Submission to Performance Framework for Queensland's Biodiversity Strategy

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About The Biodiversity Council

The Biodiversity Council brings together leading experts including Indigenous knowledge holders to promote evidence-based solutions to Australia's biodiversity crisis. The Council was founded by 11 universities with the support of Australian philanthropists.

Introduction

The Biodiversity Council welcomes the opportunity to provide feedback on the Performance Framework for Queensland's Biodiversity Strategy (Performance Framework). The Performance Framework is intended to support implementation and reporting for *Conserving Nature – a Biodiversity Conservation Strategy for Queensland* (Biodiversity Strategy) that was released in 2022.

The Biodiversity Strategy lacks a coherent program logic and confuses goals and objectives with actions[1]. This presents significant challenges to preparing an effective performance framework.

The Performance Framework seems to address some of the shortcomings of the Biodiversity Strategy's by

> "*clarif[ying] the vision by defining an aim for Queensland's biodiversity to be thriving by 2050 where: 'Declines in Queensland's native species have been halted and reversed, and the ecological integrity of ecosystems is restored to function for people and nature'*" (pg. 4).

To achieve this vision the Performance Framework:

> "*sets targets, actions and indicators necessary to drive strategic approaches, continuous improvement and results for biodiversity to 2030. Setting these 2030 targets clarifies the scale and pace of change needed to halt and reverse the loss of biodiversity in Queensland, and improve our social, economic, and cultural relationships with nature*" (pg. 4).

The six proposed targets in the Performance Framework are:

1. Effectively protect areas of high biodiversity value to ensure net gain in extent and condition by 2030 as part of the national 30 by 30 target.
2. Restoration is underway in up to 2 million hectares of priority degraded ecosystems by 2030.
3. Improve threatened species recovery and reduce overall extinction risk by 2030
4. Mitigate key threats to biodiversity and enhance nature's resilience to change by 2030.
5. Integrate biodiversity into relevant decisions of government, business and community by 2030.
6. Increase awareness and engagement in conservation efforts by 2030.

The Performance Framework outlines actions and indicators under each of these targets.

The Biodiversity Council welcomes the clear vision in the Performance Framework. However, it could be further improved by:

- ❖ **refining the vision so that it more closely aligns with the global Nature Positive goal**
- ❖ **developing a more conventional program logic with:**
  - ● **outcome targets**
  - ● **intermediate outcome targets**
  - ● **activity or action targets.**

Further information about each of these suggestions are provided below.

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[1] The four main goals in the biodiversity strategy are: "protect, restore and recover, adapt and connect". These are not outcomes, but actions. See:
https://s3.treasury.qld.gov.au/files/Developing-a-program-logic-model-Information-Sheet-QG-Program-Evaluation-Guidelines.pdf

Refining the vision to better align with the global Nature Positive goal

The global Nature Positive goal is to:

> "*Halt and reverse nature loss measured from a baseline of 2020, through increasing the health, abundance, diversity and resilience of species, populations and ecosystems so that by 2030 nature is visibly and measurably on the path of recovery*".[2]

The proposed vision in the Performance Framework picks up on some of the concepts in the Nature Positive goal, particularly halting and reversing nature loss by 2050.

> The Biodiversity Council recommends that the vision set a baseline against which halting and reversing nature loss will be measured. To align with the Nature Positive goal it is recommended that 2020 be used as the baseline year.

The Performance Framework notes that to achieve restoration by 2050, requires actions and improvements in the interim and so sets targets for 2030. It would be preferable if the vision specified that outcome measures, such as ecosystem health, condition and extent, will return to 2020 levels by 2030 and are fully recovered by 2050.

Outcome targets

The outcome targets should be a quantifiable state that we want biodiversity to return to by a specified date.

Outcome targets should be developed for threatened species, ecosystems and ecosystem processes.

Threatened species

Queensland has over 1000 threatened species and their recovery needs to be the highest level outcome. Recovering populations of threatened species is the most fundamental outcome for a biodiversity strategy.

The Performance Framework proposes a target for threatened species:

> "*Improve threatened species recovery and reduce overall extinction risk by 2030*."

