

THE IUCN GLOBAL STANDARD FOR NbS AND THE REST-COAST PROJECT

SUMMARY OF THE ASSESSMENT AT PROJECT LEVEL



REST-COAST

MAY 2026

Pilar Marín*, Naomie Kayitesi*, Natascha Wahlberg**

*International Union for Conservation of Nature, Gland, Switzerland; **Social Climate S.Coop.And., Spain

This document synthesizes the project-level results of the assessment carried out using the IUCN Global Standard for Nature-based Solutions within REST-COAST. Building on the aggregated results of the Pilot assessments, it presents the summary of criterion-by-criterion analysis, providing a consolidated project-level perspective on how the full suite of restoration interventions collectively perform against each of the eight criteria. The purpose of this exercise has been to consolidate and complement the recommendations developed throughout the project, adopting the integrated perspective provided by the Standard and taking into account the full range of activities implemented across the different work packages.

A comprehensive account of the analysis, including the assessment conducted at the Pilot Site level, is presented in the full report “Advancing Coastal Restoration through the IUCN Global Standard for Nature-based Solutions: Running the Standard in REST-COAST Pilot Sites”.

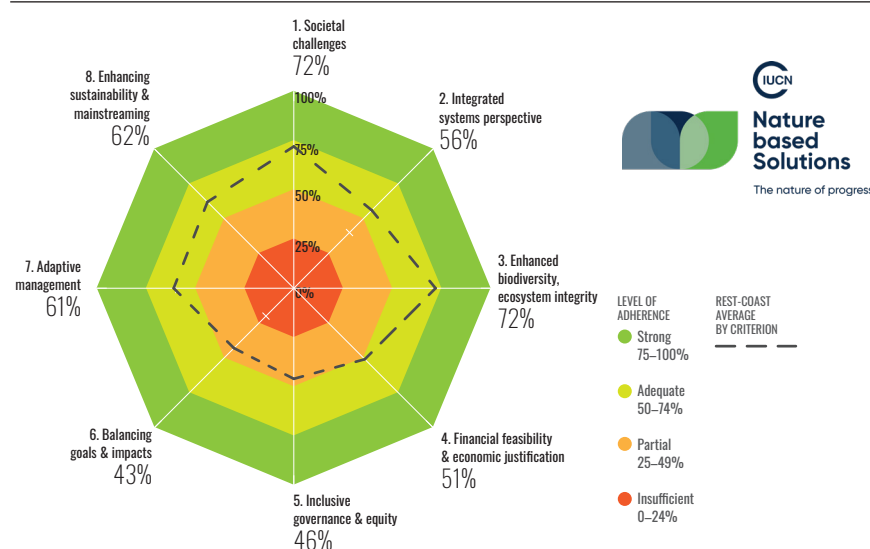
RESULTS

At project level, the REST-COAST **average score reached 57%**, corresponding to an **Adequate level of adherence to the NbS Standard**. Among the eight criteria (see graphic below), the strongest overall

performance was recorded under **Criterion 1** “Societal challenges” and **Criterion 3** “Enhanced biodiversity and ecosystem integrity”, both achieving an average score of 72%, followed by **Criterion 8** “Enhancing sustainability and mainstreaming” (62%), **Criterion 7** “Adaptive management” (61%), and **Criterion 2** “Integrated systems perspective” (56%). Lower average scores were observed under **Criterion 4** “Financial feasibility and economic justification” (51%), **Criterion 5** “Inclusive governance and equity” (46%), and **Criterion 6** “Balancing goals and impacts” (43%). These scores reflect that **while NbS implementation is generally robust in ecological and technical terms, greater attention is needed to strengthen economic viability, inclusive governance, and the explicit assessment and management of trade-offs**. Addressing these dimensions will be critical for improving the long-term sustainability, scalability and mainstreaming of interventions beyond the pilot phase and across broader policy and planning frameworks.

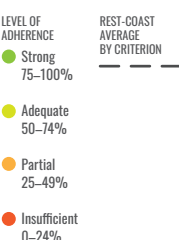
Overall, the assessment shows that REST-COAST provides a strong scientific and ecological foundation for coastal NbS, while highlighting the need to move from project-based pilot actions towards long-term, institutionalised management, financing, governance and monitoring arrangements.

AVERAGE PERFORMANCE OF REST-COAST PROJECT BY CRITERION AGAINST THE NBS STANDARD



PROJECT
OVERALL SCORE
57%

ADEQUATE
ALIGNMENT WITH THE NBS STANDARD



REST-COAST project receives funding from the European Union's Horizon 2020 Research and Innovation action under grant agreement No 101037097.

