Submission to the NSW Biodiversity Legislation Review Panel

Issues Paper

From



The Nature Conservation Trust of NSW (NCT)

The Nature Conservation Trust of NSW is a not for profit conservation business that was established by statute in 2001 with a clear purpose to protect and enhance natural heritage in NSW through the application of in perpetuity Trust Agreements on private property titles. The Nature Conservation Trust of NSW operates in accordance with the *Nature Conservation Trust Act* 2001.

In the lead up to its establishment in 2001, the NCT was championed by NSW Farmers Association, WWF and NSW Nature Conservation Council. One of the key objectives of the establishment of the NCT was to create an entity independent of Government that effectively operated as a private conservation business with an independent Board, able to be responsive to opportunities as they arose and able to effectively engage with landholders to promote private land conservation.

The benefits of this approach include:

- (i) Highly efficient use of conservation capital where public goods (including biodiversity and other ecosystem services) are effectively delivered in perpetuity using private land equity. At least \$20 million worth of private equity land value has been voluntarily protected forever.
- (ii) Market responsiveness capacity for rapid decision making to meet policy and market opportunities
- (iii) Deductible Gift Recipient status enables tax deductibility of donations
- (iv) Board governance applies duty of care / sound fiduciary principles within the organisation and a focus on ethical business principles
- (v) Strategies, including conservation priorities, are science based
- (vi) Capacity to leverage professional services pro-bono as a not for profit
- (vii) Customer, including corporate, engagement is simplified and enhanced as a non-Government entity

The NCT has been successful working with private landholders to protect the biodiversity of NSW, having now established 96 inperpetuity Trust Agreements with a further 17 in progress which will, by the end of 2014/15, cover more than 65,000 hectares across the State.

The Nature Conservation Trust welcomes the opportunity to make a submission to the Independent Biodiversity Legislation Review Panel in response to the Issues Paper August 2014.

Theme 1

1. Should there be an aspirational goal for biodiversity conservation?

The Nature Conservation Trust of NSW (NCT) supports an aspirational goal for biodiversity conservation that is embedded within conservation strategy and policy, and is linked to international and national goals.

2. Given available evidence about the value and state of the environment, are the existing legislative objects still valid? Do the current objects align with international and national frameworks, agreements, laws, obligations? If not, what objects are required?

NCT submits that the objects of the Nature Conservation Trust Act 2001 remain valid to the biodiversity conservation policy framework:

- In-perpetuity private land conservation and management is a vital and integral component of a contemporary biodiversity conservation policy and planning framework for all tiers of government, and strongly aligned to contemporary international policy settings
- Mechanisms to provide in-perpetuity protections are required to ensure private land conservation (PLC) contributes to
 a comprehensive representative and adequate National Reserve System and more broadly to landscape scale
 ecosystem service delivery. The establishment of a National Reserve System aligns with international and national
 frameworks, agreements, laws, obligations, such as Article 8 of the International Convention of Biological Diversity.
- The development of mechanisms for private land to contribute the National Reserve System is consistent with priority actions of *Australia's strategy for the National Reserve System 2009 2030* such as Action 3.3:
 - Develop and apply the National Framework for Protected Areas on Private Lands to facilitate cost-effective and consistent approaches to covenanting and enhance incentives to support and recognise the contributions of participating landholders, including use of market-based instruments and improved tax treatment for private initiatives.
- Revolving funds are a market based instrument that uses existing real estate markets to secure high conservation
 values on private land. Revolving funds enable fund managers to respond quickly to market opportunities and
 complement other public and private conservation programs. They are appropriate for both the voluntary and offset
 conservation markets. The NSW Government and Australian Governments have invested in revolving funds, and the
 NCT revolving funds have secured approximately 20,000 hectares under in-perpetuity conservation agreements since
 2003.
- Private land conservation complements the public reserve system, "and can offer social and economic benefits to
 individual land managers and to regional communities by supporting people with local knowledge and practical land
 management skills to stay on the land. They also open new market opportunities for investing in specific conservation
 priorities." (Australia's Strategy for the National Reserve System 2009 2030)
- Education and promotion of biodiversity is integral to awareness, landholder uptake and fundraising to increase private land conservation in NSW. The NCT's object of promoting awareness of biodiversity is consistent with Article 13 of the International Convention of Biological Diversity.
- Australia's Strategy for the National Reserve System 2009 2030 recognises that the conservation of biodiversity is best addressed at multiple scales and through collaborative approaches that better coordinate conservation and management efforts on public and private lands.
- The objects of the NCT Act will grow in importance over time with less than 10% of NSW in public protected areas and some of most threatened ecosystems, species and habitats occurring on privately managed lands.
- Independence of the NCT remains relevant for increasing landholder participation and fundraising, and studies continue to identify that independence of program delivery influences uptake by private landholders

• Independence enables access to private and philanthropic funds.

3. To what extent are the current objects being met?

The NCT submits that the objects of the Nature Conservation Trust Act are being met. The NCT has been successful having now established 96 Trust Agreements with a further 17 in progress which will, by the end of 2014/15, cover more than 65,000 hectares across the State and currently provide the following:

- (i) Protection of 97 different vegetation communities in NSW, 74 of which are under-reserved in the public reserve system
- (ii) Protection of 4 nationally threatened ecological communities
- (iii) Protection of 16 ecological communities that are threatened in NSW
- (iv) Habitat for 12 animal species that are threatened nationally
- (v) Habitat for 70 animal species that are threatened in NSW
- (vi) Habitat for 22 plant species that are threatened nationally
- (vii) Habitat for 44 plant species that are threatened in NSW

Figures 1 - 2 illustrate the steady progress of conservation outcomes, and increase in profile and community awareness of private land conservation being achieved by the NCT since its establishment in 2003.

