

## Review of the Flora and Fauna Guarantee Act (FFG)

[REDACTED]

The Consultation paper to review the FFG Act has many positive elements, notably its acknowledgement of the need for measurable targets and meaningful monitoring. It would, however, benefit from clearly defining biodiversity, including ecosystems as well as species within that definition, and aligning definitions and conservation assessments with the global standards and national common frameworks for assessing risk to species and ecosystems.

I agree with the statement on p44 that measureable targets, timeframes for implementation, and a process for monitoring, evaluation and reporting would greatly improve our biodiversity legislation. Statewide biodiversity targets (p7) would be highly beneficial, particularly if measurable and achievable yet with strong aspirations. Clarification about the nature of these targets would be useful; for example, their relationship with international agreements such as Convention on Biological Diversity (CBD) targets and the Sustainable Development Goals, to both of which Australia is a signatory. Many of the CBD targets relate to ecosystem-level biodiversity and environmental degradation, as well as species viability, and to actions needed to slow the declines in biodiversity.

The consultation paper provides no definition of biodiversity. As a result, what is encapsulated by any changes to the act remains unclear. Text refers to species, communities, native vegetation and ecosystems generally (with no definitions of these terms), though with a substantial focus on species throughout the text; for example on p 13, “biodiversity is the foundation of healthy ecosystems”, although later it is stated that native vegetation is one component of biodiversity. A very clear definition of biodiversity that aligns with EPBC Act definitions, the Convention on Biological Diversity, and the scientific literature (e.g. Noss 1990) is strongly recommended. Within that should be clear definitions of elements of biodiversity and other terms, including ecological community, ecosystem and native vegetation.

For example, under the CBD, “*Biological diversity* means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems” (<https://www.cbd.int/>). In the EPBC Act, “**components of biodiversity** includes species, habitats, ecological communities, genes, ecosystems and ecological processes”.

In the review, a clear role of biodiversity conservation based around ecological communities or ecosystems (as per the EPBC Act and IUCN; Bland et al. 2016) is missing (ecosystems and ecological communities are considered synonymous under the IUCN Red list of Ecosystems). Indeed, many of the problems identified in the review would be solved by a clear ecosystem or ecological community approach. The arguments presented for landscape and area-based planning (p45) are common with arguments for ecosystem approaches to conservation; for example dealing with multiple species, multiple scales, restoration and ecological processes. Ecosystems provide a basis of quantifying and mapping ecosystem services, and can provide a more concrete means of conservation action planning than species, whose presence may be uncertain,

temporally variable (e.g. seasons), and harder to demonstrate if burden of proof is placed in sighting (e.g. Leadbeaters possums in forestry coups).

While there are recognised challenges to ecosystem risk assessment and ecosystem-level conservation, the IUCN have provided detailed practical guidance (e.g. Bland et al. 2016) and numerous case studies to aid in applying ecosystem risk assessment and for monitoring, evaluation and reporting (see <http://iucnrle.org/assessments/>). These case studies include several ecosystems that are found in Victoria, and examples from terrestrial, freshwater and marine ecosystems.

An assessment system based on ecological communities or ecosystems (as defined by the IUCN and the EPBC Act) would also remove the anomalies of 'habitats' such as caves, freshwater systems, and beaches that do not qualify as native vegetation (as per p55), but come under the definitions in the EPBC Act and IUCN. It would remove the arbitrary boundaries of what is called a habitat, community and native vegetation type, through an explicit definition of ecological communities or ecosystems that can encapsulate all these, and aligns with the IUCN's global standard and EPBC Act. Importantly, an approach based on ecosystems or ecological communities would include marine, freshwater and estuarine systems, and thus allow a consistent approach across realms. It would explicitly link ecosystem function and services with biodiversity, i.e. benefits from healthy ecosystems.

On P52, the report outlines the adoption of the Common Assessment Framework for species, and mentions the Victorian Government's intention to examine criteria for ecological communities and to consider using the IUCN ecosystems criteria with EVCs. I urge the government to agree to the Common Assessment Framework, and to sign the MOU to opt-in to the Common Assessment Framework for ecological communities, based on the IUCN criteria. This would bring Victoria into line with the global standard, already adopted by NSW and ACT.

Adopting the IUCN ecosystem criteria would give a consistent approach across species and ecological communities in Victoria. The IUCN approach is closely aligned with the EPBC Act criteria (revised in 2015), and the Native Vegetation Management regulations, and thus is a relatively low risk strategy for conservation, with few likely surprises (Nicholson et al, 2015). The IUCN ecosystem criteria have been adopted by several countries around the world, including Norway and Finland; Victoria's joining with these countries and other Australian states in supporting the global standard would demonstrate Victoria's environmental leadership in Australia and internationally.

#### **References:**

Bland, L.M., Keith, D.A., Miller, R.M., Murray, N.J. and Rodríguez, J.P. (eds.) (2016). Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria, Version 1.0 . Gland, Switzerland: IUCN. ix + 94pp.

Nicholson, E., Regan, T.J., Auld, T.D., Burns, E., Chisholm, L.A., English, V., Harris, S., Harrison, P., Kingsford, R.T., Leishman, M.R., Metcalfe, D.J., Pisanu, P., Watson, C.J., White, M., White, M.D., Williams, R.J., Wilson, B. & Keith, D.A. (2015) Towards consistency, rigour and compatibility of risk assessments for ecosystems and ecological communities. *Austral Ecology*, **40**, 347–363.

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