

**Submission to the Victorian Government Environment and Planning
Committee
On
The Decline of Victoria's Ecosystems and Measures to Restore Habitats and
Populations of Threatened and Endangered Species**

By: Extinction Rebellion Grey Power Victoria.

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To the Victorian Government Environment and Planning Committee,
Via email: <https://www.parliament.vic.gov.au/epc-lc/article/4500>

Summary

Global and Victorian ecosystems are under severe and increasing threats from many human-induced factors including global warming, deforestation, pollution and habitat destruction.

Global warming, despite misleading messages from various media, is scientifically a fact, and is a significant threat to humanity - indeed, an existential threat (eg. UN Sec-Gen Guterres, 2018) in several ways:

- Rising sea-levels, predicted in the order of 0.3-2.5m by 2100;
- Rising air temperatures, with a 1.5C rise almost locked in and further rises inevitable
- Increasing bushfire risks (who can forget the 2019/2020 inferno?).

Recommended actions to limit global warming include:

- Declare a climate emergency (with clear commitments to follow-up actions)
- Begin immediately to transition as fast as possible from fossil fuels to renewables
- Institute a Citizens Assembly, with significant science and First Nations input, to guide the government on the basis of, not politics, but logic and science together with Indigenous traditional knowledge
- Ban oil and gas exploration and development to reduce future CO2 emissions

Further recommendations that are not specific to the various habitats are:

- Funding of community environmental projects (vetted by a non-political government agency such as the EPA) that will enhance the environment
- Reafforestation and revegetation programs in areas of environmental degradation, riparian zones and coasts
- Restoration of areas which have been heavily impacted by logging and other extractive industries, as well as areas impacted by the horrific 2019/2020 bushfires
- Ensure that waste disposal systems (both household and industrial) are safe and effective, reducing methane emissions, plastic pollution and other risks to the environment and human health

Forests in Victoria are under severe threat from both global warming, manifest as increasing bushfires, and logging by VicForests. VicForests has been shown to be: unnecessarily destroying habitat with no care for threatened and endangered species; economically unviable, costing taxpayers \$190 million over the next ten years; acting illegally with systemic breaches of the law and regulations; and disregarding the science.

We recommend the following:

- The VicForests Corporation and all other state-tolerated native forest logging corporations in Australia should be wound up without delay. The current

Commonwealth Royal Commission into Natural Disaster Arrangements should issue an interim recommendation to that effect

- Salvage logging must be ceased immediately
- The Victorian Forestry Plan (2030) should be fully activated now
- All VicForests Corporation staff should be terminated with full entitlements. All VicForests staff should then be immediately offered new employment under an expanded Biodiversity 2037 Implementation Framework
- The Wood Pulp Agreement Act and all attendant regulations should be repealed
- All Regional Forest Agreements should be cancelled
- All remaining contracts between VicForests and their contractors, suppliers and customers should be cancelled on the basis of “force majeure” arising from last summer’s bushfires
- There should be no exemptions from the requirements of the Environment Protection and Biodiversity Conservation (EPBC) Act. Indeed, the Act and its enforcement need strengthening
- The immediate shortfall in timber supply should be filled by plantation timber. It is likely that there will be a need to expand the area under plantation timber, on lower-grade agricultural land rather than ecologically sensitive landscapes
- Research projects should be initiated for the production of paper, cardboard, and “engineered wood” from non-tree sources of plant fibre, e.g. sugar-cane bagasse, bamboo, hemp, crop stubble, and similar materials grown on agricultural land

Marine and coastal ecosystems are under siege from three main threats:

- Rubbish, litter and pollution (biohazards, poisons, chemical, plastics) which find their way from urban runoff into bays and oceans, where they are killing fish, cetaceans and seabirds
- Industrial development of environmentally-sensitive areas, allowed under current legislation, but which ultimately fragments and destroys ecosystems
- Sea-level rise as a result of global warming, with impacts also on humans residing near coasts or in low-lying areas

To combat these threats, we recommend:

