



DRAFTING THE NATURE RESTORATION PLAN: REPORT FROM THE MARINE LEADERS' FORUM

September 2025

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Completed by the social research charity consultancy



Introduction

This report provides a summary of the discussions of the fourth meeting of the Leaders' Forum to inform the drafting of Ireland's National Restoration Plan. The meeting was held on 3rd September 2025 in Athlone with 55 attendees from 45 organisations attending (see Appendix for full list).

Following a welcome and introduction to the day, Dr Aoibhinn Ní Shúilleabháin gave a presentation on the Nature Restoration Law, the expectations of the Independent Advisory Committee and the Leaders' Forum meetings. Dr Katherine Cronin, co-chair of the Interdepartmental Marine Working Group, then presented the marine ecosystem restoration targets for the Nature Restoration Law and the outline of how the restoration plan will be developed.

Attendees were invited to share their input with colleagues at their tables over four sessions throughout the day:

1. Future Visioning for Ireland's Marine Ecosystems sharing goals and tensions prompted by the following statement: *It's 2050! We look out at the ocean in the knowledge that we are restoring wildlife and habitats while ensuring food security, with an economically viable fishing industry where new generations of fishermen and women are getting a good income working on the water using their skills and knowledge. We are delivering on ORE (Offshore Renewable Energy) obligations to generate clean energy and enabling the many other uses of the sea, such as tourism, and coastal regions are thriving with good jobs and vibrant communities*
2. Opportunities & Benefits: *What are the opportunities and benefits with nature restoration in mind? What specific opportunities and good practice are needed to achieve the goals outlined in session 1?*
3. Challenges & Risks: How do we deliver restoration in a complex environment with competing priorities
4. Systems Thinking: What are the factors that are needed to support scaling of what works?

Sessions included panel discussions on the various themes and topics, as well as table discussions. A summary of each of the panel discussions is included in this report. Attendees were seated at nine tables, with a mix of stakeholders seated at each table. Tables were facilitated through the four discussions outlined above, with note-takers recording the discussions. These detailed records form the basis of this report.

This report includes points that were raised by at least two tables, with some specific outstanding issues raised by only one table included in the Appendix. The sections within this report correspond to the four table discussions and contain composite statements developed from a synthesis of the table notes. Information is provided on the table numbers that contributed content to each point. Also provided is a

count to allow readers to assess the prioritisation of issues, all commentary is ordered from the most raised to the least.

To keep the report clear and avoid repetition, each theme is written out in full the first time it appears (starting in Session 1). When the same theme comes up again in later exercises, the original number is referenced "+ Session N" to indicate that points already commented on also made in this discussion. If a theme is raised for the first time in a later exercise, it is written out in full there.



Figure 1 Marine Ecosystems Leaders' Forum

Future Visioning for Ireland's Marine Ecosystems

Goals	Tables	No.
<p>1. Public Awareness and Education on Marine Environments:</p> <ul style="list-style-type: none"> • People need greater knowledge of: Irish species, habitats, biodiversity, nature restoration and how this benefits their everyday lives, marine protected areas, pressures on marine environments, and the role of fishermen/women. • Information should be targeted at the general public, tourists, fishing groups, local communities, and NGOs. • Outcomes from communication efforts should include improved ocean literacy, motivation to steward marine environments – protecting nature and biodiversity, and recognition of the value of habitats for livelihoods. • Practical tools to be used include educational signage, visual aids such as animations, volunteering opportunities, public education campaigns, museums/community centres/heritage centres promoting nature restoration, improved recreational fishing opportunities, and training programmes for citizens, fishermen/women, and coastal communities. 	<p>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</p>	<p>10</p>
<p>2. Stakeholder Engagement and Collaboration:</p> <ul style="list-style-type: none"> • Stakeholder involvement is crucial because no single sector can achieve marine restoration goals alone. Engagement fosters inclusive and informed decision-making, building trust and shared direction. At the same time, tensions are evident—for example, between fishermen, authorities, and conservationists, or between local communities and EU institutions — underscoring the need for transparency, respect, and recognition of different perspectives. • Stakeholders should be meaningfully involved in decision-making and implementation, including the co-management of waters and fisheries, site selection, pooled management of fishing targets, monitoring actions, and the shared stewardship of Marine Protected Areas. They should have avenues to protest or take action against anti-marine activity. • Effective engagement requires facilitation, cross-group understanding, ground-truthing, and locally coordinated data collection, education, and short-term projects, supported by ongoing dialogue and regional committees. • Relevant stakeholders include local communities, local businesses, young people, commercial operators (especially fishermen/women), government agencies, local authorities and planners, sustainable management authorities, engineers, NGOs, offshore renewable energy companies, 	<p>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</p>	<p>10</p>

<p>agriculture, transport and tourism sectors, the Defence Forces, EU institutions, and the International Maritime Organisation.</p>		
<p>3. Shared Ecological and Biodiversity Goals:</p> <ul style="list-style-type: none"> Stakeholders should collectively prioritise nature restoration, habitat sustainability, and ecological conservation, with goals that include promoting biodiversity, thriving fish populations, thriving blue economy (fisheries, marine tourism, offshore renewable energy, port development, etc.) that can grow in an eco-friendly way, alongside functional marine ecosystems that support food security and food quality. The fishing industry should adopt sustainable, restorative, and socio-ecologically responsible practices. Communities should be supported in restoring marine habitats, wildlife, and coastal ecosystems. 	<p>1, 2, 3, 4, 6, 7, 8, 9, 10</p>	<p>9</p>
<p>4. Integrated Marine Spatial Planning and Protected Areas:</p> <ul style="list-style-type: none"> Ireland should develop a clear, integrated marine spatial plan that identifies areas of ecological and economic importance and ensures balanced, equitable sharing of marine space. Designated zones could include no-take areas to support fish, shellfish, and seabird recovery; Marine Protected Areas (MPAs) and Highly Protected Areas (HPAs) potentially co-located with Offshore Renewable Energy; areas for local fishing using least invasive methods; and zones that accommodate commercial and leisure activities sustainably while protecting key habitats. MPAs provide benefits by promoting biodiversity recovery, structuring access and use in a sustainable way and generating spillover into fishing areas. 	<p>1, 4, 5, 6, 7, 8, 9, 10</p>	<p>8</p>
<p>5. Adequate Resourcing and Incentivisation:</p> <ul style="list-style-type: none"> The Nature Restoration Plan will only succeed if all goals and activities are adequately funded and resourced. Funding may include financial incentives to encourage participation and sustainable practices, such as results-based wildlife and habitat restoration schemes, and incentives for harbourmasters to maintain ports sustainably. 	<p>1, 2, 4, 5, 6, 7, 8, 10</p>	<p>8</p>
<p>6. Regenerative Coastal Tourism:</p> <ul style="list-style-type: none"> Tourism plays a vital role in supporting employment and local economies in fishing and coastal communities while fostering engagement with the coast and its natural heritage. However, unmanaged tourism can create pressures by disturbing wildlife, overwhelming local infrastructure during peak seasons, raising housing costs that displace families, and creating tensions with other sectors, such as aquaculture, where communities fear impacts on the attractiveness of coastlines. Sustainable and regenerative tourism must be developed to ensure visitor impacts are positive. This includes building infrastructure capable of handling 	<p>2, 3, 4, 5, 6, 7, 8, 10</p>	<p>8</p>

