

**Submission from Felicity Spear, Secretary Batesford, Fyansford, Stonehaven Landcare Group to Legislative Council Environment and Planning Committee in response to the Inquiry into Ecosystem Decline in Victoria 2020.**

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**Introduction**

As the impact of humankind on our finite planet has become ever more profound and inescapable, geologists have officially recognised a new era – the **Anthropocene** — **characterised by its dominant force, humans**. As we acknowledge our own responsibility for stewardship of natural resources, and our capacity to affect the Earth fundamentally — for good or for ill — it becomes ever more important to develop better ways of sharing knowledge and making decisions about the protection of our ecosystem, our land use (considering land broadly to include water and biodiversity) and our management at all levels.

We write this submission as members of a peri-urban Landcare group, (the BFS or Batesford, Fyansford, Stonehaven Landcare Group Inc.), affiliated with Landcare Victoria. **The Landcare movement** (the idea of the visionary Prime Minister Bob Hawke over 30 years ago), has grown to be one of the largest grassroots environmental movements which is actively addressing some of Australia's greatest environmental and sustainability issues.

**1 An overview - extent of decline and impact on people**

**Australians have an urban mindset and are largely uneducated about the environment in which we live.** We are the ultimate post-modern society consisting of populations largely from the northern hemisphere who have for over two centuries been destroying the fragile Australian ecology. **Before colonisation grasslands and woodlands covered over a third of Victoria. Less than 5% of these remain** caused by extensive and thoughtless land clearing. **Introduced species have had a profound negative impact on Victoria's environment** Rabbits, cats, foxes, pigs, deer and horses. Since European settlement Victoria has lost 18 species of mammal, 2 birds, 1 snake, 3 freshwater fish, 6 invertebrates and 51 plants. Invasive weeds clog up streams and rivers, smother native plants and degrade habitats suitable for native plants and animals.

**After a comprehensive assessment of Victoria's environmental health in 2018 Victoria's Commissioner for Environmental Sustainability found that most areas were going backwards by thirty percent.** There was a trend of deterioration in 51% of all biodiversity indicators. Also, the current status of 60% of biodiversity indicators was assessed as being 'poor'. None of the biodiversity indicators were assessed as being 'good'. The status 'poor' indicates that inadequate protection of natural ecosystems and biodiversity is evident, the environment is under significant stress, and this pressure is likely to have significant impact on environmental conditions and human health.

**Australia has a high proportion of the world's biodiversity.** The depth and complexity of many complex ecosystems are still not fully understood. We have wild and natural areas that are still intact and Victoria has a number of these. But scientists are predicting that we are very close to the threshold of collapse. It is extremely urgent that we change our way of life and revolutionise the relationship between society and nature. **Rates of extinction in Australia are among the highest in the world and Victoria is not doing enough to address this trend. Victoria's legislated Flora and Fauna Guarantee Act 1988 has failed to protect the ecosystem, its resilience and the biodiversity it supports.**

We believe that Governments at all levels in Victoria need to significantly shift their focus to **caring for country**. Because in doing that they will also be caring for all of us. Australian **Aboriginal First Peoples'** practices have always supported inhabitants of the land without

destruction of the environment. The tradition of the Australian Aboriginal cultures has been to 'care for country'. This term refers to the many practices that have operated in Australia's ancient and fragile environment for thousands of years before European settlement. We have much to learn from studying these ancient practices, including the **role that fire** plays in the environment. **Last summer we witnessed the most devastating bushfires in Australia since European settlement** with the loss of more than one billion animals and their habitat. This can be sheeted home to a lack of acknowledgement of the increasing consequences of climate change and the contribution of fossil fuels to global warming, piecemeal management and neglect by successive governments.

**The World Wildlife Fund has put Australia on its list of global deforestation hotspots – the only one in the developed world** – while koala and other native animal and plant populations continue to be decimated through habitat loss. Climatologists say one of the easiest and cheapest ways to reduce carbon emission is to preserve forests; deforestation accounts for 18 percent of global emissions far surpassing vehicles and aircraft combined according to the **Climate Council**. **In order to preserve a robust ecosystem we will need to rapidly adapt to a warmer, drier future.**

We must make it our highest priority to protect the size of our forests, to prevent fragmentation and to allow evolutionary processes to take place. **Victoria has more than seventy forest dependent threatened species, yet native forest logging is set to continue until 2030.** This is despite a recent Federal Court case that found much logging in Victoria is in breach of national environmental laws and is directly driving animal extinction. **The role of politicking and the influence of vested interests in these decisions should not be allowed to overwhelm the protection of Victoria's ecosystems.**

The advent of the **COVID 19 pandemic** crisis has forced us to think about our environment in more insistent and complex ways. Our relentless and pervasive disruption of the deep complexity of nature and its processes is leading to major health consequences. There is increasing evidence from DNA sequencing that old diseases like small-pox first entered human populations as humans became more aggressive towards nature, degrading or destroying the rich biodiversity which supports a healthy ecosystem and all healthy life.