- Banning offshore oil/gas exploration
- Implementing stronger controls on streams and rivers (and their catchments) flowing into the bays and ocean to limit rubbish and poisons contamination e.g. soil traps and containment measures for flow from industrial/ agricultural waste
- Compulsorily-fenced rivers and streams where livestock is raised
- Banning developments in ecologically-sensitive areas (e.g. the currently proposed Modewarre Lake housing development, AGL’s proposed Westernport development)

Pollution: our ecosystems are being overwhelmed by the dross of humanity - rubbish, litter, poisons, chemicals. Two circumstances combine to ensure current pollution/littering controls are ineffective: the lack of consequence for offending, and the very low chance of being caught. To redress these flaws, we suggested:

- Legislating immediately for recycling of drink containers (including glass, plastic, cans), under a Scandinavian model (this is so obvious, but despite promises, recycling is 20-30 years behind the times); all agricultural packaging to be converted

to compostable wrap, particularly from plastic used in field for wrapping banana or fruit bunches

- Dramatically increasing fines for littering, rubbish dumping and polluting so they act as an effective deterrent
- Increasing the likelihood of polluters being caught, by increasing EPA powers, funding and staff, and instituting council-based pollution officers (“litter police”) similar to parking officers, to fine offenders and generate revenue
- Putting at least partial responsibility for take-away litter back on the providers - the take-away franchises in particular

Grasslands: only small relicts remain. We recommend:

- Identifying and protecting remaining grassland remnants across Victoria

For all of the above, clear processes and actions are required to recognise and address the impacts of ecosystem decline on First Nations peoples, and the prioritisation of First Nations voices and involvement in management of country and traditional lands, including returning custodianship to Traditional Owners.

We implore our politicians of all parties to put aside their party politics, their polls and electoral concerns, and to act now to save our remaining, dwindling natural resources, to protect our legacy for future generations. The future is not written. It is made by our choices.

Introduction

Contributors include environmental experts and activists, several with long-term involvements in protecting the environment, and all are members of Extinction Rebellion Grey Power, Victoria.

Aims

To produce a document with relevant data on the causes of, and actions to address, the decline of Victoria's ecosystems and the restoration of habitats and populations of threatened and endangered species,

Data Sources

We have selected data and reports from reputable sources, with references given if possible.

Context

Life on planet Earth is in the midst of a sixth mass extinction event (eg. Glickson, 2015). Unlike previous events caused by meteorites and volcanic activity, this event is caused by humans. With a population now of over seven billion, in the last few thousand years and especially the last decades, we have: extensively cleared the forests; depleted the oceans of fish; poisoned the fields with insecticides; polluted the air, rivers and oceans with chemicals, litter and plastic; and burnt fossil fuels so that the earth's temperature is increasing to the point that global warming is a "clear and present danger to humanity" (IPCC report 2014).

Despite the clear science, sadly there is a lack of coordinated response from humanity, as various political leaders including Australia's, disregard the science for their own unfathomable but short-term objectives.

Confronted with this gloomy outlook, we ask ourselves rhetorically: What can we do? The answer is to do as Prof Suzuki said: "Think globally, act locally." So, we return our attention to Victoria, to see what can be done.

A: the extent of the decline of Victoria's biodiversity and the likely impact on people, particularly First Peoples, and ecosystems, if more is not done to address this, including consideration of climate change impacts

There is no doubt that Australia's, and Victoria's, ecosystems are in decline. The recent bushfires are likely the worst ever in terms of their impact on nature, with an estimated one billion animals killed (although the loss of human lives was less than other fire events). A recent report from the WWF estimates that over 3 billion animals were impacted - killed or displaced (WWF, 2020).

One overarching feature contributing to the decline of all ecosystems is fragmentation. Relatively small encroachments by human infrastructure inevitably lead to further incursion, with the initially intact ecosystem being cut by roads, development or housing, so that ever smaller relicts eventually become unsustainable, placing the ecosystems under constant pressure. This is where we find ourselves.

We will discuss ecosystem decline under various headings.

Forests

Victorian native forests, as viable ecosystems, are under such huge threats that there may be none left by 2030. These threats include: bushfires, which we will show are linked to both global warming and forestry; forestry and clearing for human use; and both agriculture and development. Here we will firstly focus on VicForests, the state-run corporation.

