



3 November 2011

Tim Moore and Ron Dyer
Co-chairs
NSW Planning System Review
GPO Box 39
Sydney NSW 2001

Dear Mr Moore and Mr Dyer,

Please find attached a submission to the NSW planning system review from the Natural Resources Commission.

During discussions with the planning review team in August 2011, the Commission was asked to make a submission to give the team the benefit of the Commission's insights. This was to focus particularly on the operation of the *State Environmental Planning Policy 71 – Coastal Protection*, but also cover other issues relevant to the overall alignment between natural resource management and statutory land use planning.

I would be pleased to discuss this submission with you at your convenience.

Yours sincerely,

A handwritten signature in black ink that reads "John Williams". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

John Williams
Commissioner

1 Summary

The Natural Resources Commission (NRC) is an independent body providing the NSW Government with advice on natural resource management in the environmental, economic, social and cultural interests of the state.¹

The Commission's primary areas of responsibility are to independently review and audit strategic, regional planning for catchment management, and advise government on progress in implementing natural resource management policy and programs in NSW. Further, it has specific roles under *State Environmental Planning Policy No 71 – Coastal Protection* (SEPP 71) to advise the Minister on adopting master plans, or considering requests to waive the need for a master plan.²

The NRC has previously reported³ on the need for greater alignment between land use planning, and the mechanisms for managing natural resources through government activities such as catchment management, water allocation planning, biodiversity management, and protected areas. The review of NSW planning legislation provides an opportunity to create a more coherent and aligned system for managing landscapes in NSW; a system that manages development while aiming to improve or maintain the essential landscape functions that support the environmental, economic, social and cultural attributes of value to current and future communities.

During discussions with the planning review team in August 2011, the Commission was asked to make a submission to give the team the benefit of the NRC's insights. This was to focus particularly on the operation of SEPP 71, but also cover other issues relevant to the overall alignment between natural resource management and statutory land use planning.

This submission details the NRC's experience and views on the role and effectiveness of SEPP 71 in protecting sensitive coastal areas. It then outlines a broader suite of issues and principles relevant to the effective functioning of the overall planning system. In particular, the fundamental principle that to ensure sustainable development there needs to be a clear priority given to comprehensive and strategic planning that directs all subsidiary decision-making.

1.1 Introduction to the NRC

The NRC provides independent advice to the NSW Government on what is working in natural resource management, what needs fixing and how it is tracking against its policies and targets.

As a result of the Commission's early recommendations, the Government adopted a set of 13 state-wide targets for natural resource management, and the *Standard for Quality Natural Resource Management*. The Commission reviews catchment action plans, which are strategic, regional-scale plans for catchment management, and recommends whether they should be approved. The Commission then audits how effectively these plans are being implemented on the ground. These

¹ *Natural Resources Commission Act 2003*

² Pursuant to 18(1)(e) and 21(2) of SEPP 71

³ See a) Natural Resources Commission (2010), *Progress towards healthy resilient landscapes: Implementing the Standard, targets and catchment action plans*, December, pg. 54; b) Natural Resources Commission (2008), *Progress report on effective implementation of catchment action plans*, November, pg. 36; c) Natural Resources Commission (2005), *Recommendations: State-wide standard and targets*, September, pg 49.

plans are increasingly taking a whole-of-government approach, coordinating the actions of a range of partners in natural resource management.⁴

The Commission also conducts reviews of complex scientific and policy issues under legislation or as requested by the Government. This may involve conducting forest assessments, reviewing assessment processes for clearing native vegetation, supervising the Snowy Mountains Cloud Seeding Trial and reviewing water sharing plans. The NRC also has a specific role under SEPP 71 that is explained in the following sections.

⁴ Natural Resources Commission (2011), *Framework for assessing and recommending upgraded catchment action plans (v1.1)*, August.

