Nature risks and opportunities in Hawke’s Bay:

A place-based approach to understanding nature risks and business readiness for nature disclosure

EnviroStrat
Impact Investment Project Development

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Introduction

This research project investigates what's needed for a place-based approach by businesses to reporting nature-related risks and opportunities, with consideration of the blue economy.[1] The project extends previous research that examined global trends in sustainability disclosures and the developing principles of the blue economy.[2] The project is focused on the importance of understanding how nature risks and opportunities influence business outcomes. It explores New Zealand's preparedness for incorporating nature-related disclosures in the transition towards a sustainable blue economy.

New Zealand's economy depends on its natural resources, which poses risks and opportunities for the national economy. Nature degradation and biodiversity loss is increasingly recognised, not just as a corporate social responsibility issue, but as a source of deep risk for businesses. Equally, businesses can capture opportunities from addressing risks and from providing solutions to nature challenges.

This project is designed to gather insights and help integrate nature risks and opportunities in business and investment decisions, particularly from an Aotearoa New Zealand perspective. A place-based approach was adopted, with a focus on Hawke's Bay region. There's an opportunity to integrate marine ecosystems into strategies for tackling climate and nature risks through:

- fostering business value
- implementing ecosystem-based management (EBM)
- steering towards a sustainable blue economy.

The Aotearoa New Zealand Climate-related Disclosure Standards, along with existing sustainability disclosure practices, provides a conducive environment for the early implementation of nature-related disclosures.

Globally, regulatory and voluntary efforts are ongoing to enhance sustainability and environmental, social, and governance (ESG) disclosures. These efforts include incorporating nature-related information into business and financial reporting.[3] Sustainability disclosures are gaining momentum, extending to broader environmental impacts and social-cultural aspects, such as the rights of mana whenua and local communities.[4] Ocean ecosystems, recognised as global commons, present unique challenges in policy and governance.

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[1] This report utilises the definition provided by the Sustainable Seas National Science Challenge for the blue economy, which is described as "marine activities that generate economic value and contribute positively to social, cultural, and ecological well-being." This encompasses various industries including shipping, fisheries, aquaculture, offshore oil and gas exploration, as well as tourism activities along the coast and in marine settings, ranging from cruise ship operations to local coastal tourism ventures.

[2] For more information on other Sustainable Seas work on the blue economy, see https://www.sustainableseaschallenge.co.nz/our-research/blue-economy/

[3] Peacocke, L., Stancu, C., Diplock, J., & Short, K. (2022). Sustainability disclosures in the blue economy. Sustainable Seas National Science Challenge.

[4] Taskforce on Nature-related Financial Disclosures (2023). Guidance on Engagement Indigenous Peoples, Local Communities and affected stakeholders. Version 1.0. https://tnfd.global/publication/guidance-on-engagement-with-indigenous-peoples-local-communities-and-affected-stakeholders/

Blue economy sectors face unique challenges for addressing nature risks and opportunities. Science on oceans is complex, meaning understanding impacts and dependencies is more complicated than terrestrial realms. Development of Ocean science-based targets is underway, but will not be complete for at least another year, and will focus on seafood value chains first.[5] So far, science-based nature targets for oceans are in their infancy, with the Science Based Targets Initiative announcing their nature targets in May 2023.[6] Future work will focus on other sectors, with impacts on the ocean such as habitat damage, pollution, endangered or threatened species, rewilding, and more.

Compared to climate risks, businesses and financial institutions are less equipped in assessing and responding to nature risks, despite their close connection.

This research aims to synchronise and capitalise on New Zealand's current emphasis on climate-related disclosures and broader sustainability reporting. This includes being aware of international initiatives like the Taskforce on Nature-related Financial Disclosures (TFND) that supports the uptake of nature disclosure, currently voluntary, but it is expected TNFD will follow the progress of the Taskforce on Climate-related Financial Disclosures (TCFD) and become mandated in some jurisdictions. Developing an understanding of climate and nature risk management is vital for the finance, insurance, and private sectors.

Addressing nature risks and opportunities, the new frontier in sustainability reporting

Businesses recognise that addressing climate and nature risks is critical for a sustainable future. The need to communicate and address nature and climate-related risks has never been more pertinent. New Zealand has committed to mitigating climate risks adopting early the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations via the Climate-related Disclosures Act 2021. Understanding and addressing *nature*-related risks and opportunities is the next frontier for New Zealand businesses to engage with.

The sustainability disclosure agenda is moving quickly. United Nations initiatives[7] emphasise the pivotal role of financial institutions in moving towards net-zero economies and encourage active steps to support this transition. In line with this, the Financial Stability Board recognises the importance of climate and nature-related risks in preserving the financial stability of global economies (Figure 1). As a response, the board has instituted the Taskforce on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD) to address these issues.

[5] https://sciencebasedtargetsnetwork.org/our-mission/issue-hubs/ocean/

[6] See https://sciencebasedtargetsnetwork.org/how-it-works/the-first-science-based-targets-for-nature/

[7] Such as the UN Environment Programme Finance Initiative (UNEP FI) Principles for Responsible Banking, and Net-zero Insurance Alliance

