

Parliamentary Inquiry into Ecosystem Decline

Submission by Bruce McGregor, August 2020

My submission addresses four topics:

1. Planning for Melbourne's growth areas;
2. Waterways and wetland protection;
3. Biodiversity offsets;
4. Parliamentary Committee focussed on Treasury allocations for nature conservation.

1. Planning for Melbourne's growth areas

The Victorian Planning Authority (VPA) is responsible for planning for long-term urban development of metropolitan Melbourne and elsewhere in Victoria. This process is being hurried along for no clear reason given that there is plenty of land available for new housing. The present outcome is that the planning processes are locking in the continued decline in threatened species and communities.

For particular Precinct Structure Plans, insufficient time, resources and expertise is leading to outcomes which are not in the best interests of threatened species, Victoria, her citizens nor for the long-term sustainability of new residential areas.

The Biodiversity Conservation Strategy produced under the Melbourne Strategic Assessment (Vic. Govt Dept of Environment & Primary Industries 2013) identified 36 Conservation Areas within the urban growth areas to protect matters of national environmental significance and state significance. The total extent of proposed Conservation Areas was reduced by 35% between the draft Biodiversity Conservation Strategy and the final Strategy by inviting the landowners to challenge the original assessments. Other examples of bad outcomes include loss of habitat for endangered species, loss of native grasslands and loss of important wetlands (see following section).

The solution is to stop the present rush to prepare Precinct Structure Plans, properly reassess recent Precinct Structure Plans and appoint people with specialist knowledge of biodiversity conservation and waterway management to the various assessment panels for the Precinct Structure Planning process.

Greater involvement of the community is required to provide long-term sustainable outcomes as community members have more intimate knowledge of local issues which impact on threatened species conservation. It appears that the VPA is overseeing the designing of future ghettos given the chronic lack of private garden space, green nature links and places for informal recreation in natural settings. Properly designed habitat corridors along waterways and adequate east-west corridors are required which can satisfy the needs of nature and people. Presently it appears that the VPA and the Precinct Structure Plans are whittling away ore pre-empting proposals for regional parkland and open space links which provide vital routes for wildlife migration and genetic connections. Such green links will become even more critical as the climate continues to change over the next 50 years and longer.

Recommendations:

1. **That the VPA carefully follows existing adopted policies for waterway management and ecological protection and gives higher priority to matters of environmental protection and ecological restoration.**

- 2. The Precinct Structure Planning processes around Melbourne be halted to allow proper consideration of soils, land capability, waterway and wetland protection and habitat corridors.**
- 3. All existing Precinct Structure Plans should be reviewed to include proper ecological planning, including ecological restoration and waterway management.**
- 4. That all planning assessment processes include skilled ecological and biological experts who are knowledgeable about environmental protection, waterway management and the reestablishment of indigenous habitats.**

2. Waterways and wetland protection: a matter of priorities

There are sound, adopted Victorian Government policies and strategies promoting ecosystem protection and restoration, that are not being implemented through government processes.

The Plan Melbourne 2017-2050, the Victoria Planning Provisions (in all Planning Schemes), the Integrated Water Management Framework for Victoria (2017) and the Healthy Waterways Strategy (2018) all make considered, practical and professional recommendations regarding protection of waterways and wetlands.

In the Healthy Waterways Strategy (2018) the threats to waterways are clearly listed as:

1. Climate change
2. Urbanisation
3. Pollution
4. Litter
5. Vegetation clearing and grazing
6. Interference to natural water flows
7. Pest plants and animals.

All these issues also threaten ecosystem resilience and contribute to ecosystem decline. Pollution, turbidity from soil disturbance (such as grazing, development, vegetation clearing) and litter all end up in waterways, wetlands and our bays and estuaries. Animals die from these pollutants including platypus, marine animals and birds.