VicForests credibility

There are a number of factors which impinge upon the credibility of VicForests' claims they responsibly manage Victoria's forests. These factors include:

- the damage wrought by VicForests' logging operations and the adverse effects which flow on into surrounding areas, demonstrable from simple eye-balling
- the failure to curtail logging in recognition of the destruction caused by recent bushfires
- looming extinctions
- salvage logging, despite clear evidence of lasting ecological damage
- a dearth of social licence for native forest logging
- economic indefensibility
- findings of the Federal Court, and
- some revealing statements in the press (The Age, 30/4/2020), and on VicForests website, including the following; "We do not accept the published opinions of Professor David Lindenmayer as reflective of evidence and do not consider him to be an authority in these matters." See:

<https://www.theage.com.au/national/loggers-return-to-native-forests-burnt-in-summer-bushfires-20200430-p54ok1.html>

Professor David Lindenmayer is a world renowned authority on forest ecology. Following the publication of Ms Dawson's comments, 100 scientists signed a letter to the Victorian government affirming Professor Lindenmayer's expertise ([top-scientists-back-australian-ecologist-in-vicforests-bushfire-row-20200714-p55bt0.html](https://www.theage.com.au/national/top-scientists-back-australian-ecologist-in-vicforests-bushfire-row-20200714-p55bt0.html)).

For an example of Lindenmayer's expertise, see:

https://www.youtube.com/watch?v=bt-WDa-ZKE&feature=share&fbclid=IwAR3T8bLMY1UjO4vJUOtykHPPK0deVx_EApS08zmOqSLINoshSq8ggQzVqvs

See also: Lindenmayer, 2020: <https://youtu.be/RFNRj0leT8o> which is a summary of many scientific, peer-reviewed papers, showing powerful (perhaps irrefutable) evidence of strong links between the decline of the forests and increased threats to wildlife, from the joint impacts of global warming and logging.

If the statement quoted is correct, and is representative of the scientific expertise of VicForests, then VicForests has no legitimacy operating in any forested area, and it should disqualify Ms Dawson from any position of responsibility relating to forests. We consider Ms Dawson's position to be untenable.

Looming extinctions

Over a billion animals perished in last summer’s bushfires. See:

<https://www.abc.net.au/news/2020-01-31/fact-check-have-bushfires-killed-more-than-a-billion-animals/11912538>

https://www.theguardian.com/environment/2020/jul/28/almost-3-billion-animals-affected-by-australian-megafires-report-shows-aoe?CMP=share_btn_link

Table 1: Species impacted by the current fire extent

% of modelled habitat In the current fire extent	Total species	Listed under the EPBC Act**	Listed under the FFG Act*	Listed as Victorian Rare or Threatened species*
Fauna				
Over 95%	1 species	1 species	1 species	1 species
50% or more	17 species	3 species	8 species	11 species
20% or more	87 species	13 species	26 species	35 species
Flora				
Over 95%	4 species	0 species	1 species	4 species
50% or more	168 species	10 species	13 species	162 species
20% or more	689 species	19 species	48 species	397 species

See also:

https://www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery?fbclid=IwAR2outzW1cHRyDtjzS-iELzSp9Wq0BQ3J64S2uoyC32SSvPV9jRc3hZ_XY

The combustion of a forest, and the burning of debris remaining after logging, not only directly kills native flora and fauna, but also places any remaining populations at risk of starvation and predation as opportunities arise for pest species to invade and wreak their own forms of havoc.

The destruction of remaining habitat by logging and salvage logging is increasing the risk of extinctions of our unique native species. The continuation of native forest logging, and “salvage logging” must stop, especially since the bushfires of 2019-2020.