<p>high visitor numbers, promoting biodiversity-friendly ecotourism, and encouraging sustainable visitor behaviour through awareness campaigns, codes of conduct, and the use of responsible operators. Planning processes should take account of seasonal imbalances in visitor numbers and community impacts, while protective measures such as dunes and the safeguarding of sensitive habitats are reinforced. Well-managed tourism can also directly fund restoration efforts, through tourist levies, while strengthening community stewardship and shared responsibility for coastal ecosystems.</p>		
<p>7. Monitoring, Enforcement and Accountability:</p> <ul style="list-style-type: none"> • Enforcement of existing laws and regulations should be improved through fair, and consistent monitoring, with meaningful consequences for non-compliance. • Authorities should be accountable for the state of nature and progress on restoration, including tracking marine life, marine protected areas, and implementation of the Nature Restoration Plan. • Accountability should also extend to industries whose activities impact the marine environment, such as shipping, with requirements to contribute to restoration and apply nature-based solutions where feasible. 	<p>1, 2, 4, 5, 6, 7, 10</p>	<p>7</p>
<p>8. Leveraging and Valuing Existing Knowledge:</p> <ul style="list-style-type: none"> • Existing knowledge and expertise should be recognised and leveraged to support positive change. • All valuable sources, including local and former fishermen/women, academics, community groups, NGOs, citizen science, and professional generational knowledge, should be acknowledged. • Lessons should be drawn from previous achievements and failures, such as the Marine Safety, Water Framework, and Nature Framework Directives. 	<p>1, 2, 3, 4, 5, 7, 8</p>	<p>7</p>
<p>9. Maintaining and Improving Water Quality:</p> <ul style="list-style-type: none"> • Marine habitats require good water quality and climate resilience to support biodiversity and fisheries. • Risks to water quality arise from terrestrial activities, including sewage, wastewater, and agricultural run-off. Pollution control measures should be enforced, and water quality targets must be met and improved where necessary. 	<p>1, 3, 5, 6, 7, 8, 9</p>	<p>7</p>
<p>10. Practical Fishing/Aquaculture Practice Changes:</p> <ul style="list-style-type: none"> • Practical changes to fishing practices could support both fisheries and marine biodiversity • Fish populations should be safeguarded by protecting key spawning areas and restricting the use of wild-caught fish for aquaculture feed. Fishermen/women should adopt low-impact, non-wasteful methods to reduce overfishing, and be particularly selective with at-risk species. Accidental bycatch should be traded among fishermen/women rather than discarded. 	<p>1, 3, 5, 7, 8, 9</p>	<p>6</p>

<p>Economic stock management and fleet coordination can maximize economic and sustainability benefits. Industrial fishing of sprat for national and international markets should be limited, and bottom trawling should be eliminated.</p>		
<p>11. Financially Supporting those impacted by Nature Restoration:</p> <ul style="list-style-type: none"> • People who are negatively affected by the Nature Restoration Plan should be supported, focusing on those whose livelihoods depend on fishing, aquaculture, tourism, ports, shipping, and other marine industries. • Impacts may include income loss from restrictions, spillover effects during transition, international competition, and the need to adapt professions. • Support measures could include financial compensation, subsidies for retraining or alternative income strategies, transitional protections to maintain quality of life, and consideration of national and EU dynamics affecting industry competition. 	<p>3, 4, 5, 6, 7, 9</p>	<p>6</p>
<p>12. Employment Opportunities:</p> <ul style="list-style-type: none"> • Careers in conservation and restoration should be expanded. Marine and habitat-linked careers, including fisheries, tourism, and monitoring programmes, should be supported. Employment initiatives should provide adaptable, alternative, and subsidised opportunities to ensure sustainability and alignment with the Nature Restoration Plan. • Young people should be actively engaged and encouraged to pursue careers in marine and habitat-related fields, with pathways that are environmentally sustainable, realistic, and rewarding. Subsidised training and education should be explored. 	<p>1, 2, 4, 8, 9, 10</p>	<p>6</p>
<p>13. Policy and Legislative Review:</p> <ul style="list-style-type: none"> • Current policies and legislation should be reviewed to ensure coherence, effectiveness and stakeholder agency, including the Common Fisheries Policy and resolving conflicting government policies. • New legislation should support nature restoration and sustainable fishing practices, including provisions for local and national fishing plans, laws for commercial trawlers, and promotion of least-damaging fishing methods such as pot fishing. 	<p>1, 2, 4, 5, 8</p>	<p>5</p>
<p>14. Planning:</p> <ul style="list-style-type: none"> • The success of the Nature Restoration Plan depends on the quality of its design and implementation. • Plans must be long-term, realistic, and simple enough to be understood and acted upon, while also being robust and practical to deliver. • They should reduce unnecessary administrative and bureaucratic burdens. 	<p>1, 3, 4, 7, 9</p>	<p>5</p>
<p>15. Data Collection and Evidence-Based Decision Making:</p> <ul style="list-style-type: none"> • Baseline data on marine habitats should be established and maintained to understand current conditions and restoration needs. 	<p>1, 3, 7, 8, 10</p>	<p>5</p>