THE ASSESSMENT BY CRITERION:

SUMMARY, CONCLUSIONS, STRENGTHS & WEAKNESSES



CRITERION 1. SOCIETAL CHALLENGES (72%, ADEQUATE)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project demonstrates a well-structured approach to identifying and addressing societal challenges, well aligned with the NbS Standard. Key challenges and their underlying drivers have been clearly articulated and documented, providing a strong and coherent rationale for NbS design and implementation, while reflecting both local and broader priorities such as climate adaptation, risk reduction, biodiversity conservation, and ecosystem service provision. Most interventions are underpinned by structured assessments and well-developed narratives; however, some variability persists across Pilot Sites in terms of the depth, consistency, and accessibility of this information, particularly for nontechnical audiences. Despite these differences, stakeholders generally have access to relevant information. Monitoring and verification systems are generally in place, and outcomes for people and nature are often linked to specific indicators. Some Pilot Sites have also established benchmarks or reference conditions, while others are still developing them.	Stronger documentation, communication and verification would improve consistency and support future upscaling.	 Strong diagnosis of the societal challenges: Most of Pilot Sites demonstrate a solid understanding of their local societal challenges and their underlying drivers, supported by baseline studies and contextual assessments.  Limited updating capacity and autonomy: Some Pilot Sites rely heavily on outdated or externally generated data and have limited capacity to update challenge assessments over time.



CRITERION 2. INTEGRATED SYSTEMS PERSPECTIVE (56%, ADEQUATE)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project shows an adequate level of performance in applying an integrated systems perspective, having identified and analysed interactions between ecosystems, society and the economy, including temporal dynamics. This approach has often been translated into practice by incorporating ecological, social and economic considerations into the planning and implementation of NbS, although the depth of integration varies and remains partly conceptual in some cases. Complementary measures and cross-sectoral links, particularly with water management, fisheries, coastal protection and spatial planning, are recognised but not always fully operationalised. Risk identification is also uneven, with limited use of formal risk-management frameworks in some interventions.	Further progress in formalising complementary actions, strengthening crosssectoral synergies and consolidating risk-management and verification processes would enhance consistency and support long-term effectiveness and scalability.	 Recognition of system linkages: Pilots generally show a strong understanding of how ecosystem health influences local economies, social well-being, and coastal resilience.  Weak formal risk management: Although risks are often acknowledged, few Pilots have formal and operational Risk Management Plans covering environmental, social and economic dimensions.



CRITERION 3. ENHANCED BIODIVERSITY AND ECOSYSTEM INTEGRITY (72%, ADEQUATE)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project demonstrates a solid alignment with this criterion, supported by the establishment or effective use of baseline ecological assessments that provide a clear and verifiable reference for evaluating changes in biodiversity and ecosystem integrity. There is strong consistency in identifying and assessing the main drivers of degradation and biodiversity loss, which underpins the design of relevant restoration measures. Opportunities to enhance biodiversity and ecosystem condition are widely recognised, documented, and often assessed, although in some cases this process is still ongoing. Most interventions have defined objectives and targets focused on ecological recovery, including habitat quality, species presence and ecosystem functioning. However, while indicators are generally in place, the monitoring and evaluation of outcomes remain uneven, limiting the ability to fully assess biodiversity and ecosystem integrity improvements in some cases.	Further strengthening the consistency and breadth of ecological indicators, and ensuring their systematic assessment over time, would enhance the robustness of performance evaluation and support long-term learning and upscaling.	Strong scientific baseline: High-quality ecological assessments and monitoring, including BACI (Before-After) monitoring, provide a robust technical foundation. Limited biological response indicators: Monitoring often focuses more on physical parameters than on biodiversity response indicators. In addition, clear corrective mechanisms for ecological underperformance remain limited.



CRITERION 4. FINANCIAL FEASIBILITY AND ECONOMIC JUSTIFICATION (51%, ADEQUATE)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project shows an adequate but uneven performance under this criterion, with clear progress in economic assessment and cost-effectiveness. Significant efforts have been made to identify and document the financial and socio-economic costs and benefits of NbS, particularly in the short term, while long-term value assessment remains under development. Stakeholder and rights holder mapping is a strong aspect, with most interventions clearly identifying who bears costs and receives benefits, supported by appropriate verification. Many interventions also demonstrate cost-effectiveness, highlighting NbS as competitive or complementary alternatives to grey infrastructure. However, long-term financial sustainability remains a key challenge, as financing strategies, risk allocation and equitable benefit-sharing are not yet fully consolidated. In addition, mechanisms to monitor and address unintended negative impacts are recognised but not consistently formalised, indicating the need to strengthen transparency, accountability, and risk management across the project.	While meaningful progress has been achieved in economic assessment and cost-effectiveness analysis, further consolidation of long-term financing mechanisms, equitable benefit-sharing arrangements and formally established, verifiable risk-monitoring frameworks would significantly strengthen compliance with the IUCN Global Standard for Nature-based Solutions.	Recognition of economic value: Several Pilots demonstrate that NbS can be more cost-effective and more efficient than other solutions. Weak long-term financial sustainability: Post-project financing remains one of the main gaps, with limited long-term maintenance mechanisms and insufficient operationalisation of benefit-sharing approaches.