VicForests clear-fells an average of about 9.5 hectares of native forest each working day, or about 3,000 hectares per year. See:

<https://www.abc.net.au/news/2019-02-20/fact-check-five-mcgs-of-native-forests-logged-in-victoria/10780846?fbclid=IwAR389qLAAaDK8ByDfnWaNApn05qViDb99XT3uo2mf8EpUUFNU5JIUprNGEU>

The continuation of native forest logging is inconsistent with the intent, if not the letter, of the *Biodiversity 2037 Plan*: <https://www.environment.vic.gov.au/biodiversity/biodiversity-plan>

Native forest logging lacks social licence

“When asked: ‘What could be done to alleviate concerns and improve the things most valued about forests in Victoria’, most respondents (75%) said stronger focus on biodiversity

conservation followed by stronger focus on the health and structure of our forests (73%) and improved protection of ecosystem services (69%). These strongly -supported statements are consistent with the other questions, rating the health and biodiversity of the forests as the most important.” See page 31 in:

https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/4915/6438/3710/FutureOfOurForests_FeedbackReport.pdf

The dearth of public support for native forest logging extends beyond Victoria

“...harvesting native forests was viewed as unacceptable by 65% of regional and rural residents - including in areas with timber industries - not far shy of the 70 per cent disapproval by urban respondents.” Hannan (2018). See:

<https://www.smh.com.au/environment/sustainability/bush-turns-its-back-on-support-for-logging-native-forests-20181113-p50frc.html?fbclid=IwAR3gbeXNDMGSSB0RCeMlcy1kxD51HT7u7EYPtJNg5U7jbclspxoB1g9bHjQ>

Native forest logging until 2030 is economically indefensible

The Parliamentary Budget Office (Victoria) has concluded that the immediate cessation of native forest logging by VicForests could save taxpayers over \$190 million, over ten years.

Looking at it another way, taxpayers can expect to subsidise the financially unviable native forest logging industry by more than \$190 million over the next ten years for the privilege of having our unique biodiversity trashed and largely sent to Asia as little chips. Unless it is stopped.

Now.

See:

<https://sway.office.com/cQXoiKWO0HHNL6ml?fbclid=IwAR1QJbkVOfc8MoGjQ0gXyZuz5UvUaqszXYawF2ZBxyso91aF-IQTZ-57vvM>

See also:

https://www.theguardian.com/environment/2020/apr/13/ending-logging-in-victoria-now-would-save-tax-payers-192m-budget-office-estimates?CMP=Share_iOSApp_Other&fbclid=IwAR1Us5aHsCNSygY6Acfg8dUddJSI1YBhDjedHK0FkszzYAWGZhij_Ykl2g

Legal considerations

We note with concern the findings of the Federal Court, 27 May 2020. For example;

“The Court has found that existing forest management prescriptions have not been effective to arrest the decline of the Greater Glider and the Leadbeater’s Possum. This includes accepting the expert opinion of Professor Woinarski that the protection zones created for Leadbeater’s Possum are not effective.”

... and ...

“Not only do VicForests’ forestry operations damage or destroy existing habitat critical to the survival of the two species, they also prevent new areas of forest from developing into such habitat in the future.”

As the Federal Court has not yet issued final orders, it would be most unfortunate if VicForests were found to have been logging, or attempting to harvest trees, in any of the areas under consideration by the Court.

Further conditions were imposed in August 2020, ee:

https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2020/2020fca0704/summary/2020fca0704-summary?fbclid=IwAR34eLW_vJTF9BBgd7oD-Gd453xwfuDkrA_aS_HYuw7HaNKP_pQAG8c6f6E

<https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2020/2020fca0705>

<https://www.smh.com.au/politics/federal/landmark-environment-case-halts-vicforests-logging-in-its-tracks-20200821-p55o3b.html>

Forests: In summary

No government should be in the business of cutting down native forests. Logging of native forests should cease now. Every government should be in the business of protecting forests, especially in this era of catastrophic climate change where their role as carbon sinks is critical.

A state-run native forest logging corporation is an anachronism. VicForests fails tests of economic viability, compliance with the law, adherence to environmental standards, and listening to the science. VicForests should be wound up, or at least totally restructured.

Grasslands

Precious little of Victoria’s original grassland is preserved, and what remains is fragmented and often confined to roadside reserves. A number of threatened and endangered species are endemic to these grasslands.

The fragmentation of the grassland with their obvious agricultural attractiveness is an example of what happens to most ecosystems with progressive incursion by human development resulting in their ultimate decline.

Two key issues emerge: ensuring protection of the remnants already protected; and identifying any other areas with high conservation values in this ecosystem and attempting to protect these.