<ul style="list-style-type: none"> • Data collection and management practices should be improved, including habitat mapping, ongoing monitoring, research, storage, hygiene, and sharing, ensuring accuracy, up-to-date information, open access, and energy efficiency. • Evidence-based, data-driven decisions should guide restoration priorities and constrain trade-offs. 		
<p>16. Innovation and Technology in Marine Restoration:</p> <ul style="list-style-type: none"> • Innovation and adoption of new technologies are needed to support sustainable fishing and marine restoration. • Suggested approaches include environmentally friendly and more efficient fishing vessels, technologies to reduce bycatch, and drone-based habitat mapping and remote sensing, including eDNA monitoring of habitat health. 	4, 5, 7, 8, 9	5
<p>17. Sustainable Energy in Marine and Restoration Industries:</p> <ul style="list-style-type: none"> • The offshore renewable energy industry should minimise environmental impacts and implement measures to restore environments and create new habitats post-construction. • Energy consumption in marine and restoration industries should be monitored and aligned with national targets, and “Not in my back yard” tensions should be addressed (e.g. offering free energy to local communities). • New and reliable renewable energy sources, including wind and wave energy, should be developed to meet national objectives. 	1, 5, 6, 9, 10	5
<p>18. Supporting and Protecting Small-Scale Fisheries:</p> <ul style="list-style-type: none"> • Small-scale fishermen/women face tension with large multinational operators. They contribute to heritage, sustain coastal communities, and have lower environmental impact while often sharing goals with conservationists. • Protection measures could include equitable access to fishing opportunities, restrictions on inshore vessel size, and allocation of sufficient coastal space for fishing. 	1, 2, 6, 10	4
<p>19. Addressing Knowledge and Expertise Gaps:</p> <ul style="list-style-type: none"> • Nature restoration success depends on addressing existing knowledge and expertise gaps and investing in research. • Gaps exist because expertise in marine ecosystems is limited, changes in habitats and wildlife often lack clear explanations, marine biodiversity targets are difficult to define, and existing data is heterogeneous or from institutions not embedded in the marine environment. • Research is needed to better understand the drivers of change, impacts of invasive species, pressures and state at appropriate spatial resolutions, and priority and vulnerable areas for restoration. 	4, 5, 6, 7	4
<p>20. Marine Literacy Across Education System:</p> <ul style="list-style-type: none"> • Marine and ocean literacy should be incorporated into all educational curricula, from primary through tertiary education. 	1, 2, 3, 8	4

<ul style="list-style-type: none"> Programmes should include opportunities for students to learn directly in marine habitats. 		
<p>21. Communication Strategy:</p> <ul style="list-style-type: none"> A communication strategy is needed to increase awareness and support for nature restoration and the fishing industry. It should include marketing and communications at national and local levels, engagement that helps communities feel invested in restoration, clarifications around misinformation and legal obligations of all involved, as well as clear explanations of expected outcomes to manage expectations credibly. The strategy should improve communication and partnerships between government authorities and fishermen/women, and local communities and present reasonable, well-justified trade-offs to encourage cooperation. 	3, 5, 7, 8	4
<p>22. Food Security and Marine Ecosystems:</p> <ul style="list-style-type: none"> Healthy marine habitats are essential to food security. Restoration approaches should ensure sustainable populations of wildlife and marine habitats while considering the entire food web to maintain balanced and resilient marine ecosystems. 	5, 6, 9, 10	4
<p>23. Special Protection for:</p> <ul style="list-style-type: none"> Protection measures should be put in place for carbon sequestration offshore, sub-sea cable infrastructure and for marine forms which cause tensions with fishing activities such as Angel Sharks 	5, 9	2
<p>24. Infrastructure:</p> <ul style="list-style-type: none"> Ports and other coastal infrastructure should be safe and resilient, while being embedded in an approach that is compatible with ecosystem governance and restoration. Infrastructure development must be nature-inclusive, promoting restoration goals alongside economic viability. 	3, 9	2

Opportunities & Benefits of the NRL

At the beginning of this session Dr Louise Allcock, University of Galway, chaired a panel discussion around the opportunities and benefits of the Nature Restoration Law. This pane included: Rory Campbell, Seafood Technical Services Director at BIM; Oliver O Cadhla, Department of Climate, Energy & Environment; and Dr Oliver Tully of the Marine Institute. The panel outlined that oysters are one of the best examples of restoration potential in Ireland's marine environment. Oyster habitat in Ireland is degraded, for various reasons, compared to the 19th century when oyster commercial production was at its peak. Active restoration of these habitats in combination with restorative aquaculture, will support water quality goals, enhance biodiversity and carbon sequestration, while also producing food and incomes for coastal communities. The panel outlined that while active restoration is important, we also need to remove pressures from the ocean since the root causes of decline of species and habitat can

often be attributed to specific pressures. In shallow coastal waters these pressures might also originate from land. Meaningful stakeholder engagement and community involvement is key to considering what solutions can exist, by identifying how specific pressures can be minimised or adapted. In addition, meaningful stakeholder engagement is also key to ensuring that relevant data can be shared and utilised for the benefit of all, and that local ecological knowledge is taken into account. It is vital to recognise that understanding a problem is key to finding a solution and that the reasons for decline in species and habitats are correctly identified. For example, in Galway Bay the pressure of fishing has been removed but oyster habitat is not improving because the shell content at the seabed is too low to facilitate settlement and recruitment of oysters. This is being resolved by using scallop shell as settlement substrate. The challenges of restoring marine environments are wide and therefore an extensive programme of work needs to be set out, with ambition and consistency over time. This will require a commitment of funding and investment from the State.