**The removal of habitat and the accelerated extinction of multiple animal species is forcing several bacteria that lived inside their guts for millennia to move elsewhere for survival.** Reckless deforestation has a ripple effect, caused by the treatment and trafficking of wild animals taken from their wilderness homes, and the growing need for food, forcing millions of people to resort to eating animals that should be left alone. As well, intensive feedlot farming, involving animals crammed together in small spaces, and the huge overuse of antibiotics, create environments where pathogens can proliferate releasing micro-organisms we haven't even identified or named yet. **So in fact the consequences of climate change and our loss of healthy ecosystems become a far bigger threat than the COVID virus.**

(Italian Physicist and author Paolo Giordano, 'A pox on all our houses', interview with Greg Callaghan The Age Good Weekend July 2020)

Rachel Walmsley from the NGO the Environmental Defenders Office says the recent review of the Federal Government's **EPBC Environment Protection and Biodiversity Conservation Act 1999** which is required every decade under the law, actually recommended that the EPBC Act be repealed and rewritten. Professor Graeme Samuel's interim report has found the laws are ineffective, complex, costly to business and provide little benefit to the environment: **"We are seeing our environment in a state of steady decline over the 20 years since the Act has been in operation."**

Professor James Pittock, an environmental scientist from Australian National University says there should be stronger national standards and that the states should change their laws to match: **"We need better information systems so that it is clearer to everybody where the places are of environmental importance that should be left alone versus those where development activities should occur,"** he says. "There is a need for more matters of national environmental significance to control things like the clearing of native vegetation. Australia is one of the top five countries undertaking deforestation in the world, and it's a disgrace."

**The Wilderness Society's Suzanne Milthorpe says the United States' Endangered Species Act has been remarkably successful, compared to Australia's efforts.** "Ninety per cent of species are meeting their recovery milestones ... and it is estimated that 227 extinctions have been prevented, which is incredible, compared with Australia where you've only really got one or two animals that have ever come off the EPBC because they've been recovered by conservation action." She says the United States law has strong safeguards, and the ability for communities to force the government to the table "and actually say to them we're going to take you to court to make sure you do your job". An endangered species habitat is regarded not only as the place that it needs to live now, but also the habitat in which it needs to recover.

**Ninety percent of Australians live in cities.** This population inevitably spills in to the permeable peri-urban zone, eating away at the fragile Australian ecosystems on the edge of cities, hard up against forest, grasslands, woodlands, rivers and wetlands and our agricultural food bowls. 4000 hectares of land disappear for development each year in Victoria. **State of the Environment reporting indicates a continuing and alarming trajectory of decline in our ecosystems. This is due to large-scale clearing but also incremental losses which are occurring in urban, peri-urban and non-urban areas.** This is enabled by poor planning that does not support the protection of ecosystems, and insufficient regulation, poor oversight, lack of funding and enforcement by Governments at all levels, resulting in the destruction of the environment in and around the edges of developments.

**The following list reflects the neglect of rivers and environmental assets along the length of the Moorabool River, and in and around Batesford where our Landcare Group works:** illegal removal of native old growth trees for which approval is required, and legal and illegal land clearing, neglect through land banking, with consequent depletion of native grasses and other plants which support the ecosystem, lack of protection for rivers and riparian zones with inadequate buffer zones near housing developments, inaction by landowners to fence to protect banks from farm animals, abuse of water rights by illegal pumping, illegal dams, intensive farming run-off, drought, flood plain remodelling for housing developments, lack of action on invasive species and the removal of weeds of national significance like serrated tussock, lack of sufficient regulation to protect wildlife from cats and dogs, lack of responsibility by home owners and others for rabbit management, cats and dogs, rubbish dumping, edge effects from adjoining landowners (invasive weeds and animals), destruction of vegetation by trail and quad bikes.