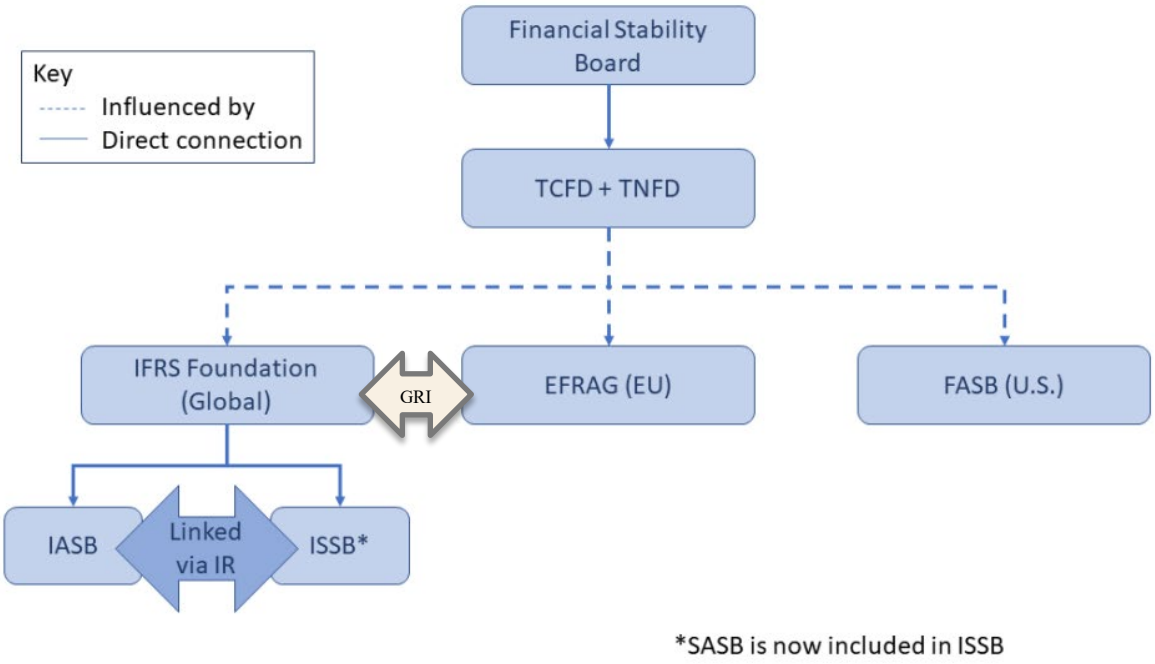

Figure 1: *Global sustainability standards are backed by the Financial Stability Board, particularly the Taskforce on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD). The International Financial Reporting Standards Foundation (IFRS)[8], EFRAG, and FASB are all influenced by the board. The IFRS Foundation controls the IASB and ISSB (including SASB) standards, linked via Integrated Reporting. Produced by EnviroStrat*

This direction is further reinforced by initiatives led by investors and financial institutions, drawing from the United Nations and the Financial Stability Board efforts. The Finance for Biodiversity Pledge was launched in 2020 with the aim of mobilising banks to protect and restore biodiversity through their financing activities and investment. It encourages banks to assess and disclose the impacts of their portfolios on biodiversity, integrating biodiversity considerations into their decision-making processes, loan and investment criteria, and risk management strategies. Over 160 financial institutions have joined this pledge[9] to date (end 2023). Under the auspices of the United Nations Environment Programme Finance Initiative (UNEP FI), The Principles for Responsible Banking have also been developed and provide a framework for a sustainable banking system. Banks that adhere to these principles commit to being more transparent about their impacts on the environment and society, actively engaging with stakeholders, and continuously working on their positive contribution to society's goals.

Due to the crucial role insurance plays in mitigating climate risks and supporting the transition to a low-carbon economy, the Net-Zero Insurance Alliance consists of leading insurance and reinsurance companies committed to transitioning their underwriting portfolios to net-zero greenhouse gas emissions by 2050. The members of this alliance pledge to regularly evaluate

[8] GRI, IFRS and EFRAG are researching and mapping interoperability between the different standards and requirements. See for example Interoperability/mapping - EFRAG

[9] The Pledge consists of 5 steps financial institutions promise to take: Collaborating and sharing knowledge, Engaging with companies, Assessing impact, Setting targets and Reporting publicly on the above before 2025.

and disclose the climate impact of their portfolios, set science-based targets, and align their underwriting activities with the goal of limiting global warming. Nature Action 100 is a global collaborative initiative aimed at investors who are focused on engaging with companies to improve their impact on nature and biodiversity. Over 200 institutional investors, who represent over $27 trillion in assets under advice or management have signed up. It s similar to Climate Action 100+ and it highlights the increasing recognition of biodiversity loss as a financial risk and opportunity in investment decisions. Importantly, TNFD has recently published its first voluntary Guidance for Financial Institutions (i.e. banks, investors, insurance, asset managers and owners) and various sectoral guidance to support adoption of disclosures.[10]

Together, these movements signify a global shift towards incorporating climate and nature metrics in sustainability reporting. This highlights the recognition of the intrinsic connection between economic systems and climate and nature, and underscores expectation nature will become more important to financial reporting in future.

A place-based approach to nature risks and opportunities: a focus on Hawke's Bay

Hawke's Bay has felt the tangible impacts of nature and climate risks and serves as the focal point for this project. Cyclone Gabriel in early 2023 underscored the link between nature, community livelihoods, and business sustainability. This research project engaged with iwi, businesses, and other stakeholders in the region to explore the perceptions of, dependencies on, and opportunities involving nature. This knowledge-sharing exercise informs businesses in other regions of New Zealand looking to voluntarily disclose nature risks and opportunities.

For this research project, we defined readiness as an organisation's willingness and ability to disclose nature dependencies and impacts, and related risks and opportunities. When we refer to nature disclosures, we mean, follow the guidelines of the Taskforce on Nature-related Financial Disclosures (TNFD) as the current best practice framework. However, we also recognise the ability of an organisation to invest in nature disclosures varies depending on sector, size, and resources.

Our research in Hawke's Bay was informed by a snap online survey that we organised before the work in Hawke's Bay began. The survey results informed us about the understanding of nature disclosures in New Zealand. The survey was aimed primarily at report preparers, and we had respondents from across New Zealand, giving insight into the market understanding. We were able to test assumptions ahead of engaging in one-on-one interviews with stakeholders in Hawke's Bay to ensure our approach was aligned with where current understanding was. The survey results are a part of the broader research project and include statistics from the results.