Opportunities & Benefits	Tables	No.
<p>2. Stakeholder Engagement and Collaboration + Exercise 1</p> <ul style="list-style-type: none"> • Effective engagement requires paid staff for continuity, scheduling that suits participants, clear commitments, and leadership within institutions and communities. • Examples of good practice: Outer Hebrides community-led projects (Scotland); Cefas stakeholder management groups; Greater North Sea Basin Initiative; Maharees Native Association; Cuan Beo oyster restoration; coordinated site management in France; Harbour Island (Cork) voluntary engagement; Dublin Bay Biosphere model; Maharees Conservation Association; Norwegian Coexistence Fora; LAWPRO community fora. 	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10
<p>4. Integrated Marine Spatial Planning and Protected Areas + Exercise 1</p> <ul style="list-style-type: none"> • Expand designated zones to include offshore renewable energy areas • Create plans using: bottom-up and evidence-based approaches, consider existing protection innovations, include different levels of protection, apply a “cost layer” approach mapping social, economic, and ecological factors, and identify areas suitable for co-location of activities. • Ensure effective monitoring and management. • Consider: learning from international examples (e.g., Isle of Man's short-term no-take zones), considering spillover timelines while providing interim solutions to support the transition and protect livelihoods, banning damaging activities in sensitive zones (e.g., jet-skis in shallow areas), and pushing foreign fleets further offshore. • Effective marine spatial planning requires political will 	1, 2, 3, 4, 5, 8, 9, 10	8
<p>1. Public Awareness and Education on Marine Environments + Exercise 1</p>	1, 2, 3, 5, 6, 7, 8, 9	8

<ul style="list-style-type: none"> • Outcomes: Challenge the narrative that fishermen are solely responsible for environmental harm; foster ocean literacy, stewardship, and motivation to support protection and restoration. • Practical tools: engage the public through national multimedia campaigns and local signage (e.g., Wild Atlantic Way “Our Marine Natural Heritage”), observational points that use technology to show under sea activity, supporting recreational activities such as swimming and kayaking, interpretive centres and nature experiences (e.g., Cliffs of Moher), heritage festivals, and community-led dune restoration initiatives. Build on existing initiatives like Blue Flag and Green beaches to improve awareness. Use traditional media and social media to increase ocean literacy (e.g., documentaries on RTE about dolphins in Ireland). • Skills and capacity building: Support transferable skills and new qualifications for fishers to enable movement into other marine industries or delivery of ecosystem services and nature-based solutions. 		
<p>6. Regenerative Coastal Tourism + Exercise 1</p> <ul style="list-style-type: none"> • Encourage fishermen and women, as well as local tourism and eco-tourism businesses, to take responsibility for tourism management and participate in local coastal management and marine restoration, ensuring knowledgeable stakeholders guide activities in the marine environment. • Tools and approaches: Establish staffed facilities at tourism locations to educate visitors about biodiversity and responsible behaviour; implement Codes of Practice for tourism operators (e.g., post-Fungi dolphin in Dingle) to promote responsible practices and enhance reputations; collaborate with organisations such as Fáilte Ireland to manage visitor flows, particularly on islands; support local good-practice initiatives (e.g., Dublin Bay boat users managing recreational activities, Carraroe Men's Shed providing equipment locally for swimming/scuba diving); develop habitat creation projects such as manmade shipwrecks or small artificial reefs to promote biodiversity and provide sustainable tourism; explore policy innovations like allowing transfer of fishing licenses to leisure use to diversify income streams for fishermen and women. 	2, 3, 4, 6, 8, 9, 10	7
<p>20. Marine Literacy Across Education + Exercise 1</p> <ul style="list-style-type: none"> • Topics to teach: Ecosystem services, natural heritage, species identification, skills development, good practice and success stories, and the cost of doing nothing. • At third level, training should prepare future technicians capable of implementing restoration and conservation goals. • How to teach: Engage learners directly in restoration efforts through field trips and hands-on activities such as sample collection and citizen science. Transition year students could stay near marine areas to participate in local 	1, 2, 3, 4, 6, 7	6

<p>projects, supported by teachers, researchers, or Marine Institute staff.</p> <p>Education in the marine environment should build practical skills as well as knowledge.</p> <ul style="list-style-type: none"> • Good practice examples: Lego's biodiversity collaboration on reefs, the Ocean Explorers module in primary schools, the Green Schools award, and Streamscapes' aquatic and biodiversity education programmes in Irish schools. 		
<p>10. Practical fishing/aquaculture practice changes + Exercise 1</p> <ul style="list-style-type: none"> • Examples of lower impact practices include attract scallops using "disco lights" to reduce need to dredge (Norway), dive for scallops and oysters, use pot fishing instead of trawling. • Help lobster populations grow through practices such as v-notching and release of females. • Diversification into lower-impact species such as anchovy and sardine, which do not disturb seabeds. • Introduction of Extended Producer Responsibility schemes for fishing gear to reduce abandoned gear. • Rotational use of marine areas, with recovery/fallow periods like agriculture. • Promote practices that enhance carbon capture and promote restoration of habitats, such as oyster restoration, mussel bed restoration, seagrass cultivation, seaweed farming, and saltmarsh development. • Recognise aquaculture's role in ecosystem services such as water filtration, carbon sequestration, and reef restoration. • Recognise that managing already healthy habitats now is easier than restoring them later. • Acknowledge that changes in practice can cause unintended consequences, e.g. conflict between mobile (towed) and static (potting) gear fishers. • Reduce pressure on the sea by lowering demand (energy and fish consumption), encouraging "take what you need" approaches, and securing greater value from less extractive activity (e.g. pairing fishing with whale watching). • Concrete changes to pursue include: lab-grown seagrass planting (Europe) and snorkeller-led restoration of kelp, oysters, and seagrass (e.g., Baldoyle Bay, Brighton). 	<p>3, 4, 5, 8, 9</p>	<p>5</p>
<p>13. Policy and Legislative Review + Exercise 1</p> <ul style="list-style-type: none"> • Policies to review: Support reintroducing or prioritising short supply chains in fishing and seafood sectors; consolidate fishing licenses to reduce overall fishing mortality; learn from international examples (e.g., Germany, Denmark) where offshore renewable energy planning drives data collection and environmental safeguards. Monitor the status of legislative initiatives such as 	<p>1, 2, 3, 7, 9</p>	<p>5</p>