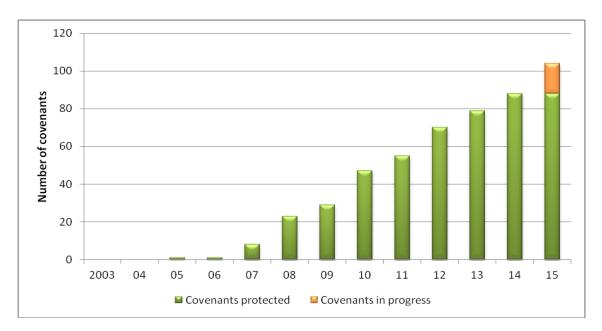


Figure 1: Cumulative graph depicting covenants registered since 2003, including covenants currently in progress expected to be registered in 2015.

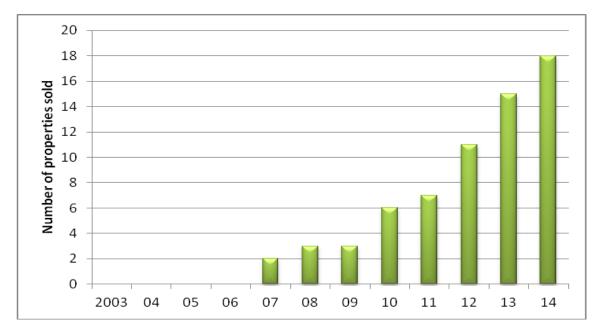


Figure 2: Cumulative graph depicting sales since 2003. Note 2014 total includes properties under contract.

NB: Properties for sale are not included.

4. Could the objects of the current laws be simplified and integrated? If so, how?

At present there are a number of private land conservation mechanisms in NSW. This can create confusion in the market place and there is an argument that these instruments could be consolidated to remove this duplication.

Theme 2 Conservation Action

1. Is the current system effective in encouraging landowners to generate public benefits from their land and rewarding them as environmental stewards? Or are current mechanisms too focused on requiring private landowners to protect ecosystem services and biodiversity at their own cost?

There is very little financial reward or public recognition for those landowners who choose to protect areas and implement actions beyond their perceived / or legislated level of duty of care.

Private landowners who voluntarily establish land under conservation/sustainable management provide an extremely important public service, often at considerable financial cost to themselves. This is particularly true as the highest priority conservation lands, for example coastal rainforests and inland grassy box woodlands, are now found mostly on private land.

Private conservation landholders are frequently unable to earn significant income from their properties (because it is protected for conservation) but must still meet the costs of rates, taxes, pest, weed and fire management and fencing.

The provision of economic incentives is integral to securing biodiversity conservation management, and financial assistance to private landholders, through payments and concessions recognised as an important motivator for private land biodiversity conservation.

Attachment 1 to this submission provides a summary of some of the available literature concerned with motivations and barriers to private landholder adoption of conservation practices.

2. Are there elements of the current system for private land conservation that raise impediments (for example, the binding nature of agreements and potential loss of production) for individuals who want to manage their land for conservation? If so what are they? What incentives might be effective, efficient and equitable in promoting biodiversity conservation on private land?

The NCT submits there are a number of impediments to landholders who want to manage their land for conservation. Addressing inequity, removing financial barriers and improving incentives for voluntary private land conservation are essential to increasing uptake of in-perpetuity private land conservation, and improving protection of biodiversity in NSW.

The key issues are summarised below:

- Local Government Rates at present, private landholders who enter into in-perpetuity conservation covenants under the *Nature Conservation Trust Act* are not entitled to an automatic exemption under *the Local Government Act* 1993 to that portion of the property covered by the covenant. Whereas landholders who enter into in-perpetuity agreements under the *National Parks and Wildlife Act* are entitled to an automatic exemption. The NCT submits that this circumstance is inequitable for landholders participating in private land conservation and provides a barrier for participation. It is submitted that that *Local Government Act* be amended to apply proportional local government rate exemptions to in-perpetuity conservation covenants under *the Nature Conservation Trust Act*. It is also submitted that any amendment recognise the possible adverse impacts of extending rate concessions on local Councils, particularly those with a low rating base, and consider alternatives which more appropriately apportion the rate concession to the broader public (including those living in cities) who indirectly benefit from the protected areas on private land.
- Stamp Duty the application of stamp duty on the conveyance of conservation properties diminishes the philanthropic base for conservation land purchases and transactions. The NCT submits that an amendment to the *Duties Act* to provide a proportional stamp duty concession on the conveyance (sale/purchase) of properties covered by NCT Trust Agreements, OEH Conservation Agreements, and of properties purchased by or donated to an organisation listed on the Register of Environmental Organisations would improve equity amount conservation land managers. Currently, the Nature Conservation Trust and OEH are provided concessions, however private landholders are not. The provision of proportional concessions would also be consistent with the land tax concessions for in-perpetuity conservation covenants provided under the *Land Tax Management Act* 1956.
- Rural lands rates currently both livestock and pest and weed control rates are levied on land under in perpetuity
 conservation covenants. It is submitted that an amendment be considered to the Rural Land Protection Act to exempt
 properties covered by Conservation Agreements and NCT Trust Agreements from rates based on livestock stocking
 rates but retain liability for pest and weed rates.
- Western Lands Act rent currently rate rebates are able to be granted under the Western Lands Act 1901 where the Commissioner is of the opinion that the land is managed for rehabilitation. It is submitted that this rebate be clarified to identify Western Lands Leases that have an OEH Conservation Agreement or NCT Trust Agreement to be eligible for a proportional rebate on the annual rent.

Other financial barriers are found at a Commonwealth Government level. The NCT understands that the State can only influence change and would require support from the non-government conservation sector. The following measures would support a growth of the private conservation market:

- Income tax concessions for private land conservation works currently, private conservation landholders are not entitled to offset the cost of conservation management activities against off farm or off land income. It is submitted that where possible the NSW government seek influence change so that landholders with in-perpetuity conservation covenants are eligible for deductions of land management activities such as weed, pest and fire management.
- GST exemption for private land conservation conveyance (sale/purchase) currently land used for primary production or residential purposes are entitled to exemptions from GST, however the conveyance of properties with in-perpetuity

conservation covenants are not. It is submitted that where possible the NSW government seek to influence change so that land protected by in perpetuity conservation covenants be exempt from GST on future sale/purchase, including land protected with an in-perpetuity conservation covenant within 2 years of purchase.