The first part of this target, to 'improve threatened species recovery' is not specific or measurable. It raises questions about how much improvement, improvement against what, and for which threatened species. The second component of the target 'reduce overall extinction risk by 2030' raises questions about how much reduction in extinction risk and how to measure it.

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[2] Nature Positive Initiative
https://www.naturepositive.org/app/uploads/2024/02/The-Definition-of-Nature-Positive.pdf

The Biodiversity Councils recommends that the proposed target be replaced with these two outcomes targets:

- Outcome Target 1a: Recover the threatened species index[3] to 2020 levels or better by 2030[4]
- Outcome Target 1b: Recover the abundance of all monitored threatened species to 2020 levels or better by 2030.

Ecosystems

The abundance and diversity of life depends a lot on quality habitat.

The Performance Framework proposes two targets that relate to ecosystem protection and restoration:

> "*Effectively protect areas of high biodiversity value to ensure net gain in extent and condition by 2030 as part of the national 30 by 30 target*"

> "*Restoration is underway in up to 2 million hectares of priority degraded ecosystems by 2030*".

The first target introduces the concept of 'high biodiversity value', rather than focussing on under-represented ecosystems as a target for protection.

The *Draft National Roadmap for protecting and conserving 30% of Australia's land by 2030* states that:

> "*Australia's efforts to expand and enhance Protected and Conserved Areas will increase protection and conservation in bioregions and subregions where ecosystems are not fully represented*" (pg. 26).

The *Protecting Australia's Nature: Pathways to protecting 30 per cent of land by 2030* report provides maps showing where bioregions, subregions and major vegetation groups are under-represented in the national reserve system. The maps show that large parts of Queensland are under-represented, with large bioregions, subregions or major vegetation groups showing <10 % reservation.

As currently drafted, there is significant uncertainty about whether the target will drive greater protection of ecosystems that are currently under-represented within Queensland's reserve system.

The second target is not an outcome target; it sets an area over which activities are to be undertaken rather than a condition to be achieved.

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[3] The Threatened Species Index is the single national and state level indicator for threatened species. For more information about the Threatened Species Index see here: https://theconversation.com/threatened-species-have-declined-2-a-year-since-2000-nature-positive-far-from-it-230116 & https://tsx.org.au/

[4] This is an ultimate outcome and requires immediate action as 4 years have been lost. One of the advantages of this target is that much of the analytic work and data stewardship is already being carried out by the Terrestrial Ecosystem Research Network (TERN). Furthermore, with cooperation with TERN, reporting can be brought down to the species level.

For both targets, the definitions of the component parts ('high biodiversity value', 'net gain' and 'priority degraded ecosystems') determine the scale of action. For instance, it would be possible to define 'high biodiversity value' so that only a few areas qualify, for 'priority degraded ecosystems' to be selected on the basis of ease of restoration and 'net gain' to be defined such that a small improvement is sufficient to achieve the target.

To align with the international nature positive definition, an appropriate outcome would be to return the extent and condition of native vegetation in Queensland to 2020 levels.

Biodiversity Councils recommends that the proposed target be replaced with these two outcomes targets:

- Outcome Target 2a: Recover the *extent* of all "endangered" and "of concern" regional ecosystems to 2020 levels or better by 2030.[5]
- Outcome Target 2b: Recover the *condition* of all "endangered" and "of concern" regional ecosystems to 2020 levels or better by 2030.[6]

Because representation is a cornerstone of a conservation strategy these targets need to be applied for every regional ecosystem.

Ecosystem Services

The Biodiversity Council recommends that similar time-bound quantified targets be set around ecosystem processes (for example soil erosion and eutrophication).

Intermediate Outcome targets

Ultimate outcomes are often hard to achieve quickly. Hence, intermediate outcomes believed to be important for delivering ultimate outcomes can be useful. There are a range of possible intermediate outcomes the state could set that are aligned with the ultimate outcomes and connected via theories of change[7] supported by the scientific literature. A good start is to use the intermediate outcome targets from the Kunming-Montreal Global Biodiversity Framework (GBF Targets) adapted to the state level. For example, GBF Target 2 'Restore 30% of all Degraded Ecosystems' and GBF Target 3 'Conserve 30% of Land, Waters and Seas', which set targets for areas under restoration or management respectively. Both of these targets are *intermediate* outcomes because they do not set

