Independent Biodiversity Legislation Review
Taronga Conservation Society Australia

Theme 1: Objects and principles for biodiversity conservation

1. <u>Should there be an aspirational goal for biodiversity conservation?</u>

Yes. The conservation of biodiversity needs to be considered a priority to protect and secure NSW natural resources, native wildlife and vegetation, and healthy ecosystems. Because it is critical that we evaluate and understand the effectiveness of efforts in protecting/conserving biodiversity, the aspirational goal should be ambitious with clear, measurable, time-bound targets. The aspirational goal should become the guiding framework for biodiversity conservation in NSW and should be referred to in all environmental legislative documents. The aspirational goal will define success in conserving biodiversity and will be measured in biological terms. The time frame of the aspirational goal should be long but should logically produce clear shorter term goals to ensure the trajectory for the long term goals would be met.

Australia's Biodiversity Conservation Strategy for 2010-2030 has 10 national measurable and time-bound targets that could be used as a guide for NSW, for example. The national targets are

1. By 2015, achieve a 25% increase in the number of Australians and public and private organisations who participate in biodiversity conservation activities.
2. By 2015, achieve a 25% increase in employment and participation of Indigenous peoples in biodiversity conservation.
3. By 2015, achieve a doubling of the value of complementary markets for ecosystem services.
4. By 2015, achieve a national increase of 600,000 km2 of native habitat managed primarily for biodiversity conservation across terrestrial, aquatic and marine environments.
5. By 2015, 1,000 km2 of fragmented landscapes and aquatic systems are being restored to improve ecological connectivity.
6. By 2015, four collaborative continental-scale linkages are established and managed to improve ecological connectivity.
7. By 2015, reduce by at least 10% the impacts of invasive species on threatened species and ecological communities in terrestrial, aquatic and marine environments.
8. By 2015, nationally agreed science and knowledge priorities for biodiversity conservation are guiding research activities.
9. By 2015, all jurisdictions will review relevant legislation, policies and programs to maximise alignment with Australia's Biodiversity Conservation Strategy.
10. By 2015, establish a national long-term biodiversity monitoring and reporting system.

We propose for the overarching goal for NSW Biodiversity Conservation:
"To maximise the number of species and ecosystems that are secure from threats and have a positive predicted trajectory for at least 100 years".

2. <u>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?</u>

Overall, objects are still valid despite some being 40 years old (National Parks and Wildlife Act 1974), because they are general. However, they are not 100% aligned with current international and national frameworks and strategies. For example, the Strategic Plan for Biodiversity 2011-2020 established in Nagoya, Japan set up the ambition target "*Take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human wellbeing, and poverty eradication...'.*

To promote a more integrated, large-scale, approach with clarity and limit duplication, the legal instruments of NSW should be directly informed by and coherent with the National Strategy. We suggest the objects are revised in line with the commitments set up in the Australia's Biodiversity Conservation Strategy for 2010-2030 (http://www.environment.gov.au/biodiversity/publications). Only where this strategy is insufficient or inconsistent with the needs of NSW biodiversity, should the NSW instruments differ significantly.

Consistent with the national approach, NSW should also have the clear objective to develop a system of protected areas that are *comprehensive* – it includes regional scale ecosystems in each bioregion; *adequate* – it includes sufficient levels of each ecosystem to provide ecological viability and maintain population, species and communities; and *representative* – it includes areas that encompass the variability of habitat within ecosystems. This goal has been endorsed at a national level through the National Strategy for Conservation of Australia's Biological Diversity (2010) and the National Forest Policy Statement (1992).

The International Convention on Biological Diversity requires a nation's biodiversity strategy to be integrated and mainstreamed into planning and monitoring of all activities which can have an impact (positive and negative) on biodiversity (http://www.cbd.int/). All of our national and state conservation objectives should be developed and implemented in line with this international standard.

Twenty Biodiversity targets were established in Nagoya, Japan, under the five goals of the Strategic Plan for Biodiversity (Aichi Biodiversity Targets). The rationale for the Aichi targets (and of the strategic plan) is that biological diversity underpins ecosystem functioning and the provision of ecosystem services essential for human well-being. The strategy and targets set a framework for achievement in biodiversity conservation at the global level and should be tailored to national priorities. Overall, the targets put biodiversity at the centre of government and economic decisions and policies and aim to protect, promote sustainable use of, and reduce direct pressures on biodiversity, and also to enhance community engagement by participatory planning, knowledge management and capacity building.