Other financial impediments identified by the NCT include:

- Treatment of registered in-perpetuity agreements under biodiversity offsetting policy
 - Current policy treatment of properties with registered conservation covenants is a disincentive to the voluntary private land conservation market. At present, the "additionality" rules preclude a landholder with a voluntary conservation agreement on their property from obtaining the full value of a Biodiversity offset agreement which is discounted due to the protection already provided by the voluntary agreement. The NCT recommends that the Government follow the Victorian Government approach which allows landholders with voluntary conservation agreements to convert those agreements to a Biobanking offset agreement without discounting the value of the offset agreement due to the existence of the voluntary conservation agreement. It is submitted that the additionality principle be focussed on management activities to 'maintain and improve' biodiversity offset values, which in turn are protected via in-perpetuity conservation agreements.
- Assistance with weed and pest control
 - On-going assistance for private conservation landholders with weed and pest control, including but not limited
 to prioritisation of environmental grant funds towards landholders with in-perpetuity agreements. Current
 investment in the FNP Private Land Conservation Grants program by OEH and other NGO partners (including
 the NCT) is strongly supported.
- Perceived impact of covenants on land value
 - Valuers have provided feedback to the NCT that conservation covenants on title are perceived by the market to have a 5-10% impact on property value irrespective of whether there is a real change in land use. The NCT is of the firm view that addressing financial barriers related to taxes and rates will contribute greatly to addressing market perceptions of the impact of conservation covenants on property value.
- Rating categories
 - Currently the Local Government Act 1993 does not recognise conservation lands as a separate category for rating. Whilst the NCT submits that in-perpetuity PLC should be proportionally exempt, environmental rating may provide a useful mechanisms for the government to recognise other non in-perpetuity contribution made by rural landholders
- 3. What should be the role of organisations and bodies, such as the Nature Conservation Trust, in facilitating and managing private land conservation through mechanisms such as conservation and biobanking agreements?

The role of the NCT in permanent private land conservation (PLC) currently includes promotion of the benefits of PLC, landholder engagement, provision of technical advice, ecological assessment, application of conservation agreements on property titles, management of funding contracts, stewardship and monitoring of compliance. These functions are undertaken at present primarily in the voluntary conservation market within the context of the NSW State priorities for biodiversity conservation. The NCT is also involved in the delivery of offsets for major projects through the application of NCT Trust Agreements and Plans of Management on properties meeting the offset requirements.

The NCT has the governance, structural, legislative and technical capability to deliver effective permanent PLC in NSW as evidenced by the performance of the Trust to date. Whether PLC is undertaken voluntarily or as a consequence of an offset obligation, the same fundamental skill sets and capacity are required and NCT contends that there would be value in having both voluntary and offset PLC managed by the one organisation to improve the strategic delivery of PLC in the State through better coordination of voluntary and offset areas.

4. How should the government determine priorities for its investment in biodiversity conservation while enabling and encouraging others (e.g. community groups) to contribute to their own biodiversity conservation priorities?

The NCT submits that government is best placed to take a leadership role in identifying priorities for investment guided by best available science, and where possible matched to community capacity. The NCT submits that priorities for investment should be guided by:

- the establishment of a comprehensive representative and adequate national reserve system
- priorities for threatened species and ecologically endangered, vulnerable and overly cleared communities
- regional and local climate change and wildlife corridors
- areas of known endemism and refugia
- areas of known community capacity

It is further submitted that a private land conservation strategic plan be developed to guide investment which is adequately resourced and that includes both realistic and aspirational targets.

Finally, the NCT understands that best science will evolve, and that conservation planning responses will need to be flexible to incorporate changes to our knowledge about the actions required to assist our ecosystems and species respond and adapt to climate change. It is therefore submitted that strategic plans and priorities for conservation investment be regularly reviewed to accommodate new understanding and actions required to assist ecosystem resilience in a changing climate.

5. How can the effectiveness of conservation programs be monitored and evaluated?

The NCT submits that the following principles would assist in effective monitoring and evaluation of conservation programs:

- **Simple and easy to apply methodology** with unified acceptance and approach of a by local, regional, and State Government agencies and other conservation organisations.
- Application of benchmarks for vegetation types and use/training of consistent methods of assessment towards targets.
- **Realistic and achievable targets**, with better articulation of goals of programs in short and long term timeframes. This includes not only targets for the actual program but more clarity on bioregional and species oriented targets and agreement from key stakeholders. Target setting should be supported by a M & E framework that is based on vegetation and habitat benchmarks, yet also provides flexibility for establishment of site or project specific quantifiable goals.
- **Dedicated funding** towards M & E as an essential component of programs, preferably not at the expense of less funding towards on-ground actions
- Reduce "siloing" and data collection overlap with so many groups, agencies, organisations, consultancies chartered with the responsibility for conducting M & E there is a need for a good supportive framework, that ensures that data is not lost once gathered. This highlights that partnership approaches (and their ongoing funding) such as GER are vital to ensure that these groups conducting M & E are talking to each other.

7. To what extent is the system forward looking or dealing with legacy impacts?

NCT private land conservation is concerned with the in perpetuity protection of biodiversity in NSW which is a response to the legacy impacts of land use, in particular loss of habitat and fragmentation. Conservation priorities for the NCT include a focus on under reserved ecosystems, threatened species and endangered, vulnerable and over cleared ecosystems and communities. However, the NCT is also focused on priorities that look forward including establishment of climate change corridors and to engage with private landholders to collaboratively identify private land conservation solutions for the protection of biodiversity in NSW.

The NCT model is based on an adaptive management approach which enables management to respond to improvements in knowledge and best available science.