**Development of peri-urban areas** involves the conversion of rural lands to residential use, closer subdivision, fragmentation and a changing mix of urban and rural activities and functions. Changes within these areas can have significant impacts upon agricultural uses and productivity, environmental amenity, biodiversity, healthy ecosystems and natural habitat, supply and quality of water and consumption of water and energy. For cities to be liveable and sustainable into the future there is a need to maintain the natural resource base and the ecosystem services in the peri-urban areas surrounding cities. We are horrified by what developers have been allowed to get away with regarding the natural environment, permitted by all levels of government. We understand the necessity to accommodate a

growing population, but the design and planning of communities needs to be rethought with the natural environment at the top of the list, not the bottom, and governing all decision making across every area of life.

## **2. The adequacy and effectiveness of the legislative framework protecting Victoria's environment.**

**Communities have a constant struggle to have Government enforce the existing laws and policies which are supposed to protect biodiversity and ensure they are implemented properly.** We feel as though once these laws are legislated they are often put back on the shelf, unless subject to a legal challenge, and similarly with the local governments' environment strategies. Fine intentions, then shelved and forgotten so 'business as usual' continues with vested interests and developers continuing to be the dominant influence in planning. There seems to be little strength or action behind such laws, just shallow intentions. Consequently as a Landcare group, and as citizens wanting to care for our environment, we are unable to act strategically because there are problems with the implementation of laws and policies. Communities are having to fight inappropriate developments and proposals even when there is no policy support for them and we are caught up reacting to those proposals. **We need bioregional strategic plans for conservation of natural values and sustainable food production, that are properly implemented and enforced, and provide certainty to communities and businesses.**

### **A case study from the lower reaches of the Moorabool River, the most flow stressed in Victoria.**

The issue of water is becoming increasingly political and contentious as water resources become commodified and depleted through climate change and overuse. New ways of handling and delivering water are unfolding.



**The Moorabool River is a severely flow-stressed river and requires targeted action to improve flows. Figures collated from the Victorian Water Accounts show that the Moorabool is the most over-allocated river in the State, with 68% of water in the Moorabool basin allocated (i.e. taken out of the River). This impact is most severely felt in the lower Moorabool where flows at Batesford have been reduced by 90%.**

In 2010, the Moorabool River Environmental Entitlement was established. This water, which is allocated specifically for the ecological health of the river, is currently 2500 ML per annum. However, as stated in the Moorabool River Environmental Water Management Plan (EWMP), the current Environmental Water Entitlement is insufficient to sustain the ecological values of the Moorabool River, let alone achieve improvements in the condition of the waterway. According to the Victorian Government's Sustainable Water Strategy Central Region, environmental flows would need to be enhanced to about 20,000 ML to meet the scientific environmental flow recommendations.

**The City of Greater Geelong is planning extensive housing developments for the western and northern edges of Geelong, which includes the area where our Landcare Group operates. Situated near the banks of the lower Moorabool River between Batesford and Fyansford is the Adelaide Brighton Quarry. Future plans for this quarry involve its 'rehabilitation' to create a lake as part of this development. This will be extremely problematic for the health and integrity of the Moorabool River and associated biodiversity and ecosystems throughout this district.**

The Moorabool River was diverted twice for the Quarry - first to create it 100 years ago; later to expand it. The concrete diversion channel destroyed the original ecology and flow of that stretch of the river. Combined with declining flows in the system, the link to the estuarine environment and the sea for important migratory species is often lost for periods vital to their long term survival. This includes species with formally recognised conservation significance. It is imperative that the issue of the bed repair of the Moorabool River is rectified.

The Moorabool River now loses up to 10 Million litres per day in seepage due to foregone base flows and the poor condition of the older works. Much of this seepage ends up in the quarry. Dewatering the Quarry sees up to 3,500 million litres per year pumped back into the river downstream. The Victorian Government classes this as an environmental flow for what is regarded as the most flow-stressed river in the state.

The Quarry's pumps will be turned off in the foreseeable future. The current issues already facing this reach of the river will be greatly magnified when this happens. We are concerned that the change in management of the water supply to the Quarry from the Moorabool River in order to create a huge lake will have serious repercussions for the health of the lower Moorabool. There is no guarantee the 'lake' will ever get to the level of the River. **The extraction industry which has caused so much modification of the river must now ensure that any new artificially-constructed lake is independent of the river flows.** Work on this should be commenced now and not wait until the pumps are switched off.

Most recently it was found that the volume of water that is lost to the Moorabool River due to the Quarry is orders of magnitude higher than what has been thought in the past. A recent scientific review commissioned by the Corangamite Catchment Management Authority (CCMA) shows that the volume of water lost is in the order of 5.14 million litres per day, or over 1800 million litres annually (Lloyd, L.N., Clarke, S. and Dahlhaus, P. 2020). This is orders of magnitude higher than the 102 million litres per year which was the figure relied upon by experts to the Planning Panel assessing Amendment C395 for this development.