<p>the Marine Protected Area Bill, noting potential delays or integration into broader marine planning processes (e.g., MAPA), to ensure protections are effectively implemented.</p> <ul style="list-style-type: none"> • New policies to consider: Introduce a national policy to reward low-impact fisheries with additional quota. 		
<p>12. Employment Opportunities + Exercise 1</p> <ul style="list-style-type: none"> • Support just-transition initiatives that retrain workers from declining industries into sustainable marine sectors (e.g., mussel farming) • Facilitate the development of transferable skills and new qualifications for fishermen and women, enabling them to move into other marine industries, deliver ecosystem services, or implement NRP measures. • Address international recognition gaps by supporting pathways for seasonal workers whose qualifications may be more recognised abroad (e.g., survey vessel work in the UK). • Explore multi-use licenses allowing fishermen and women to use their boats as guard vessels for Marine Protected Areas while continuing fishing activities. 	1, 2, 3, 8, 10	5
<p>19. Addressing Knowledge and Expertise Gaps + Exercise 1</p> <ul style="list-style-type: none"> • Conduct further research into opportunities for the shipping and transport industry to support biodiversity. • Establish and expand pilot areas—such as Tralee Bay in North Kerry—to test restoration approaches, evaluate what works, and build long-term knowledge. 	3, 6, 7, 8, 9	5
<p>7. Monitoring, Enforcement and Accountability + Exercise 1</p> <ul style="list-style-type: none"> • Establish clear reporting and monitoring systems that make it easy for the public to report environmental incidents (e.g., anglers reporting fish die-offs in Cork). • Create a central hub for marine monitoring that provides feedback, shares information, and facilitates co-ordinated tracking of the sea, similar to ENFO (Environmental Information Service). 	2, 5, 6, 10	4
<p>14. Planning + Exercise 1</p> <ul style="list-style-type: none"> • Make the plan brave and ambitious, with strong political commitment to ensure it does not become merely another report. • Ensure the plan is flexible and adaptable, enabling effective nature restoration in a changing environment. 	3, 4, 7, 8	4
<p>8. Leveraging and Valuing Existing Knowledge + Exercise 1</p> <ul style="list-style-type: none"> • Learn from international experience through exchanges and idea sharing, while ensuring solutions are designed for Ireland's specific context including a specific focus on: Azores' habitat rebuilding model (regional leadership and philanthropic resourcing), the Native Oyster Restoration Alliance (NORA) for guidance and networking, and lessons from the Lyme Bay MPA as an example of what not to do. 	1, 3, 4, 7	4

<p>15. Data Collection and Evidence-Based Decision Making + Exercise 1</p> <ul style="list-style-type: none"> ● Improve current practice by using fishing vessels as research platforms (hosting monitoring technologies, gathering local data where gaps exist), expanding surveys, and addressing time/cost pressures. ● Establish a single federated data space (like the Biodiversity Data Centre) to collate marine and fisheries data, improve accessibility of existing datasets (e.g., Fair Seas, Birdwatch Ireland, industry), and ensure open access for local authorities and biodiversity officers. Upskilling should be provided so staff can use this data effectively. ● Expand types of data collection available to all by documenting successes and failures, conducting feasibility assessments, improving detailed habitat mapping, and scaling up electronic monitoring to capture temporal and spatial patterns for ecosystem-wide insights. ● Draw on good practice, such as North Sea multinational data-collection initiatives and international science collaborations (e.g., ICES), to inform Ireland's systems. ● Ensure action is not delayed by data gaps: implement projects with imperfect knowledge, then refine through follow-up monitoring. 	3, 5, 7, 10	4
<p>16. Innovation and Technology in Marine Restoration + Exercise 1</p> <ul style="list-style-type: none"> ● Suggested innovations: Develop and deploy low-impact trawl equipment (e.g. off-bottom trawl doors and footropes), encourage technologies that separate target from non-target species in nets, require UV purification of wastewater to protect shellfish and human health, adopt new habitat and wildlife monitoring technologies, refine selective fishing gear, and adapt scallop gear to reduce seabed pressure. ● Approach to innovation: Recognise and manage trade-offs, prioritise doing proven measures well rather than chasing novelty, and increase funding to ensure boats can be equipped with emerging technologies already under development globally. 	1, 3, 4, 7	4
<p>9. Maintaining and Improving Water Quality + Exercise 1</p> <ul style="list-style-type: none"> ● Pilot dry toilets in public buildings to reduce water pollution and recycle nutrients; implement watercourse buffers at an industrial scale with native species; follow international best practices such as IMO guidelines on plastic pollution and biofouling and prepare for the upcoming EU Directive on ship pollution and ballast water management; adopt integrated "blue-green nature solutions" linking land and sea to enhance ecosystem health. 	1, 3, 6, 8	4
<p>3. Shared Ecological and Biodiversity Goals + Exercise 1</p> <ul style="list-style-type: none"> ● Goals should be long-term and focused on supporting future generations. ● Position Ireland as a leader in restoration, using small-country advantages to test innovation and develop international best-practice models. ● Sustain genetic diversity across marine species. 	1, 8, 9	3

<ul style="list-style-type: none"> Improve public wellbeing by supporting access to and enjoyment of restored marine habitats. 		
5. Adequate Resourcing and Incentivisation + Exercise 1 <ul style="list-style-type: none"> Introduce incentives like biodiversity-focused subsidies to encourage environmentally friendly practices, similar to Talamh Beo in the Burren 	1, 7, 9	3
24. Infrastructure + Exercise 1 <ul style="list-style-type: none"> Implement nature-inclusive, restoration-promoting infrastructure: Incorporate designs that support wildlife, such as terns' nesting pontoons in Dublin Port or covered car parks for birds (U.S. examples); apply nature-based solutions and nature-inclusive planning in all projects (e.g., Ark Marine approaches); consider wildlife movement in siting infrastructure (Denmark's windfarm flight paths) Require a Nature Inclusive Design plan as part of seabed licensing to ensure restoration and ecosystem compatibility are embedded 	4, 6, 10	3
25. Accessing and Managing Funding: <ul style="list-style-type: none"> There is a knowledge gap regarding funding or how to access it, especially for local groups. Improving guidance, information, and transparency is essential to ensure these resources are effectively used. 	2, 3	2
26. Diversified and Innovative Funding Sources: <ul style="list-style-type: none"> Stakeholders can diversify work practices and income streams, access match-funding opportunities such as the Continuous Plankton Recorder programme in Plymouth, and market products or services as green or eco-certified to generate additional revenue. 	7, 8	2
17. Sustainable Energy in Marine and Restoration Industries	7, 9	2
11. Financially Supporting those impacted by Nature Restoration + Exercise 1 <ul style="list-style-type: none"> Consider spillover effects and timelines when implementing zoning, providing interim solutions to support transitions and protect livelihoods. 	9	1
22. Food Security and Marine Ecosystems:	8	1