The NCT submits that adequate, stable and long term government investment in the establishment of a comprehensive, adequate and representative National Reserve System (including Private Land Conservation) is required to secure biodiversity benefits and to secure public confidence which is required to achieve landholder and community participation.

8. To what extent does current practice (rather than the legislation) determine outcomes?

The establishment of in-perpetuity conservation covenants on the title of land requires legislation. Whilst in many cases it is the historic and current land practices that result in suitable biodiversity for protection with conservation covenants, it is the legislation that provides the mechanism for protection.

The NCT submits that other legislative frameworks would be able to be amended to improve financial incentives for landholders and improve the uptake of private land conservation, and therefore improve the outcomes for biodiversity across NSW. Financial incentives should recognise the public benefit that private landholders with in perpetuity conservation agreements provide, and legislative amendment is required to achieve this outcome.

The NCT further submits that legislation is required to ensure that in perpetuity agreements are enforceable at law, and to instil public confidence that in perpetuity agreements will be monitored and if required compliance action initiated.

Theme 4: Conservation in development approval processes

5. Are there other models (international or Australian) that regulate activities impacting on biodiversity that may be relevant to NSW?

The NCT submits that the_Trust for Nature Victoria provides a good example of the successful model for private land conservation. The Trust for Nature Victoria operates voluntary and offset PLC programs, providing a 'one stop shop' for landholders. This reduces confusion in the marketplace, builds expertise in engagement and fundraising, and builds trust of landholders with longevity.

6. Some impacts cannot be offset. What are they? Are these appropriately addressed in approval systems? What is the relevance of social and economic benefits of projects in considering these impacts?

The NCT supports the hierarchy of 'avoid, minimise, offset', and the role the Government has taken in guiding this assessment. An effective offsetting policy requires the hierarchy to have regulatory force to ensure that the policy is not undermined by offsets simply being purchased without proper effort being made to avoid impacts.

The NCT would consider values such as critically endangered and endangered ecological communities, populations and species (and their habitats) under the *Threatened Species Act* and the *Environmental Protection and Biodiversity Act* to be values that should be subject of 'red flags'. Overly cleared vegetation communities would be another biodiversity value that should be considered for such status to prevent communities from becoming endangered through cumulative additional impacts.

The NCT submits that the Government should consult with the scientific community to identify those biodiversity values that are unable to withstand cumulative additional impacts and Government should regulate unacceptable loss accordingly.

The government is urged to set clear limits on the loss that a species or habitat can withstand, and then allow the market to resolve the offsetting of those impacts above that limit. Certainty is central to market confidence and mitigating unacceptable loss is essential to public confidence.

The NCT supports the principals of ecologically sustainable development and the valuation of ecosystem services when considering the social and economic benefits of projects that impact biodiversity values.

8. How can offsets be more strategically located?

One of the difficulties with offsets at present is the tendency for them to be driven by the objective of finding offsets that meet consent conditions at the lowest possible cost to the developer without any consideration of broader landscape scale benefits that could be derived if a more strategic approach was taken to their location. Individual developers are unlikely to take the time to consider broader landscape scale benefits and the end result is an ad hoc creation of offsets that meet the individual development requirements but often have very little strategic value in delivering priority biodiversity outcomes.

The NSW Government's Biodiversity Offsets Policy for Major Projects proposes the establishment of a biodiversity offset program manager who would be responsible for the delivery of the offsets for major projects for which the developer has paid into an offset fund rather than sourcing the biodiversity offset themselves.

One of the benefits of this approach is that the program manager would be able to consider not only the immediate or local requirements of the offset but would be able to consider the location of offsets more strategically to give effect to broader landscape scale benefits including connectivity and meeting priority biodiversity objectives of the State. The program manager would also be dealing with multiple projects over time that may provide opportunities for more strategic acquisition of offsets that are not available to an individual developer.

Theme 6: Information provisions

1. What information should be generated about the different kinds of value (for example, monetary and intrinsic value) of biodiversity and other natural assets in NSW?

The information that needs to be generated depends upon the audience to whom the information is being provided. From NCT's perspective there are five key audiences to whom information is provided:

- The community (particularly school children) understanding the intrinsic value of biodiversity and it's connection with societal health and well-being.
- Farmers understanding the interplay of biodiversity and production on farmland is critical. This includes both intrinsic value and the value of ecosystem services to the production system.
- Developers understanding the monetary value of ecosystem services is critical in evaluating the full economic impact of developments. Until economic modelling expressly includes the monetised value of these services, rather than treating them as externalities, the model will not reflect the true economic impact of the project.
- PLC Funders providing simply understood information about the need for biodiversity conservation is critical to the success of engaging philanthropic support for PLC.
- Urban community those who live in cities are increasingly being disconnected to the rural environment and the high conservation value areas most under threat in NSW. Information is required to demonstrate the tangible links between "the bush" and the "big smoke" and the benefits that biodiversity / conservation based agriculture provides (directly and indirectly) to one's quality of life. Increased connections with this demographic will, in turn, assist with greater philanthropy and private sector investment in biodiversity conservation.

2. What type, quality and frequency of data should be collected about biodiversity? Who should be responsible for such a system?

- Data collection about biodiversity needs to be conducted at a level which allows analysis across regions, catchments
 and states. Ideally the data being collected in NSW will be consistent with Queensland, South Australia and Victorian
 data collection. Therefore the responsibility for such a system should be shared between State and Commonwealth
 Governments.
- The type of data required will vary between the detail required to manage site specific threatened species and the generic data to manage and evaluate catchment / regional scale biodiversity trends. Data collection will ideally be higher in frequency and quality in areas dedicated to conservation in-perpetuity, as there is a greater level of security in these sites.
- NCT supports the approach to empower community and landholders to collect data about biodiversity. This fosters
 respect and care for biodiversity and creates local role models / ambassadors for rural communities. Citizen Science,
 Land for Wildlife, Conservation Management Networks, GER, NCT Stewardship Program, Bioblitz, and Community
 Biodiversity Surveys etc. are all relevant examples of this approach. This may require a larger initial investment in
 biodiversity data collection; however it will reap great outcomes via voluntary conservation participation, especially on
 private land. Hence some consideration as to how the public data collection can contribute in an effective way is
 required.
- Refer also to response in Theme 2 Q5 of effectiveness of monitoring and evaluation of conservation outcomes.