Nature disclosures, dependency, impact, risks and opportunities differ from the climate-related disclosures. Carbon and greenhouse gas emissions are proxies for understanding our impact on the climate. We don t have a similar metric for nature. As such, taking a place-based approach to

[10] For more information on this topic, see the Briefing on nature-related disclosures for financial sector prepared with support from the Sustainable Seas National Science Challenge: www.sustainableseaschallenge.co.nz/tools-and-resources/nature-reporting-in-nz-financial-sectors

exploring this topic in Aotearoa New Zealand gives us the opportunity to explore the local context, where businesses, iwi, local stakeholders and community groups depend on shared environmental assets and ecosystems services.[11] In doing so, we can connect the international conversations to a local place and engage with local stakeholders to gauge their understanding and readiness for nature reporting.

The Hawke's Bay Region is abundant with natural resources, including indigenous forests, pasture lands, and orchids (Figure 2). The 2022 regional GDP was $10,708 million, with primary production and processing generating more than a quarter of the GDP.[12]

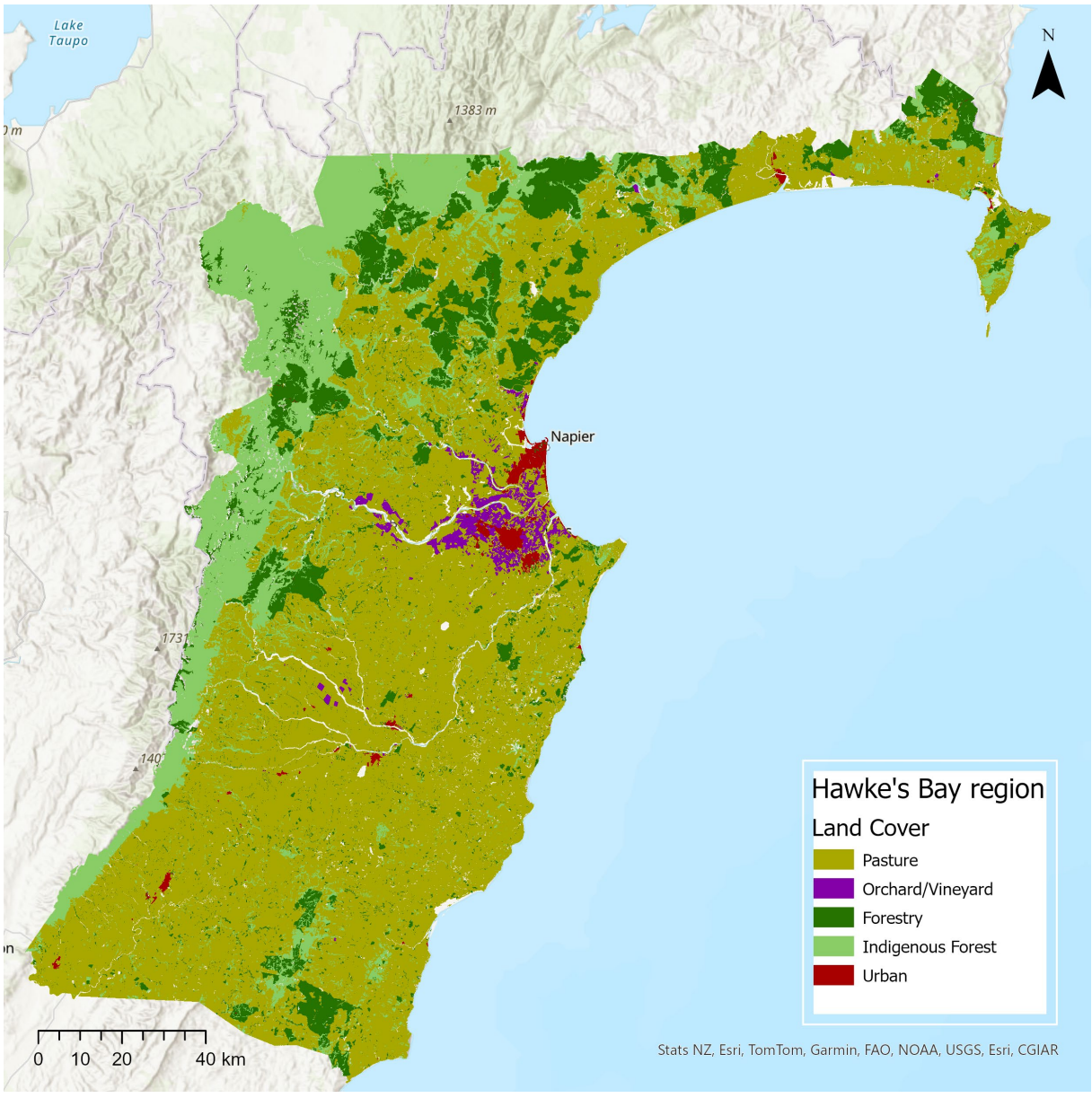

Figure 2: *Map of the Hawke's Bay region classified by land use. Produced by EnviroStrat.*

[11] Environmental assets are marine and freshwater ecosystems, land and forests (indigenous or not).
[12] Statistics New Zealand (2023) *Regional gross domestic product: year ended March 2022*. https://www.stats.govt.nz/information-releases/regional-gross-domestic-product-year-ended-march-2022/

We chose the Hawke's Bay region as our focus for this work for several reasons:

1. Sustainable Seas National Science Challenge has a history of engaging in the region, including a project on marine use scenarios.[13]

2. The region's geography means it has a high percentage of nature-reliant businesses — growing food, forestry, and other primary producers. We were keen to understand how nature-reliant businesses are managing their impacts on the land and sea.

3. We've done nature-related work in the region previously (preparing the region's first water accounts) and Hawke's Bay Regional Council is interested in supporting business engagement on nature issues. From this work, we had a good understanding of the sectors, and an understanding of what business was like pre cyclone.

4. The region has a clear connection between terrestrial and marine impacts, as further demonstrated by the impact from Cyclone Gabrielle. We worked from the assumption that the drivers of negative environmental impacts in the marine realm are not just the result how marine space is used but also due to terrestrial-based activities and impacts. Therefore, to understand how to remedy them, it is important to understand the terrestrial impacts. All the organisations we talked to clearly understood the terrestrial - marine connection, and for those organisations operating in the marine realm, monitoring impacts was a practice they valued investing in.