As an example, the UK has developed a set of measurable and time-bound goals informed by Aichi targets, to protect and manage biodiversity (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf).
Some suggestions of amendments of the current objects (in bold):
Native vegetation Act – Suggestion: **move current item c** '*protect native vegetation of high conservation value having regard to its contribution to such matters as water quality, biodiversity, or the prevention of salinity or land degradation*' **to the top, becoming item a**.

Climate change is considered a threat to biodiversity, not only in its own right but also by magnifying the impacts of existing threats. Therefore, climate change must be of primary concern for governments and directly addressed in the legislative objects.

National Parks and Wildlife Act – Should assert that a comprehensive, adequate and representative network of protected areas is a primary conservation measure by NSW government and its establishment and management are priorities.
Suggestion: a) *the conservation and **effective protection** of nature, including but not limited to, the conservation of: i. habitat, ecosystems and ecosystem processes, and ii. biological diversity at the community, species and genetic levels.*
b) Fostering public appreciation, understanding, and enjoyment of nature and cultural heritage and their conservation
c) Engaging and empowering general public to act positively for biodiversity and natural systems.

d) Creating, protecting and managing a coherent and resilient ecological network of protected areas

3. <u>To what extent are the current objects being met?</u>

Biodiversity is under threat worldwide and Australia is no exception. The objects are not being met as, despite our efforts to date, most of the drivers of biodiversity decline have yet to be adequately addressed. In NSW, biodiversity is still being lost by habitat degradation, land clearing, invasive species, commercial logging, expansion of mining activities, port expansions etc. Environmental agencies appear powerless to enforce and legal instruments (and common sense) are not being used. Further, the licensing process is not transparent which makes it difficult for the wider community to evaluate the government decisions. The legal instruments must aim to strike an effective balance between the needs of the human communities and the longevity of the neighbouring ecosystems. Developing legal instruments that are based on the ecosystem approach from the International Union for Conservation of Nature (IUCN), which recognises that humans are part of the ecosystem and that our activities both affect the ecosystem and depend on it, is a way of balancing these needs.

Some recent examples of conservation objects not being met are the environmental approval for the Whitehaven's open coal mine development at Leard State Forest, Maules Creek, NSW; one of the last forest remnants in the Liverpool plains area. The protection of remaining unique woodland forest across NSW, for example, should be considered primary priorities, and a strategic approach taken to assessing the short term gains of open-cut coal mining compared with the loss of long term ecosystem stability. Further, management of environmental flows and water extraction in the Murray-Darling river basin must be weighed against the long term degradation of ecosystems that will inevitably lead to species decline and loss of ecosystem services.

In order to meet the objectives laid out in all of these documents, the power behind them must be at least equivalent to instruments that facilitate planning and development changes and confidently enforced. However, in order to avoid claims that biodiversity legislation is just "green tape" acting as an impediment to development, the requirements for environmental assessment needs to be clear, the time frame by which a decision is made needs to be enforced and all stakeholders need to be engaged, their input considered and a response provided.

4. <u>Could the objects of the current laws be simplified and integrated? if so, how?</u>

The current legislation needs to be updated with measurable targets associated to each. The referred Acts have many points of similarity and three of the four, the National Parks and Wildlife Act 1974, the Threatened Species Conservation Act 1995, and the Native Vegetation Act 2003, could be integrated into a single instrument, similar to how the Commonwealth developed the Environment Protection and Biodiversity Conservation (EPBC) Act 1999. The Nature Conservation Trust Act 2001 should remain separate as this is more focussed on achieving conservation through agreements with private landholders. This would promote a more integrated, large-scale, approach to biodiversity conservation in NSW these legal instruments need to be coherent with each other to facilitate cross-referral and consistency. Paramount is for biodiversity to be considered in all national development policies and strategies and economic sectors. As a suggestion, the National Parks and Wildlife Act and the Nature Conservation Trust Act could explicitly refer to each other and, among their objects, aim to establish a 'coherent and resilient ecological network' similar to what has been proposed in the UK (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf).