3. Is current data about biodiversity highly credible and readily accessible? If not, how can quality and access be improved?

- The NCT submits that there are a number of strengths and areas for improvement in the current data about biodiversity.
- The NCT endorses the work by the NSW Government that has been undertaken in respect to threatened species profiles, and the information collated for biometric assessments and biobanking calculator. The key gaps in these areas are consistent regional vegetation mapping with associated condition benchmarks and area in reservation. This is critical information for prioritising private land conservation investment. It is also critical information for biodiversity offset determinations, to identify whether biodiversity offset values are actually available. The NCT further submits that mapping of critical habitat and mapping of ecologically endangered ecosystems should be a priority.
- The NCT endorses the NSW Government investment in multiple species Biodiversity Management Plans such as the Border Ranges Biodiversity Management Plan and the North Coast Biodiversity Management Plan which provide clear guidance on priority areas for conservation investment, determined by best available science. The plans also provide a 'one stop shop' for information about biodiversity features and values for the region. This information is invaluable for private land conservation and would be of great assistance if it were available for the entire state.
- The NSW Government Native Vegetation Management (NVM) Priorities for Investment work is of great assistance to focus private land conservation activities. The NCT would encourage the NSW Government to support a continuation of the project to complete the process of identifying local priorities for investment.

4. How effective is the threatened species listing process (including the listing of key threatening processes) in guiding subsequent conservation action?

The protection of threatened species, endangered ecological communities and their habitat on private land is a conservation priority for the NCT. The NCT considers threatened species, endangered ecological communities and their habitat in assessment of private lands for in-perpetuity protection.

7. To what extent is the identification of critical habitat an effective tool for biodiversity conservation? Should we list critical habitat for more species where relevant and useful?

The protection of critical habitat on private land is a conservation priority for the NCT. The identification and associated mapping of critical habitat would greatly assist the NCT in our assessment of private lands for in-perpetuity protection.

8. Should private conservation data be collected and if so how?

Refer to answers in Q.2.

Collection of conservation data on private land is essential to gauge the condition of biodiversity across NSW, especially considering private land covers the majority of the State and the fact that many threatened and poorly conserved species and communities are mostly located on private land.

There are however many examples where attempts to collect data on private land has produced perverse outcomes, primarily due to mistrust of data use and aims of projects. Regionally based organisations such as Landcare groups, Local Land Services, and NCT have great experience in this regard and their staff have established relationships of trust with landholders over many years. Trust is essential to maximise data collection from private land owners, community empowerment in data collection is required, and provision of tools to use data to more effectively manage their own land. If there is something tangible provided to landholders (ie. maps, lists of species, information on management, integration with land/resource use), there may be more willingness to share data and provide permission for collection of data on biodiversity on their land. This should not just be an online resource. Investment is required in private land extension via one to one visits on property in order to improve trust and maximise data collection.

In addition, ongoing support should be provided for the stewardship and monitoring of the existing protected areas on private land. This network already provides ready access to a "snapshot" or representation of how biodiversity is faring on the parcels of private land being managed for conservation, especially on vegetation types that are not adequately conserved in the public land estate.

Additional Issues for Consideration by the Review Panel

(i) Limitations within the Nature Conservation Trust Act to utilise Revolving Funds

The NCT Act currently restricts the use of the Revolving Fund to purchasing properties and applying our covenant. We have experienced situations in which a landowner is interested in applying an NCT Covenant to their property (without NCT purchasing and reselling the property) at a price which is on par or cheaper than the average cost to NCT to revolve a property. We do not however have the capacity to utilise our Revolving Fund for this purpose. This creates the perverse outcome of NCT being unable to apply our covenants at the most cost effective price. An amendment to the NCT Act that enabled the use of the Revolving Fund for the application of a covenant on land where it is cost effective to do so would enable a more efficient use of the NCT's resources.

(ii) Impact of Mining Exploration Licences

One impediment to the NCT in procuring properties is the existence of mining exploration licences on the properties. If a mining exploration licence exists we will not progress our investigation into procuring a property – due to the negative impact of the licence on our ability to re-sell the property. The speculative nature of mining licences results in a significant number of licences existing that are not used but which nonetheless create an impediment to the NCT potentially progressing the protection of high value conservation land. The NCT recommend that consideration be given to setting exploration licence fees at a level that is a disincentive to speculative exploration and that the exploration licence must be used within a 3 month period of approval or it lapses. These mechanisms would assist in limiting the number of exploration licences that sit idle on properties and which limit the opportunity for protection of high value conservation land.

Annexure 1

Literature summary

Social research regarding Private Land Conservation (PLC) landholders, their motivations and barriers to adoption of conservation practices.

Draft prepared by Jakki Trenbath (OEH) as part of the PLC Implementation Plan, June 2013. This summary does not reflect an OEH position. Papers marked (*) are highly recommended.

1. Communities in Landscapes: Working together to integrate conservation and production in NSW Box-Gum Grassy Woodlands – Evaluation of the social and cultural aspects of the project (2012) Judy Lambert and Michael Williams.

Evaluation of the socio-cultural aspects of the Communities in Landscapes project run by Landcare to increase native habitat and conservation in the Grassy Box Gum Woodlands in the NSW central west. Valuable lessons to be learned from this project in terms of partnerships across agencies and community to integrate conservation and production.

2. A review of landholder motivations and determinants for participation in conservation covenanting programmes. Thomas Kabii and Pierre Horwitz (2006), Consortium for Health and Ecology, School of Natural Sciences, Edith Cowan University, Environmental Conservation 33 (1): 11–20. (*)

Reviews the literature on the influences on landholder decision-making regarding conservation initiatives. Analyses barriers to adoption of perpetual covenants and also the factors making them more likely to participate. Stresses the importance for program managers to understand the motivations of landholders and offers approaches for removing barriers to entry.