The existing planning processes, especially those now managed by the VPA are leading to the loss of important wetlands. For example, Healthy Waterways Strategy 2019 Annual Report Figure 7 (p 26)

https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.mw-yoursay.files/5815/8086/9737/HWS_progress_report2019-web.pdf

shows that there are many wetlands which are being lost or in danger of loss as a result of urbanisation. In a rather perverse and engineering style of management the VPA allows natural wetlands to be filled in during urbanisation and then in other places holes are dug to collect stormwater runoff and there is a pretence that these manmade holes are some kind of wetland (see Melbourne Water annual report 2019/20 p 28 <file:///C:/Users/User/Downloads/01-237%20Annual%20Report%202019%20WEB%20FA.pdf>).

What is needed is proper restoration of waterway function by returning drained wetlands, billabongs and similar back to their former hydrological functioning. Wetlands in Australia are adapted to cycles of wet and then drying out. Many wetland plants can survive long periods underground during the dry cycles via tubers, corms, bulbs and seeds. Natural wetlands are far preferable to artificial wetlands which lack natural morphology and vegetation. Natural wetlands are also in the right place in the landscape. How natural wetlands can be restored is clearly illustrated by the excellent work of Nature

Glenelg Trust in western Victoria and SE South Australia. Their work needs to be supported and amplified rapidly (see: <http://natureglenelg.org.au/>).

To make matters worse for waterways, humans have interfered with the natural system by installing barriers in the form of weirs, fords and other structures which impede natural water flows and the movement and migration of fish, eels and other animals. Removal of these obstructions is essential but is being undertaken at a snail's pace. For example, while Melbourne Water acknowledge the problems caused by obstructions, their plan is to remove them over a 50 year period!!! (see map p 97, Healthy Waterways Strategy 2018). Much faster removal is necessary to return flows to more natural regimes and enable more natural ecological functioning.

Similarly, there are good examples of Catchment Management Authorities (CMAs) doing good work on rehabilitation of damaged river systems but the work is too slow, underfunded and in some CMAs lacking in clear direction.

Recommendations:

1. **Fund and implement existing waterway protection policies as outlined in the Healthy Waterways Strategy (2018) with a 10 year timeline on all actions (beginning in 2018).**
2. **Protect existing wetlands which have been drained by past practices. The objectives should be proper restoration of waterway function by returning drained wetlands, billabongs and similar back to their former hydrological functioning.**
3. **Ensure all CMAs have board members and staff who are knowledgeable about wetlands, and for coastal CMAs estuary conservation and management.**

3. Biodiversity offsets

The starting point is that land clearing is considered to be the single greatest threat to the extent and quality of terrestrial indigenous biodiversity in Victoria. Longstanding national and Victorian policy regarding the requirements for vegetation clearing are that:

1. First the proposal should **avoid** clearing of native vegetation.
2. If avoidance is not possible then the proposal should **minimise** any disturbance.
3. If avoidance and minimisation are not possible then biodiversity offsets must be considered.

What has occurred over the past 20 years is that offsets have now become the default position.

There are many biological, practical, administrative, financial and logic problems with the use of offsets. Over the past 20 years increasing evidence in Europe and Australia has shown that the theory of offsets is **logically** flawed, the **economic costs are not properly accounted for**, and **offsets have been misapplied**. There is little quantitative support for the use of offsets to reduce ecological impacts.

Firstly, there can be a considerable period between the establishment of an "offset" and it performing ecological functions equivalent to those lost from clearing. For example, using an offset for the destruction of 600 year old Red Gums for housing or roads will take 600 years to replace them. Existing offset policies do not require the offset to provide equivalent resources **prior** to clearing, which results in a long-term break in the continuity of a resource, such as hollow-bearing trees. So, for example, hollow dependent species like owls become extinct and 80 years later hollow bearing trees appear somewhere else in another landscape. All the owls have been dead for 80 years. How is that a useful offset?

Studies have suggested that there is no empirical evidence indicating that biodiversity offsets have worked to date, as they have only resulted in a net loss of biodiversity.

The costings of offsets exclude or avoid many of the main establishment and ongoing maintenance costs and the risks associated with offsets as discussed below. There is a recent fashion in State government to offset within already protected areas, for example the destruction of rare and threatened protected habitat to enable a new dam to be built at Mt Buller with an offset in the already protected Mt Stirling area.

