vulnerable groups (e.g., small-scale farmers, fishermen) have limited influence. This highlights the importance of designing inclusive processes that amplify underrepresented voices.

Resistance to engagement was especially notable among economic stakeholders, often due to concerns over potential trade-offs with conservation goals. In many cases, this stems from a lack of awareness or fear of losing economic opportunities, particularly in tourism or development sectors.

Barriers such as limited communication channels, fragmented governance structures, and low levels of stakeholder trust were consistently observed. These factors indicate that engagement constitutes not solely a technical endeavor but also a social process that is influenced by contextual dynamics, historical factors, and institutional adaptability. Overall, these findings emphasize the necessity for ongoing, adaptable engagement strategies (strategies that foster trust, promote collaboration, and acknowledge the diverse roles and interests of local stakeholders in facilitating sustainable change). In the context of collecting local knowledge, the participation of the case studies has been instrumental. As demonstrated in the graphs and the table available on Zenodo, all case studies have provided pages and documents relevant to their respective regions, which serve as a valuable database.

With respect to the additional sources of information, the distribution across the various categories exhibits a relatively homogeneous pattern. Notably, within the "type of information/local knowledge" category, the

majority of entries are classified under the "other" option. This observation suggests that, despite the presence of numerous predefined categories, a significant number of sources do not conform to them, either due to the inherent difficulty in encompassing all conceivable categories or, more importantly, due to the challenges in categorising local-level information, which is often highly context-specific and heterogeneous. To a lesser extent, the distribution within the "information category" and "type of scale" also reflects obstacles in obtaining primary data or organizational-scale sources, as the overwhelming majority of contributions were classified as secondary data and associated with geographical scale, respectively.

These trends may be attributed to several factors. Firstly, the prominence of the "other" category in local knowledge types likely reflects the context-specific and heterogeneous nature of local information, which often fails to conform to predefined classifications. Each region or case study may possess distinct methodologies for documenting and disseminating knowledge (such as community reports, oral histories, or informal records) that are pertinent yet challenging to categorize under conventional labels. Secondly, the absence of sources from international organizations may stem from language barriers, limited dissemination of localized content, or a general lack of detailed, place-based knowledge at the international level. International sources typically emphasize broader trends and may not deliver the requisite granularity for local or regional assessments. This highlights the need for more flexible classification systems and supports a broader methodological reflection within PRO-COAST on how to better capture and integrate diverse knowledge types.

Similarly, the challenges associated with identifying sources at the “organizational scale” may indicate that institutions or entities at this level either do not consistently publish this type of information or that such data is not readily accessible. The reliance on “geographical scale” and “primary data” further underscores the efforts employed by case studies to gather or obtain information that is directly pertinent to their specific context, which may also suggest a paucity of secondary or synthesized data available for these areas.

Ultimately, these findings emphasize the significance of locally-driven contributions in the aggregation of relevant and meaningful knowledge. They highlight the importance of collaboration with stakeholders who are deeply integrated within the territory, as well as the necessity for more adaptable frameworks capable of accommodating a diversity of knowledge sources.

ANNEX 1

Classification: Power – Vulnerability matrix

- CS1 – Comino Island

Stakeholder	Power	Justification	Vulnerability	Justification
National Government	High	Legal power and NATURA 2000 designation	Low	Lack of effective regulatory enforcement
Local Government	High/Moderate	Depends on national government	Low	Limited influence on policies
Malta Tourism Authority	High/Moderate	Regulates maritime transport licences	Low	Indirect influence
Hotel "Hili-Group"	High	Economic and relational power	High/Moderate	Dependent on environmental attractiveness
NGOs (e.g., BirdLife Malta)	Low	Community mobilisation	Moderate	Interest in conservation
Activists (Moviment Graffiti)	Low	Social mobilisation	High/Moderate	Reputational risks
Residents of Comino	Moderate	Voting power	High	Interest in conservation and quality of life
Small Businesses (kiosks)	Moderate	Moderate economic power	Moderate	Dependent on tourism
Academia	Moderate	Scientific research and advisory role	Moderate	Conservation focus
Media	Low	Soft power (influence)	Low	Not directly affected