Simply switching the pumps off when the quarry ceases operation will have a devastating impact. This water has been pivotal in maintaining some linkage between the Moorabool and



Barwon Rivers and the Ramsar wetlands and estuarine environment that are vital to important but declining migratory species within the Moorabool system. The scientific review commissioned by the CCMA also found that even when full, an artificial lake in the quarry would continue to draw water from the Moorabool River due in part to the legacy of historical modifications such as the 1930s concrete recourse north of the quarry.

**In August the following questions were put to City of Greater Geelong Council by PALM, People for a Living Moorabool, asking it to show environmental stewardship by supporting the following:**

1. A modified pumping regime continuing after the quarry is decommissioned designed to match the current losses from the river.
2. No net water from the Moorabool River, the most flow stressed in Victoria, be used to fill the quarry.
3. The 1930s diversion is replaced with an impervious structure capable of preventing further losses of river flows to the underlying substrates.
4. The outlet of the pumped water from the quarry be moved from its current position to a site upstream of the first recourse.

**Council's response was as follows:**

“It is premature for Council to commit to these specific outcomes at the moment and there is further strategic planning and state-wide strategy to be resolved. The framework plan and amendment C395 provide the high-level land use direction for the area and confirms the further work that is necessary for the planning of the area. Key aspects of this further work are the Integrated Water Management Strategy (IWM) and the more detailed Precinct Structure Plans.

There will be further opportunities for People for a Living Moorabool to continue to participate in the IWM process for the Western Geelong Growth Area, managed by Barwon Water. The IWM strategy is nearing completion. It would be premature to pre-empt the outcomes of the IWM plan at this stage.

While the IWM plan has options to consider pumping regimes, the overall amount of water released from the top of the Moorabool catchment is outside of the scope of the study but rather a state level project. A larger project underway called Central Regions Sustainable Water Strategy will consider this on a more appropriate scale. The IWM plan will inform detailed master planning of the Moorabool River corridor that will occur as part of the preparation of the Batesford South Precinct Structure Plan.”

There are significant issues to be dealt with in repairing or restoring the section of the River which has been diverted using artificial means for the Quarry. **As a member group of the Lower Moorabool River Catchment Alliance, our Landcare Group believes it is problematic to expect a small and fragile river like the Moorabool to contribute in any way to increasing the water level in the Quarry to create an ornamental lake, especially with the unpredictability of climate change.** Before this idea is further touted as a real attraction in City of Greater Geelong's promotional material it needs to be further explored or redesigned with more realistic and frankly honest expectations in mind.

**Despite the existence of listed species of conservation significance linked to the health of the Moorabool River, we feel that the matter of ecosystem health and biodiversity conservation are of little real priority when it comes to decision-making about development proposals. In this case, it is particularly disheartening to see an ornamental lake taking precedence over threatened species and stressed river systems when the Geelong region is anticipated to have a shortfall of water to supply**

**its growing population within the coming decade. We are also aware that there are probably other quarries in the State that will be coming to the end of their operations in the next few decades and it is critical that the State Government does not set unrealistic and unsustainable precedents in choosing to 'rehabilitate' these areas by turning them into lakes in the context of worsening water shortages and a drying climate.**

While this is a work in progress it looks as if the Victorian Government and the City of Greater Geelong are keeping their options open when it comes to protecting waterways.

**Time and again we see the use and abuse of environment assets by developers, with the co-operation of local councils and a lack of adequate or enlightened government legislation.**

### **The BFS Landcare Experience**

Twenty years ago **the Batesford Fyansford Stonehaven Landcare Group**, (known as BFS Landcare), of which I am currently Secretary, began to transform from a farmers group combating the invasive weed serrated tussock, into a small peri-urban group of volunteers. Now our Landcare Group works with state and local governments, PALM, (People for a Living Moorabool), local groups, school groups, and the public to restore and manage native vegetation in our reserves, and combat invasive weeds and animals. We also provide opportunities for people to connect with, and learn from nature. **Increasingly we find ourselves having to advocate for the protection of the natural environment.**

**Batesford, west of Geelong, is a peri-urban settlement**, where we have lived for over forty years. We have seen its transformation from farms and grassy woodland to peri-urban housing estates. Over this time, (and having Australia's record of environmental destruction in mind), **we have inevitably been involved in combating a number of significant threats to the environmental integrity of the area.** This includes the potential grid subdivision of a long established 80 ha **Dog Rocks Flora and Fauna Sanctuary**, the last remnant grassy woodlands in the area on the banks of the Moorabool River. We have also seen the proposal to erect a **gas fired power station** on farm land on the south west edge of a newly established peri-urban community development adjacent to the Sanctuary. Both proposals achieved success at VCAT in spite of energetic local groups protesting and appealing. Fortunately neither of these went ahead due to unforeseen circumstances locally and internationally.