Challenges and Risks associated with the NRL

This session began with a panel discussion chaired by Dr Mark Mellet, retired Vice Admiral with the Irish Naval Service. The panel included: Carol Forrest, Sea Fisheries Policy and Management at the Department of Agriculture, Food and the Marine; Simon Berrow, Irish Whale & Dolphin Group; and Norah Parke, formerly of the Killybegs Fishermen's Organisation and member of the Independent Advisory Committee on Nature Restoration. They discussed how we might deliver nature restoration in a complex environment with competing priorities. The panel set out the wide range of goals for our marine environment and the variety of sectoral interests that must work together to deliver on them

simultaneously. However, it was acknowledged that not all of the levers are in Ireland's control: the conservation and management of fish stocks - including quotas and access - is an EU competence beyond the 12 nautical miles. The NRL does propose a way of managing these interests, but it's untested. Nonetheless, there is a clear need for greater congruence at a national level in terms of understanding and deconflicting competing perspectives in terms of fisheries and nature restoration. Of the levers that are in Ireland's control, the panel was clear that we are starting to move in the right direction, citing the Working Group on Offshore Renewable Energy as a good example of ongoing, meaningful stakeholder engagement and collaboration, and that the same approach is needed for the fishing sector. It was acknowledged that the fishing industry is aware of the challenges and that resourcing has improved across departments, but that we now need a shared vision and a more holistic approach to deal with these issues and ensure that the solutions work for everybody. The panel agreed that fishermen, with their significant marine and maritime knowledge, must be central to the conversation and noted that when we engage and work towards a shared goal as partners, we can find common ground. Challenges do remain, not least with regard to information and evidence in order to make informed conservation and restoration decisions: we need more data gathering, better centralisation of data and easier access to it. The panel concluded with the observation that everyone wants vibrant seas, and to deliver that we need ambition, resources and to empower everyone to work together.

Challenges and Risks	Tables	No.
<p>2. Stakeholder Engagement and Collaboration + Exercise 1&2</p> <ul style="list-style-type: none"> Engagement requires clear knowledge transfer mechanisms to inform local communities, full-cycle feedback systems to avoid tokenistic consultation, and legislator oversight to effectiveness. Children and relevant EU fora such as the Northwestern Waters Group should be included as stakeholders. Examples of practical engagement ideas: Use engaging tools like VR headsets and seafloor footage to involve young people; utilise resources such as the Online Marine Atlas and the Marine Institute. Wide stakeholder engagement risks 'dancing around' the main issues as common ground can't be found on all things. Societal polarisation can hinder alignment on restoration goals, and practical reporting mechanisms like NPWS helplines are sometimes lacking. 	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10
<p>7. Monitoring, Enforcement and Accountability + Exercise 1&2</p> <ul style="list-style-type: none"> Consider establishing a Department of Oceans, a National Ocean Act, a National Ocean Policy, and Cabinet-level committees to oversee and coordinate the 30–40 currently siloed marine sectors. Learn from previous accountability gaps as limited enforcement of the Birds and Habitats Directives demonstrates the need for stronger mechanisms to ensure implementation of legislation. 	1, 3, 5, 6, 7, 8, 9, 10	8

<p>13. Policy and Legislative Review + Exercise 1&2</p> <ul style="list-style-type: none"> • New policies: Legislate long-term government spending to protect and manage maritime resources; consider mandatory biodiversity net gain in marine projects; account for the challenge of restoring habitats that have been entirely lost. • Prioritise and align strategies, legislation, plans, and directives across all State Bodies to ensure clarity of intention and action; address fragmented policymaking such as parallel processes in the NRP and NAP and division of responsibilities between DECC and DAFM; establish coordinated processes to weigh environmental impacts and social needs fairly, and maintain focus on the NRP despite competing national issues and crises. 	<p>1, 2, 4, 5, 6, 7, 8, 9</p>	<p>8</p>
<p>5. Adequate Resourcing and Incentivisation + Exercise 1&2</p> <ul style="list-style-type: none"> • Budgets should accompany any targets or actions, and delivery roles in national and local government should be funded. • Economic metrics should be used to make the case for investment, highlighting links between nature restoration, ecosystem services, and local job creation, and clarifying the costs of inaction using environmental accounting methods. 	<p>1, 4, 5, 6, 7, 8, 9, 10</p>	<p>8</p>
<p>15. Data Collection and Evidence-Based Decision Making + Exercise 1&2</p> <ul style="list-style-type: none"> • Baseline: Nature restoration will be difficult to measure due to shifting baselines; what counts as a reference point may depend on historical memory, and perceptions of ecosystem condition differ between older and younger stakeholders. • Sharing data: Data collected by private industry may not be shared due to commercial sensitivity, and GDPR requirements must be considered. • Monitoring external research: Findings from EU research projects, such as Mission Ocean and Harpers Island publications, should be tracked to inform decision-making. • Data reliability challenges: Applications may be hampered when agencies or data-holders refuse to accept existing datasets as valid, even when derived from authoritative sources. 	<p>1, 2, 3, 5, 6, 7, 8, 9</p>	<p>8</p>
<p>1. Public Awareness and Education on Marine Environments + Exercise 1&2</p> <ul style="list-style-type: none"> • Topics to cover: A holistic understanding of the ocean beyond a purely utilitarian or blue economy perspective, highlighting social, ecological, and cultural values alongside economic uses. • Practical tools include Living Laboratory initiatives to demonstrate restoration in practice, such as adoption of local areas or features like Seasearch where divers monitor seagrass beds, bringing concepts to life and providing measurable outputs. • Skills and capacity building: Integrate marine literacy and nature education into professional training for engineers, planners, and business professionals, including degree programmes and CPD. 	<p>1, 2, 4, 5, 6, 8, 9, 10</p>	<p>8</p>