This network concept should be applied to terrestrial and marine habitats so there is a better integration of conservation efforts between land and sea. The protected areas, natural or semi-natural, public or private, should all be integrated in the landscape to allow movement of organisms and gene flow. An integrated strategy would simplify the information exchange on mechanisms of protection,

agencies responsible and avenues of support for landscape managers on a private and public level. This strategy should also be supported by a website accessible by all that describes all the opportunities that operate under this legislation and the federal legislation to support conservation activities.

Theme 5: Wildlife management

1. **Have threats to biodiversity posed by:**

b) Feral animals and weeds been effectively managed?

No. Funding for feral animal control appears to operate on a short funding cycle inappropriate to conservation. This unreliability means that, for example, Taronga investment in a breed for release program that is established to run with demographic and genetic integrity for 30 years is wasted when a fox baiting program operates on a 3-year funding cycle. This not only compromises the success of such a program but seriously compromises the duty of care Taronga extends by ensuring that threatening process are ameliorated before animals in Taronga care are released.

c) Illegally imported species been effectively managed?

No. There is no coordination between the agencies responsible for the control and disposition of animals confiscated because they are abandoned or been held illegally. Seizures can be made under several jurisdictions and the fate of an animal depends on the legislation being used. The lack of coordination between agencies responsible for border seizures, police seizures and the RSPCA means there is no consistent approach to illegally imported animals. There is little understanding of the role of the Commonwealth in the seizure of CITES-listed species and the legislation does not reference all stakeholders: Department of Primary Industries (under Exhibited Animals Protection Act and Non-indigenous Animals Advisory Committee) or the Vertebrate Pest Committee, or AQIS on the threat posed by some animals by disease or as a pest.

2. **Has the NPW Act and the supporting policy framework led to a positive change in the welfare of native animals?**

No. Animal welfare is a secondary consideration in the interpretation of the National Parks and Wildlife Act of 1974 and Regulations of 2009. The treatment of native fauna by rehabilitation groups licensed by OEH panders to human values to the complete detriment of the welfare interests of any animal. The language in Section 120 of the Act is anthropocentric in interpretation: 'harm' is treated as it would if applied to a person and the consequence is poor welfare decision making.

Government does have a role in ensuring the welfare of individual animals which is way beyond the remit of Prevention of Cruelty to Animals Act 1979. Though this legislation is useful if responsibly applied it does not address the welfare issues consequent to land clearing or degradation, habitat modification and the rendering of landscapes into a condition in which animals cannot cope.
The tone of the Act and its Regulations is that it is better to die slowly in the wild than live in human care or be dead. This application of human values under the banner of animal rights should be resisted by OEH in both the drafting and interpretation of legislation.

3. **Are the provisions for marine mammals effective?**

The provisions for marine mammals are for the most part effective but would become more effective if they were consistent with Commonwealth legislation which applies to Commonwealth waters. Marine mammals are considered listed marine species under the EPBC Act so that also provides a level of protection. It would make sense for this to be consistent in state waters as well.
The legislation needs to make better provisions for:

- Understanding the full range of threats to marine mammals and their ecosystems (e.g. by-catch, competition with fisheries, harassment from tourism, habitat loss, pollution, and climate change), as well as their cumulative impacts;
- Reducing human impacts through the development and implementation of scientifically-based monitoring and mitigation strategies;
- Providing appropriate legal protection for all areas identified as critical habitat to ensure marine mammals maintain their roles in the ecosystem;
- Monitoring the effectiveness of new regulations that are incorporated in management plans and providing feedback to industry and key stakeholders;
- Implementing an enforcement plan for dolphin and whale-watching to ensure compliance from commercial operators and recreational boat users;
- Responding to climate change by incorporating flexibility in the legislation and allowing for an adaptive approach to marine mammal management.

This could be achieved through sections 112C to 112E by incorporating the above into the provisions for preparing, adopting and carrying out a management plan for marine mammals.

The making of management plans for marine mammals should also consider the Convention for Biological Diversity's "ecosystem approach". This is a way of managing human activities sustainably and requires an integrated approach that considers all ecosystem components (e.g. human activities, habitats and species, and physical processes), ecosystem functions and resulting ecosystem services, and requires engaged participation of stakeholders.

