

# Advancing the conversation on well-being and environmental stewardship

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## Introduction

### People and the environment: a complex relationship

We have a fundamental relationship with the environment: *we both influence it and are influenced by it*. We influence it by the way we live, causing ‘pressures’ on the environment and changes in the ‘state’ of the environment. For example, our actions can cause changes in the quality or condition of our soils, rivers or seas.

The other dimension of our relationship with the environment is how it influences us. We depend on the environment and the benefits the environment provides us. Examples of these benefits include food, energy, health, recreation and identity. These dependencies and benefits are often described as ‘ecosystem services’, as popularised by the Millennium Ecosystem Assessment.

### The importance of understanding the relationship

Given how deeply intertwined people and the environment are it is important that environmental stewardship and related management decisions include consideration of our place within the environment. At the same time, our efforts to protect and manage the environment should not be at the expense of our own well-being. Well-being has a unique and important place in decision-making in Aotearoa New Zealand. It is already an important basis for decisions on budgetary allocation and investments and is used to evaluate government progress towards goals.

## Challenges

### Many efforts, many initiatives

Given this relationship between people and the environment a key question is “*how well do we currently understand this reciprocal relationship?*” Our review reveals there are a large number of initiatives that focus on aspects of environmental stewardship and well-being. Some are outlined in Figure 1, with a summary of selected initiatives in Appendix 1.

When we look at the different initiatives and a) characterise their focus and b) classify the current indicators used, we see that many initiatives focus on conceptualising or assessing only one part of the system: either *people*, or *the environment*, but few on the interface between them. Furthermore, our review suggests that there is a strong bias towards assessing environmental integrity and degradation. This narrow focus can make it difficult for people to target restorative or protective action, or even appreciate why it is necessary.

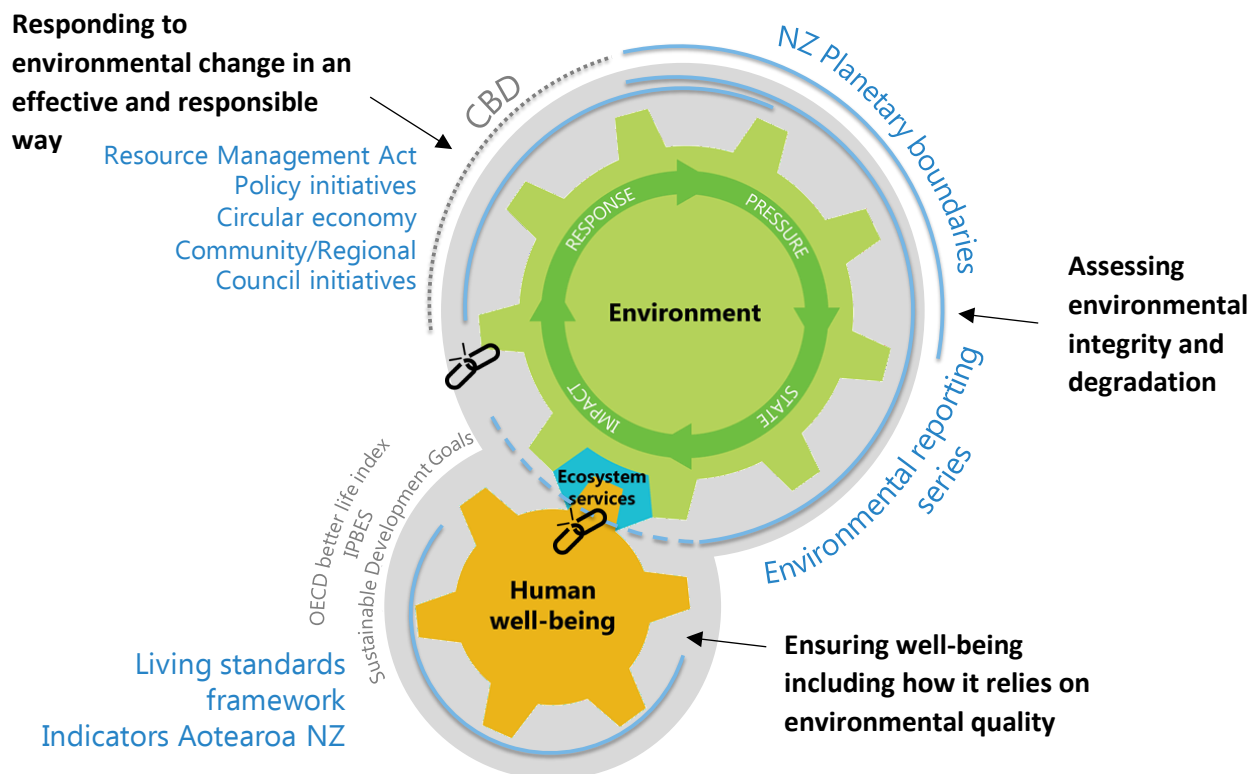


Figure 1. Initiatives focusing on different aspects of environmental stewardship and well-being