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[5] The herbarium already has this data.
[6] The state does not yet have this data as condition mapping at scale is expensive, so work needs to be done on quantifying this objective – either by remote sensing or by direct observation (stratified sampling of field sites).
[7] See for example: Mayne, J. (2015) Useful Theory of Change Models *Canadian Journal of Program Evaluation* **302:** 119-142. https://utpjournals.press/doi/pdf/10.3138/cjpe.230

a state or condition that is to be achieved; instead they predict that if a certain percent area is under effective restoration or management, then it will lead to halting and reversing biodiversity loss.[8]

To be effective, intermediate outcomes must be mapped against the overall outcome targets with information about how they will lead to change in the overall outcome ('impact pathways') and the underlying assumptions. This approach enables monitoring and evaluation which can lead to improvements to the approach. For instance, if intermediate outcomes are not sufficiently contributing to the overall outcome, the activities sitting beneath them could be redesigned, the intermediate targets could be adjusted to be more ambitious, or new intermediate targets and activities could be developed.

> The Biodiversity Council recommends that intermediate outcome targets be developed, including GBF Targets 2 and 3 adapted to the Queensland context. The intermediate outcome targets should also include clear theories of change to support monitoring, evaluation and improvement.

Activity or Action targets

The GBF Targets include many activity or action targets. These should be the basis for the activity or action targets in the Performance Framework.

The proposed target in the Performance Framework for threat mitigation is an activity or action target:

> "*Mitigate key threats to biodiversity and enhance nature's resilience to change by 2030.*"

This target could be improved by supplementing it with the following actions targets from the Kunming-Montreal Global Biodiversity Framework: GBF Target 5 'Ensure Sustainable, Safe and Legal Harvesting and Trade of Wild Species', GBF Target 6 'Reduce the Introduction of Invasive Alien Species by 50% and Minimize Their Impact', GBF Target 7 'Reduce Pollution to Levels That Are Not Harmful to Biodiversity', and GBF Target 8 'Minimize the Impacts of Climate Change on Biodiversity and Build Resilience'.

The proposed target in the Performance Framework for policy integration is an activity or action target:

> "*Integrate biodiversity into relevant decisions of government, business and community by 2030.*"

This target could be improved by supplementing it with the following actions targets from the Kunming-Montreal Global Biodiversity Framework: GBF Target 14 'Integrate Biodiversity in Decision-Making at Every Level' and GBF Target 15 'Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts'.

The proposed target in the Performance Framework for policy integration is an activity or action target:

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[8] Note that these targets were based on the scientific literature. See summaries here: https://www.campaignfornature.org/science-page and here: https://theoceanproject.org/wp-content/uploads/2021/09/TheScienceSupporting30x30-002.pdf .

"Increase awareness and engagement in conservation efforts by 2030."

This target could be improved by supplementing it with the following actions targets from the Kunming-Montreal Global Biodiversity Framework: GBF Target 1 '[Plan and Manage all Areas To Reduce Biodiversity Loss](#)', GBF Target 12 '[Enhance Green Spaces and Urban Planning for Human Well-Being and Biodiversity](#)', GBF Target 16 '[Enable Sustainable Consumption Choices To Reduce Waste and Overconsumption](#)', GBF Target 21 '[Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action](#)' GBF Target 22 '[Ensure Participation in Decision-Making and Access to Justice and Information Related to Biodiversity for all](#)' and GBF Target 23 '[Ensure Gender Equality and a Gender-Responsive Approach for Biodiversity Action](#)'.

> The Biodiversity Council recommends that the Performance Framework's three activity targets be supplemented by the appropriate GBF Targets as described above.

One of the advantages of incorporating the targets of the Kunming-Montreal Global Biodiversity Framework, is that the framework [has a set of direct and indirect metrics](#) to track progress towards the targets.

> The Biodiversity Council recommends that the metrics of the Kunming-Montreal Global Biodiversity Framework should be used as the primary basis for the Performance Framework, with supplementary metrics as required (see discussion under Outcomes in this submission). The indicators component of the Performance Framework should include precise information about each indicator, including a workflow on how it is calculated, and ideally the number with dates.