**The Batesford, Fyansford, Stonehaven Landcare Group was eventually able to assist the owners of the Dog Rocks Flora and Fauna Sanctuary** with restoration and continued management of the property, which remains privately owned. It now **has a Trust for Nature covenant and is recognised as a site of biological significance by the City of Greater Geelong**. We had the benefit of some welcome **government grants** for which we applied, as well as 'in kind' assistance from the **Geelong Landcare Network**, for which we have been grateful. This assistance is ongoing.

**The DRFF Sanctuary and the adjacent Honey Woodland are one of the largest and most significant patches of native habitat in the Geelong region.** The predominant Ecological Vegetation Classes are: EVC 132 Plains Grassland, EVC 716 Plains Grassy Woodland, Stony Knoll and Shrubland Mosaic, EVC Streambank Shrubland, Woodland Mosaic. All of these EVCs have a designated conservation status as endangered. **Only 5% of the Geelong region supports indigenous vegetation and most of that is degraded: in this context the fact that this area of vegetation still exists in a relatively intact condition is of particular importance for the protection of regional biodiversity.** It provides habitat for a large range of native birds and animals, (including platypus, Swamp



Wallabies, Eastern Grey Kangaroos, echidnas, koalas, bats), in the area, as well as the insect and reptile population. Our work in revegetation, continuous weed control and community involvement are **part of a national effort to restore Woodland habitat for native birds**. Fragmentation of this vegetation, (including native grasses and old growth trees), compromises them all and encourages invasive pest plants and animals. This is why we are attempting to retain and rebuild bio-link corridors to increase the survival of native flora and fauna across this region.



This winter, with the assistance of the “Friends of the Forgotten Woodlands’ and their efforts to find enough genetically diverse seed stock in western Victoria, we planted a **Silver Banksia (Marginata) seed orchard in the Honey Woodland and the Sanctuary**. We hope to regenerate these species which once covered much of the Victorian Volcanic Plains. We also planted a **1800 tree bio-link** on this property. Both projects have been aided by Biodiversity On-ground Action grants from the Victorian Government.

**The benefit to our nation of protecting and restoring scattered paddock trees is immense.** Many of them are eucalyptus trees with a lifespan of 400 – 500 years and sometimes much longer. This remarkable longevity provides a continuity of resources, a thread of familiarity and certainty that the local wildlife have relied on for millennia. Unfortunately large scale clearing of paddock trees and the original mixed vegetation that connected them across the broader landscape, has dramatically reduced the creation of inland rainfall. We see our reserves at Batesford, and the bio-links we are extending, as a way of **planning strategically for climate refuges for native flora and fauna**.

**As a Landcare group we are trying to maintain and restore ecosystem health in a holistic sense (not just individual species). We recognise that all are connected and the severe decline in ecosystems means that whatever remains is worth protecting.** Our hope is to prevent the fragmentation of these areas which would further isolate and degrade habitats around the Moorabool River bio-link which runs through our area. We hope to extend our reserves and create buffer zones to prevent the edge effects of encroaching development.

**These areas would no longer exist without BFS Landcare's continual and persistent efforts to combat and tackle the array of different threats**, some actually coming from government agencies and processes like VicRoads and local councils' planning processes. The preservation of these areas is important for the protection and enhancement of biodiversity and the ecosystem, protecting woodland birds and threatened species, however we are increasingly feeling that our efforts are only able to achieve a more managed decline in biodiversity, as opposed to achieving true enhancement and restoration.

**The most recent incursion into the Batesford area has been the proposal of various options by VicRoads for a 4 or 6 lane highway through Batesford's environmental assets.** One option proposed cutting through **the Dog Rocks Flora and Fauna Sanctuary and Honey Woodland**. Others further north cut through the **Moorabool River Valley bio-link** in the Batesford Valley, all options disrupting **carefully nurtured environmental assets including the Moorabool River Reserve and the Red Gum Reserve established with BFS Landcare and local councils for the protection and enhancement of habitat for native flora and fauna and human passive recreation.** The approach Vic Roads took was to use the most minimalist interpretation of the value of those assets, as if existing habitat had no value whatsoever unless it contained species formally listed and mapped as critically endangered. This kind of thinking has to change if we wish to preserve the ecosystem.