3. Encouraging Participation in Market Based Instruments and Incentive Programs, Research project number CSU29 of the Social and Institutional Research Program of Land & Water Australia. April 2008. Professor Mark Morrison, Dr Jeanette Durante, Ms Jenni Greig and Dr John Ward. (*)

Excellent analysis of how MBI/incentive programs can be designed and implemented to increase landholder participation. It emphasises the importance of tailoring the program as well as the form of communication/advertising to the particular category of landholder being targeted. Says advertising is less effective than word of mouth and use of networks.

4. "Who cares about the environment?" survey OEH 2012. Full survey at http://www.environment.nsw.gov.au/resources/community/130265WC12Rpt.pdf more detailed results available from OEH.

Interesting results of broad survey of NSW residents by OEH on their attitudes towards the environment, and compares with three-yearly surveys since 1994. Results can be examined by NSW region and specifically for people Annexure 1 – Literature summary – 2013 - Social research regarding Private Land Conservation (PLC) landholders, their motivations and barriers to adoption of conservation practices

living outside urban centres. A new question in 2012 covered "perceived personal effectiveness". This showed that people's belief or lack of belief that they can make a difference has a major impact on the number of environmental actions ("everyday" or "occasional") that people engage in. This is true at all levels of environmental concern.

5. Engaging Difficult to Reach Landholders Through Improved Communications (2011) Mark Morrison, Roderick McCulloch, David Waller, Jenni Greig and Mark Filmer, Report prepared for the NSW Environmental Trust and the Hawkesbury-Nepean Catchment Management Authority.

Twenty six NRM communications practitioners across Australia were surveyed to find out what communication channels and message type they use. Report makes recommendations about which are the most effective in reaching certain landholder segments.

6. Investigating the needs of Nature Refuge landholders – A case study approach, Tanya Pritchard 2008 Research Report for the Griffith University Masters Program.

Useful research on the support needs of Queensland Nature Refuge landholders in managing their private conservation areas. Nature Refuges are the equivalent of a cross between the Conservation Agreements and Wildlife Refuges in NSW. Administered by a state government department, they are in perpetuity and can allow continued productive uses. Research found that there was significant demand for advice and assistance (both financial and labour), reinforcing the need for rural nature conservation extension and incentive programs.

7. Drivers of practice change in land management in Australian agriculture - Results of a national farm survey (2012) Saan Ecker, Lyndal Thompson, Robert Kancans, Nyree Stenekes and Thilak Mallawaarachchi Department of Agriculture, Fisheries and Forestry http://www.daff.gov.au/ data/assets/pdf_file/0010/2235934/drivers-practice-change.pdf

ABARES surveyed 1329 farm managers in the broadacre, dairy and horticulture industries in 2010–11 to better understand what motivated farmers to implement sustainable farm practices. It looked at to what degree the adoption of specific soil and land management practices was influenced by a range of motivations. The study demonstrated that decisions to undertake land management practices are influenced by a combination of motivations. These motivations were ranked according to the degree of influence on land management practice decisions: 1) financial benefits and constraints 2) environmental factors 3) personal objectives and circumstances. The results indicate that extension, communication and engagement activities should include information relevant to all three motivational areas — financial, environmental and personal.

8. Adoption of conservation practices by rural landholders, David J. Pannell, Graham R. Marshall, Neil Barr, Allan Curtis, Frank Vanclay and Roger Wilkinson – summary from Pannell, D.J., Marshall, G.R., Barr, N., Curtis, A., Vanclay, F. and Wilkinson, R. (2006). Understanding and

promoting adoption of conservation practices by rural landholders. Australian Journal of Experimental Agriculture 46(11): 1407-1424.

Dissects the economic, social and psychological factors that influence adoption or non-adoption of new practices. If a practice is not adopted in the long term, it is because landholders are not convinced that it advances their goals sufficiently to outweigh its costs. Points out that programs should avoid putting the main burden for promoting adoption onto communication, education and persuasion activities. This strategy is destined to fail if the innovations being promoted are not sufficiently attractive to the target audience. The innovations need to be adoptable. If they are not, then communication and education activities will simply confirm a landholder's decision not to adopt, as well as degrade the social standing of the field agents of the organisation. Extension providers should invest time and resources in attempting to ascertain whether an innovation is adoptable before proceeding with extension to promote its uptake.

9. Growing the Market for Private Land Conservation Properties, Recommendations for Program Delivery to develop and stimulate the market for private land conservation properties. Leonie Gale, CEO, Foundation for National Parks & Wildlife May 2009.

Relates to the resale market of properties with conservation agreements. Has useful analysis of the barriers to resale of conservation properties and recommendations for overcoming these.

10. How to promote NRM practices and get them adopted (2007) Greening Australia website.

Helpful Greening Australia brochure giving tips for working with landholders on promoting NRM practices.

11. What does "community" mean for farmer adoption of conservation practices? Some logic and evidence by Graham R. Marshall, C.M. Raymond, G. Brown (2009) Occasional Paper, Institute for Rural Futures, University of New England.

Discusses evidence that attempts to help develop farmers' self-reliance in NRM can be counter-productive unless community-based approaches can succeed in developing the 'vertical' social capital needed in the NRM governance system to motivate farmers to reciprocate the help provided to them. Without such social capital, there is a real risk that farmers will predominantly free ride on the help they receive rather than reciprocate it, so that their dependence on external help is reinforced or deepened.

12. Providing social and economic data to support regional natural resource management in the Burnett Mary (2006) Ian Byron, Allan Curtis, Jacinta MacKay, Australian Government Bureau of Rural Sciences.

Presents a summary of key findings from a survey of 600 landholders in the Burnett Mary region in 2004. The mailed survey gathered information regarding the key social and economic factors affecting landholder

decision-making about the adoption of practices expected to improve the management of natural resources in the Burnett Mary region of Southeast Queensland.