Streams and Rivers

The complex political situation with the Murray-Darling catchment and water flows appears intractable. As usual, the environment appears to lose out, with farmers (who vote) and commercial interests in cotton crops, pitted against the needs of the environment (which does not have a vote). Especially during droughts, environmental flows have been continually diverted and eroded for human use. At some point, we must realise that we humans depend on a healthy riverine ecosystem, and not vice-versa.

Human engineering facilities (weirs, dams, channels) have significantly affected stream flow rates, so that downstream flows and the timing of flows are quite different to the previously unconfined flows, impacting fish populations, affecting fecundity, and in turn predatory species (waterbirds).

Marine and Coastal Environments

A major threat to Victoria's marine and coastal environment is sea-level rise, attributable to global warming. The IPCC projects sea-level rises of up to 59cm by 2100; however a number of reputable scientists with expertise in this field (eg. Glikson, 2015) suggest that this is a conservative estimate and the real rise will be more than this. NOAA (2017) predicts a rise of between 0.3 and 2.5m by 2100.

Sea-level rise will have a significant effect on low-lying areas, the best Victorian example being the Gippsland Lakes. Even a 0.5m sea-level rise would jeopardise large areas of the Gippsland Lakes Coastal Park.

Another serious threat is the rubbish and plastic that finds its way into the oceans, discussed below in '*Polluting the Commons*'.

Industrial and housing developments along the coast and nearby wetlands are another threat. Naturally, proponents in many cases do significant amounts of work to justify why their development should go ahead, and extensive tomes of complex data and interpretations can be hard to argue against.

However, this is a death by a thousand cuts to the ecosystem. Every incursion reduces the boundary where the natural ecology can survive intact; and it is often the case that further developments follow the first one. Sadly, no-one seems to have a big-picture view, recognising that in sensitive areas, a new development is the thin edge of the wedge, and in fact can be fatal. Two examples right now are the AGL proposal for Westernport Bay, and a housing development partly over wetlands, at Modewarre Lake near Geelong.

The following is from the Darebin Climate Action Now (DCAN) submission to the Victorian Government's Crib Point Inquiry and Advisory Committee:

"The potential impacts on marine life and risks posed by increased shipping, fuel spills, chlorine and possible accidents represent serious threats to the internationally recognised

Western Port Ramsar Wetlands (959,955.05 hectares). This is an extensive site with rich biological diversity including migratory birds, sea-grasses, saltmarsh, mangroves, fish and marine mammals. It is a dynamic, sensitive environment. Three national parks are situated within the Westernport area. All of these would be put at unreasonable risk by the proposed development. The ecosystem of Western Port Bay is already facing severe threats from climate change. Impacts such as increasing water-surface temperature and sea levels, reduced rainfall and increasing intensity of heatwaves are just some of the well-documented effects of climate change which would be exacerbated by this development. The proposed development presents an unacceptable level of risk to the health and very survival of ecosystems in the Ramsar site, and the Bay overall."

Polluting the Commons

Pollution of the Commons - the air, inland waters and oceans - has a major impact on all of the ecosystems. There are few places one can go where there is no human rubbish; in the cities, air quality is poor from vehicle emissions; the beaches are littered and the oceans have islands of plastic and rubbish.

In our disposable and take-away society, human behaviour is the problem. It is so easy to dispose of something no longer needed, like a paper coffee cup with a plastic lid, and there is no consequence for doing that. Improperly disposed of rubbish is washed into water courses, rivers and lakes, where (in Melbourne), a small proportion is collected in minimally effective litter traps, and the rest continues, often into the ocean. The oceans now have so much rubbish like plastic, that fish, mammals (Cetaceans) and seabirds are dying in increasing numbers from ingested plastic (eg. ABC: the East Australian Current TV series). Whales starve to death as plastic blocks their intestines; seabirds have been found with stomachs full of plastic. Measures need to be taken to address this.

The problem with litter is this: one takeaway coffee cup is of little consequence, but millions of them is a big problem. Huge. People create this problem. Littering is easy; there is no consequence (penalty), and the chance of being caught is minimal. So the habit continues.

One example of the problem is the litter rings that are present around take-away restaurants notably Macdonald's and KFC. Who is responsible? No-one it seems; the litter remains for weeks, eventually following the path of other litter to the sea.