We spoke to several organisations in the region, ranging from primary producers to the Ports of Napier, the Hawke's Bay Regional Council, and representatives of Ngāti Kahungunu. Due to limited timeframes and resources, we took a targeted approach to engaging with a range of stakeholders that have an interest in nature related risks and opportunities, rather than seeking a wide view of all stakeholders and participants in the Regional economy. For more information on the methods, see Appendix 1.

A regional approach can bring more detail to the forefront than if we took a national approach, where we would be less able to gauge nuance from different regional sectors and stakeholders. For example, by taking this place-based approach in Hawke's Bay, we were able to engage with several sectors all sharing the same natural resources (e.g. water use) and space (catchment, coastline) and gauge their understanding of 'nature' as residents. We engaged with interviewees using a semi-structured interview approach. We touched on similar themes with most of those we interviewed, which gave us different perspectives. We would not gain this level of insight from a larger study area.

The 'blue' dimension

The blue economy as a concept and the principles developed for it, are not widely recognised or adopted in the Hawke's Bay region. To understand how nature risks and opportunities play out in the blue economy, we decided to look broader than just blue economy sector businesses and undertake a place-based view. This approach allows us to assess broader actions that contribute to the marine environment, for example, slash from forestry, causes of sedimentation, discharge from industry etc. Hawke's Bay Regional Council is considering how best to grow the Port of Napier operations, presenting an opportunity to grow a bigger blue economy sector in the

[13] https://www.sustainableseaschallenge.co.nz/our-research/Hawke's-bay-regional-study/

region.[14] The port already has a track record of positive environmental monitoring including building an artificial reef during the latest expansion and protecting penguin habitat. Similarly, engagement with local iwi led to the creation of an award-winning cultural monitoring framework which aligned with both the aspiration of the port and Ngāti Kahungunu.[15]

The well-being and advancement of societies and economies across the globe are deeply rooted in the functions of ecosystems and the array of services offered by the natural environment. These essential services encompass the supply of freshwater, food, and timber, as well as the pollination of agricultural crops by wild insects. Services also include maintaining soil health, managing water cycles and climate conditions, and reducing risks posed by natural phenomena such as floods and storms, among other benefits.

Indigenous peoples, local communities, and affected stakeholders

The importance of nature is especially profound for communities like Indigenous peoples and local communities, whose existence and economic well-being are intimately tied to their lands, territories, resources, and water. Addressing the critical global issue of stopping and reversing the loss of nature can be greatly enhanced by incorporating the traditional wisdom and practices of Indigenous Peoples and Local Communities. As such, the Taskforce on Nature-related Financial Disclosures has released Guidance on engagement with Indigenous Peoples, Local Communities and affected stakeholders. For Māori and local communities in Hawke's Bay, all those we spoke to felt a connection to nature as central to their wellbeing as kaitiaki and residents.

Nature risks and opportunities: insights from research

We were interested in understanding how businesses assess nature-related risk currently, or if they consider business risks related to nature at all. We targeted businesses that rely on nature, such as horticulture, forestry, ports, and others.

We conducted semi structured interviews with four main groups.

- Business sector, which included several marine and terrestrial businesses operating in the region.
- Policy, which included Hawke's Bay Regional Council and focused on the local policy context.
- Local stakeholders, which included local stakeholder groups that represented local community interests in the marine realm.
- Māori interests, which included local Māori perspectives, from within iwi and other roles within the community.

We found that nature risk assessment is done in an ad-hoc manner, with no standardised and consistent framework for evaluating nature risks. One reflection from our conversations was that most people we engaged understood the connection between nature and financial stability.

[14] About our Region | Hawke's Bay Regional Council (hbrc.govt.nz)
[15] The Marine Cultural Health Programme is a kaupapa (initiative).

Similarly, where organisations were aware of their nature impacts, for example discharging waste into the ocean, they aspire to finding solutions to reduce or ideally eliminate the impact in future. For example, one business said:

"The site selection with proximity to the sea for the ocean discharge we've refined over the years and cleaned up the discharge significantly. So it s quite a big thing for us, how we can sustainably use that resource and it's very integral to the business being able to discharge into the sea."

This business went on to state if technological solutions to discharge became available in future, they would look to deploy them.

Similarly, we noticed when we asked businesses about their nature reporting regimes and practices, most said they currently had no framework for nature reporting. However, when we explored what monitoring programmes organisations had, we found that most businesses have undertaken various degree of nature-related assessments – largely due to resource consent requirements but not only – which are reflected in some of their monitoring and reporting. With the current monitoring programmes in some businesses, these organisations are well placed to start the journey towards producing a TNFD aligned report. Work would still need to be done to ensure all aspects of the recommended disclosures are covered, however some businesses already have data and metrics to work with. For example, the Ports of Napier has a monitoring programme that assesses several ecological and biophysical factors. Potential exists to transition this data into a nature report, using appropriate metrics.

Place-based insights into nature risk and opportunities

Nature risk reporting or nature disclosures are not widely in practice in Hawke's Bay
Most organisations do not currently formally disclose nature-related risks, dependencies, impacts or opportunities in a systematic way or by applying recognised tools and metrics. However, for organisations reliant on nature for their business, they understand the intrinsic link between ecosystem health and their business.

Some businesses had science-based targets for climate – but none mentioned science-based targets for nature
Science-based targets for the organisation who used them predominantly focused on scope 1 and 2 emissions, with some sustainability reports mentioning they would consider scope 3 emissions in future. Science-based targets for nature were announced in May 2023, with guidance on how to implement these targets.[16] One company initially assessed nature risks and opportunities in preparation for the future. The company had identified several opportunities to set targets for biodiversity by establishing restoration projects around their operations. The company has committed to a long-term approach, recognising Te Ao Māori values and the interconnectedness of climate, nature, and a sustainable future.

Some organisations have environmental monitoring programmes that could support nature risk reporting and disclosures
Some organisations already collect environmental information for monitoring purposes, and there may be value in this information for nature-related disclosures.