13. Social acceptability of a duty of care for biodiversity (2010) G. Earl, A. Curtis, C. Allan and S. McDonald Australasian Journal of Environmental Management, Volume 17.

Reports on two surveys in rural Victoria (Corangamite and Wimmera) on landholder attitudes towards the concept of "duty of care" towards biodiversity on private land. The surveys canvassed support for the idea that landholders should be obliged to take reasonable steps to avoid foreseeable harm to biodiversity. Eg The majority of Corangamite respondents (54%) agreed with the proposition that it is reasonable that the wider community asks landholders to act in ways that will not harm native plants and animals, but support was stronger among non-farmers (69%) than farmers (44%). The report has a useful analysis of the results which are broken down to show differing opinions between farmers and non-farmers, long-term residents vs newer arrivals etc. Farmers and long-term residents are the least supportive of the concept.

14. Public policy, private landholders: Perspectives on policy mechanisms for sustainable land management, Chris Cocklin, Naomi Mautner, Jacqui Dibden, Journal of Environmental Management 85 (2007) pp986–998. (*)

Gives results of landholder surveys regarding the Land Stewardship program in Victoria and the attitudes of landholders on the strengths and limitations of the standard policy tools (regulation, MBIs, voluntary approaches and education/information).

15. Natural resource manager capacity in the expanded Murray Catchment. (2013) Jacobs, B. Institute for Sustainable Futures.

Reports on a process asking communities of NR managers to identify aspects of the five types of capital (human, social, natural, physical and financial) that constrained or enabled their ability to manage natural resources, to rate the degree of constraint or enablement of each indicator, and to suggest collective actions that might remove the constraint (or enhance the enablement). The aim was to use this list of actions to assist in directing investment of limited funding for NRM into areas where it should be of greatest benefit to NRM outcomes. The process could also assist in prioritising investment and enable monitoring, evaluation and reporting MER on change in regional landholder capacity that results from action to build capacity.

16. Social Research for the Great Eastern Ranges Initiative (2011) Mark Morrison, Michael Lockwood and Jenni Greig, Report Prepared for the NSW Environmental Trust and Hawkesbury Nepean Catchment Management Authority. (*)

Presents results of a survey of 796 landholders in Southern Highlands and Tablelands of NSW regarding how to effectively engage with them and their preferences for different forms of support. The research identified 5 different landholder segments – two farmer segments called "Quality Operators and Traditional Farmers", and three non-farmer segments called "Professional Lifestylers, Retiree Lifetsylers and Blue Collar Blockies". The segments and their attitudes towards NRM/participation in NRM programs are analysed. It is shown how programs, "key messages" and communication channels need to be carefully targeted at certain segments because the segments differ widely in their attitudes and preferences of program type and communication methods.

17. Landholder perceptions on remnant vegetation on private land in the Box - Ironbark region of northern Victoria (1999) Hamilton, S., Dettman, P. and Curtis, A. National Research and Development Program on Rehabilitation, Management and Conservation of Remnant Vegetation, Research Report 1/00. (*)

Older but still useful analysis of landholder attitudes in Victoria. 358 landholders were surveyed and attitudes of those with properties greater or lesser than 150 hectares were compared. Shows that the largest areas of intact vegetation are on the larger properties (80% of the total remnant area was on the larger properties, which made up 50% of the landholders by number Nb the smaller properties make up only 4% of the total land area and 20% of the remnant vegetation). The larger property landholders are less likely to be involved in conservation, although the remnant areas on the larger properties tend to be larger patches and in better ecological condition than those on the smaller properties. They therefore should be a priority for any conservation programs.

Concludes that for the larger property holders (who generally derive their income largely on-property), the main impediment for the conservation and management of Box-Ironbark remnants is the need for the property to be productive and profitable. However for smaller property landholders who derive their predominant income off-farm, it is a lack of time and/or knowledge. They also conclude that attempts to protect the Box Ironbark will be unsuccessful if they do not engage the larger property owners.

18. Assessing conservation opportunity on private land: Socio-economic, behavioural, and spatial dimensions (2011) Christopher M. Raymond, Gregory Brown, Journal of Environmental Management 92 (*)

Survey of 659 landholder in South Australian MDB region. Landholders were divided into "highly engaged", "moderately engaged" and "disengaged" according to the proportion of their properties they had planted with native trees. Points out that high conservation value land is managed by landholders with all levels of engagement – this needs to be taken into account by conservation program managers/policy makers. The potential for revegetation seems most promising within the moderately engaged landholder group considering the vast amount of land managed by this group in areas of high ecological value. They suggest that incentive schemes which purchase conservation need to be targeted at disengaged landholders; mentoring schemes led by commercial farmers highly engaged in native vegetation planting should be

directed at moderately engaged landholders, and; awards programs which acknowledge conservation successes should be targeted at highly engaged landholders. It should be recognised that the moderately engaged landholders own by far the most land.

19. Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior? (2002) Anja Kollmuss and Julian Agyeman, Environmental Education Research, 8: 3, 239 — 260

Looks in detail at the psychology of how and why people make decisions about their environmental behavior. They look at how factors such as motivation, environmental knowledge, values and attitudes interact to affect environmental behaviour. They quote research showing that people choose the proenvironmental behaviours that demand the least cost. Cost is not strictly in the economic sense but in a broader psychological sense that includes, among other factors, the time and effort needed to undertake a pro-environmental behavior. The study showed that environmental attitude and low-cost pro-environmental behavior (eg recycling) do correlate signicantly. People who care about the environment tend to engage in activities such as recycling but do not necessary engage in activities that are more costly and inconvenient such as driving or flying less.

20. Learning Conservation: the role of conservation covenants in landscape redesign at Project Hindmarsh, Victoria, Chris Harrington, Ruth Lane & David Mercer, Australian Geographer Volume 37, Issue 2, 2006

Reports on interviews with landholders with conservation covenants in Victoria. Concluded that better networking amongst covenanters would be good to support them, plus better engagement between the covenanters and the general farming community would allow them to become agents of change in the community. Currently there are cultural barriers between the two groups and insufficient incentives to engage with each other to reconcile their differences.