2 Implementation of SEPP 71

The NRC has an independent review role in the application of SEPP 71. This policy aims to protect the natural, cultural, recreational, economic and aesthetic attributes of the NSW coast; to encourage a strategic approach to coastal management; and to further the implementation of the *1997 NSW Coastal Policy*. Master planning is one of the mechanisms SEPP 71 uses to achieve its aims, and is targeted towards large subdivisions and subdivisions in sensitive coastal locations. A master plan provides a more detailed description of a proposal.

The Minister for Planning and Infrastructure must consult the NRC when considering waiving the need for a master plan or adopting a draft master plan for certain coastal developments.

In November 2006, the NRC provided the Minister with generic advice to waive the need for a master plan for all minor development proposals. This was on the basis that during 2005-06 approximately 100 coastal development applications were referred to the NRC, and around 90 per cent of these applications were for minor developments (2-3 lot subdivisions). This advice was tendered to streamline the development application process for minor proposals while maintaining a strong system of independent review for the more complex applications.

Since 2007-08, the NRC has not received any master plans for review, and has reviewed 41 requests to waive the need for a master plan. The NRC has recommended that the master plan requirement not be waived for 19 of these 41 requests.

2.1 Observations on master planning

The NRC supports the objectives of SEPP 71, but is concerned that the master planning option does not facilitate good, strategic decision-making at a scale that is appropriate for maintaining important coastal values and functions.

In practice, master planning is often not happening. In 2010-11 the NRC reviewed seven applications to waive master planning requirements under SEPP 71. The NRC recommended that the master plan be waived for one of those cases, and that a master plan should be required for the remaining six.

The NRC assessments flagged key provisions that were generally not well considered in the waiver applications received including: measures to protect cultural places; impacts of coastal processes and hazards; impacts on water quality of coastal waterbodies due to sewage effluent; and impact of untreated stormwater discharge on coastal waterbodies.

In most cases, the Minister's decision was to waive the requirement to prepare a master plan and to require the council to consider the matters raised by the NRC.

In 2007 the NRC reported concerns about the relationship between subdivision and development consent. The master planning process of SEPP 71 is only triggered for subdivisions, not for all development that can impact on sensitive coastal locations. Developers can effectively circumvent the master planning requirements of SEPP 71 by applying to subdivide the land after the consent authority has granted consent for development. Once development consent has been granted there is limited scope to improve consideration of natural resource outcomes from a development via SEPP 71 master planning provisions.⁵

⁵ Natural Resources Commission (2007), *Master Planning under State Environmental Planning Policy 71 - Coastal Protection: Periodic progress report*, April.

In some cases, the NRC found that the developments were significant, but that there was limited scope to mitigate any potential impacts from the design of the project through master planning, given that development consent for the land use has already been granted. These considerations were happening far too late in the process to meet the objectives of the SEPP.

SEPP 71 does not explicitly recognise or promote the state-wide targets for natural resource management. Development assessments under SEPP 71 (or any other SEPP) are not required to consider the development's impact on NSW's ability to meet the state-wide targets for natural resources as reflected regionally through the relevant catchment action plan.

Consequently, the implementation of SEPP 71 does not always match its strategic intent. Under the existing arrangements, it is apparent that the independent oversight role of the NRC at development proposal scale, and at such a late stage in the planning process is not effective. Making assessments and plans for coastal protection at the development assessment stage misses the opportunities to strategically manage the coastal zone at a more appropriate scale, earlier in the process.

2.2 Options for improving coastal protection

The NRC suggests that integrated strategic planning, with appropriate independent oversight, is the preferred way to make sure coastal protection issues are appropriately managed, rather than managing complex issues at the stage of individual development proposals. This would aim to ensure coastal protection issues are considered earlier in the planning and approval processes, and cumulatively at a regional scale. Possible principles of such an approach are discussed in the remainder of this submission.

However, in the absence of a more strategic approach, some independent oversight of the SEPP's implementation at a local level would be appropriate, supported by strengthening the natural resource management expertise available to the local environmental plan (LEP) review panel.