<p>14. Planning + Exercise 1&2</p> <ul style="list-style-type: none"> • Ensure the NRP is long-term and resistant to short political cycles by bringing in long-term cross-party commitments, introducing reporting prior to elections, and phasing delivery to continue essential actions during shocks such as war or acute food insecurity; underpin the plan with legislation and secure long-term resourcing so policymakers' decisions outlive individual terms and political priorities. 	<p>1, 2, 4, 5, 6, 7, 9</p>	<p>7</p>
<p>4. Integrated Marine Spatial Planning and Protected Areas + Exercise 1&2</p> <ul style="list-style-type: none"> • Consider adopting "shifting" Marine Protected Areas to account for species moving due to climate change, such as herring relocating to new areas. • Recognise that some habitats recover extremely slowly, with growth rates as low as 0.1 mm per year, meaning restoration timelines may span hundreds or thousands of years depending on the habitat. 	<p>2, 6, 7, 8, 10</p>	<p>5</p>
<p>19. Addressing Knowledge and Expertise Gaps + Exercise 1&2</p> <ul style="list-style-type: none"> • Address the lack of skills / knowledge among civil servants overseeing aspects of marine restoration, which can complicate decision making 	<p>6, 7, 8, 9</p>	<p>4</p>
<p>20. Marine Literacy Across Education + Exercise 1&2</p> <ul style="list-style-type: none"> • Topics to teach: Include interpretation of data and how to utilise it. • How to teach: Make marine education engaging for children by connecting lessons to topics that spark curiosity (e.g., whales or dolphins) while also introducing less obvious species such as sponges or algae • Good practice examples: Children can transfer knowledge to their families, leading to long-term behavioural change (e.g., in Iceland, children encouraged parents to wear life vests). 	<p>1, 2, 3, 8</p>	<p>4</p>
<p>12. Employment Opportunities + Exercise 1&2</p> <ul style="list-style-type: none"> • Ensure competitive salary scales for marine and restoration careers to attract required staff and to manage the risk that the private sector draws ecologists away, limiting government and NGO capacity. • Increase the number of National Parks and Wildlife Service personnel dedicated to marine work to strengthen public sector capacity. 	<p>2, 6, 8</p>	<p>3</p>
<p>25. Accessing and Managing Funding + Exercise 2</p> <ul style="list-style-type: none"> • Ensure flexibility in spending windows so that funds are not withheld and funds can be spent wisely in the time required. • Current funding mechanisms are highly competitive, available in small quantities, difficult to access, and have high barriers to entry. • Local agencies should be tasked with assisting community organisations, for example committees linked to fishing industries, to access to funding. 	<p>2, 3, 4</p>	<p>3</p>
<p>21. Communication Strategy + Exercise 1</p> <ul style="list-style-type: none"> • Use careful, constructive language when discussing biodiversity loss and climate change, avoiding terms like "emergency" or "crisis" that may cause public disengagement or feelings of hopelessness, while increasing awareness of the actual risk of ecosystem collapse. 	<p>4, 7, 8</p>	<p>3</p>

<p>26. Diversified and Innovative Funding Sources + Exercise 2</p> <ul style="list-style-type: none"> Ireland should work to attract investment, including offshore investment that supports environmental goals, ensuring equity across sectors; explore biodiversity credits and consider funding mechanisms such as corporate taxes rather than a Tourism Tax or Nature Levy. 	1, 9	2
<p>8. Leveraging and Valuing Existing Knowledge: + Exercise 1&2</p> <ul style="list-style-type: none"> Leverage existing tools such as Special Areas Conservation legislation 	4, 5	2
<p>9. Maintaining and Improving Water Quality + Exercise 1&2</p> <ul style="list-style-type: none"> 'Source to sea' planning and enforcement should become mainstream to manage pollution from terrestrial sources to the marine environment. Risks to marine ecosystems from waste and pollution should be treated with the same seriousness as impacts on land habitats, as public perception often underestimates the harm to the ocean. 	1, 8	2
<p>10. Practical Fishing/Aquaculture Practice Changes + Exercise 1&2</p> <ul style="list-style-type: none"> Prepare for shocks in fish populations by implementing long-term recovery plans that provide sufficient time and resources for species to rebuild. 	4	1
<p>16. Innovation and Technology in Marine Restoration: + Exercise 1&2</p> <ul style="list-style-type: none"> Look at using technology (AI, Remote Sensing, Drones) for faster surveying and monitoring. 	6	1
<p>17. Sustainable Energy in Marine and Restoration Industries + Exercise 1&2</p> <ul style="list-style-type: none"> Renewable energy directive's 'overriding public interest' exception could allow projects to proceed at the expense of nature EU legislation may conflict with national protective laws, creating potential tensions between biodiversity and climate objectives. 	2	1
<p>6. Regenerative Coastal Tourism</p>	4	1
<p>22. Food Security and Marine Ecosystems</p>	7	1
<p>24. Infrastructure + Exercise 1&2</p> <ul style="list-style-type: none"> Reluctance to adopt nature-based solutions is partly due to unfamiliarity among engineers and planners, coupled with a lack of marine expertise within local authorities. Consider mandatory requirements in public infrastructure and mechanisms to increase uptake in the private sector. 	6	1

Systems Thinking: What is Needed to Support Actions and Change

Systems Thinking	Tables	No.
2. Stakeholder Engagement and Collaboration + Exercise 1&2&3	1, 2, 3, 4, 5, 6,	10