In the marine environment the ecosystem approach is essentially the comprehensive integrated management of human activities based on best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of the marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity. In marine environments there are four main types of ecosystem services: 'provisioning services' (e.g. harvesting of fish, shellfish and algae); 'regulating services' (e.g. regulation of climate, wastes and water quality); 'cultural services' (e.g. recreational, cultural and spiritual benefits); and 'supporting services' (e.g. nutrient cycling, marine habitats that support fisheries). States and the Commonwealth should establish bilateral agreements in carrying out the plans for biodiversity so that Commonwealth waters and State waters are treated consistently.

4. <u>Is the current framework for wildlife licensing, offences and defences, including those applying to threatened species, easily understood?</u>

The division of responsibilities between Commonwealth, State and i*ntra* State agencies such as Environment and Primary Industries is so unclear that even professionals working in the area are easily confused. The confusion also allows special interest groups to apply legislation in ways that suit their own agendas. This is done almost invariably at the expense of biodiversity conservation, which is the opposite of the objects of the biodiversity legislation. The view that biodiversity is an impediment to human endeavour has to change: 'green tape' is put up as an impediment to development rather than the facilitator it should be. As mentioned above, valuing and securing NSW natural resources, native wildlife and vegetation, and healthy ecosystems must be a priority for the current and future governments.

This is particularly evident when abuses to wildlife laws (including broad-scale land clearing) are brought before magistrates. Penalties are almost invariably token and rarely a disincentive to illegal actions. Magistrates need 'greening' and until that happens no amount of good legislation will help.

5. Is there currently appropriate regulation for the sustainable use and trade of wildlife?

No. In fact there are so many internal contradictions in the various Acts relating to biodiversity conservation (even within NSW, between OEH and DPI) that the term 'sustainable' becomes meaningless. In deed in the modern era the concept of 'sustainable use and trade' of wildlife smacks of exploitation which puts public opinion in some areas ahead of the legislation. The legislation should make it clear that 'harm' can only be justified by good elsewhere and that 'harm' is recognised as having two dimensions, both prudential and environmental.

Theme 6: Information provisions

1. What information should be generated about the different kinds of value of biodiversity and other natural assets in NSW?

A standardised methodology should be applied to increase understanding of ecological, cultural and long term economic roles of species and their habitats.

In addition to the number of individuals that remain in a population and the likely trajectory of that population (current focus of species assessment around the world), we must understand the role of that species in the ecosystem – do they fill a unique and essential niche in the ecosystem, adding resilience, maintaining health and protecting other species? If so, monitoring and action must be prioritised even if that species is not yet considered under significant threat. Similarly, an assessment must be made of the cultural values around different species. The absence of some species from their traditional range make the passing on of cultural traditions impossible. This loss of tradition is a serious national loss and one that must be recognised and valued. Similarly, we need to value the opportunity for wildlife umbrella species or ambassador species to generate support from the community for not only these species but for wider conservation efforts.

It is understood that these values are much more difficult to measure and fundamentally less quantifiable than numbers of animals, but that does not obviate the need to start acting on what we do know. A good example is the Tasmanian Devil. At the time of discovery of the Devil Facial Tumour Disease, in 1996, the Tasmanian Devil was common. The disease has now wiped out 70% of the population. As scavengers they had already been identified as ecosystem drivers - cleaning up carcasses, keeping disease levels low and controlling invasive species. At the time resources were allocated to critically endangered species like the Orange-Bellied Parrot whose numbers have been below 50 for many years now due to habitat fragmentation and competition for food sources with invasive species. Few resources were allocated to the devil, listed as "Of Least Concern", and the disease remained undescribed, the mechanism of spread was not yet known but a decrease in devil populations was immediate across diseased regions, and there has been no indication of population recovery. In turn, exotic predators (e.g. cats) have increased, quolls (the next largest native predator in Australia) are now at significant risk and levels of disease have been recorded as increasing in pristine areas of Tasmania. Had we been watching this ecosystem driver, even when it was common, and committed a fraction of the funds now being spent, we might have been able to stem the tide of the financial and ecological cascade now facing the area.

