

## Introduction – Impact Assessment and the Marine Environment

**Nick Taylor and Richard Morgan, editors.**

In 2017 we produced Impact Connector (IC) 4, pointing out in the introduction that “Impact assessment seems to have a weak connection into resource policy, decision making and management for the ocean environment.” We noted then the many different impacts of human activity on the ocean environment and asked how impact assessment can play a more effective role. Articles back then covered decisions around deep-sea mining, impact assessment of the wreck of the *Rena*, legal jurisdictions in the marine and coastal, guidelines for EIA prepared by our colleagues at SPREP, and SEA in New Zealand.

Now, nearly ten years later we return to the marine environment for Impact Connector 17, recognising that there are serious, ongoing environmental issues and demands on impact assessment practices. We recognise challenges for commercial, recreational and customary fisheries that are in decline (see the article by Raewyn Peart in this issue). Sea bird numbers also are in decline and there is increased recognition of the important linkages between marine and island or coastal breeding areas and habitats. After many years of improvement following the end of harvesting, whale numbers are declining again across the Pacific attributed to ocean warming and declines in feed species. These declines in marine ecosystems affect the strong connections between coastal and island communities and their environments. On the positive side people and communities are engaged with marine and coastal conservation, and ecotourism is a common source of livelihoods in island and coastal places such as Rakiura, Kaikoura, Rarotonga and Tonga.

In his article Steve White points to the many pressures on coastal environments from climate change, urban developments, fishing, sand mining, aquaculture, shipping, recreation and tourism. To these we might add marina developments, port infrastructure, cruise ships, sporting events such as SailGP, and vessels grounding, or sinking. There are also multiple concerns around invasive species such as *Caulerpa spp.*, *Undaria spp.*, and Mediterranean fanworm (*Sabella spallanzanii*). All authors in this issue point to the many pressures on the marine environment.

These trends underline the importance of strategies for marine protection, fisheries policies and coastal planning as discussed by Peart. Planning and establishing marine protection is a case in point where planning processes require well developed public involvement, with necessary inputs from iwi, fisher associations, recreational fishers, other user groups and the public. Work on marine protection over recent years was based around combined regional marine planning and stakeholder exercises in the Hauraki Gulf, Golden Bay, Marlborough Sounds, East Otago and Fiordland. Different levels of marine protection resulted, with some frustrations evident around opposition by some groups, slow progress, and limited outcomes for protection, leaving the lesson that time and sufficient resources are essential for participatory processes and, importantly, that strategic environmental assessment (SEA) is largely missing to guide such work.

Ursula Rojas-Nazar and colleagues, in their paper, emphasise the important role that Environmental Impact Assessments could serve as a central support tool for decision-making towards more sustainable management of the marine environment. They outline how the

regulatory system works for offshore activities through the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 with its requirement for Impact Assessments. The Act looks to balance environmental integrity and sustainable development through ecosystem management and by building mitigation measures into consent conditions.

Together these papers find that quality of IAs for the marine environment is a prevailing problem that must be addressed. The authors point to issues such as inadequate baseline data on the marine environment including the sea floor and fisheries, and poor understanding and assessment of cumulative effects. We therefore agree with their suggestions that more effective use of SEA will build more robust marine and coastal policy and plans.

Capacity building is therefore an issue to address for impact assessments in and around the marine environment both in New Zealand and the Pacific Islands. Puta Tofinga and Ivan Diarrapoint out in their paper that the ability of Pacific Island countries to conduct EIA and SEA in areas beyond national jurisdiction will mostly depend on strengthening EIA governance and IA processes.

This collection of articles points to areas of capacity building that NZAIA can continue to encourage and support for impact assessments directed to coastal zones, off-shore, EEZs, and beyond national jurisdictions:

- Improved understanding of the complexities of marine environments, and specific habitats, including marine-coastal interactions, and the baseline conditions for policy making, planning and assessments of specific policies and or projects affecting the marine environment
- Better tracking of baseline biodiversity data and tracking of changes over time
- Our understanding of cumulative effects in time and place
- Uptake of new tools such as AI managed data sets, satellite imagery and remote sensing, acoustic surveys and eDNA analysis
- Regulatory impact assessment for international and government policies and treaties affecting fisheries, off-shore mining, coastal development and marine protection
- Application of SEA in the marine environment for planning processes
- Ecosystem based assessments
- Acknowledgement of multiple stakeholders and broad public interests and allowing the time and means necessary to bring their voices into the assessment process
- Involvement of indigenous communities throughout.

Building capacity in SEA is particularly needed in New Zealand. As the paper by Rojas-Nazar and colleagues emphasises, current management of the EEZ typically is on a project by project basis, but there are times when a more strategic perspective is required. We note, for example that recently the expert panel for the Taranaki VTM application – the offshore mining of ironsands in the South Taranaki Bight – recommended marine consent be declined. This was the third major effort in ten years to gain approval for the project, and it again largely foundered on the potential marine ecological impacts. During the public debate about the project, a company interested in offshore wind energy raised concerns about the potential negative interaction of the two developments, and later decided not to proceed with further investigations.

Given competing pressure for development, together with potential cumulative impacts of multiple developments over time, there is a clear argument for marine spatial planning (e.g. see Scott, K (2016) referenced in the paper by Rojas-Nazar & Parr). Peart et al. (2024)<sup>1</sup> published a report calling for marine spatial planning, as part of the EDS Oceans Reform Project, though their model lacked any SEA which we believe is an essential component. New Zealand legislation generally does not recognise SEA as such, although there are processes that fulfil some of the elements of SEA. A New Zealand marine spatial plan, supported by an SEA, could identify where different activities would be ruled out due to ecological or biophysical conditions, or socio-cultural considerations, and provide the framework within which marine protection areas can be identified. In January this year the UK government published a scoping report as the first stage of the UK Offshore Energy Strategic Environmental Assessment<sup>2</sup>. Although it is a sectoral process, rather than a spatial planning process, the scoping report provides a very useful model of what SEA can contribute to managing the offshore environment, when the appropriate measures and tools, and skills, are available.

Next year the IAIA conference returns to New Zealand (IAIA27) and will bring participants from many countries. The call for sessions starts on 1 June 2026. We look to interested members of NZAIA and IA specialists to submit sessions and paper abstracts relating to the marine environment when the call goes out. The theme of the conference is *Ka mua, ka muri*: Looking back for the future of impact assessment. It is timely to apply this thinking to impact assessment in our marine environments throughout New Zealand, Australia and the Pacific Islands. What have we learnt and, returning to our question back in 2017, how can impact assessment play a more effective role?

A final note: we are very grateful to all our contributors to IC17 for their patience, given a number of unforeseen delays in the production of the issue.

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<sup>1</sup> Peart, R., Koolen-Bourke, D. and Sidibe, S. (2024) *Restoring the sea: The role of marine spatial planning*. EDS Oceans Reform Project Working Paper 1. EDS, Auckland.

<sup>2</sup> UK Government (2026) *UK Offshore Energy Strategic Environmental Assessment. Future Leasing/Licensing for Offshore Renewable Energy; Offshore Gas, Carbon dioxide and Hydrogen Storage; Future Transitional Energy Certificates for Oil & Gas and Associated Infrastructure. Scoping for Environmental Report*. Department for Energy Security and Net Zero. [https://assets.publishing.service.gov.uk/media/6979e5d41c24881f40a4d6fe/OESEEA5\\_Scoping\\_Document.pdf](https://assets.publishing.service.gov.uk/media/6979e5d41c24881f40a4d6fe/OESEEA5_Scoping_Document.pdf)