Since most responsibility for SEPP 71 is delegated to local government, both through Ministerial decisions on master plan waivers and requirements in the Standard Instrument for LEPs, there may be a need for some independent oversight or audit to make sure the provisions of the SEPP are being effectively implemented at the local level.

Further, the NRC is concerned there may not be adequate natural resource management expertise on the panel that advises the Director General on the development of LEPs. The NRC suggests that natural resource management expertise be made available to the panel, either by expanding the membership, or establishing triggers for when the panel must seek appropriate input.

In addition, new catchment action plans may highlight opportunities for better coastal protection. Catchment management authorities along the coast are currently co-ordinating the preparation of upgraded catchment action plans using a whole-of-government and community planning process, and analysing catchments based on linked social-ecological systems. During this upgrade process and the NRC's subsequent assessment of the plans, any inconsistencies between the priorities identified in catchment action plans, and those reflected in LEPs or regional strategies should become apparent, and could inform future revisions.

3 General comments on the planning system review

The community is increasingly debating the tensions between food, energy and water security, climate change adaptation and carbon sequestration, biodiversity conservation, urban development and mining. The planning system and its interaction with other legislation is where these tensions become apparent and can be managed, and where the community can work with government to make decisions about how these demands can be reconciled at different scales.

This review is an opportunity to more strategically position natural resource management within the planning system to ensure that, as a community, we: better manage cumulative risk; properly value the linkages between environmental condition and socio-economic well-being; and preserve future options for alternative land uses not yet considered. It is also an opportunity to streamline processes at the development proposal scale by having properly dealt with significant environmental concerns earlier in the planning process, at a more appropriate scale.

In addition to managing development, the planning system should give equal consideration to improving the functionality and resilience of landscapes to support the environmental, economic, social and cultural values of communities now, and in the future. We need to figure out what our landscape can sustain, and plan within those limits. The planning process should facilitate a shared vision for our landscapes and communities that keeps options open and avoids future liabilities from planning decisions that push the landscape beyond the point from which it can recover.

The natural resource management institutions in NSW have made good progress in: strategic regional-scale planning for landscape management; community engagement; and delivering projects on the ground to improve landscape resilience.⁶ NSW now needs to better align land use planning, catchment management, mining and water resource management systems at a regional-scale with the objectives of maintaining and improving landscape function. This will improve the consistency and efficiency of government policy, reduce future risk, and put NSW in a better position to achieve the goals of ecologically sustainable development already enshrined in the planning legislation.

3.1 Concerns with the existing planning system

The planning system does not explicitly support the state-wide goals to improve or maintain landscapes and there is limited alignment between the planning system, and other government initiatives for landscape management.

The NRC has reported on the need for greater alignment between the land use planning system and natural resource management.⁷ The Commission has also commented on the need for land use planning to take a landscape approach⁸ that is consistent with the principles of 'improving or maintaining' the landscape.

In 2003, the government introduced a package of legislation which ended broad-scale clearing of native vegetation, and established a regional approach to catchment planning and management.⁹

⁶ Natural Resources Commission (2010), *op. cit.*

⁷ See footnote 3.

⁸ Natural Resources Commission (2007), *Final report – a landscape approach to vegetation management*, June.

⁹ *Native Vegetation Act 2003, Catchment Management Authorities Act 2003, Natural Resources Commission Act 2003.*

The aim was to implement integrated catchment management¹⁰, with an overall objective of functioning, resilient landscapes that can support the environmental, economic, social and cultural values of communities for the long term. Notably, the aim of the 13 state-wide targets for natural resource management, and native vegetation management under legislation, is to 'improve or maintain' the condition of the landscape.