- CS2. Protected area of Aquatina di Frigole, Apulia, Italy

Stakeholder	Power	Justification	Vulnerability	Justification
National Government	High	Legal authority and policy regulation	Low	Indirectly affected
Local Government	High/Moderate	Implementation and policy enforcement	Moderate	Reliance on local support
Academic Institutions	Moderate	Influence in research and conservation	Moderate	Focus on scientific studies
Private Sector	Moderate	Economic power within the local economy	High	Dependence on tourism

NGOs & Civil Society Groups	High/Moderate	Active role in conservation efforts	Moderate/High	Reputational risk if initiatives fail
Fishermen	Low	Small and ageing workforce	Very High	Livelihood threatened by biodiversity loss
Media	High	Ability to influence public perception	Low	Not directly affected

- CS3. Area of Strunjan, Slovenia

Stakeholder	Power	Justification	Vulnerability	Justification
National Government	High	Legislative authority and environmental policy enforcement	Low	Indirectly affected by conservation challenges
Local Government	Moderate	Implements conservation initiatives locally	Moderate	Requires alignment with national policies
Landscape Park Strunjan	High	Main conservation authority within the CS area	Moderate	Dependent on funding and policy support
Academic Institutions	Moderate	Research and monitoring expertise	Moderate	Focus on data collection rather than governance
Private Sector	Moderate	Economic power in tourism and agriculture sectors	High	Subject to regulatory and environmental constraints
NGOs & Civil Society Groups	High/Moderate	Advocates for conservation policies and public engagement	Moderate/High	May struggle with funding and political influence
Farmers	Low	Small stakeholder group with limited influence	Very High	Directly affected by biodiversity and land use policies
Tourists & Seasonal Visitors	Moderate	Contribute significantly to local economy	Low	Indirectly impacted by conservation efforts

- CS4. Boka Kotorska Bay, Montenegro

Stakeholder	Power	Justification	Vulnerability	Justification
National Government	High	Legal authority, policy decisions	Low	Indirectly affected
Local Government	High/Moderate	Implementation role, policy enforcement	Moderate	Dependence on local support
Cruise Operators	Moderate	Economic influence, tourism dependency	Moderate/High	Vulnerable to tourism restrictions
Fishermen	Low	Small, ageing workforce	Very High	Livelihood threatened by biodiversity loss
Business Owners	Moderate	Economic power in local economy	High	Dependence on tourism
NGOs & Civil Groups	High/Moderate	Active role in conservation	Moderate/High	Reputation risk if ineffective
Academia	Moderate	Research influence	Moderate	Conservation focus
Media	High	Public awareness, soft power	Low	Not directly affected

- CS5. Streedagh beach, Sligo, Ireland

Stakeholder	Power	Justification	Vulnerability	Justification
County Council	High	Legal authority, environmental policies	Low	Regulatory influence
Farmers / Landowners	Low/Moderate	Some economic power	Very High	Livelihood at risk due to biodiversity loss
Local Business Owners	Moderate	Economic power in local tourism	Moderate/High	Dependence on tourism
Seasonal Business	Moderate	Economic influence (seasonal tourism)	Low	Could relocate if tourism declines

Tourists (Domestic)	Moderate	Economic contribution	Low	More concerned about biodiversity
Tourists (International)	Moderate	Economic impact	Low	Less connected to biodiversity
NGOs & Activists	Moderate	Environmental advocacy	Moderate/High	Risk of reduced influence
Academia	Moderate	Research expertise	Moderate	Conservation-focused
Media	High	Public influence, awareness	Low	Not directly affected