<ul style="list-style-type: none"> • Tool for engagement: Consultations must take place in coastal communities rather than inland locations to ensure genuine engagement; use open “town hall” style meetings; provide funded positions within communities to avoid stakeholder fatigue and burnout. • Good practice examples: Use the Climate Action Plan as a template for interagency working; establish or expand representative forums, such as a Marine and Seafood forum similar to Ireland's inland Water Forum (An Foram Uisce), to provide input on decisions, planning, and strategy. 	7, 8, 9, 10	
7. Monitoring, Enforcement and Accountability: + Exercise 1,2&3 <ul style="list-style-type: none"> • Link NRP progress to reporting obligations under the Corporate Social Responsibility Directive and ensure results are publicly disseminated 	2, 3, 4, 5, 6, 7, 8, 9, 10	9
5. Adequate Resourcing and Incentivisation	2, 3, 4, 5, 6, 7, 8, 9, 10	9
1. Public Awareness and Education on Marine Environments + Exercise 1&2&3 <ul style="list-style-type: none"> • Increase public awareness and education by using the arts; supporting ocean-friendly media programming on TV and radio; including labelling on products from restored areas so consumers know they are buying sustainably; supporting access to the ocean through new access routes and reassessing trespass laws to allow more access to the ocean; build water activities infrastructure to connect people to the ocean; and establish observatories to help local communities see what is happening in their local oceans. 	1, 2, 5, 6, 7	5
13. Policy and Legislative Review: + Exercise 1,2&3 <ul style="list-style-type: none"> • Make local stakeholder and community participation a legal requirement in nature protection processes. • Specify in legislation the staffing and resource commitments necessary to deliver the NRP. 	2, 5, 6, 7	4
14. Planning	2, 5, 7, 9	4
15. Data Collection and Evidence-Based Decision Making + Exercise 1&2&3 <ul style="list-style-type: none"> • Conduct a comprehensive audit of all organisations and stakeholders involved in marine activities to identify who should participate and how 	4, 6, 8, 9	4
21. Communication Strategy	1, 4, 7, 9	4
4. Integrated Marine Spatial Planning and Protected Areas + Exercise 1,2&3 <ul style="list-style-type: none"> • Establish a well-resourced Marine Spatial Planning Advisory Group, intersectoral and cross-departmental, chaired by an independent “Commissioner for Nature,” supported by a Marine Unit empowered to coordinate planning across offshore renewable energy, biodiversity, the Marine Institute, and the Maritime Area Regulatory Authority. 	6, 7, 8	3

<p>25. Accessing and Managing Funding + Exercise 2&3</p> <ul style="list-style-type: none"> • Set clear limits on the proportion of funding that can be spent on admin. • Avoid models that pit community groups against each other for funding. • Ensure proper structures are in place before funds are allocated. • Consider using existing organisations such as local community development companies or LEADER partnerships to administer funding, while recognising that these may have less engagement with marine and coastal communities. 	6, 8, 10	3
<p>26. Diversified and Innovative Funding Sources + Exercise 2&3</p> <ul style="list-style-type: none"> • Encourage private sector contributions to marine restoration efforts in general, potentially starting by using 1% green fund allocations, and directing forthcoming Corporate Social Responsibility Directive funding. • Ensure Exchequer funding remains the core source, supplemented by community benefit funds or Bord Iascaigh Mhara initiatives and others. • Explore levies on marine users whose activities have the greatest environmental impacts, directing the revenue to restoration. 	4, 6, 10	3
<p>20. Marine Literacy Across Education</p>	1, 2, 7	3
<p>10. Practical fishing/aquaculture practice changes + Exercise 1,2&3</p> <ul style="list-style-type: none"> • Focus on reducing invasive species 	1	1
<p>11. Financially Supporting those impacted by Nature Restoration: + Exercise 1,2&3</p> <ul style="list-style-type: none"> • Support people during transitions with advance grants, i.e. not just funding that is given when you provide receipts. 	2	1
<p>12. Employment Opportunities</p>	2	1
<p>8. Leveraging and Valuing Existing Knowledge</p>	7	1
<p>16. Innovation and Technology in Marine Restoration</p>	3	1
<p>17. Sustainable Energy in Marine and Restoration Industries: + Exercise 1&2&3</p> <ul style="list-style-type: none"> • Wind farm developers should be required to use a scoring system to assess the environmental impact of their planned actions. 	8	1
<p>6. Regenerative Coastal Tourism</p>	5	1

Appendix

Specific Points Raised by One Table

This is a list of specific points raised by tables that have not been addressed within other sections of the report.

GOALS

- We should work to reverse the decline of coastal populations (Table 9)
- There is a better balance between coasts – e.g. more focus on the West Coast rather than just the East Coast. (Table 10)

CHALLENGES

- The Catholic Church could play a role as, if seafood were to sell year-round at the levels it does during Lent, the difference would be astronomical. (Table 8)
- We should consider the risks of Sea Level Rise and coastal flooding and its impacts on the marine environment (Table 6)
- Irish markets have limited control over imported fish products (Table 7)

Attendance List

1. ACT
2. BirdWatch Ireland * 2
3. Bord Iascaigh Mhara (BIM)
4. Business for Biodiversity Ireland
5. Coastwatch Ireland
6. Commissioners of Irish Lights * 2
7. Cork City Council
8. Department of Agriculture, Food, and Marine * 2
9. Department of Climate, Energy and the Environment * 4
10. Department of Housing, Local Government, and Housing (Marine Environment Section)
11. Department of the Taoiseach
12. Department of Transport (Pollution from Shipping)
13. Dún Laoghaire Rathdown County Council
14. Dublin City Council * 2
15. Eirgrid
16. Environmental Protection Agency (EPA)
17. ESB * 2
18. Fair Seas Ireland
19. Fingal County Council
20. Green Compass
21. Independent Advisory Committee member
22. IFA Aquaculture
23. Irish Elasmobranch Group
24. Irish Environmental Network
25. Irish Fish Producers Organisation (IFPO)
26. Inland Fisheries Ireland
27. Irish Islands Marine Resource Organisation
28. Irish Ocean Literacy Network
29. Irish South + East Fish Producers Org Ltd (ISEFPO)
30. Irish Whale and Dolphin Group * 2
31. Irish Wildlife Trust
32. Kerry County Council
33. Killarney Road
34. Killybegs Fishermen's Organisation
35. Mara
36. Marine Institute * 4
37. National Inshore Fisheries Association (NIFF) * 2
38. North Western Waters Advisory Council
39. Renewables Ireland Ltd
40. Seasearch Ireland
41. Sustainable Water Network (SWAN)
42. Trinity College Dublin (TCD) and European Parliament
43. University College Cork, Marei Centre, Sustainability Institute
44. University of Galway
45. Wind Energy Ireland