In our conceptual view of the system (figure 1), we visualise how the environment (green cog) can contribute to people and human wellbeing (orange cog) via ecosystem services. This is in contrast to a Te Ao Māori view, which sees people within, not separate to, their environment. We are working to build more of this approach into this framework.

### Many terms, many concepts

Another challenge is that the initiatives often use slightly different terms and concepts (e.g. quality, condition, impact, pressure), making their direct comparison difficult (see Table 1).

Table 1. Examples of some of the comparative terminology used across selected frameworks

NZ Environmental Reporting framework	Inter-governmental Platform on Biodiversity & Ecosystem Services	EU Biodiversity framework <sup>[1]</sup>
Driver [excluded from reporting]	Indirect driver	Driver
Pressure	Direct driver	Pressure
State	Nature or Natural Capital	Extent Condition
Impact	Changes in Nature's contribution to people or Ecosystem services	Changes in Ecosystem services
Impact	Changes in Good quality of life, human well-being or living in harmony with nature	Changes in human well-being: - Benefit - Value
Response [excluded from reporting]	- Institutions and indirect drivers - Anthropogenic assets	Response

<sup>[1]</sup> <https://biodiversity.europa.eu/maes>

## A passive, patchy evidence base

The initiatives we reviewed use a diverse set of data which are often inconsistently collected and used. Many also rely on data that is already available, rather than actively seeking what is ideally needed. This reliance on existing data was noted by the Parliamentary Commissioner for the Environment (PCE) in his recent review. A ‘passive’ or opportunistic approach to data collection, such as this, could undermine our ability to make good decisions for environmental stewardship and well-being.

As Table 2 shows there is also a lack of coverage across indicators types, with most indicators being ‘state’ indicators, with some measures of ‘pressure’ and fewer measures of ‘impact’. This issue was acknowledged in the Environment Aotearoa (2019) report. There are few indicators that cover impact or human well-being, and even less that draw on Mātauranga Māori.

While some initiatives such as the Waikato Wellbeing project, the Living Standards Framework (LSF) developed by The Treasury, and Indicators Aotearoa New Zealand (IANZ) led by Statistics NZ, have attempted to bridge these gaps, there are still few indicators or data available outside of pressure and state.

Table 2. Audit of indicators in selected initiatives

Indicator Initiative	Driver	Pressure	State	Impact (Ecosystem services)	Impact (Benefit)	Response
IANZ (Stats NZ)	0	4	19	7	5	0
Environmental Reporting (MfE/StatsNZ)	0	27	56	15	3	0
Living Standards Framework (Treasury)	0	1	1	2	2	0
Waikato Wellbeing project (Regional Council)	0	0	6	1	0	0

## Insights from others

There is a huge opportunity to develop better environmental initiatives at both the global and local scales, but this can only be achieved through understanding (and measuring) the relationship between **people** and their **environment**. This opportunity is not only relevant to New Zealand—other countries are working to bring this dual approach into their policymaking. For example, the Biodiversity Strategy 2020 from the European Union (EU) is based on an ecosystem assessment approach<sup>1</sup>, and the EU is now considering the use of a *System of Environmental Economic Accounting* (SEEA) to ensure indicators used to track the relationship between people and the environment are relevant, credible, robust and traceable over time.

Recently, the United Nations’ Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) extended the ecosystem services concept to a notion of ‘Nature’s Contribution to People’. This conceptual framing acknowledges the diverse worldviews of people’s connection with nature, and encompasses indigenous and local knowledge. This framing may be beneficial in recognising New Zealand’s biculturalism and integrating the value of Te Ao Māori perspectives into this new method of decision-making.