CRITERION 5. INCLUSIVE GOVERNANCE AND EQUITY (46%, PARTIAL)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project shows partial and uneven performance under this criterion, reflecting varying levels of maturity in governance and inclusion. While most interventions have effectively identified stakeholders and rightsholders, the depth and quality of participation differ significantly, with stronger engagement of directly affected groups but more limited involvement of indirect stakeholders. Progress has been made in establishing grievance and conflict-resolution mechanisms, which are generally transparent and accessible, though their ongoing review and adaptation are inconsistent. Principles of equality and inclusion are widely acknowledged, but gaps remain in ensuring clear communication and meaningful influence for all stakeholders. Decision-making processes represent the main challenge, as participation is often constrained and does not fully address the needs and concerns of all affected groups, despite some recognition and documentation of these limitations.	Strengthening inclusive decision-making, improving the quality and continuity of participation, and systematically reviewing governance mechanisms would significantly enhance empowerment, transparency and long-term legitimacy of NbS interventions.	Strong stakeholder mapping: Pilots generally have a good understanding of local actors, users and institutions involved in the intervention areas, supported in some cases by tools like a “Restoration Agreement”. Limited decision-making power: Participation is often consultative rather than decisive, while grievance and conflict resolution mechanisms are frequently weak, temporary, or not institutional.



CRITERION 6. BALANCING GOALS AND IMPACTS (43%, PARTIAL)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project shows partial and uneven alignment with this criterion, with clear progress in identifying potential negative environmental and social impacts and designing safeguards and corrective actions to address them. A key strength is the recognition of the need to balance biodiversity conservation, risk reduction, socio-economic uses and long-term ecosystem functioning, often supported by transparent and participatory decision-making processes. However, a gap persists between planning and implementation: while many interventions have well-defined safeguards, fewer systematically monitor, document and communicate their effectiveness in practice. The level of formalisation and consistency in risk management also varies, with some corrective measures not yet fully operationalised and remaining gaps in response procedures and transparency when addressing negative impacts.	Strengthening the transition from planned safeguards to fully implemented and monitored corrective actions, and ensuring consistent verification and communication of tradeoffs and responses, would significantly enhance the robustness, credibility and long-term sustainability of NbS interventions.	Transparency in intervention designs: Where safeguards exist, they are generally discussed openly with stakeholders, scientific community and rights-holders. Major implementation gap (the most critical point): In several Pilots safeguards either remain conceptual or exist only on paper, with limited evidence of systematic monitoring, review, or active application.



CRITERION 7. ADAPTIVE MANAGEMENT (61%, ADEQUATE)

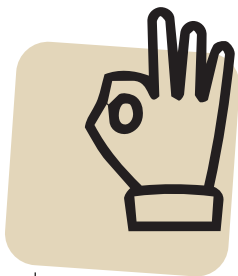
ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project demonstrates adequate performance under this criterion, with a solid conceptual basis for adaptive management but varying levels of practical implementation. Expected outcomes are generally well defined, combining scientific, local and, where relevant, traditional knowledge to ensure context-specific objectives, although some cases remain more technically focused. Monitoring is widely recognised as essential, and most interventions have established plans, though their scope and effectiveness differ, with some lacking sufficient indicators or integration into decision-making. The ability to adjust interventions based on monitoring results is uneven, with some cases embedding structured learning and others applying more ad hoc adjustments. Nevertheless, many interventions include verification mechanisms that support transparency, document changes and provide a foundation for strengthening adaptive management over time.	Further progress in consolidating monitoring frameworks, systematically linking results to decision-making, and embedding inclusive learning processes would significantly enhance the effectiveness and credibility of adaptive management across the project.	Strong willingness to adjust: Several Pilots demonstrate responsiveness and have developed management plans that combine scientific evidence with local knowledge and practical learning. Lack of systematic adaptive management: Corrective actions are often ad hoc and are not consistently linked to structured monitoring systems or formal learning processes that trigger management adjustments.