Plastics are a particular problem. On average, Australians use 130 kg of plastic per person each year. Only 9% of that is recycled. More frightening still, up to 130,000 tonnes of plastic will find its way into our waterways and into the ocean. (WWF, 2020):

https://www.wwf.org.au/get-involved/plastics/?utm_source=taboola&utm_medium=native&utm_campaign=me_plastics&utm_content=sign_1&tblci=GiBtlylcMdSnVUYQJgibon0aDIweHmOMalX4yPQ5F67aASDFok8#tblci=GiBtlylcMdSnVUYQJgibon0aDIweHmOMalX4yPQ5F67aASDFok8

Global Warming

Burning of fossil fuels for 100 years has led to a concomitant rapid increase in CO₂ and hence temperature, comparable to the several major extinction events in the geological record (eg. Glikson, 2015). We humans are causing the world's sixth mass extinction event.

The science is clear. We do not intend to argue this here, simply refer to some reputable science organisations such as:

IPCC:

https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf

NASA: <https://climate.nasa.gov/>

BOM: <http://www.bom.gov.au/state-of-the-climate/>

B: the adequacy of the legislative framework protecting Victoria's environment, including grasslands, forests and the marine and coastal environment, and native species

International, federal and state legislation are all relevant to consider in terms of protection of Victoria's ecosystem.

At federal level, the recent performance audit of referrals, assessments and approvals of Controlled Actions under the Environment Protection and Biodiversity Conservation Act 1999 (Auditor-General 2020, p6) presented a worrying picture:

- "The Department of Agriculture, Water and the Environment's (the department's) administration of referrals, assessments and approvals of controlled actions under the EPBC Act is not effective.
- The department's regulatory approach is not proportionate to environmental risk.
- The administration of referrals and assessments is not effective or efficient.
- Conditions of approval are not assessed with rigour, are non-compliant with procedural guidance and contain clerical or administrative errors.
- The department is not well positioned to measure its contribution to the objectives of the EPBC Act."

The interim report on the current review into the EPBC Act (Samuels 2020) recognises the considerable problems with the current legislation. In his foreword to the report Samuels states that: "the EPBC Act does not position the Commonwealth to protect the environment and Australia's iconic places in the national interest. The operation of the Act is dated and inefficient, and it is not fit to manage current or future environmental challenges, particularly in light of climate change." His report sets out a long list of detailed recommendations, a particularly important one is the creation of "An independent compliance and enforcement regulator, that is not subject to actual or implied political direction from the Commonwealth Minister". It is our position that the regulator should be responsible for monitoring

compliance, enforcement and assurance. It should be properly resourced and have available to it a full toolkit of powers.

This needs to be strongly supported, recognising that the current Federal Government has stated that they do not intend to implement this.

Other particularly important recommendations are contained in this extract from the summary points in Samuels (2020, page 1):

- Fundamental reform of national environmental law is required, and new, legally enforceable National Environmental Standards should be the foundation. Standards should be granular and measurable, providing flexibility for development, without compromising environmental sustainability
- National Environmental Standards should be regulatory instruments. The Commonwealth should make National Environmental Standards, in consultation with stakeholders, including the states and territories. The law must require the Standards to be applied, unless the decision-maker can demonstrate that the public interest and the national interest is best served otherwise
- Precise, quantitative standards, underpinned by quality data and information, will support faster and lower-cost assessments and approvals, including the capacity to automate consideration and approval of low-risk proposals
- The EPBC Act has failed to fulfil its objectives as they relate to Indigenous Australians. Indigenous Australians' traditional knowledge and views are not fully valued in decision-making, and the Act does not meet the aspirations of Traditional Owners for managing their land. A specific Standard for best practice Indigenous engagement is needed to ensure that Indigenous Australians that speak for, and have traditional knowledge of, Country have had the proper opportunity to contribute to decision-making
- Indigenous Australians seek, and are entitled to expect, stronger national-level protection of their cultural heritage. The suite of national-level laws that protect Indigenous cultural heritage in Australia needs comprehensive review. Cultural heritage protections must work effectively with the development assessment and approval processes of the EPBC Act

The Climate Council (2019) report provides a detailed overview of the Australian government's approach to climate change since the election of the Liberal-National Coalition government in 2013. The period has been characterised by slashing climate science funding, cutting effective climate change programs, rejecting the expert advice of national and international bodies, senior ministers making publicly misleading claims, a lack of credible climate policy, and consistently covering up poor performance. As the Climate Council concludes, "this is the defining policy and leadership failure of the last decade".