Finally, the economic value of species and ecosystems to the local area and the Nation must be considered. While some arguments can be made for iconic species such as Koalas, the most often cited example is the Great Barrier Reef. We recognise much of the economic value brought to Australia through tourism, food security and coastal protection by the Great Barrier Reef, although the estimated $6 billion annually is likely to be an underestimate. Even with this recognition, short term decision making has resulted in actions that reduce the viability and longevity of the reef, and reduce its ability to withstand the local and global threats we can already foresee. Economic values should be considered on a long term scale and ask not what is it worth to us now, nor how much will it cost to replace, but what

will we have to pay to replace all of the services over the next 100 years that are currently provided to us for free. What is the cost of taking no conservation action?

Taken together – these values indicate the importance of a species/ecosystem. This is an essential assessment technique that must be employed when deciding whether or not to expend resources on this species/ecosystem in preference to others. The associated areas that require definition include the most appropriate action to directly address the threat, the urgency of the action, the cost and the probability of success. These areas are interrelated but must all be defined before a conscious, informed decision can be made.

2. What type, quality and frequency of data should be collected about biodiversity?

Depending on the level of importance and urgency of acting to protect a species/ecosystem, different approaches should be employed. As the importance and urgency both escalate, additional data must be collected to better manage the populations and the habitats and to ensure that any mitigative action is having a positive impact. As a basic measure, species role will inform importance and distribution and abundance are required to inform urgency. Other assessments will inform best practise management. On the ground data would fuel the generation of a well founded picture in the following areas:

Ecological role of species: Expert opinion on species biology could inform a top level map of key ecosystems, identifying essential elements and data deficient elements (large scale effort at inception). Individual processes and species could set priorities for exploration through experimentation by Universities and NGO's (updated continuously and reviewed annually).

Cultural significance: Community groups to be surveyed in culturally relevant ways as to the connection with the species/ecosystem, the willingness to act to protect the species/ecosystem and the perceived threats. This would involve a large scale effort at inception of area/species assessment.

Economic value: Reliant on data from the two sections above. An environmental economic assessment is required including analysis of: 1) the services provided; 2) the feasibility and cost of replacing those services; versus 3) the cost of mitigating threats.

Abundance and distribution: With an emphasis on efficiency it would be possible to analyse data already gathered through disparate means – theses, environmental impact assessments, citizen science, data collection by parks staff. A portal is required to enter, validate, value (with a degree of certainty) and amalgamate these data. Key ecosystems within and outside of protected areas should be included to ensure the state of the environment is captured as a whole. This portal could be an active part of Australian schools, volunteer groups, NGO's, conservation tourism programs throughout NSW, updated constantly, interrogated for status information and identification of knowledge gaps.

Threats and impacts: Expert opinion could inform a list of key present and future threats to ecosystems and specific species. This list would identify threats, order and extent of threat impact, mitigating actions, scale of action to be effective, the probability of need to mitigate several threats simultaneously and estimate costs for each action.

Species health and function: Constant surveillance of dead animals - disease surveys, investigations into mass mortality, analysis with environmental conditions. Examination of perturbation of wildlife behaviour or stress response - change in foraging times, change of population range, level of vigilance, influence of humans, urbanisation, agricultural and mining activity.

Individual and population viability: Population demographics and genetics. Particularly to be monitored for species of significantly declining numbers. e.g. Is one gender more impacted by changing environment than others?

Efficacy of conservation actions: In all cases, the progress along the path of recovery must be measured constantly. Only with reference to the conservation goal, cam progress be measured, so milestones must be identified up front and measured constantly, actions assessed and modified wherever necessary.

Who should be responsible for such a system?

Government, academic and non-government agencies must all act to bring this data but the portal to manage it all must be government run, supported long term, and accessible for analysis by any qualified person. This is essentially research infrastructure that is important in order to make predictions and to see what is happening in real time to biodiversity. The Integrated Marine Observing System is such a system that works for physical and biological marine data and is accessible through the web. A similar system could be developed for terrestrial information.

Long term serial data sets can prove invaluable in understanding the reasons for population changes and developing a system to ensure data are shared and widely available might (in a climate where it is difficult to get support for long term monitoring) go some way towards achieving this.

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

It is highly sporadic, inaccessible, inconsistent, disparate and uncoordinated so the credibility is impossible to judge.