The land use planning and mining legislation, do not explicitly require consideration of the state-wide targets, or the improve or maintain principle. There are some existing mechanisms for linking the natural resource management with planning, for example, by requiring regional strategies (with which LEPs must adhere) to consider catchment action plans, and by requiring catchment action plans to have regard to environmental planning instruments. However, these mechanisms do not appear to be ensuring that natural resource management is considered in decision-making, and the approach is at best variable since the regional strategies only cover some parts of the state.

The NRC has strongly recommended that upgraded catchment action plans are spatially explicit to make them more immediately relevant to land use planning.

Planning resources are disproportionately focussed on development assessment rather than strategic planning.

The NRC is concerned by the imbalance of planning effort between individual development assessments, and strategic planning at a larger scale where the important functions of landscapes and cumulative impacts can be properly considered.

When decisions are being made at the local-scale, or at the scale of individual developments, most of the opportunities for better landscape management have been missed. Strategic planning at a scale relevant to important functions in the landscape is where different demands on landscapes should be debated and reconciled.

3.2 Overall goals for an improved planning system

The NRC believes that an imperative to improve or maintain landscape function should underpin NSW's planning system.¹¹

Landscape function refers to how well the landscape is working to provide a reliable flow of the range of ecosystem services that underpin our economic development and lifestyles, for example: water purification and flood regulation; nutrient cycling and soil formation; food, water, fibre, and fuel.¹²

An example of the risks from not consistently applying the improve or maintain principle across different areas of government policy is evidenced in NSW's approach to native vegetation. The *Native Vegetation Act 2003* only applies to rural-zoned, privately-owned land. Rezoning rural land

¹⁰ The basic principles of integrated catchment management are to: integrate the management of land and water resources at the water-catchment scale; involve communities in planning and managing their landscapes; and find a balance between resource use and conservation.

¹¹ The recent independent review of the *EPBC Act 1999* suggested that this test be adopted nationally. Hawke, A (2009), *The Australian Environment Act – Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999*, October.

¹² The Millennium Ecosystem Assessment defines four categories of ecosystem services: **provisioning services** such as food, water, timber and fibre; **regulating services** that affect climate, floods, disease, wastes and water quality; **cultural services** that provide recreational, aesthetic, and spiritual benefits; and **supporting services** such as soil formation, photosynthesis, and nutrient cycling.

for urban uses avoids the *Native Vegetation Act 2003*, which means urban, coastal and industrial development proposals are not required to improve or maintain environmental outcomes in their region. Vegetation clearing for mining is also exempt from the Act, and therefore the improve or maintain test.

Native vegetation has important functional values in every type of landscape, and the most aggressive threats to biodiversity in NSW include urban and mining development pressures, often in coastal areas. NSW effectively exempts some industries and areas of the state from promoting sustainable development, and is forcing private conservation onto a limited sub-set of landholders. This risks not getting the balance right between conservation and development at the state and regional scales.¹³

To ensure the essential services provided by landscapes are considered in all government planning, a revised legislative framework could have an **explicit objective of managing development while improving or maintaining landscape function**.

3.3 Principles for a new planning system

A new legislative framework could be based around key principles such as those underpinning the *Standard for Quality Natural Resource Management*:¹⁴

- **Planning based on best available information** - Ensuring a structured and transparent decision-making process based on best available science and knowledge of broader community values.
- **Planning at the right scale** - Avoiding the cumulative risks and inequities of individual development assessments by implementing strategic land use planning as the mechanism for making broad decisions about land use, and to direct a clear, nested hierarchy of plans.
- **Whole-of-government alignment** - Making the linkages between land use, catchment management, water allocation, extractive industries, regional development, infrastructure, health, transport and other services at the regional scale, and establishing governance that facilitates alignment from the national through to local scale.
- **Community engagement** - Effectively involving the whole community in the strategic planning process to draw on their knowledge and values, and build a shared view of future landscapes and communities to be delivered through the planning system.
- **Risk management** - Ensuring that the planning process considers cumulative risks, and the risks of environmental degradation to future socio-economic opportunities for communities.
- **Independent audit, monitoring and evaluation** - Independent oversight of planning processes and their implementation to ensure credibility of the plans, and inform adaptive management in response to changing circumstances.
- **Open access to information** - Making sure that data collected through environmental assessments contributes to a regional body of knowledge that is accessible, and relevant to decision-making and future planning.