- CS6. Arne Parish, UK

Stakeholder	Power	Justification	Vulnerability	Justification
Landowners	High	Ownership and decision-making power	Moderate	Potential land use restrictions
Indigenous Communities	High/Moderate	Cultural ties, community voting influence	High/Moderate	Strong ecological connection and interests
Permanent Farmers	Moderate	Economic dependency on land use	High	Sensitive to land management changes
Cultivators	Moderate	Social and ethical influence	Moderate	Conservation interest without direct dependency
General Population	Low	Community engagement influence	Low	No direct impact but general conservation interest
Academia	Low	Knowledge-driven soft power	Moderate/High	Dependent on conservation funding, reputation
Conservation Interest Groups	Moderate	Organised advocacy, government cooperation	Moderate/High	Economic dependency, reputational impact
Parish Council	Moderate	Local governance and policy consultation	Moderate	Relies on community support for legitimacy

Animal Rights Groups	High	Strong lobbying and advocacy power	High/Mod	Focused on ethical wildlife treatment
Media	Moderate/High	Public influence and awareness	Low	Interest in public engagement
Hunters	Moderate	Stakeholder in land and wildlife management	Moderate	Interests aligned with biodiversity balance

- CS7. a. Eidsvika-Kildn, Norway

Stakeholder	Power	Justification	Vulnerability	Justification
Municipality of Askøy	High	Governing body responsible for land-use planning	Moderate	Subject to political and economic pressures
County Government of Vestland	Moderate	Regional planning authority	Moderate	Limited direct control over local decisions
Norwegian Environmental Agency	Moderate	Regulatory oversight on environmental protection	Moderate	Focused on compliance rather than local governance
Tertnes Holding (Developer)	High	Financial power and influence in infrastructure	High	Project dependent on government approvals
NGOs & Civil Society Groups	Moderate	Advocacy and public mobilisation	High	Relies on community engagement and external support
Local Residents & Land Co-owners	Moderate	Land ownership influence on project feasibility	High	Potential economic gains vs. environmental concerns

- CS7. b. Ghostfishing, Norway

Stakeholder	Power	Justification	Vulnerability	Justification
Directorate of Fisheries	High	Regulatory authority over fishing practices	Low	Indirectly affected by ghost fishing impact
Coast Guard	High	Enforces national fishing laws and monitoring	Low	Operates under national directives

Academic Institutions	Moderate	Provides scientific research and monitoring	Moderate	Limited direct influence on policy
Private Sector	Moderate	Economic power in fishing industries	High	Subject to regulatory and conservation constraints
NGOs & Civil Society Groups	High/Moderate	Environmental advocacy, conservation initiatives	Moderate/High	Limited by funding and institutional support
Recreational Fishers	Low	Small stakeholder group with limited influence	High	Affected by policy restrictions and environmental changes
Tourists & Seasonal Visitors	Moderate	Indirect influence through economic contributions	Low	Not directly affected by ghost fishing practices

- CS8. Kloogaranna-Laulasmaa, Estonia

Stakeholder	Power	Justification	Vulnerability	Justification
National Governance	High	Legal authority over environmental policies	Low	Broader jurisdiction, less direct impact
Local Authorities	Moderate/High	Regional decision-making influence	Low/Moderate	Locally involved but not directly affected
Private Companies	Moderate	Own businesses dependent on tourism	High/Moderate	Economic reliance on tourism and landscape
Real Estate Companies	High	Major landowners and political influence	Moderate	Regulatory changes could impact them
Educational Institutions	Low	No legal power, focused on education	Low/Moderate	Indirect influence via awareness programs

Community NGOs	Low/Moderate	Initiate local conservation activities	Moderate	Partially involved in biodiversity issues
Sport-Action Groups	Low	No major influence, activity-dependent	Moderate/High	Landscape-dependent activities
Fishermen	Low	Small and loosely organised group	High	Direct livelihood dependence on ecosystem
Seasonal Residents	Low	Own property but lack voting rights	Low/Moderate	Use of land but no governance role
Permanent Residents	Moderate	Voting rights and land ownership	Moderate	Directly affected by environmental changes
Tourists & Visitors	Moderate/High	Economic impact through spending	Moderate	Interest in tourism but not deeply invested
Media & Public	Moderate/Low	Soft influence through awareness	Low	Indirectly involved in conservation
Access Providers	High	Control transport and access	Low	Centrally regulated services
Regional Action Groups	Moderate	Receive EU funding, work on conservation	Low	Less locally affected due to EU support
Academia	Moderate	Knowledge and research-based influence	Low	Indirect impact, supports informed policies

