Submission on the Climate Change Authority's issues paper, 'Action on the Land: Reducing emissions, conserving natural capital and improving farm productivity'

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Submitted via email to: submissions@climatechangeauthority.gov.au

TRUST FOR NATURE
Habitat forever

About Trust for Nature (Victoria)

Trust for Nature is a Victorian statutory entity with broad objectives focused upon promoting conservation of Victoria's native vegetation, flora and fauna on private land. Trust for Nature has the power to enter into statutory in perpetuity conservation covenant agreements protecting conservation values on private land. It was established under the Victorian Conservation Trust Act 1972.

Trust for Nature has responsibility for the stewardship of privately protected areas in Victoria, recognised as part of the Commonwealth and state agreed framework for the National Reserve System. Currently this involves around 100,000 hectares of privately protected land with significant ecosystem services and ecological processes protected in perpetuity, including carbon stores.

Trust for Nature is a founding member of the Australian Land Conservation Alliance, which acts as a national voice for private land conservation. Other Alliance members are the Nature Conservation Trust of New South Wales, The Nature Conservancy (Australia), Queensland Trust for Nature, Nature Foundation SA, Tasmanian Land Conservancy, and the National Trust of Australia (WA). Together these organisations represent thousands of private landholders engaged in permanently protecting their own land for biodiversity. The Australian Land Conservation Alliance also works closely with other stakeholders in the conservation sector, including Bush Heritage Australia, Conservation Volunteers Australia, WWF-Australia, Landcare groups and many others.

Throughout Australia, private land conservation encompasses a range of approaches, from Landcare-type activities such as tree planting and fencing to more formalised approaches such as permanent protection of remnant vegetation through conservation covenants. Private land conservation is supported by multiple stakeholders and its focus is broader than biodiversity – increasingly taking place in productive landscapes where private lands are sympathetically managed for both conservation and production, leading to more resilient landscapes and more sustainable practices. Importantly, virtually all private land conservation activities produce a carbon benefit, whether it is stewarding the vast carbon stores already secured by the Alliance's member organisations through conservation covenants, restoring existing forests to make them more resilient and less vulnerable to pest weed or animal infestations, or creating biodiverse plantings that sequester new carbon.

Like our sister organisations in the Australian Land Conservation Alliance, Trust for Nature has developed communities of landholders who are engaged with their local environment, and provides a link between private landholders, sustainable land management and environmental outcomes at a local, regional and state scale. We harness the enthusiasm and expertise of those already living on and managing the land: building the land management capacity of landholders through active

stewardship programs, changing land management practices to become more sustainable, and contributing to the achievement of national and international conservation targets. And by working in productive landscapes, farmers are benefitting from this support for sustainable land management (e.g. from weed management, wind breaks and managing soil erosion). In this way our work – and that of our sister organisations across Australia – strongly links to the themes tackled by the Issues Paper.

A. General response to the Issues Paper

Trust for Nature thoroughly supports the fundamental concept raised in the Issues Paper – that climate change mitigation, land sector and natural resource management policies should be better integrated. As described above, we steward vast carbon stores for the public good, and are achieving significant carbon benefits through our many and varied projects, yet are frustrated by the extremely limited opportunities to have those carbon benefits recognised through the existing climate change policy framework.

To date Trust for Nature has not found opportunities for its work to be supported by the climate change policy framework, although some of its sister organisations have found limited opportunities to do so. Overall we have found the existing and prior climate change legislation to be too prescriptive to fit any of our conservation activities within its ambit.

The focus of this work should be on the land sector generally and not just the agricultural sector

The Issues Paper seems to somewhat conflate the agricultural and land sectors, referring in some instances to the agricultural sector and in others more generally to the land sector. We recommend that these issues be addressed regarding the land sector overall, while recognising that the agricultural sector comprises a large and significant subset of the land sector.