Specific issues relevant to each of these principles, and how landscape function can be more effectively considered in the planning system, are outlined below.

¹³ Natural Resources Commission (2007), *op. cit.*

¹⁴ Natural Resources Commission (2005), *Standard for Quality Natural Resource Management*, September.

Principle: Planning based on best available information

Relevant information and data at the right scale that is improved and built on over time should provide the foundation for all planning decisions, and particularly high-quality strategic planning. As stated by the Planning Institute of Australia, the foundation of a mature and effective planning system should be robust and well researched strategic plans as the basis for decision-making.¹⁵

Strategic land use planning should **access the extensive scientific and community information already available** in catchment management authorities and regional catchment actions plans, as well as the substantial amounts of ecological data collected by project proponents during environmental assessment processes. Rather than addressing environmental, economic and social concerns as separate issues, biophysical and socio-economic knowledge should be brought together to understand the whole landscape system and how it is changing over time.

There should also be a **review of the specialist expertise available within government** on issues such as water, public health and biodiversity. There is a risk that consultants are unnecessarily duplicating the knowledge and skills for environmental assessment already available in government. Specialist consultants and peer review processes should be used to complement the expertise available within government.

One mechanism for greater alignment is to **share data between sectors**, and for different parts of government to **plan using common data-sets**, where possible. A project run by the National Water Commission demonstrated that **spatial analysis** and sharing data can allow water allocation planners, and catchment planners to agree on a common set of priorities.¹⁶

There is a *NSW Natural Resources Monitoring, Evaluation and Reporting Strategy 2010-2015*¹⁷ that supports continuous improvement in natural resource management policy and programs. A key principle of the Strategy is that all data should be freely available and exchanged across all levels of government using the frameworks and standards defined by the NSW Common Spatial Information Initiative.¹⁸ This initiative should be used to capture and make available all relevant data from local government, universities, community groups and industry.

Faced with imperfect knowledge and competing stakeholder values, planners should focus on bringing together the region's stakeholders and best available knowledge to develop and implement a satisfactory management solution, **addressing uncertainty and risk through adaptive management** to achieve continual improvement over time.

Principle: Planning at the right scale

The NRC supports the widely held view that resources should be rebalanced away from individual development assessments to strategic planning and plan accreditation. This principle forms the basis for many of the planned amendments to the *Environment Protection and Biodiversity*

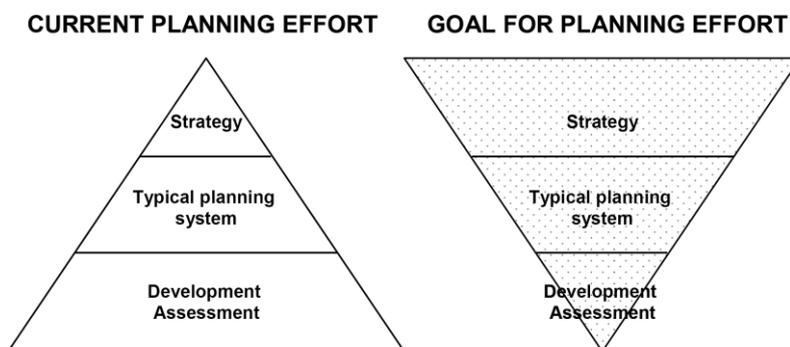
¹⁵ Planning Institute of Australia NSW Division (2010), *A New Planning Act for NSW: Paper prepared by the NSW Division of the Planning Institute of Australia*, August.

¹⁶ Hamstead, M (2010), *Alignment of water planning and catchment planning*, Waterlines report, National Water Commission, Canberra.

¹⁷ NSW Department of Environment, