



**Sustainable  
Communities  
and Waste**

**National Environmental Science Program**

**Measuring what matters for  
Australia: a scoping study  
and proposed framework  
for selecting  
environmental indicators  
of wellbeing and  
productivity**

**Executive Summary**

**December 2022**

## Acknowledgement of Country

In the spirit of reconciliation, the authors of this report acknowledge the Traditional Owners and continuing custodians of Country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

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## Executive Summary

A two-month scoping study was undertaken by the National Environmental Science Program (NESP) Sustainable Communities and Waste (SCaW) Hub to inform the development of a framework of environmental indicators linked to the wellbeing and productivity of Australians. Critical evaluation of the literature, theory, and examples of policy implementation overseas led to the conclusions presented here. The predominant conclusion is that linking human wellbeing and productivity with environmental quality in decision making is critical for sustainability. Australia has an opportunity to create a world-leading sustainable wellbeing framework, one which values the health and wellbeing of people and the planet now and for the future.

*"After all, almost all of human activity on earth rests one way or another upon the condition of the natural environment, and if we don't address the deterioration of the natural environment sometime pretty damn soon, the rest of it's going to come crashing down."*

– Former Treasury Secretary Dr Ken Henry (ABC News)

### Human wellbeing is dependent on a healthy environment.

- The health and wellbeing of Country and people are connected. The oldest continuing cultures in the world, Australian Aboriginal and Torres Strait Islander cultures, have held that truth for tens of thousands of years: *if you take care of Country, Country will take care of you*<sup>1</sup>.
- The concept of sustainable wellbeing<sup>2</sup>, in which the health and wealth of people is understood to be intricately connected to the health and wealth of the environment, should be the foundation for Australia's framework for wellbeing and productivity.
- Sustainable wellbeing is founded on the principle that the integrity and resilience of the natural environment is a precondition of both individual and collective human wellbeing. As a policy goal, it integrates the flourishing of individuals, society, and the natural world.
- Sustainable wellbeing also recognises that satisfying human needs (particularly the material consumption levels of the most affluent individuals and nations) has had negative implications for the health and wealth of the natural environment, e.g., biodiversity loss and the impacts of climate change. Current material consumption patterns are also increasingly placing the health and wellbeing of future generations at risk.
- A sustainable wellbeing framework builds on this integrated perspective, recognising that the value of nature goes beyond the benefits (e.g., ecosystem services) that it provides for society: the environment holds cultural and intrinsic value as well.
- Placing both people and environment at the heart of a wellbeing approach provides a coherent basis from which Australia can continue to drive reform to embed environmental

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<sup>1</sup> Source: 2021 State of the Environment Report (<https://soe.dcccew.gov.au/>)

<sup>2</sup> O'Mahony, T. (2022). Towards 'sustainable wellbeing': advances in contemporary concepts. *Frontiers in Sustainability*, 15.

considerations across all facets of decision making, moving beyond economic growth towards measuring what matters (inclusive growth).

**It is critical that the Australian government develop a solid theoretical basis for its conceptual framework before selecting indicators to measure wellbeing and productivity.**

- Australia has an opportunity to create a world-leading wellbeing framework based on the concept of sustainable wellbeing.
- The conceptual framework must be comprehensive and robust so that the resulting indicator set can inform policy and ultimately support decisions that protect and provide for human and planetary wellbeing, now and for the future: *“What we measure affects what we do; and if our measurements are flawed, decisions may be distorted.”* – Joseph Stiglitz.
- The Organisation for Economic Co-operation and Development (OECD) Framework for Measuring Well-Being and Progress, developed in 2011, used by many countries as the basis of their wellbeing approaches, has a number of widely recognised limitations and is not sufficiently robust for delivering on wellbeing for people and the planet.
- Australia should instead base its framework on the "nature and people" model developed by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in 2015. This model broadens the policy goal from poverty reduction to generalised wellbeing and goes beyond the focus on ecosystem services to socio-ecological systems thinking.
- Implementing a people and planet focused wellbeing approach leads to a framework which embraces the National Common Approach to Environmental-Economic Accounting, a sophisticated way to measure changes and trends in the natural capital of Australia that was designed according to the international guidelines set forth by the United Nations.
- The proposed sustainable wellbeing framework (see Appendix A) provides a theoretical base for selecting a headline indicator, i.e., a 'summary statistic,' that, ideally, could be reported on annually. Here, the framework drives towards “the overall health and wealth of the environment” as the headline indicator.
- Australia should seek out lessons from the United States proposed system of Natural Capital Accounting and headline indicator reporting, as well as learnings from other countries attempting to use the United Nations System of Environmental-Economic Accounting guidelines.

**Next steps: Australia's sustainable wellbeing framework and indicator set must be co-designed with Indigenous knowledge keepers, and consultation must incorporate the voices of diverse Australians.**

- The design and consultation process must prioritise diversity and inclusivity.
- Significant shifts in perspective are necessary:
  - The development of indicators that capture the value of nature for Culture should be a priority: this process must embed Indigenous understanding of wellbeing and our relationship with the natural world. Indigenous knowledge keepers are best positioned to advise on ways to measure the health and wellbeing of Country.
  - Valuing nature for nature's sake means embracing an eco-centric, rather than anthropocentric, worldview. This enables us to make decisions that are better aligned with the goal of planetary wellbeing. Consultation with the research sector should seek out experts in the field of deep ecology to advise on this aspect.

- Appropriate indicators need to be purpose-driven, not selected due to convenience. Pre-existing indicators, for which data is already available, can form part of a sustainable wellbeing framework. However, new indicators for which data may not yet exist are very likely needed in order to enable us to measure and monitor the many intrinsic, relational and instrumental values of nature (see Appendix B).
- Appropriate investment in the development of the framework and indicator set for measuring the wellbeing of people and planet will position Australia as world-leading, and, importantly, will provide a coherent basis from which Australia can embed environmental considerations across all facets of decision making.

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## Citation

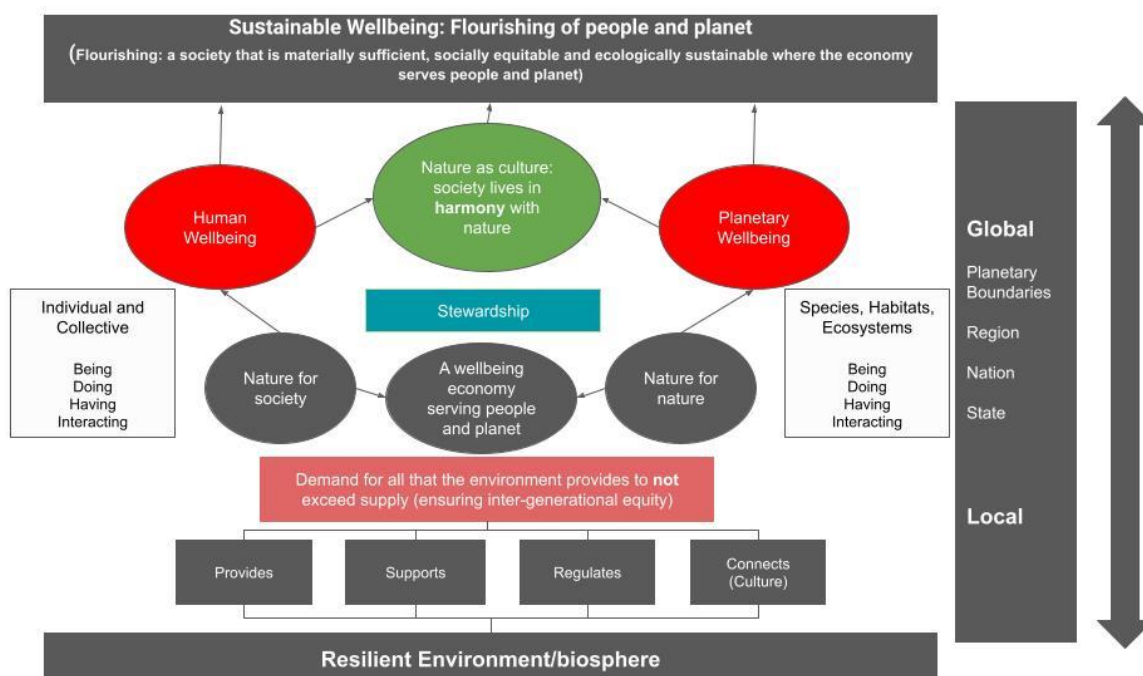
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## Appendix A

Figure 1 outlines a first draft of a conceptual framework for sustainable wellbeing for Australia, which has been developed to provide the theoretical underpinning of the selection of environmental indicators measuring the wellbeing and productivity of Australians. Further development of this framework is recommended.



**Figure 1.** Adapted from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Nature and People conceptual framework (Diaz et al., 2015).

The environment provides for all that we do and all that we are. Without it, there is no life. We are only able to satisfy our needs – to be, to do, to have and to interact – because of nature. Going forward, we have an obligation to ensure our needs are satisfied in harmony with nature in a way that ensures inter-generational equity. Therefore, we must value, conserve, restore, wisely use, and maintain our environment at all levels – from the regional ecosystem to biogeographical realms to the planetary scale. Only by embedding ourselves into nature, recognising nature’s intrinsic value, and acting as stewards for our planet, will we flourish, the aim of any wellbeing approach.

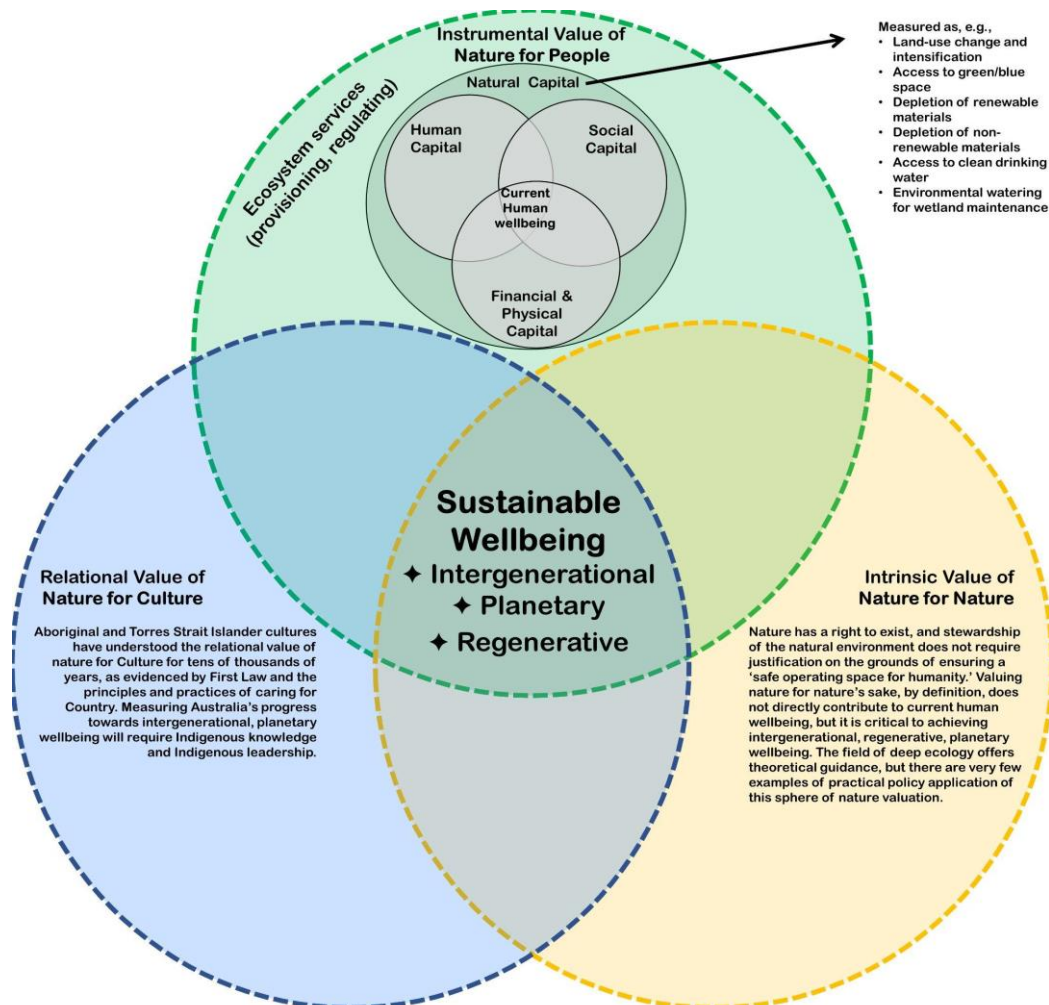
## Appendix B

Figure 2 contextualises the indicator categories suggested in this report and in most global wellbeing frameworks as narrowly reflecting instrumental values of ‘nature for people.’

Ways of monitoring changes to stocks and flows of natural capital, which underpin the growth and sustainability of human, social, financial and physical capitals, can be modelled on the useful precedents set internationally that can be readily adapted for the Australian context. However, these measurements are relevant to only one of the three spheres of how nature can be valued.

The indicator categories suggested in this report can be used to help monitor progress towards “current human wellbeing,” rather than towards holistic sustainable wellbeing, which by definition is intergenerational in duration and planetary in scale. Natural capital underlies all other kinds of capital, and Environment-Economic Accounting systems have been developed recently to guide how natural capital stocks and flows are measured and monitored. Measuring the other capitals that contribute to current human wellbeing is not the focus of our research and so those circles have

been left unpopulated in this figure. The authors of this report are not aware of any indicator sets or national guidelines for monitoring Nature for Nature or Nature for Culture. If Australia can develop a framework that reflects all three value types, it will be world-leading and support decision-making for intergenerational, planetary wellbeing.



**Figure 2.** Adapted from two existing conceptual diagrams<sup>3</sup>.

<sup>3</sup> Lundquist, C. J., Pereira, H. M., Porto, C. A. D. V., Peterson, G. D., Karlsson-Vinkhuyzen, S., Pereira, L., ... & Kuiper, J. (2021). A pluralistic Nature Futures Framework.

Scobie, M. and Love, Tyron Rakeiora (2019). The Treat and the Tax Working Group: Tikanga or tokenistic gestures? *Journal of Australian Taxation* - New Zealand special edition. Vol 21(2).