Foreign-owned entities more often considered sustainability practices, including nature risks and opportunities

[16] For more information on science-based targets for nature, see https://sciencebasedtargetsnetwork.org/take-action-now/take-action-as-a-company/what-you-can-do-now/

Foreign-owned entities had the advantage of access to more capital to implement sustainability related practices that aligned with the parent organisation's values. For example,

"We've got a lot of support from the shareholders to invest in [nature positive practices]*. Thats why when we want to look at TCFD even though it's not a requirement for the business. So, yeah, I guess we see nature as being integral to our business."* – Hawke's Bay Business

Cyclone Gabrielle influenced the perception of nature and climate risks
Most organisations we spoke to were impacted by the cyclone, and most were considering how to increase future resilience to other severe weather events. This included considering nature-based solutions like increasing planting on land to reduce erosion. On material impacts of nature in the region, one business said:

"This is very material, this nature impact. We always had this understanding that we've got a flood protection scheme [for their operating site] e.g. stop banks and drainage around the site that was supposedly meant to protect us from a 500-year flood." – Hawke's Bay Business

This protection failed, and the operating site was flooded, and the business we interviewed is still not fully operational almost a year later. Without the financial support of shareholders, the business would be struggling much more than it is.

Environmental monitoring, or nature reporting, can provide a baseline for companies to improve on
This baseline can translate into financial benefits in terms of improved operational efficiencies or through other mechanisms. One business described how monitoring improved operational efficiencies and the bottom line by improving water use:

"You know, not only is it a wise use of resource, it's actually an efficient use of resource. There are savings; operational savings for growers to be following that sort of practice which pays for it. So it's not, not a financial issue. It's an operational efficiency and out of that operational efficiency comes a financial benefit." – Hawke's Bay Business

Awareness of TNFD was not widespread, although organisations who had a sustainability report were more likely to be aware of it
Most organisations were not familiar with the TNFD but could see the value in understanding climate and nature risks.

Most organisations understood the connection between land and sea and the impacts from land, into the marine environment
We mostly spoke to organisations who rely on nature for their business and the connection between nature and economic stability for their businesses is largely recognised. These organisations understood their own operations and the nature risk factors for their bottom line quite well, and connecting the impacts on land to the ocean was universally recognised as connected to each other. The two most referenced examples for land and sea impacts:

1. The slash washed into the marine environment, affecting commercial and recreational / cultural fisheries.
2. Sediment and discharged waste into the marine environment.

We spoke to several businesses reliant on nature for their product, and all identified the connection between land, sea, nature and financial prosperity.

"Nature is core to our business, we rely heavily on nature and natural resources. We re relying on nature inputs and biodiversity to be able to grow a good crop… We re heavily dependent on nature and

natural resources as well. We take a lot of water out of the East River and discharge into the sea." – Hawke's Bay Business

Access to data and information poses some challenges for disclosing nature-related risks and opportunities

Some organisations collect monitoring data for export markets or regulatory compliance. The challenge with data collection is data privacy. Some organisations have extensive data but cannot share it with other organisations due to data privacy concerns. For example, the council collects data on private lands, and some sensitive information would not be allowed to be shared or the council loses access to the land to monitor.

International market requirements and foreign ownership can drive disclosures

Export-focused businesses, such as primary producers, prioritise export market requirements for their produce. Biosecurity risks are managed with the export market in mind. Businesses recognise the role of international markets and consumers in driving behaviour for producers. For example, Global Gap require disclosure on certain metrics, such as water efficiency, to comply, and this requirement can drive measurement at the farm or orchard level. Compliance with such initiatives can give more market access, which is desirable to exporters.

"I just see requirement for increasing awareness and a requirement for global business heads to be mindful of what consumers in particular because the consumers ultimately are going to be the drivers" – Primary Producer

Regulatory compliance is currently the biggest driver for disclosure

Some companies had voluntary reporting frameworks, and one company was beginning to explore how they would implement a TNFD aligned report. Resource consents are an entry point for measuring and monitoring.

"We are required as part of our [resource] *consent for irrigation… and we have to report actual water use. So there are meters on all of our wells but the wells are irrigating multiple crops in multiple locations."* – Primary Producer

We heard from several organisations who were undertaking initiatives that regulatory compliance with the resource consent was a driver for actions. For example. Napier Port undertook environmental monitoring to comply with the resource consent condition, and in the process, have found addded value from the datasets it maintains and collects information on.

Growing engagement with tangata whenua / mana whenua / te ao māori by councils, government, and businesses has added an additional workload on Hawke's Bay hapū and iwi

Local representatives of Ngāti Kahungunu have often felt they lack the capacity to address the level of feedback sought by a range of stakeholders in the region. While the intention of seeking consultation with local iwi is a positive step towards better stewardship, ensuring iwi have sufficient resources and capacity to support the consultation requirements remains a challenge in the Hawke's Bay region, and likely in other regions.

For blue economy businesses, nature risks and opportunities in Hawke's Bay will be influenced and impacted by on-land activities

Understanding the nature impacts, dependencies, risks, and opportunities for blue economy sectors in Hawke's Bay will require consideration of on-land impacts. Developing a regional vision for nature that both terrestrial and blue economy businesses can align with would bridge the gap.

Gaps and barriers to nature risks and opportunities in the Hawke's Bay region

In addressing nature risks and opportunities, the region's businesses and decision-makers demonstrate a foundational understanding. However, certain gaps and barriers persist that hinder full progress towards nature disclosures.

1. No unified vision on nature and biodiversity for the region
The absence of a cohesive vision for nature in the region makes it challenging to align nature goals with broader objectives, such as those related to climate change mitigation strategies like carbon scenarios. This disjointed approach limits the effective integration of nature considerations into wider goals.

2. A business perspective on nature considerations
Outside of compliance requirements i.e. resource consents, many businesses view nature risks and opportunities as secondary or 'nice-to-have' elements when financial bottom line comes into play. Introducing voluntary guidelines that outline initial steps could help bridge this gap, fostering greater business engagement in understanding dependencies and impacts, and putting in place nature-related strategies that address risks and opportunities.