**It is timely that the Victorian Government inquiry into environmental infrastructure for a growing population is about to be launched.** The highway proposals also cut through newly established housing communities of young families. Predictably, there seemed to be absolutely no understanding of community needs or the value of a sense of place by Vic Roads, developers, local councils, or the Geelong Regional Alliance (G21). As a member of the **Batesford Highway Action Group**, a group largely consisting of well informed and well qualified local residents, including engineers, we suggested an alternative, the **Batesford Community Bypass**, which we hope VicRoads will take seriously as an option in future as populations grow in rural areas.

**Further development of the Riverstone housing estate in Batesford on the edge of the Moorabool River, has seen what we regard as problematic planning issues, including the remodelling of the flood plain.** The subdivision and development process has taken almost ten years. Blocks were advertised and sold on the promise of access to public open space along the Moorabool River. That access is still not available. Removal of noxious weeds has been delayed until the very last block is sold, instead of being attended to annually, allowing seed to build up and infest adjacent areas. Instead of appropriate native trees, European street trees planted bedside roads which do little for biodiversity in the area.

**This riparian zone of the Riverstone development has been argued over by the Golden Plains Shire Council, Ramsey developers and the Corangamite Catchment Management Authority debating the size allocation of public land in the riparian zone, the timing of its release and the associated responsibilities for it.** At one stage an inappropriate proposal was made by Council suggesting they would 'give back' the allocation of public land in the riparian zone to the developer, because of the imagined future cost of management Council did not see fit or wish to bear. This was then reversed due to local activism and debate about how far habitation should be allowed to intrude into the treed riparian zone and the original promised size allocation of public open space. Currently there are two existing residential-zoned blocks which intrude into the anabranches of the River. This was allowed firstly by the CCMA and then accepted by the local Councillors who evidently have the final say about such things! Neither the residents or BFS Landcare, PALM, People for a Living Moorabool or the Traditional Owner representatives who have heritage sites along the River, were consulted.

So as we struggle to conserve what remains of this ecosystem **we see urban development as a major driver of environmental change**. The conversion or degradation of natural ecosystems in urban areas has the most obvious and immediate impacts on the ecosystem and biodiversity, as we see buffer zones and green corridors whittled away. In addition, human settlements and development are often the entry point for introduced species such as rabbits, feral cats and invasive weeds, which are a major pressure on biodiversity.

**'Protecting' and 'enhancing' are words we often see in aspirational documents about the natural environment but the reality is somewhat different. Too often the actual outcomes we see on the ground demonstrate that efforts to improve biodiversity are sacrificed if they get in the way of development, commercial interests or recreational activities. Recent amendments to the Flora and Fauna Guarantee Act** introduced obligations relating to the restoration of biodiversity as well as protection & enhancement; a focus on ecological processes (as well as species and ecological communities); and obligations to address the underlying causes of biodiversity decline such as cumulative impacts, indirect impacts, short and long-term. These appear to be positive changes, however we are waiting to see whether they will be implemented and enforced.

### **3 What is required for a better future**

Most Australians are ignorant of the value of Australia's ecosystem, the rich biodiversity it supports and how the preservation of this asset will determine their own health and well-being. **The challenge is to educate and encourage communities, city or country or in between, to start to 'own' the problem of looking after the natural environment.** We need to understand that our health relies on a healthy ecosystem and that we are part of the ecosystem, not separate from it. **We can learn from Aboriginal cultural heritage and 'caring for country', recognising this contribution as part of the common heritage of all peoples and to the sustainable development and management of land and of the environment. ( Aboriginal Heritage Act 2006 (Vic)).**

**We believe governments at every level should reframe the way nature is considered in the planning process.** This will also require commensurate funding rather than the current inadequate allocations. This is a significant challenge and requires a major rethink of population management. With a current forecast of a 60 per cent rise in dwellings in regional centres by 2041, it's possible that Victorians will lose their rural landscape and become a fragmented network of residential settlements, unless we change our attitudes towards the current planning model.