CRITERION 8. ENHANCING SUSTAINABILITY AND MAINSTREAMING (62%, ADEQUATE)

ASSESSMENT SUMMARY	CONCLUSION	STRENGTHS  WEAKNESSES 
The project demonstrates a good level of performance under this criterion, with strong alignment in capturing and documenting lessons learned throughout the design and implementation of interventions. This reflects a high degree of institutional learning and ensures that knowledge generation is systematically embedded within project activities. In most cases, these lessons are actively used to inform replication and upscaling, addressing technical, governance, financial and stakeholder engagement aspects, thereby enhancing the long-term relevance and transferability of the interventions. While documentation is consistent, some cases have yet to translate learning into concrete actions for replication. A key strength is the presence of robust verification mechanisms across all interventions, ensuring transparency, credibility and a solid evidence base for future coastal restoration efforts and policy development.	Continued efforts to systematically translate documented lessons into operational guidance and scaling strategies would further strengthen long-term sustainability and mainstreaming of NbS outcomes.	Strong documentation of lessons learnt: Pilots perform well in documenting experiences, technical knowledge, and lessons learnt, supporting future replication and knowledge transfer. Limited policy influence: Translating lessons learnt into permanent institutional frameworks, policies and regulatory frameworks remains one of the main barriers to long-term mainstreaming.

CONSIDERATIONS FOR A LONG-TERM IMPACT: WHAT WORKS, WHAT DOESN'T, AND WHAT MATTERS



THE EXCELLENCE

DIAGNOSIS AND SCIENCE

CRITERION RELATED C1, C3 and C8



The project excels in its technical phase. All Pilots have established solid baselines, rigorously identified societal challenges, and documented lessons learned for the future. Replication is real, and Pilot Sites like Venice Lagoon and Foros Bay demonstrate that it is possible to achieve near-perfect ecological integrity (95%) through rigorous scientific monitoring.



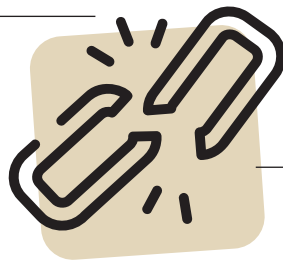
THE CHALLENGE FOR SUSTAINABILITY

ECONOMIC VIABILITY

CRITERION RELATED C4



The project has demonstrated that NbS are cost-effective compared to traditional engineering (cost-effectiveness analysis), but dependence on public funds and one-off projects remains high. Future success will depend on the Pilot securing long-term financial mechanisms and, above all, achieving an equitable distribution of the economic benefits generated (tourism, fishing, coastal protection).



THE “ACHILLES’ HEELS”

SAFEGUARDS AND RISKS

CRITERION RELATED C6



A critical gap exists between intention and formal protection. While Wadden Sea is the model to follow in terms of safety, other Pilots such as Ebro Delta and Nahal Dalia operate with a critical lack of documented safeguards. Mechanisms to guarantee that the intervention will not harm third parties or the ecosystem itself in the long term are needed.