3. An inconsistent use of tools and frameworks
The application of tools and frameworks, both local and international, is ad-hoc and unsystematic. Clearer local and national policy directives could guide regions and businesses in identifying local issues. Clearer directives would lead to a more robust approach to assessing risks and identifying response interventions. Tailored guidance on knowledge and tools for specific regions and sectors could enhance the uptake and effective use of tools and frameworks.

Reporting barriers

Barriers to uptake of nature risk and opportunity reporting for the Hawke's Bay include the following.

a) Limited capability and capacity
Understanding and implementing biodiversity and other environmental metrics require specialised knowledge and skills. This need for expertise limits the capacity and capability of organisations to effectively address nature-related risks and opportunities at individual levels (especially for small and medium size businesses).

b) Data privacy concerns
Challenges arise with data privacy in existing datasets and information. For instance, some private land data, valuable for nature reporting, is restricted due to landowners' reluctance to share information publicly. Similarly, companies that collect environmental data are hesitant to share it without clarity how it will be used but also with a view to compensation, as data collection incurs costs.

c) Constraints to iwi / Māori participation
Iwi and Māori communities play a crucial role in guiding local land use and marine decisions. However, capacity to review and contribute to current inquiries is limited and described as reactive 'fire-fighting'. It is essential to establish systems and support that enable meaningful engagement of Iwi and Māori communities in co-governance and decision-making processes related to nature.

A multi-faceted approach is needed to effectively address these gaps and barriers. This approach should encompass the development of a unified regional vision for nature, the introduction of

accessible guidelines for businesses, the standardisation of tools and frameworks, resolution of data privacy issues, enhancement of organisational capabilities, and the empowerment of iwi / Māori communities. Such concerted efforts will pave the way for a more cohesive and effective management of nature risks and opportunities in the region.

Discussion

In the current landscape of nature risk assessment and disclosure, several systemic gaps and areas for improvement have been identified. This discussion aims to explore these areas, their implications, and potential solutions.

Businesses in the region don't systematically assess risk. This lack hinders a comprehensive understanding of nature risks and their potential impact on businesses and the environment. Establishing a standardised approach to risk assessment could provide a clearer picture of these risks and help develop more effective management strategies.

Currently, the assessment of, and disclosure of nature risks within organisations appears to be ad-hoc and inconsistent – particularly in the case of smaller businesses. This raises questions about how these risks are being understood and integrated into organisational planning and decision-making. Implementing a more structured and regular disclosure process could ensure that nature risks are adequately recognised and addressed in business strategies.

Although abundant data is available at the entity level, particularly data generated through the resource consent processes, this data needs to be packaged and processed for disclosure purposes. This requirement presents challenges with data privacy and the need for effective data management systems that can transform raw data into useful information for stakeholders.

A clear need exists for a more defined vision and set of goals for nature conservation and sustainability in the region, which is communicated in a more accessible way than a regional policy statement or long-term plan. This lack of clarity hampers the ability of businesses and policymakers to align their strategies with regional objectives and to set targets, leading to disjointed efforts and missed opportunities for collaborative action.

The intersection of climate and nature-related risks and opportunities presents a unique challenge. While there are established metrics and scenarios for climate risks, such as the Aotearoa New Zealand Climate Standard (NZ CS1), a similar standardised approach for nature risks is lacking. Nature risks are inherently place-based and require a different set of assessment tools and metrics.

The principles of the blue economy are not widely understood, yet are crucial for businesses that rely on water resources. Increasing awareness and understanding of these blue economy principles is essential for fostering sustainable practices within these sectors. The WWF Principles for a Sustainable Blue Economy or the Blue Economy Principles for Aotearoa New Zealand could be used to guide blue economy sectors in Hawke's Bay.

The overlap between the frameworks of climate disclosures (NZ CS1) and potential nature-related disclosures (TNFD) suggests a commonality that could be leveraged. For companies already complying with the NZ CS1 standard, this overlap might ease the transition to including nature-related disclosures, provided they align with the TNFD framework. However, the challenge

lies in the lack of a shared scenario metric for nature as compared to climate, where specific global warming degrees are used as benchmarks. The TNFD s approach to scenario analysis, which recommends considering ecosystem service degradation and alignment of market and non-market driving forces, requires a different set of considerations than those used in climate risk assessments.

Addressing these gaps and barriers requires a multi-prong approach that includes

- standardised risk assessment tools
- improved data management and privacy protocols
- clear nature and biodiversity goals
- enhanced understanding of blue economy principles
- exploration of the synergies between climate and nature disclosures.

This multi-prong approach will improve the accuracy and efficiency of nature risk assessment and disclosure and ensure that these practices align with broader environmental and economic objectives.

Recommendations

Overall, Hawke's Bay is well positioned, though not ready, to execute nature-related disclosures, including assessing nature risks and opportunities. The business community is interested in being more strategic and intentional about assessing nature risks and opportunities. Readiness for disclosure is expected to increase. Challenges to overcome involve data to inform metrics and targets and resourcing for local iwi in their role as mana whenua/kaitiaki to support Indigenous-informed nature goals and disclosures.

The recommendations below are directed at different stakeholder groups (e.g. standard setters, regional policy makers, and science and research) who can collectively make a material contribution to the nature-related disclosure agenda.

Recommendation 1: Develop a tailored guidance framework for nature-related financial disclosures for Aotearoa New Zealand

Currently, there are ad-hoc efforts to assess and disclose nature risks, without recognising New Zealand's goals and commitments or the different contexts of the regions. To increase the practice and readiness of businesses and financial institutions to assess and disclose nature-related risks, a shift is needed to a more robust and systemic approach to disclosing nature risks and opportunities. A voluntary guidance framework that aligns to international developments, but also reflects Aotearoa practices and knowledge – especially Te ao Māori, could be a stepping stone towards a future statutory disclosure regime. Adopting such a framework is more likely to be successful if the framework:

- is issued by an authoritative agency — the *External Reporting Board* appears to be the best-placed agency in New Zealand to lead such development given its role as a standard setter and experience with the *Climate Disclosure Act*
- is tailored to New Zealand's context and policy approach to biodiversity and nature
- takes into account te āo Māori views and aspirations

- builds on international frameworks and practices, such as TNFD or GRI
- leverages the knowledge and experience with statutory climate disclosure — doing this will reduce the disclosure effort by individual businesses and financial institutions and increase buy-in for adoption.