We now face a new world, post-2019-20 bushfires, as threatened species are now even more threatened or critically endangered; some species not previously endangered now probably are (eg. koalas). A report prepared for the Wildlife and Threatened Species Bushfire Recovery Expert Panel (Department of Agriculture, Water and the Environment 2020) described the results of a rapid analysis of impacts of the 2019-20 fires on animal

species, identifying that 119 animal species are high priority for urgent management intervention.

Littering and pollution of the commons have significant impacts on the environment, particularly rivers and marine ecosystems. If we go back to the source of the problem - people (wherever they are) - the fault is in the legislation, but also at least in part in the lack of enforcement of the rules.

C: the adequacy and effectiveness of government programs and funding protecting and restoring Victoria's ecosystems

The State and Federal Government's responses to the Climate Emergency are completely inadequate, almost as if the problem is not real. As the current Federal Government is moribund on the issue, it falls to the States and local government to act.

State Government funding of VicForests is a complete disaster, an uneconomic industry turning native forest into paper, destroying the habitat of threatened species, and losing a significant amount of money, for relatively few jobs.

The decline of our ecosystems is remarkable, compounded by the 2019-20 bushfires. How did it get to this situation? Clearly, current government programs are ineffective and inadequate, as is the funding to protect and restore Victoria's ecosystems.

The problem is not only lack of adequate laws and regulations. The decline is at least as much due to the poorly funded agencies who police these; a classic example being the EPA's failure to catch and prosecute polluters.

D: legislative, policy, program, governance and funding solutions to facilitate ecosystem and species protection, restoration and recovery in Victoria, in the context of climate change impacts

We propose some actions to combat this complex array of largely human-induced problems confronting the world and Victoria:

- Institute a Citizens Assembly, with appropriate scientific and First Peoples input, to guide the Victorian Government on the path to develop strategies and plans to implement them

Global Warming:

- Declare a Climate Emergency
- Develop policies and law to combat climate warming, including a rapid transition to renewable energy
- Cease exploration for natural gas

Forests:

- Halt logging of native forests immediately
- VicForests requires a complete overhaul and restructure, to focus on logging plantations and a new role in the conservation of state forests
- Abandon the Regional Forests Agreements
- Create transition programs for workers into related areas (conservation)
- Declare the Central Highlands National Park to protect the forests and their threatened species habitats, create tourist and conservation jobs;
- Rights for First Peoples to have a say in the management of said National Park;
- Input of First Peoples into managing forests including cultural burns

Littering:

There is a need to address both the consequences of polluting and littering, and the chance of being caught. We suggest several concerted actions to address these deficiencies:

- Significant increases in all penalties for polluting and littering, so that the consequence of being caught is a deterrent; perhaps multiples of several times in any current fines would be a start. Increased revenue would also enable better policing, as follows:
- Significantly increasing the funding to the EPA, so it can detect and prosecute big polluters
- Establishing a 'litter police' operated by councils along similar lines to parking officers, to catch and fine litterers and rubbish dumpers

Marine and Coasts:

Apart from pollution and sea level rise related to global warming, the main threat is the fragmentation of fragile ecosystems. To combat this, we recommend:

- Much higher levels of protection for environmentally sensitive areas, such as wetlands and coastal heath
- Prohibit the proposed AGL development in Westernport Bay
- Ban offshore oil and gas exploration

Grasslands:

Remnants of the once-extensive grasslands of western Victoria now need preservation from creeping urban sprawl, and a program to identify any unprotected relicts to try to preserve those.

F: any other related matters

No comment.