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

Globally, conservation experts now agree that we no longer have the time or resources to preserve every species in our ecosystems as we enter the 6th Mass Extinction Event. Without a conscious monitoring and prioritisation mechanism, humans favour conservation action based on emotional connections (often primates or charismatic megafauna). So, a deliberate prioritisation mechanism is required.

The IUCN Red list is our most commonly used system globally and focuses on population trajectory – the more endangered a population is (IUCN Red List), the greater priority it receives. The 2012 State of the Environment report states that approximately 10% of species on the endangered species list have a neutral or positive prognosis. So conservation business as usual clearly is not effective. **It is clear that the Red List as a stand-alone prioritisation system results in action not being prioritised and resourced until the species is under significant threat.** At this extreme point, the cost is much greater than if action was prioritised at an earlier point, and probability of success is much lower.

Rational systems are now being developed based on a fundamentally sound formula: the benefit in terms of number of species conserved (benefit scope) multiplied by the probability that this will be successful, all divided by the cost of actions. This makes sense at first glance as the greatest number of projects can be performed and potentially the greatest number of species protected. It also means that we will prioritise the lowest cost, easiest species to work with - generalist species that are less likely to perform specific unique roles in the ecosystem. What is not considered here is the cost of losing the services of the species that are de-prioritised because they will cost more or are harder to manage. Species with specific high value roles and perform important jobs in the ecosystem that add resilience and health are considered ecosystem drivers. They are also often more expensive to manage and may

present unique management issues. But if we lose them, we have to find a way to replace those services and/or deal with the consequences.

A system that clearly lays out the importance of protecting the species (see above) and the level of redundancy of services provided by that species should be combined with the threatened species list to determine the urgency with which we need to act as part of a systematic uniform system employed by agencies across borders.

To prioritise species/areas:
Role + Redundancy (low score for multiple redundancies) **= Importance**
Importance x (Imminent Threat/Abundance) = Urgency

The next phase to determine efficacy will depend on the outcome required. If the species is highly important and there is low redundancy, but the species is abundant, then a watching brief may be all that is called for, whereas specific imminent threats may incur extensive mitigation such as invasive species control or biosecurity management. The longevity of impact of actions must be taken into account along with probability of success when prioritising actions.

Efficiency must be calculated but the cost of acting must also be weighed against the cost of maintaining the effect (e.g. perpetual fox baiting). Most importantly the cost of delaying action needs to be considered. How long can action be delayed without causing significant increase in costs and decrease in probability because the threat has progressed, spread and /or caused significant degeneration

While the listing of key threatening processes has some merit in guiding actions, the effectiveness of the actions needs to be assessed by the long term outcomes in removing the threatening process. It is important to assess the long term costs and benefits – for example, compare over say 100 years what is the cost of doing nothing, what is the cost and benefit of doing a little bit over many years, what is the cost of doing a comprehensive job now or in the near future that would require little follow up over the longer time frame.

5. Should threatened species listing decisions be decoupled from decisions on conservation actions (including recovery planning) and regulatory processes?
It plays an important role in determining urgency. In itself the threatened species listing does not indicate which actions should be undertaken and should not by itself determine priorities. However, threatened species listings on a landscape scale can inform conservation actions.

6. To what extent, if any, does having national and state lists of threatened species cause confusion, regulatory burden or duplication of conservation effort? How could national and state lists be rationalised?
Knowing the ultimate conservation goal is the only way to answer this question. If the goal is to maintain the species in the wild, then the National list must take precedence and have state lists as a subset of that list. However, if persistence in the state is paramount, then the state list should take precedence.

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?
Listing critical habitat is effective assuming that the following criteria are met consistently:

1) a diversity of native habitats is selected.
2) these habitats provide resilience and health to a wider catchment area.
3) a long term commitment is made to ensure the security, health and function of these habitats in the long term.

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

Of course - as state resources for the environment, and particularly monitoring, dwindle we will be more and more reliant on private groups and resources to monitor and protect our wildlife and habitats. In order to do this effectively we need to:

1) provide priority areas of interest/need;
2) develop protocols so that these data are consistent with other data;
3) provide training;
4) collect data through portal; and
5) make data available to answer key questions and guide conservation decision making.