Recommendation 2: Leverage the knowledge, data, and information available at regional level – particularly regional councils and DOC

Due to their oversight functions and mandates to manage natural resources and biodiversity, regional councils and agencies like DOC hold valuable knowledge, data and information that business and financial institutions can use to measure and monitor impacts and dependencies on nature. Local government can enable nature disclosure by:

- making data and information publicly available and in a format that's fit-for-purpose and user-friendly in the context of nature-related disclosures by businesses and financial sector.
- developing strategies and goals for nature and biodiversity, and synthesising and communicating clearly the aspirations, goals, and targets for ecosystems and species biodiversity that the private sector can use to inform their own risks and opportunities assessment, and target setting.
- facilitating information sharing and collaboration within businesses, and between businesses, iwi and communities that share a common space (i.e. live and do business within the same catchment, ecosystem etc).

Recommendation 3: Emphasise the role of science and research in nature-related disclosures

Effective strategies and practices to identify and address nature risks and opportunities require significant science and research input. This need presents significant opportunities for the science and research community to share the knowledge and tools it has about:

- ecosystem trends and conditions at different space and time scales
- cumulative impacts
- risk assessments and uncertainty
- ecosystem services assessment and valuation
- metrics and target setting (organisation, product, or ecosystem level)
- ecosystem-based management, and active and passive ecosystem restoration.

A particular focus is also needed for marine ecosystems as they are currently insufficiently covered in nature-related standards and disclosure practice. This focus is particularly important as New Zealand has a large marine estate and an increasing focus on the blue economy.

Recommendation 4: Foster business exploration and adoption of nature-related disclosure

To support the development of nature-related disclosures as a business practice in Aotearoa New Zealand, more experimentation and trials are needed to build the knowledge, capability, and readiness for adoption. Business action can be spurred if accessible examples are available for how to operationalise nature risks and opportunities – moving from assessing dependencies and impact to strategic decision-making. This includes examples of disclosure reports.

Pilot initiatives where businesses operating in a shared nature space (catchment, region, or biome level) can jointly assess risks and opportunities would benefit the New Zealand business community. Factors of interest that need to be explored include:

- opportunities to jointly do risk assessments and to support intra-sector collaboration
- targets set to pursue shared nature goals – informed by engagement with local iwi, community groups and local authorities
- access to data and options to share the cost of data
- a standardised assessment process so that it can be comparable between organisations.

In turn, the pilot will understand the applicability and scope of nature-related reporting, reviewing existing and upcoming nature-related disclosure requirements, both mandatory and voluntary, and assessing applicability for organisations. This can inform other regions in New Zealand.

Recommendation 5: Use the opportunity for guidance on nature disclosure from mātauranga Māori, providing an alternative to Western solutions to nature conservation and restoration

Incorporating mātauranga Māori in assessing nature risks and opportunities is a unique opportunity for Aotearoa New Zealand. Capacity to share knowledge and inform decision-making for local development can be limited for Māori. Creating a framework for nature-risks assessment, informed by the views and aspirations of local iwi, hapu and whanau would be beneficial for the community. This could be coordinated between the council, stakeholder groups, businesses and iwi.

Appendix 1: Methodology and approach

The aim of this research project is to capture the attitudes of a selection of businesses in the Hawke's Bay region, representing different sectors either in the blue economy, or businesses with significant impact on the marine environment from their operations. The following methodology documents the process we took to explore the attitudes of this group.

1. Steering group establishment

To frame the line of enquiry, we organised a steering group of knowledge holders. The knowledge holders understand the discussions around nature disclosure and gave their insights into which areas we could focus on. As well as talking to knowledge holders, we released a survey – aimed at engaging sustainability report preparers to gauge their familiarity with the TNFD and understand whether they view their business as reliant on nature or not. The results of this survey were submitted to the Challenge as part of this work.

2. Hawke's Bay Regional Council engagement

Following the steering group input and the survey results, we engaged with the Hawke's Bay Regional Council (HBRC). We met with several members of the organisation who were involved in nature, climate change, biodiversity, policy, and other areas. We sought input from the council to further frame our place-based approach to the region. We discussed subregions of Hawke's Bay, which would have a variety of sectors present on land, and included coastal communities, such as the Port of Napier. The session with HBRC helped to further direct who we would talk to about nature disclosures. Where the steering group and survey helped frame what we talked about, the HBRC session helped frame who we should talk to in the region.

3. Semi-structured interviews with local organisations (businesses and interest groups)

After we'd worked out what to talk about and who to talk with, we arranged semi-structured interviews with about 15 people in the region. These people were selected to represent a variety of sectors operating Hawke's Bay. These ranged from businesses to stakeholders to infrastructure/asset holders. The semi-structured interviews focused on discussing the stakeholders' views on nature, and the interaction with their business or community. Secondly, we focused on any reporting regimes they may have in place that could be considered 'nature reporting'. This focus was to attempt to gauge the 'readiness' of the relative sectors to shift to nature reporting. The content from the semi-structured interviews was analysed for the themes around the questions, which were informed from earlier research, plus input from the steering group and others. In-depth content analysis was out of scope for this research. However, consistent themes and insights were discussed and agreed by the researchers. We intentionally have not attributed quotes to identified individuals to maintain privacy for those who shared sensitive information with us.

4. Analysis and synthesis of findings

We analysed the content of the interviews to look for common themes. We analysed the challenges organisations described about nature disclosures.

5. Survey results

As part of this project, we sent out a survey. The survey was aimed at engaging sustainability report preparers across sectors to get a snapshot of the state of play on nature disclosures. The demographics of the survey suggest the knowledge and awareness of nature risks and opportunities is still limited to consultancies, government, and iwi entities. Here are some of the key findings from the survey:

- Māori business and iwi entities had a higher familiarity with the TNFD than non-Māori. However, generally, both groups had low familiarity, ranging between 40-57%. Entities that produce a sustainability report, in general, noted higher familiarity than those that did not produce a sustainability report.