Conclusions and Recommended Actions

Global warming has not gone away during the pandemic. As a problem, it is an order of magnitude greater than the pandemic, yet state and federal governments do nothing. The pandemic has at least shown that governments are capable of emergency action at speed and scale. Required actions are:

- Declare a climate emergency (with clearly articulated follow-up actions)
- Begin immediately to transition as fast as possible from fossil fuels to renewables
- Institute a Citizens Assembly, with significant science and First Nations input, to guide the government on the basis of, not politics, but logic and science together with Indigenous traditional knowledge. For a guide to Citizens Assemblies, why they are important and what they do, see:

[https://ausrebellion.earth/docs/Citizens Assemblies Guide - Extinction Rebellion.pdf](https://ausrebellion.earth/docs/Citizens_Assemblies_Guide_-_Extinction_Rebellion.pdf)

- Ban oil and gas exploration and development to reduce the future CO2 emissions

Further recommendations that are not specific to the various habitats are:

- Funding of community environmental projects (vetted by a non-political government agency such as the EPA) that will enhance the environment
- Reafforestation and revegetation programs in areas of environmental degradation, riparian zones and coasts

Other recommendations are listed under the various sections.

Forests

- The VicForests Corporation and all other state-tolerated native forest logging corporations in Australia should be wound up without delay. The current Commonwealth Royal Commission into Natural Disaster Arrangements should issue an interim recommendation to that effect. Ditto IGEM
- The salvage logging atrocity must stop now
- The Victorian Forestry Plan (2030) should be fully activated now. All incentives should be increased and applicable from June 2020. See:
<https://www.vic.gov.au/victorian-forestry-plan>

- All VicForests Corporation staff should be terminated with full entitlements. All VicForests staff should then be immediately offered new employment under an expanded Biodiversity 2037 Implementation Framework. See: <https://www.environment.vic.gov.au/biodiversity/Implementing-Biodiversity-2037>
... and the Biodiversity Response Planning approach. See: <https://www.environment.vic.gov.au/biodiversity/biodiversity-response-planning>
- VicForests contractors should also be offered environmentally responsible re-employment similarly
- The Wood Pulp Agreement Act and all attendant regulations should be repealed. See: <https://www.legislation.vic.gov.au/in-force/acts/forests-wood-pulp-agreement-act-1996/001>
- All Regional Forest Agreements should be cancelled. See: <https://www.agriculture.gov.au/forestry/policies/rfa>
- All remaining contracts between VicForests and their contractors, suppliers and customers should be cancelled on the basis of “force majeure” arising from this summer’s bushfires.
- There should be no exemptions from the requirements of the Environment Protection and Biodiversity Conservation (EPBC) Act. Indeed, the Act and its enforcement need strengthening. See: <https://www.environment.gov.au/epbc>
- Where there is a clear need for the removal of burnt trees to prevent them from falling on roadways, the removal work should be carried out by VicRoads, not VicForests.
- The immediate shortfall in timber supply should be filled by plantation timber. It is likely that the area under plantation timber needs to be expanded, on lower-grade agricultural land rather than ecologically-sensitive landscapes.
- Research projects should be initiated for the production of paper, cardboard, and “engineered wood” from non-tree sources of plant fibre, e.g. sugar-cane bagasse, bamboo, crop stubble, and similar materials grown on agricultural land.

Grasslands:

- Identify and protect remaining remnant grasslands.

Marine and Coasts:

- Ban offshore oil/gas exploration
- Implement stronger controls on streams and rivers (and their catchments) flowing into the bays and ocean to limit rubbish and poisons contamination
- Ban developments in environmentally sensitive areas (eg the currently proposed Modewarre Lake housing development, AGL’s proposed Westernport development).

Pollution: this is a significant but underestimated threat to all ecosystems, but especially marine and coasts as terrestrial pollution (litter, poisons) inevitably enter the oceans.

- increase funding (e.g. from receipts of “litter police”) to the EPA so it can work more effectively

- Dramatically increase fines for dumping and littering, and enforce these with a new set of officers (“litter police”) to fine litterers, perhaps with similar authority to Parking Officers
- Legislate to make take-away restaurants fund clean-up around their stores
- Implement adequate recycling programs
- Immediately adopt and mandate similar technology as used in Scandinavia for a decade for the recycling of bottles, cans and plastic drink containers.

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