## Recommendations

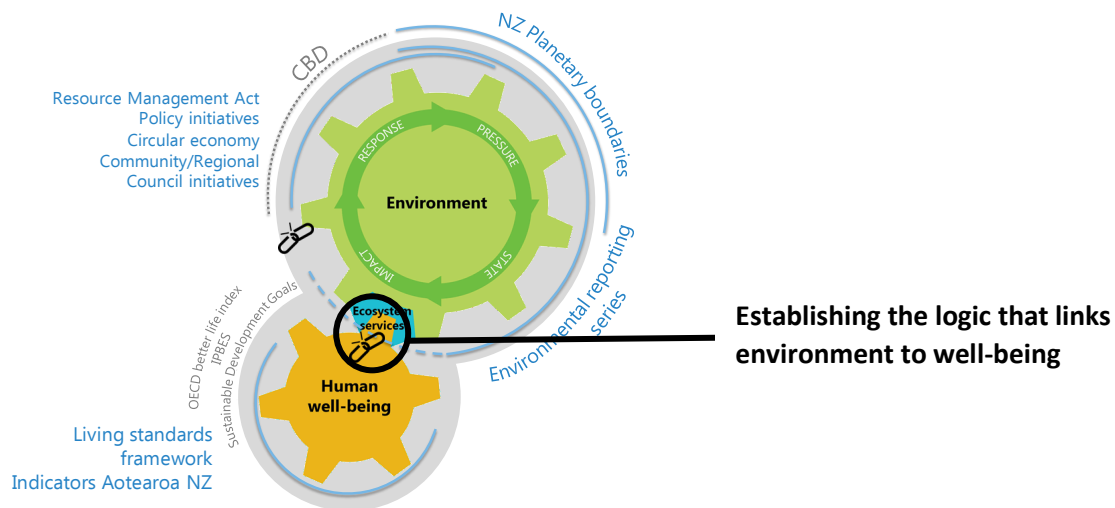
### A window of opportunity

Our preliminary analysis suggests we could advance a more integrated, robust and strategic approach to environmental stewardship, but one that is compassionate and accounts for human well-being. To do this we would need to bring together a conceptual framework that links environment (pressure, state, impact) with the desired outcomes for people (well-being). This in turn is more likely to foster an effective, responsible and balanced response. This is the goal of our project *‘Well-being and environmental stewardship: advancing the conversation through an evidence-based approach’*.

Many of those we consulted with were keen not only on this approach, but also having **the right indicators or evidence** base to link environment and people. This builds on work already underway, including research initiatives such as the Health Research Council’s research focus on ‘responding to environmental impacts on human health’. Recommendations made in recent reports also point to the need for this new approach –including Environment Aotearoa 2019, the recent PCE review of the Environmental Reporting Act, Treasury’s new Wellbeing Report (required by the Public Finance Act), and the potential Amendments to Local Government Act and the Resource Management Act.

### What would it take?

Based on our initial findings, we propose developing the logic that links **environment** to **people** (the place where the two cogs meet in the diagram). Indicators will be developed along a pathway that identifies how the state of environment matters to our well-being. In contrast to previous initiatives, the focus is on identifying the indicators based on what is needed, rather than purely on what is already available.



### Stepping forward

We have developed a prototype process to explore the link between the environment and well-being (i.e. people), including the approach to identify appropriate indicators. We plan to test this approach in Phase 2 of the project.

## Acknowledgements

We would like to thank our Advisory Group, who helped us in developing and interrogating the logic and application of this material, including:

- Beat Huser (Waikato Regional Council)
- Becky Prebble (Ministry for the Environment)
- Gary Bedford (Taranaki Regional Council)
- John Roche (Ministry for Primary Industries)
- Ken Hughey (Department of Conservation)
- Melanie Mark-Shadbolt (Ministry for the Environment)
- Sarah Novak (Intern, Ministry for the Environment)
- Suzie Greenhalgh (Manaaki Whenua Landcare Research)
- Tim Ng (New Zealand Treasury)

We also acknowledge the support of our sponsors who provided the resources, thinking space and opportunity for this work:

- Juliet Gerrard (Office of the Prime Minister's Chief Science Advisor)
- Richard Gordon (Manaaki Whenua Landcare Research)
- Vicky Robertson (Ministry for the Environment)

## Further reading

Bennett, N.J., Whitty, T.S., Finkbeiner, E. et al. (2018) *Environmental Stewardship: A Conceptual Review and Analytical Framework*. *Environmental Management* 61, 597–614 (2018)  
doi:10.1007/s00267-017-0993-2 <https://link.springer.com/article/10.1007/s00267-017-0993-2>