- For Māori businesses/entities, fishing assets, such as quota, was stated as being a reason for why the entities were reliant or highly reliant on nature. Capability building and resourcing were quoted as being important for addressing nature-related risks and opportunities.

- 51% of respondent's organisations produce sustainability reports, with environmental metrics, targets, or goals being the most reported topic. Materiality is the least reported topic.

- Despite the demographics, most respondents stated their business relies on nature (59%). Most also stated their business relies on marine ecosystems (60% agreed). This reliance highlights that they recognise the interconnectedness between business and nature.

- 30% of respondents reported being either 'extremely familiar' (3%) or 'very familiar' (27%) with the TNFD. Organisations that produce sustainability reports were more aware of the TNFD. This finding supports the notion that those respondents already familiar with nature reporting responded to the survey request, and that actual awareness is likely lower.

- Four themes emerged from respondents when asked what support they needed to address nature-related risks.

    - Capability building: support for entities to develop capacity / capability
    - Data: provision of data necessary for reporting
    - Regulatory frameworks and compliance: better frameworks and compliance, linked with data provision and capability building
    - Resourcing and funding: more funding support to develop capability

We took the lessons from the survey into our conversations in the region. When we spoke to businesses in Hawke's Bay, we heard similar things to what we found through the survey. For example, most people had heard of the TNFD, but few were confident about the material and how it might impact their organisation. Most businesses, if not all, agreed that they relied on nature, and most people sought to have nature-positive impacts in their personal lives, and some of those values had carried over to their business roles, either directly or indirectly.

Appendix 2: Taskforce on Nature-related Financial Disclosures' LEAP approach (locate, evaluate, assess, and prepare)

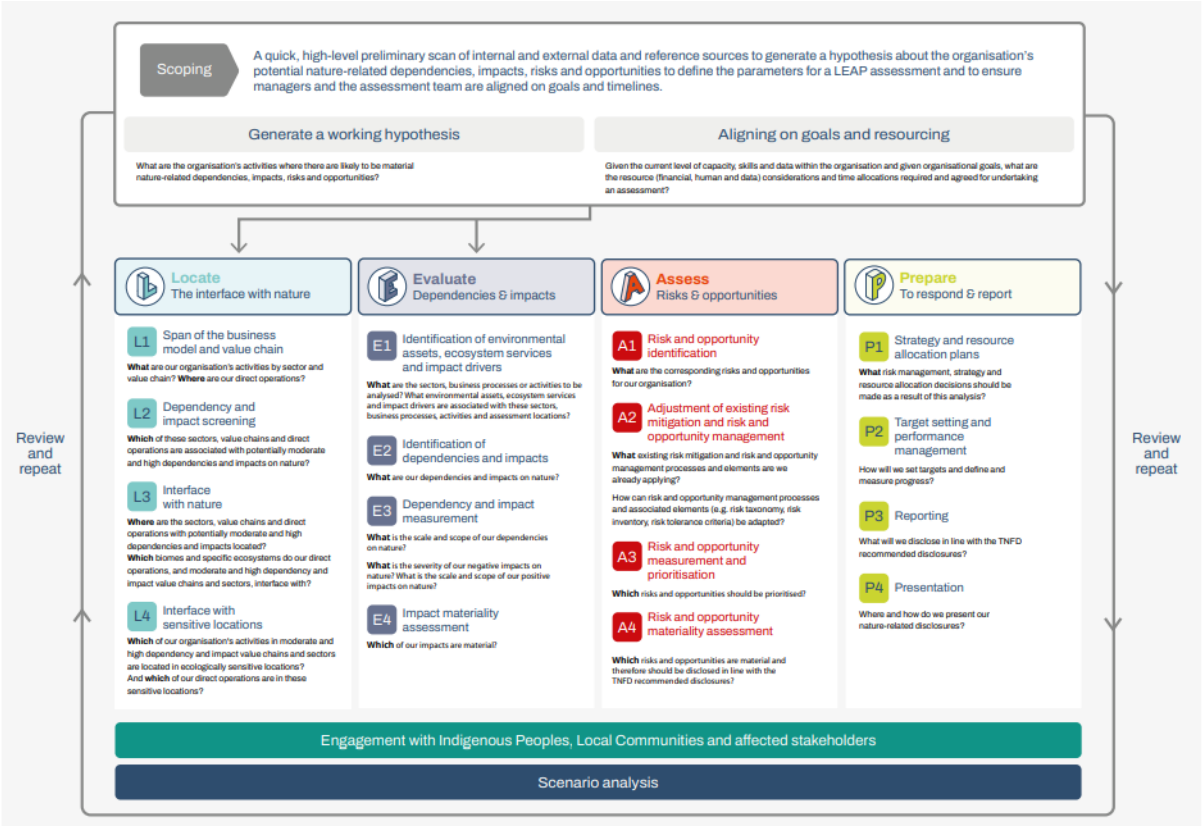

Figure 3: *The LEAP Approach: the TNFD provides the LEAP approach for organisations looking to do due diligence and understand their risks, dependences, and impacts and identify potential nature-related opportunities. Taken from the Guidance on the identification and assessment of nature-related issues: the LEAP approach (2023).*

As a starting point for businesses looking to assess their nature risks and opportunities, we have guided some we spoke with to TNFD's LEAP approach (figure 3). The LEAP process asks businesses to locate, evaluate, assess and prepare to assess nature-related risks, dependencies, impacts and opportunities (fig. 3). The Taskforce on Nature-related Financial Disclosures frames nature disclosures as a location-specific activity, and suggests companies engaging with the framework follow LEAP as part of the due diligence assessment process. The approach is helpful for organisation to identify and assess nature-related issues for their organisation, and helps organisations take effective action to manage impacts, risks and dependencies, and to identify new opportunities.

Disclaimer

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