There are some landowners across Australia – such as the owners of hobby farms, bush blocks, forest plantations, Indigenous land and conservation properties – to which initiatives arising out of this Issues Paper may apply, yet are not adequately captured by the term 'agricultural sector'. For example, page 14 of the Issues Paper states, 'The focus of this work is on how policies to reduce greenhouse gas emissions or store carbon in the agricultural sector interact with agriculture and NRM policies.' We propose that this sentence would be better phrased by replacing 'agricultural/agriculture' with 'land'. Indeed, the title of the Issues Paper itself refers specifically to farm profitability, rather than to the profitability or financial viability of the land sector as a whole. We fully acknowledge that the agricultural sector is a critically important sector to address in this area, but want to be sure that non-agricultural landowners and land uses are not inadvertently excluded from policy developments arising out of this Issues Paper due to a narrow focus on the agricultural sector.

Victoria's privately protected conservation estate has massive carbon stores

Just like our sister organisations across Australia, Trust for Nature is the caretaker of massive carbon stores. Our work over several decades has ensured that the vegetation protected on this land can never be cleared. Thus, the carbon stored in that vegetation is protected forever.

We commissioned Forests Alive conduct a desktop assessment of the carbon stores in properties either covenanted or owned by our organisation (attached).

Using FullCAM, the report conservatively estimates that Trust for Nature is responsible for protecting a carbon sink containing the CO_2 equivalent of over 12 million tonnes. This is comprised of:

- About 45,000 ha of forested covenanted properties: 9.8 million tCO_2
- About 31,000ha of forested conservation reserves: 1.9 million tCO_2

The report noted that these estimates were likely conservative, given the site data on which FullCAM relies, which under-estimates the longer term carbon carrying capacity of modelled sites. Thus, the 12 million tCO_2e figure produced in this report is in fact likely to be higher.

As the Climate Change Authority considers changes to the climate change policy framework, we recommend that it should consider introducing an alternative modelling approach that better recognises the carbon carrying capacity of intact native forests.

Protection of intact native forest is the most effective climate mitigation action in the forest sector

Trust for Nature's carbon assessment included a literature review that addressed the significant benefit of protecting intact native forest stocks from a carbon perspective. Importantly, the report states:

> *There is a strong body of scientific evidence that the most effective climate mitigation action in the forest sector is to protect intact native forest carbon stocks, followed by restoration of degraded native forest carbon stocks, followed by restoration plantings.*
>
> *Biodiversity found at all levels in natural forests confers resilience on natural forest ecosystems, with far greater resistance to pests, disease and fire than planted forests. As resilience improves the security of the carbon stock improves. The links between biodiversity and climate change flow both ways. Biodiversity, through the ecosystem services it supports, makes an important contribution to both climate change mitigation and adaptation.*
>
> *Confusing high rates of sequestration (in young forests) with slower rates in older forests, obscures the primary climate value of a forest – namely, the stability and size of the forest carbon stock. Protecting the carbon stocks in existing (and especially older) forests is more important from a climate perspective than planting new forests or trees because the older the forest the more carbon is relatively safely stored. Nor are old forests 'carbon neutral' - they continue to sequester carbon while ever they are alive.*
>
> *There are a growing number of calls in the scientific literature for national and international climate policy and market mechanisms to better support protection of intact forests in the developed and developing world.*
>
> *While policy lags behind the science there is no doubt that those taking action to protect biodiverse natural forests and improve their resilience are taking strong climate action.*

Trust for Nature strongly encourages the Climate Change Authority to take account of these facts when considering policy changes to better align climate change, land sector and NRM policies. Specifically, we encourage the Authority to consider the literature review contained in Section 11 of

our carbon assessment, which contains a summary of the relationships between intact forests, biodiversity, carbon storage and climate change. Whether found on large agricultural properties, smaller farms, bush blocks, conservation properties, forestry properties or Indigenous-owned land, Australia has large amounts of intact native forest, yet there are few climate-based policy drivers to secure them and the carbon stores they contain.

We acknowledge that additionality issues arise from including existing forests in climate change policy, yet given their value from a carbon perspective we believe that more policy attention should be given to recognising and rewarding that value. Such a policy change could recognise the stores secured through permanent protection (stores which would otherwise be at risk of clearing), or at the least recognise the carbon that continues to be sequestered in the future by those forests. While they may not sequester carbon at the same rate as new forests, the many other benefits that protection of such forests provides (such as climate change resilience, biodiversity, and connectivity) justify careful consideration of a revised approach.

We know from experience that permanent protection of intact forests through conservation covenants or other means is a positive and legally significant act that secures those forests forever. Through our stewardship program the integrity and endurance of those protection commitments is monitored by us. While native vegetation clearing laws exist in Victoria, we are keenly aware that such laws can be weakened or abolished with the stroke of a legislative pen. The federal Government should not confuse *de facto* protection of forests through native vegetation clearing laws with a legally enforceable protection mechanism such as a conservation covenant.

Blue carbon

While the Issues Paper and these comments are focused on terrestrial matters, we also note the emerging science surrounding blue carbon and the significant potential to increase carbon sequestration in marine and freshwater wetland areas. We would be pleased to provide further information on this matter if requested.

Private land conservation provides important ecosystem services

As the Issues Paper acknowledges at various points, carbon projects can often provide important ecosystem services, and the same is true of conservation actions more generally.

The value of some of the services provided by private land conservation in Victoria were quantified in a recent report by international ecosystem services expert consultancy Trucost (attached). In a report funded by the National Australia Bank, Trucost valued the following four ecosystem services provided by our private land conservation work:

- Climate regulation - the marginal quantity of carbon sequestered
- Erosion control - the marginal water treatment costs due to sedimentation
- Waste treatment - the marginal water treatment costs due to nutrients
- Moderation of extreme events - buffering against natural disasters by coastal and inland wetlands

A key aspect of the study was the valuation of the *marginal* value of ecosystem services that permanently protected vegetation provided as opposed to unprotected vegetation. This was

calculated based on State data showing the median vegetation condition for covenanted and uncovenanted land, broken down by ecosystem.

The results of the study were significant – Trucost estimates the ecosystem service value provided by Trust for Nature's protected estate in 3 study areas to be about $50 million per annum, with about $4.6 million in additional (or marginal) value being provided in two of the study areas as compared with the unprotected scenario. (The third study area is wholly owned by Trust for Nature and thus does not have a counterfactual unprotected scenario.)

Notably, climate regulation services provided the highest values by far of the ecosystem services assessed. This was followed by soil erosion control services, then waste treatment services, then moderation of extreme events. Another notable conclusion was that swamps, tidal marshes and wetlands provided the highest ecosystem services value per hectare.

Note that this study did not address the full range of ecosystem services provided by private land conservation, due to data availability limitations for certain services. The reasons for choosing the services analysed, and for not analysing others, are addressed in the report.

Natural solutions can create avoided emissions

Another factor that can be overlooked when considering the climate change benefits of conservation actions is the avoided emissions that the use of conservation and natural solutions can create. For example, where a water authority chooses to invest in a suite of land protection, improved land management practices and other activities to enable nature to naturally filter water rather than installing a new filtration plant, the avoided emissions created by that decision can be significant.

B. Specific responses to the Issues Paper

Below we provide responses to some specific consultation questions.

Consultation Question 1: Are there particular land sector abatement activities, or data on land sector abatement costs, that the Authority should consider when conducting the research?

The land sector abatement opportunities provided under the existing policy framework are extremely prescriptive and limited. As noted above, existing policy fails to acknowledge the carbon benefit involved in permanent protection of intact native forest. And even using the existing methodologies in the land sector (as described in the Issues Paper pp 3-5), only an extremely small proportion of land sector projects would qualify. While the methodologies themselves are not written specifically toward particular Australia States, in practice landowners in some States (including Victoria) are almost completely excluded from land sector carbon projects. If the objectives of the climate change policy framework was broadened to include objectives other than lowest cost carbon abatement, and to recognise the multiple values provided by intact forest protection, many more land sector projects could be brought into the climate mitigation policy fold.

Consultation Question 2: Do the four identified pressures adequately capture the major issues facing the agricultural sector that are relevant to the intersection of NRM, agriculture and climate policy?

We understand the four identified pressures referenced in this question to refer to the four preceding sections of the Issues Paper, namely (1) reducing emissions, (2) improving productivity, (3) climate change and (4) conserving natural capital.

On that basis, we believe that one additional pressure should be added: extinction risk. While the terms 'natural capital' and 'ecosystem services' capture some elements of biodiversity and biodiversity conservation, these terms are generally used to denote capital preserved or services provided *for the benefit of humanity*. As the federal Government has already acknowledged through its existing biodiversity protection legislation, nature has its own value which is important to protect in and for itself. There may be instances where the two main benefits of a project are its carbon benefits and the protection of a threatened species or its habitat. This risk of not protecting a threatened species is not captured by the four pressures articulated in the Issues Paper.

In the interests of considering the full range of risks and benefits to be achieved by policy change, Trust for Nature recommends including extinction risk as an additional pressure.

Consultation Question 3: How can the government, non-government and private sectors address these challenges?

As a preliminary matter, Trust for Nature agrees with the statements in this section of the Issues Paper that:

- Farmers play a central role in the conservation and restoration of Australia's natural capital [as do other non-farmer landowners];
- Landowners are generally unable to capture the full benefits associated with investments in the provision of ecosystem services such as biodiversity outcomes;
- Equally, they generally do not incur the full costs associated with the degradation of natural capital; and
- There is an important role for government and other actors (like non-government organisations or businesses) in the design and implementation of NRM polices that support landholders in their efforts to conserve and restore natural capital while avoiding unintended consequences.

The first step to addressing the noted challenges in a coordinated way is to change the policy setting so that projects delivering multiple benefits are recognised and rewarded. Trust for Nature believes the federal government needs to provide strong policy direction that recognises the multiple benefits that the land sector provides, and be prepared to accept some potential compromise in the pure carbon benefits projects deliver if they are delivering other benefits at the same time.

Trust for Nature acknowledges that this is not an easy task. As acknowledged in the Issues Paper, any new policy approach needs to be carefully formulated to avoid unintended negative consequences. However unless biodiversity and other benefits are deliberately designed into the policy framework, carbon policy seems unlikely to deliver many or any associated co-benefits. For example, a recent article examining policy mechanisms for supplying carbon and biodiversity co-benefits on Australian agricultural land found that:

- Uniform payments targeting carbon achieved significant carbon sequestration but negligible biodiversity co-benefits;
- Land use regulation increased biodiversity co-benefits, but was inefficient in regards to carbon, and
- Discriminatory payments with land use competition were efficient and, with multifunctional targeting of both carbon and biodiversity co-benefits, increased the biodiversity co-benefits almost 100-fold.

(See Bryan BA, RK Runting, T Capon, MP Perring, S Cunningham, ME Kragt, M Nolan, EA Law, A Renwick , S Eber, R Christian & KA Wilson (2016). Designer policy for carbon and biodiversity co-benefits under global change. Nature Climate Change 6: 301-305. http://www.nature.com/nclimate/journal/v6/n3/full/nclimate2874.html)

Consultation Question 7: What emissions reduction opportunities should the Authority consider that could enhance the interactions between climate mitigation, agriculture and NRM policies?

and

Consultation Question 8: What climate, agriculture and NRM policy interactions should be covered in the Authority's research?

Trust for Nature acknowledges and strongly agrees with the statements in the section preceding Consultation Question 7 that:

- all Australian jurisdictions have terrestrial and marine protected areas that provide ecological services, including climate benefits; and
- the extent of non-governmental involvement in the National Reserve System illustrates the importance of non-government actors in the provision of ecological services.

As noted above, a pilot study by Trucost for three areas in which Trust for Nature works confirmed the significant services provided by private land conservation.

As discussed in more detail above, the emissions reductions opportunities that the Authority should consider to enhance the interactions between climate mitigation, agriculture and NRM policies include:

- recognition of the existing and future carbon stores provided by intact forests
- broadening of carbon policy framework objectives to include co-benefits and way from the lowest-cost abatement approach
- broadening or increase of existing methodologies to make carbon opportunities available to a greater number of actors in the land use sector. The current opportunities for those in the land sector to access carbon funding are extremely limited.

Consultation Question 10: How, and to what extent, do existing climate change mitigation policies affect the operation and outcomes from NRM policies?

A statement sometimes heard in the conservation community is that 'Conservation without money is just conversation'. Due to the current policy setting in which climate change mitigation policies generally fail to provide funding for conservation actions, so it follows that, in our experience,

existing federal climate change mitigation policies have little effect on the operation and outcomes from NRM policies.

Where climate change mitigation policies do fund conservation actions, those actions arguably do not provide strong NRM and biodiversity outcomes. For example, current climate change policies favour:

- planting of overstorey rather than understorey plants (eg under the 20 Million Trees program)
- planting of fast-growing trees at the expense of those most appropriate for the landscape
- revegetation at the expense of restoration of existing forests or conservation of remnant forest
- emphasis on plantings in high rainfall areas rather than in areas identified in strategic NRM plans (such as those as noted in the Issues Paper at pp14-15)
- the practical availability of certain land sector methodologies in some States or Territories over others, depending on those States' and Territories' regulatory systems.

Consultation Question 12: What role, if any, should strategic NRM planning play in helping to minimise non-carbon costs and enhance non-carbon benefits of agricultural [land sector] carbon projects?

and

Consultation Question 13: If strategic NRM planning should be used for these purposes, whose responsibility should it be to prepare and implement the plans, and through what processes?

Trust for Nature agrees with the statement in the Issues Paper that strategic NRM plans could be used as a vehicle for providing positive incentives for the establishment of regionally appropriate biodiverse carbon plantings, or plantings that serve other functions (for example, deep rooted vegetation in areas subject to dryland salinity). If biodiversity and other benefits are to be aligned with carbon policy, it only makes sense to use existing strategic planning documents to direct the geographic and ecosystem/species priorities identified in those plans in allocating any available funding.

Regarding the question of whose responsibility it should be to prepare and implement the plans, Trust for Nature submits that existing strategic plans from reputable authorities and organisations should be used, rather than creating new plans for these purposes. For example, strategic NRM plans created by federal and state environmental authorities, NRM bodies including catchment authorities, statutory conservation agencies and potentially non-governmental organisations could be used. Increasingly strategic NRM planning documents incorporate climate change considerations and identify those areas where NRM actions are anticipated to have the greatest benefit from a climate change perspective (whether through carbon sequestration, resilience or adaptation). The policy framework could specify the plans which are eligible to be considered for this purpose.

Consultation Question 14: Is there scope to streamline, harmonise and better integrate existing environmental data collection and analysis systems that apply to the agricultural sector? If so, how might this be done?

and

Consultation Question 15: What improvements (if any) could be made to existing environmental accounts and indicator systems to facilitate better integration of climate, agriculture and NRM policies?

Trust for Nature believes that there is ample scope to streamline, harmonise and better integrate existing environmental data collection and analysis systems that apply to the land sector. As the Issues Paper notes, data gathered and processed for one purpose is often unusable for other purposes, and is difficult to collate and aggregate. As noted in the Trucost ecosystems valuation referenced above, several ecosystem services provided by Trust for Nature's private land conservation work were not analysed due to the lack of availability of relevant data.

As the Authority would be aware, the Victorian government is currently developing its approach to implementing environmental accounts. Trust for Nature encourages harmonisation of any state-based approaches to greatest extent possible.

Consultation Question 16: Should approval-linked offset schemes give explicit consideration to the emissions reductions or carbon storage implications of compensatory mitigation actions and, if so, how?

Trust for Nature believes that in theory it may make sense to take this approach, although in practice it may be difficult. Equally, other approaches such as a carbon cap and trade mechanism operating in tandem with existing offset schemes may achieve a similar result.

Consultation Question 17: Are there appropriate restrictions under the ERF to manage the non-climate related risks associated with carbon offset projects? If not, how could they be improved?

As noted above in response to Consultation Question 10, the ERF favours projects which have specific aspects which do not necessarily produce the best outcome from a biodiversity perspective (eg it favours planting of overstorey rather than understorey). Broadening the climate change policy framework to incorporate broader objectives than simply carbon abatement would address this.

Consultation Question 18: Should government policies formally recognise the non-climate benefits associated with ERF projects undertaken by Indigenous communities and, if so, how should this be done?

and

Consultation Question 19: Would the development of such approaches be better left to the private sector perhaps working in partnership with non-government organisations or Indigenous communities?

Trust for Nature strongly supports the formal recognition of the non-climate benefits associated with ERF projects undertaken by Indigenous communities. Trust for Nature does not see any reason to leave such approaches exclusively to the private sector.

Equally, Trust for Nature strongly supports the formal recognition of the non-climate benefits associated with ERF projects undertaken by non-Indigenous actors.

Consultation Questions 20-25 re multiple benefits certification and facilitation

Whatever certification approach is taken regarding multiple benefits certification, Trust for Nature believes that governmental leadership is required to create a certification scheme that recognises other co-benefits, in particular biodiversity outcomes. Alternatively, the government should support projects that achieve both carbon and other benefits using other methods.

The Victorian Catchment Management Authorities are currently collectively conducting a project to develop a 'catchment carbon offsets' trial. The project aims to develop and pilot a framework that supports the provision of carbon offsets opportunities, through carbon sequestration activities identified by Victorian Catchment Management Authorities. The project aims:

- To develop and pilot a framework that provides carbon offsets for Victorian water corporations and achieves climate change adaptation outcomes as identified by CMA Regional NRM Climate Change Adaptation Plans / Strategies.
- To improve understanding of the opportunities for carbon offsetting at a regional scale.
- To increase alignment between Regional Catchment Strategies (and supporting sub-strategies) and water sector mitigation actions arising from Water for Victoria.

At a recent multi-stakeholder workshop for the project, the prime characteristic identified by water corporations for prospective credits to be created through the project was that carbon sequestration be credible, quantified and verified. While they were supportive of the general concept of purchasing credits that were aligned with Regional Catchment Strategies, they were more concerned that the credits were verified using the formal, credited process. It was readily apparent that if there was a government-approved certification process that recognised multiple benefits, the water corporations would be willing to consider them. However the absence of such a process made the support by water corporations of uncertified credits (regardless of their significant co-benefits) less likely.

Consultation Question 26: To what extent are existing NRM grant programs designed to capture complementary carbon benefits?

and

Consultation Question 27: Are there opportunities to improve the linkages between climate change mitigation policies and NRM grant programs?

On the whole, existing NRM grant programs in Victoria are not designed to capture complementary carbon benefits. As already discussed, there are certainly opportunities to improve the linkages between climate change mitigation policies and NRM grant programs.

Consultation Question 31: Are there opportunities for improved linkages between climate change mitigation and pest and weed management policies to maximise climate and NRM outcomes?

Yes, there are such opportunities. The existing ERF methodologies have very limited application to pest and weed management projects. The draft Woodlands Restoration methodology holds out some hope in this area however even if it is approved, it will still have a very limited scope and most pest and weed management conservation projects will not meet the methodology's requirements.

C. Conclusion

Clearly there are many opportunities to better align policies regarding climate change, the land sector and NRM. Trust for Nature fully supports this endeavour and would be pleased to participate in future efforts toward this goal.

Thank you for your consideration of the points raised in this submission. Should you have any questions, please contact:

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Attachments:

Forests Alive (2016). *Conserving Carbon: A desktop assessment of forest carbon stocks in properties and covenants owned or managed by Trust for Nature Victoria*

Trucost (2016). *Pilot Study: Quantifying the natural capital value of Trust for Nature's Conservation Programs – Implications for Banks, Industry and Policy Makers*