**There needs to be a recognition that the urban-rural divide is deeply ingrained in planning systems, and that they are inadequate for dealing with processes of environmental and developmental change in the peri-urban-rural context.** The social composition of peri-urban systems is very diverse and subject to change over time. Small farmers, informal settlers, industrial entrepreneurs and urban middle-class commuters may all co-exist in the same territory. They have different and often competing interests, practices and perceptions and a predominantly urban mindset. This raises the question of the influence, roles and responsibilities vested interests and developers, who many would say have too much influence on politicians and decision makers. The growth of private enterprise has embedded the need for exponential population growth, but over the last few decades this system seems incapable of protecting key resources including air quality, fertile soils and clean water. **Economics seems to be at war with the environment.**

This also raises the question of recognising the environmental value and possibilities of non-urban undeveloped land, and the base level environmental benefits it might provide if not developed. Land banked properties by contrast close off these opportunities and tend to

be neglected over time because of lack of management, eg. invasive weeds, unproductive in any way and often impinging on surrounding farmland while waiting to be developed.

**We need to limit global warming and its impact.** By 2030 Victoria must be finally phasing out the burning fossil fuels (coal, oil and gas) and reducing other sources of greenhouse gas emissions (e.g. from transport and agriculture), while actively engaging with sustainable energy production which will provide new industries and new jobs. **We need a declared target on the reduction of greenhouse emissions.** Land clearing and deforestation in Victoria have reduced our carbon sinks and severely depleted our ecosystems and biodiversity.

**We need investment in recycling water and reducing demands on water,** as well as investment in food production in ways that also support biodiversity and healthy waterways.

**We need mandatory nature laws to inhibit the influence of vested interests and reform Victoria's primary legislation for ecosystem and threatened species protection, the Flora and Fauna Guarantee Act** so that the Environment Minister must by law step in to prevent, or limit, a situation where private or government activities would damage our ecosystems and threatened species.

**Victoria has more than 70 forest dependent threatened species, yet native forest logging is set to continue until 2030 in Victoria.** This is despite a recent federal court case that found much logging in Victoria is in breach of national environmental laws and is directly driving animal extinction. **Victoria should immediately transition out of native forest logging,** with financial support for workers and the industry. The Victorian Parliamentary Budget Office estimates this would save the Victorian budget \$190 million.

Due to the extent of land clearing in Victoria, some of our most threatened ecosystems and important habitat is on private land. Organisations like **Trust for Nature and Bush Heritage** have demonstrated that purchase and restoration of habitat remnants on private land is incredibly beneficial for threatened species recovery. These programs would benefit enormously from public funding in the form of a "revolving fund" of around \$50 million to enable the purchase, restoration and sale (for conservation purposes) of private land.

**Funding should be allocated to projects that enhance and maintain capacity, knowledge and social capital in communities for looking after local environments.** At the moment, the funding distribution is skewed towards the sorts of projects that will result in outcomes that can be counted and measured in simplistic ways (eg numbers of trees planted), but in the medium and long-term this is not necessarily the most effective or efficient way to achieve biodiversity improvements.

**We need more protection and recognition of 'ordinary' biodiversity as well as remnant vegetation,** e.g. re-growth vegetation; revegetated areas; biodiversity that is less visible (e.g. in soil); biodiversity in people's gardens (e.g. old trees even if they're small). We need to recognise and use the potential of small dis-used 'ordinary' areas for hosting improved biodiversity and providing some level of ecosystem services and urban ecology (e.g. vegetated areas down the middle of divided highways, nature strips, roundabouts - all of the areas that surround us in landscapes that are our ordinary everyday contexts).

**We need funding that is longer-term and has longer lead-times that are better suited to the capacity of volunteer groups and better suited to the longer time frames** required for ecosystem enhancement and restoration - work that can't be done in a single annual cycle but requires say a 5 year timeframe at a minimum.

Victoria needs a comprehensive and fully funded program to **remove invasive species, (introduced plants and animals )**, which are severely degrading the landscape. We also

need a **massive replanting program to restore habitat** across the state. This would also be a great way to employ many out-of-work Victorians as we rebuild our economy following COVID-19.

**Victoria needs to deliver on the promised grassland reserve.** The Victorian Government must purchase the required area of grassland and woodland reserves outlined in the Melbourne Strategic Assessment plan by December 2021 and fully restore these within the next two years. While the Victorian Government has a commitment to deliver a new 15,000 hectare grassland reserve, and a 1,200 hectares Grassy Eucalypt Woodlands Reserve (by purchasing and restoring private land) by 2020, only 10% of the grassland has been purchased and none of the grassy woodland habitat.

**Victoria needs to establish a save our species fund with substantial new government funding (minimum \$100 million) to assist the rehabilitation of threatened species** in Victoria, as well as ensuring that there is public information outlining what public funding is spent on threatened species conservation and how it is being spent.