21. What influences farmers to keep trees? A study from the Brigalow Belt, Queensland (2008) Leonie Seabrook, Clive McAlpine and Rod Fensham, Landscape and Urban Planning (84) pp 266-281.

Results of a study of 30 landholders to identify the relationships between, and influence of, the demographic, economic and cultural values of landholders on the retention of native trees on farms. It found that the strongest correlation with tree retention was property size – indicating that once an adequate income was generated from a given area of land, there is less need to clear trees from land in excess of this area. Education and training levels were also positively correlated with tree retention, but not as strongly as property size.

22. Landowner Motivations for Watershed Restoration: Lessons from Five Watersheds (2008) Rosenberg, S. and R.D. Margerum Journal of Environmental Planning and Management, 51(4): 477-496.

Results of a landholder survey in Oregon looking at landholder motivations and preferences for watershed restoration efforts. Concludes that watershed initiatives need to understand landowner characteristics and motivating factors to better promote watershed restoration and target outreach efforts.

23. Taking Over the Reins: Trends and Impacts of Changes in Rural Property Ownership (2010) Mendham, E. and Curtis, A. Society & Natural Resources, 23: 7, 653-668. (*)

Analyses property turnover in the Corangamite catchment west of Melbourne. Points out that ownership of rural properties is turning over faster than ever before, with about 50% of properties predicted to be sold over the next decade. New property owners are significantly different from longer term landholders in that they own smaller properties; are less likely to be farmers by occupation; self-report lower levels of knowledge of land management; are more likely to value conservation over agricultural production; and are less likely to adopt recommended sustainability practices. The implications of these trends for natural resource management are explored, including the difficulties of engaging an increasing number of non farmer and absentee landholders. The extent of this turnover rate may depend on whether or not the area has high amenity.

This has important implications for PLC in NSW. Although the turnover rates mentioned cannot be extrapolated for all regions of the state, it would be relevant particularly for NSW coastal and tableland regions. (see also "The Natural Resource Management Implications of Rural Property Turnover" 2012 by Mendham, Curtis and Millar, Ecology and Society 17(4))

24. The social drivers of natural resource management in the Wimmera region (2012) Curtis, Allan and Mendham, Emily, Institute for Land, Water and Society, Charles Sturt University, Albury, NSW, 2640.

Report of 494 landholders surveyed in the Wimmera region of Victoria to look at adoption of NRM practices and advise how to better engage rural landholders. Nb this is the third of three Wimmera social benchmarking surveys at 5-yearly intervals between 2002 and 2011. Interesting analysis of the changing demography of the region – it showed the significant differences between the attitudes of farmer and nonfarmer landholder groups and the major change in the proportion of respondents identifying as farmers by occupation (from 80% in 2002 to 56% in 2011). It found there was an increase between 2007 and 2011 in the landholder commitment to a stewardship ethic. Also found that, in 2011 there was for the first time in the Wimmera surveys, a small majority of respondents exhibiting a stewardship ethic (52%).

25. Understanding social and economic influences on natural resource management decisions (2005) Jeanette Stanley, Beth Clouston & Jim Binney, Queensland Department of Natural Resources, Mines and Water. (*)

Analyses social and economic drivers and constraints which influence poor natural resources management decisions and uptake of sustainable NRM practices. Finds that education levels and age are not good predictors of uptake; that in small communities the power of social acceptance can discourage people from taking up new practices; having a "stewardship attitude" towards the land will not necessarily lead to changed practices due to other constraining factors (ie usually the need to maintain short term productivity).

26. Corangamite region social benchmarking survey 2006 Allan Curtis, Penny Cooke, Simon McDonald, Emily Mendham, Charles Sturt University Institute for Land, Water and Society.

This survey of 552 landholders was designed to establish a socio economic benchmark of the Corangamite catchment in Victoria. It also looked at landholder adoption of recommended NRM practices and landholder response to a range of policy options.

Explains the significant differences between landholders who are more recently arrived (ie less than 10 years) and the long standing landholders. New settlers tend to operate smaller properties, are younger and less likely to be farmers by occupation. Newer residents were more concerned about the impact of land clearing on biodiversity and placed higher value on their property providing habitat. Newer residents are more likely to have some part of their property under a conservation covenant (or are planning to). There are some important differences between the information sources relied upon by newer residents and longer-term residents - newer residents are less likely to use the local CMA, the Victorian Farmers Federation, DPI and Landcare groups and are more likely to use the internet and universities.

When asked about their preferred arrangements for encouraging landholder uptake of better NRM practices, a reduction in local government rates was the most preferred option, followed by a fixed grant incentive scheme administered by the CMA, and a tax rebate administered by the Commonwealth.

27. Concepts for private sector funded conservation using tax-effective instruments (2007) Land and Water Australia, Canberra

This study was intended to outline a conceptual model for the use of taxation to improve the flow of funds to conservation. Its particular focus is the use of private funds to ensure conservation of high value environments on private farms, through the marriage of taxation arrangements with eco-service markets and regional management of conservation programs by farmer-led conservation organisations. The report outlines how philanthropy, markets and taxation arrangements can be combined into a business model that is consistent with the private ownership and private investment basis of our economy. It places

Annexure 1 – Literature summary – 2013 - Social research regarding Private Land Conservation (PLC) landholders, their motivations and barriers to adoption of conservation practices responsibility, authority and resources into the hands of conservation-minded farmers within a structure which ensures real accountability for conservation outcomes. $Annexure\ 1-Literature\ summary\ -2013\ -\ Social\ research\ regarding\ Private\ Land\ Conservation\ (PLC)\ landholders,\ their\ landholders,\ their\ landholders,\ their\ landholders,\ landholders$ motivations and barriers to adoption of conservation practices