No net loss in biodiversity through the use of offsets is considered to be “**administratively improbable and technically unrealistic**” (Walker et al. 2009). This is because offset schemes have had a poor track record of **compliance**. Over the longer-term (100 years and longer) there is no guarantee that government agencies responsible, or their staffing levels, will be sufficient to ensure that the ever-increasing number of offsets are properly maintained. Indeed, the so-called economic costs have very short-term budgets of only a few years.

Biodiversity offset **policies in Australia have tended to lock in biodiversity decline** and risk exacerbating it (Maron et al. 2015). Moreno-Mateos et al. (2015) consider that biodiversity offsets embrace misplaced technological optimism towards ecosystem restoration so they cannot resolve the trade-off between development and conservation.

Old-growth forests are relatively scarce and **cannot be created over any reasonable time period** through planting. Heathlands and grasslands are often very floristically diverse and no-one has ever created a new heathland or a new grassland from scratch in a different location. Presently it is not technically possible to recreate these communities.

Allowance must be made for an **uncertain outcome**, such as loss of an offset due to fire, changed hydrology, or land use, by using a multiplier (every hectare of land to be cleared requires compensation of at least X hectares where X>five). Curran et al. (2014) concluded this required offset ratios from 5 to 100 (units set aside compared to units developed) with higher ratios required for ecosystems requiring longer establishment times.

- Subsequent auditing must occur to ensure that there is compliance with regulations concerning the management of the offset and funding for such auditing must be paid **in advance** by the proponent with a bond.
- The **proponent** must take **full responsibility** for the nomination and assessment of areas proposed for offsets. This responsibility includes **paying all the costs** associated with the establishment and long-term maintenance of the offsets.

Endangered species require as much protection as possible. If lost they cannot be replaced. Offset schemes may benefit some species, but other species have been adversely affected. Existing knowledge about the impacts of an offset scheme on all species present is limited to non-existent.

The fashion of offsetting one endangered community with a different community is not logical if we are aiming to prevent extinctions.

Downstream effects need to be fully included and costed. For example, establishing a 1000 ha new reservoir on a river will impact all the wetlands down river and the estuary. Thus, at a minimum a theoretical offset would include all these ecosystems. It is not possible to establish wetlands and estuaries in other locations as water flows downhill. Just where would these offsets be located?

There are now vested interests (business and bureaucracies) in maintaining the existing offsetting practices.

Offsets can be consistent with no net loss if ALL of the following occur:

- The vegetation proposed for clearing is unlikely to persist or restoration of the values lost from clearing is feasible;
- Clearing does not present an immediate risk to any species, population, or ecological process;
- The area and quality of the offset is sufficient to ensure populations and ecosystems are not reduced in number or extent;

- There is adaptive management (particularly essential for ensuring the long-term effectiveness of an offset);
- Offsets provide values for periods commensurate with impacts from clearing;
- There is compliance in perpetuity; and
- Proponents of clearing pay all the costs into perpetuity.

Housing and other infrastructure should be and can easily be planned to avoid impacting on irreplaceable medium to high quality native vegetation, wetlands and waterways.

Some vegetation, such as old-growth forests and vegetation containing endangered species, should not be cleared, and therefore not offset, under any circumstances.

For State Governments to oversee rules about offsets enables clear conflicts of interest. Governance is problematic. For example, clearing for a new highway by providing offsets within an existing protected area is not an offset. The recent bushfires in eastern Victoria saw the main highway cleared for 100 m each side under the guise of emergency work, thus avoiding any offsets.

References:

Curran et al. (2014). Is there any empirical support for biodiversity offset policy? *Ecological Applications* 24, 617-632.

Gibbons P and Lindenmayer DB (2007). Offsets for land clearing: no net loss or the tail wagging the dog? *Ecological Management and Restoration* 8, 26-31.

Gordon et al. (2015). Perverse incentives risk undermining biodiversity offset policies. *Journal of Applied Ecology* 52, 532-537.

Lindenmayer et al. (2017). The anatomy of a failed offset. *Biological Conservation* 210, 286-292.

Maron et al. (2015). Locking in loss: baselines of decline in Australian biodiversity offset policies. *Biological Conservation* 192, 504-512.