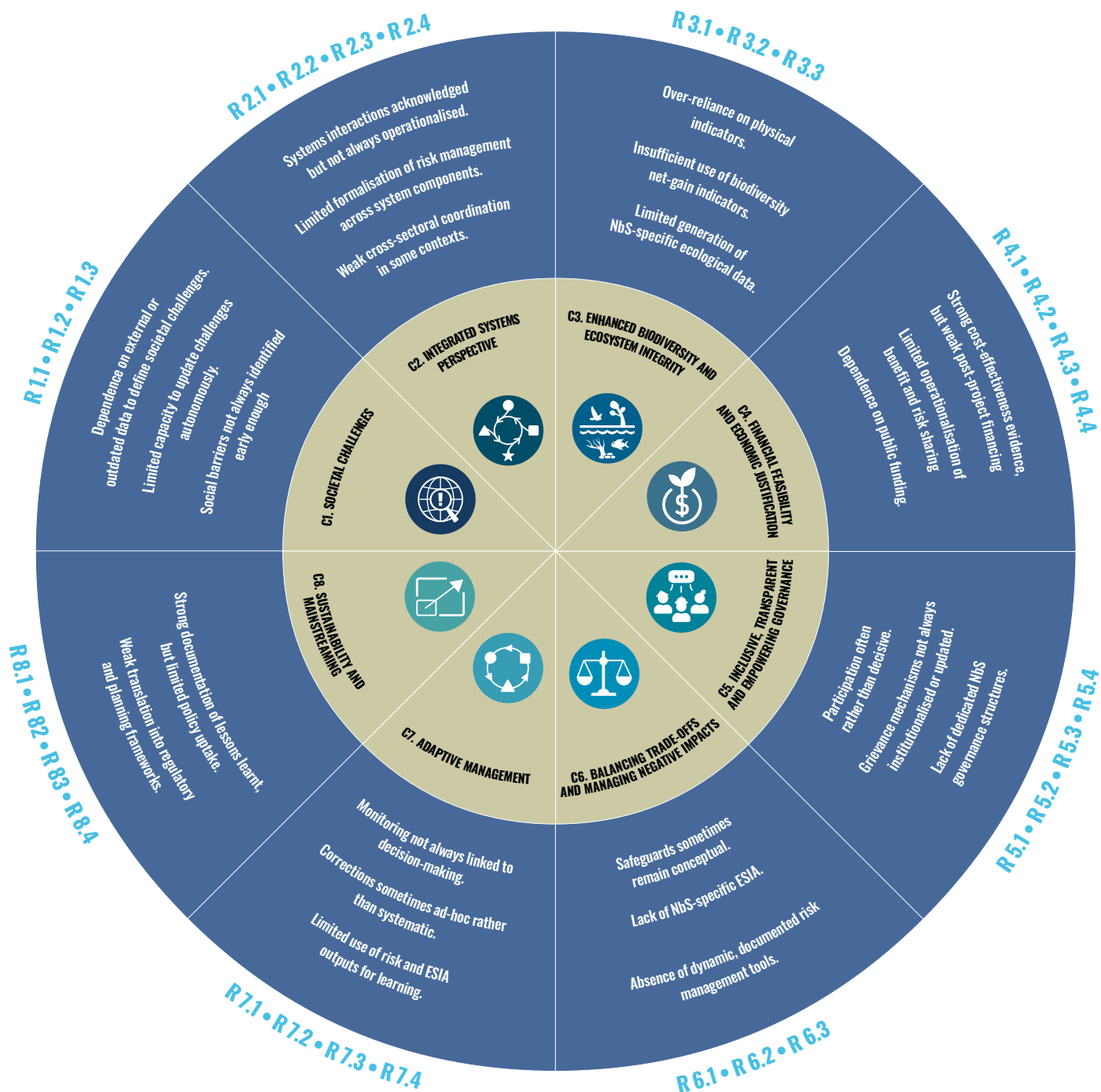
GOVERNANCE: FROM DIALOGUE TO DECISION-MAKING

CRITERION RELATED C5



Although a culture of participation exists (almost all Pilots use the CORE-PLAT), inclusive decision-making remains the most difficult level to achieve. Many Pilots inform local stakeholders, but few (except Venice Lagoon with its «Restoration Agreement») have succeeded in giving local communities a real and binding vote on the intervention's future.

TRACEABILITY FROM IDENTIFIED WEAKNESSES TO TARGETED RECOMMENDATIONS



- NbS standard criterion
- Key weaknesses identified
- Relevant recommendations

R1.1 Evidence-based assessments of societal challenges.
R1.2 Early identification of social barriers and enabling conditions.
R1.3 Awareness-raising as a core NbS component.
R2.1 Systems-based NbS design.
R2.2 Promotion of multifunctionality.
R2.3 Interdisciplinary collaboration.
R2.4 Strategic coordination across scales and sectors.

R3.1 NbS-specific biodiversity objectives and data generation.
R3.2 Use of biologically meaningful indicators aligned with WFD (Water Framework Directive)/MSFD (Marine Strategy Framework Directive) and net gain.
R3.3 Response mechanisms for ecological underperformance.
R4.1 Integration into public policies and funding instruments.
R4.2 Long-term financing and benefit-sharing mechanisms.
R4.3 Equitable distribution of costs, benefits and risks.
R4.4 Systematic cost-effectiveness analysis to attract investors.

R5.1 Early and inclusive participation.
R5.2 Shared and empowering decision-making.
R5.3 Formal grievance and conflict-resolution mechanisms.
R5.4 Dedicated NbS management arrangements.
R6.1 NbS-specific ESIA (Environmental and Social Impact Assessment) and trade-off assessment.
R6.2 Dynamic Risk Registry with assigned responsibilities.
R6.3 Active implementation and monitoring of safeguards.

R7.1 Monitoring linked to adaptive management.
R7.2 Evidence-based course correction using ESIA and Risk Registries.
R7.3 Transparent, iterative management adjustments.
R7.4 Capacity building and peer learning.
R8.1 Systematic documentation and dissemination of lessons learnt.
R8.2 Building on existing institutional capacities.
R8.3 Leveraging NbS policy momentum.
R8.4 Integration into long-term strategies and regulations.