**We need improved long-term investment into educational initiatives to raise the base-level of awareness and understanding of the biodiversity** that is all around us, and how everyday actions can impact on this including food and food production systems.

Government surveys about the health of Landcare might put a positive spin on things, but they run the risk of looking like rather ‘dumbed down’ statistics. **The reality is that the whole idea of using volunteers to do the work that government should be doing needs a rethink if we wish to see a change in the health of our ecosystems.** Landcare is recognised as a hub of strength but members are ageing and will disappear. Some other way of the community doing Landcare will need to happen. **It's not just a single agency's responsibility. We need to be acting as a collective of communities with government agencies.**

Currently, with **generational and societal change** people are just not interested in volunteering, the idea of gathering in real time as a community is fading, perhaps being replaced by virtual communities in cyberspace. We know that there is a growing number of much younger people who are actually becoming galvanised to do volunteer work as they realise the urgency of protecting the environment. They are able to tap into their on-line networks for projects in a more spontaneous way. Let's hope this movement grows with the support of government and community initiatives. **We need to focus on the things that people can DO that will help achieve better on-ground outcomes for the natural world, but in the current climate will also help people feel less hopeless and less likely to switch-off and become inactive.**

**The adoption of sustainable practices at the local scale relies upon the willingness to acknowledge that we, as people inhabiting planet Earth, are exerting an influence over the state of our ecosystems.** We believe that this can best be imparted by educating, influencing and building the self-reliance of the people who manage their own environments. **We need a volunteer ‘call to action’ where there is a local pride in ‘This is our Australian native flora and fauna’.** Evidence based, peer reviewed science, intelligent legislation and sufficient subsidies will not produce lasting change unless communities take responsibility for and adaptively manage the environment in which they live.

Some of you may also remember the success of the **public campaigns** ‘Don't Rubbish Australia’ or ‘Life be in it’ which through the mass media had a significant influence on the population at the time. The Australian demographic is much more diverse now with a large migrant population. We all need to be re-educated about such things, and Australia's flora

and fauna and how best to protect them by ensuring we protect their habitat and our ecosystem.

**The increasing realisation that environmental performance should be improved has not just been limited to farms and landscapes in Australia.** Activists of the 60's and beyond frequently promoted an image of sustainable living that included environmentally friendly housing with design and material choices to limit social and ecological harm. This movement ultimately led to upgrading the Building Code of Australia in 2003 to include energy efficiency and, soon after, various State-based home star rating schemes. **The results are sustainability impacts that are clear and measurable, and that drive behaviours and resilience thinking. Imagine a similar system for landholders.**

## **Conclusion**

We have no way of restoring ecosystems back to what they were when they were intact and relatively unmodified. We can do revegetation, we can stop burning fossil fuels, but this doesn't necessarily restore the ecological system. **Therefore we need to urgently protect the remaining intact ecosystems as a matter of the highest priority. And we have to be more serious about using the precautionary principle when considering actions that may modify or impact on an ecosystem.** This is why striving for accountability and transparency within planning systems must be an imperative. **There is still so much we don't know and there's so much data and knowledge we don't have.** About 75% of species in Australia are unknown and undescribed by science.

Plants and animals don't care about politics. They demonstrate the truth by simply responding to the conditions to which they are exposed. **We have altered our environment to the extent that we can no longer take for granted a future in which nature supports our physical, economic and social needs.** We all need to work together towards shared goals if we are to conserve our natural, living wealth, the health of our ecosystems and our biodiversity, for future generations. Only by recognising we belong to a collective humanity can we deal with the huge challenges to come.

**Rather than considering nature as a constraint—a 'problem' to be dealt with—nature should be seen as an opportunity, and a valued resource to be preserved and maximised at all stages of planning and design for the future.** Such thinking requires a different conceptualisation of nature, where nature can thrive and people can experience each day the remarkable range of benefits that nature can deliver.

**One of the world's pre-eminent biologists Professor E O. Wilson in his 2016 book 'Half Earth' asks us to consider:**

"The only hope for the species still living is a human effort commensurate with the magnitude of the problem. The ongoing mass extinction of species, and with it the extinction of genes and ecosystems, ranks with pandemics, world war, and climate change as among the deadliest threats that humanity has imposed on itself. To those who feel content to let the Anthropocene evolve toward whatever destiny it mindlessly drifts, I say please take time to reconsider. To those who are steering the growth of reserves world-wide, let me make an earnest request: don't stop, just aim a lot higher."