Department of Conservation. DOC and Mental Health Foundation partnership: Healthy Nature Healthy People movement. <https://www.doc.govt.nz/healthy-nature-healthy-people>

Díaz, S., Pascual, U., Stenseke, M., Martín-López, B., et al. (2018). Assessing nature's contributions to people. *Science* Vol.359 (6373), pp. 270–272. <https://doi.org/10.1126/science.aap8826>

Dymond J, Ausseil AG (2019). An ecosystem services approach to choosing environmental indicators for state of environment reports. *New Zealand Science Review*, 75 (2-3).

Health Research Council. The New Zealand health research prioritisation framework. Available at: [https://www.hrc.govt.nz/sites/default/files/2019-12/HRCNZ-Prioritisation-Framework-FA-web\\_0.pdf](https://www.hrc.govt.nz/sites/default/files/2019-12/HRCNZ-Prioritisation-Framework-FA-web_0.pdf)

IPBES (2018): Summary for policymakers of the regional assessment report on biodiversity and ecosystem services for Asia and the Pacific of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. [https://ipbes.net/system/tdf/spm\\_asia-pacific\\_2018\\_digital.pdf?file=1&type=node&id=28394](https://ipbes.net/system/tdf/spm_asia-pacific_2018_digital.pdf?file=1&type=node&id=28394)

IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. <https://ipbes.net/global-assessment-report-biodiversity-ecosystem-services>

Naeem, S., Chazdon, R., Duffy, J.E., Prager, C., Worm, B., (2016). Biodiversity and human well-being: an essential link for sustainable development. *Proc. R. Soc. B Biol. Sci.* 283, 20162091.  
<https://doi.org/10.1098/rspb.2016.2091>

OECD (2019), *Accelerating Climate Action: Refocusing Policies through a Well-being Lens*, OECD Publishing, Paris, <https://doi.org/10.1787/2f4c8c9a-en>.

Roberts, L, Brower A, Kerr G, Lambert S, McWilliam W, Moore K, Quinn J, Simmons D, Thrush S, Townsend M, Blaschke P, Costanza R, Cullen R, Hughey K, Wratten S (2015). *The nature of well-being*. Department of Conservation report series. Available at: <https://www.doc.govt.nz/Documents/science-and-technical/sap258entire.pdf>

Waikato Regional Council (2017). *Applying an ecosystem services approach to policy development*. Available at: <https://www.waikatoregion.govt.nz/assets/WRC/Services/publications/other-publications/Applying-an-Ecosystem-Services-Approach-WR.pdf>

Appendix 1. Initiatives purpose, scale and targeted audience.

Initiative	Purpose	Scale	Audience
<b>NZ Environmental reporting</b>	<i>To provide evidence base to know what impact we are having on the environment</i>	National	Public, policy makers, businesses
<b>NZ Planetary Boundaries</b>	<i>To raise awareness on NZ's contribution to global issues</i>	Global to national	General public, policy makers
<b>Resource Management Act (RMA), National Policy Statement (NPS)</b>	<i>To promote the sustainable management of natural and physical resources</i>	National to local	Natural resource managers (farmers, local governments)
<b>Indicators Aotearoa NZ (IANZ)</b>	<i>To provide statistically robust data for other initiatives (SOE, Living standards)</i>	National	Central government, general public
<b>Circular economy</b>	<i>To “ensure we can unmake everything we make” by promoting waste minimisation initiatives</i>	Industry	Businesses
<b>Intergovernmental Platform on Biodiversity &amp; Ecosystem Services (IPBES)</b>	<i>To provide evidence base to know what impact we are having on the environment and how it affects human well-being</i>	Global	Policy makers
<b>Sustainable Development Goals (SDG)</b>	<i>To provide a blueprint to achieve a better and more sustainable future, addressing global challenges (poverty, inequality, environmental degradation, prosperity, peace and justice)</i>	Global and industry	Policy makers, businesses
<b>System of Environmental Economic Accounting (SEEA)</b>	<i>To provide a statistical system to measure condition of the environment and contribution of the environment to the economy, and impact of the economy on the environment</i>	National	Policy makers, central government
<b>Living Standards framework (LSF)</b>	<i>To strengthen the robustness and rigour of Treasury's advice about lifting living standards, beyond a healthy economy</i>	National	Policy makers