Moreno-Mateos et al. (2015). The true loss caused by biodiversity offsets. *Biological Conservation*

Spash (2015). Bulldozing biodiversity: the economics of offsets and trading-in Nature. *Biological Conservation* 192, 541-551.

Walker et al. (2009). Why bartering biodiversity fails. *Conservation Letters* 2, 149-157.

Recommendations:

- 1. Any proposals involving vegetation clearance should avoid detrimental impacts on threatened species. If avoidance is not possible then the plans should minimise any disturbance. If avoidance and minimisation are not possible then environmental offsets must be considered but only if all costs including government costs and the costs in perpetuity are included.**
- 2. There must be a rigorous compliance regime which must be paid for in advance by proponents of vegetation clearing.**
- 3. All offsets should be secured before clearing and be legally protected on titles before the clearing begins.**
- 4. All government agencies must comply with rules about the protection of threatened species and ecosystems.**
- 5. In order to have good governance any offset relating to government works needs to be evaluated by a body independent of government.**

4. Parliamentary Committee focussed on Budget allocations for nature conservation

Victoria has had nature conservation laws for over 100 years. Victoria has had a system of National Parks and nature conservation reserves for over 60 years. Therefore, the Treasury and appropriate Departments and Authorities have had more than enough time to adequately budget for and make appropriate long-term financial allocations to properly manage our protected areas. Excuses about insufficient budgets was old news last millennium. Today inadequate budgeting for proper management of the 18% of Victoria which is in nature conservation reserves appears to be just BAD MANAGEMENT, POOR BUDGETING AND INCOMPETENT GOVERNANCE.

Why after 100 years of nature conservation laws in Victoria, is government is still incapable of making proper budgeting allocation? Blaming poor Departmental submission processes is not tenable, competent or acceptable to the Victorian public.

For example, Parks Victoria was established as a government corporation more than 20 years ago (last millennium) but is still failing to carry out the responsibilities outlined in the Act. This business model for a government agency must be questioned. Each National Park requires a Management Plan and each Plan is required to be updated every 10 years. The facts are that most National Parks do not have Management Plans, and those that exist are more than 10 years old. This is not competent. Just who is responsible for this noncompliance? Are individual Parks Victoria Board members liable for mismanagement of the parks service, the Minister responsible or the Treasurer who oversees budgets and their implementation who do not make adequate funding available?

Another example are Ramsar Wetlands, protected under an international agreement. Victoria has numerous listed Ramsar Wetlands and yet decades after listing there is totally inadequate funding to protect and manage these wetlands. What is taking departmental/Treasury officials so long to complete this piece of homework? We have thousands of international visitors coming to Victoria to see our birds and protected wetlands, yet there are dreadfully poor management practices, a lack of environmental water and worse than “third world” facilities for visitors. It is really a disgrace. Victoria would be lucky to score 2/10 for this mismanagement of Ramsar Wetlands.

Another example is the low funding available for implementing the State Government’s *Protecting Victoria’s Environment - Biodiversity 2037*. Funding needs to be substantially increased.

The only responsible way is to have a Parliamentary Committee which examines the adequacy of funding for legislated requirements on nature conservation. Treasury officials need to be held accountable about how they are meeting the long-term needs for nature conservation in Victoria. A very intense light needs to be shone into this place of inadequate funding, as the responsibility for nature conservation is a clear role of Government.

Recommendations:

- 1. That a realistic estimate be prepared for the funding needed to improve the status of all threatened species in Victoria. This estimate should be the basis for multi-year State Budget allocations. This includes proper and ongoing funding for Species Recovery Plans for all threatened species in Victoria.**
- 2. Parks Victoria’s operational budget for the conservation management of the State’s protected areas should be increased to 1% of the State Budget.**
- 3. That the Trust for Nature receive \$40 million to expand their rolling land covenanting fund.**
- 4. That the Government’s *Protecting Victoria’s Environment - Biodiversity 2037* policy be fully funded and implemented.**
- 5. That Ramsar Wetlands be properly protected, managed and fully funded.**
- 6. That a Parliamentary Committee focussed on Budget allocations for nature conservation be established.**