- CS9. Corbu, Romania

Stakeholder	Power	Justification	Vulnerability	Justification
National Government	High	Regulatory authority, environmental legislation	Low	Indirectly affected by local conservation challenges
Local Government	High	Implementation of local conservation policies	Moderate	Relies on state funding and local political support
Danube Delta Biosphere Reserve	High	Key conservation entity	Moderate	Limited enforcement capacity
Academic Institutions	Moderate	Scientific research, biodiversity monitoring	Moderate	Focused on research rather than direct governance
Private Sector	High	Economic influence in tourism and real estate	High	Subject to regulatory constraints and conservation policies
NGOs & Civil Society Groups	Moderate	Environmental advocacy, community engagement	High	Dependent on external funding and policy support
Local Residents	Low	Directly affected by policy changes and tourism	High	Socioeconomic dependence on tourism development
Tourists & Seasonal Visitors	Moderate	Economic contributors through tourism	Low	Not directly affected by conservation policies

ANNEX 2

Frequency (number of) of local knowledge sources per CS

		CS1	CS2	CS3	CS4	CS5	CS6	CS7.A	CS7.B	CS8	CS9
	PRO-COAST Partner Contributions	11	11	5	6	6	5	4	5	9	12
Information category	Primary Data	3	5	0	0	1	3	1	0	6	1
	Secondary Data	8	6	5	6	5	2	3	5	3	11
Type of Information/Local Knowledge	Academic Publications	1	4	0	1	0	1	0	1	0	0
	Government Reports	1	0	0	1	2	0	1	1	3	3
	Historical Archives	1	0	0	0	0	0	0	0	0	0
	Policy Documents	0	0	0	1	0	0	0	0	2	0
	Statistical datasets	0	0	0	1	0	0	0	0	0	0
	Community Stakeholders	0	1	1	0	0	0	1	0	0	1
	Indigenous Elders/Communities	1	1	0	0	0	1	0	0	0	0
	Local Experts/Researchers	0	1	2	0	2	0	0	0	0	2
	Fishermen or hunters/Fishermen's or hunters' Associations	0	1	1	0	0	1	0	1	0	0
	NGOs/Non-Profit Organizations	3	1	1	0	2	1	0	1	0	0
	Citizens' generated data	2	2	0	1	0	0	1	1	3	0
	Other (Specify)	2	1	0	1	0	1	1	0	1	4
Type of scale	Geographic Scale	11	10	3	0	4	3	0	2	9	8
	Organizational Scale	0	1	2	3	2	2	4	3	0	4
	NA	0	0	0	3	0	0	0	0	0	0
Scale/Reach level	National	1	0	3	1	2	2	0	1	0	1
	Regional	0	0	1	0	3	0	1	0	2	7
	Local/Community	3	2	1	1	0	2	1	1	3	0
	Government/Policy Level	0	0	0	1	0	0	1	1	4	2

	Academic/Research Institutions	0	4	0	1	1	1	0	1	0	1
	Community/Local Organizations	3	5	0	0	0	0	0	1	0	0
	International Organizations	0	0	0	0	0	0	0	0	0	0
	Industry/Commercial Sector	0	0	0	0	0	0	1	0	0	1
	Other (Specify)	0	0	0	2	0	0	0	0	0	0

-END-

About PRO-Coast: *PRO-COAST consists of 20 partners from 14 countries (Belgium, Greece, Spain, Italy, Germany, Estonia, Romania, Montenegro, Cyprus, Malta, United Kingdom, Slovenia, Norway, and Ireland). They have joined forces to stimulate and empower local communities and civil society in general, to support restoration and maintenance of biodiversity and ecosystem services across Europe, involving them more actively in environmental governance. Over the 3 years of the project, PRO-COAST will gather and synthesize knowledge for informed citizen decisions, improving co-participation in community decision-making, while integrating local knowledge into policymaking*

Project Coordinators:

Dr Julie Ewald and Professor Robert Kenward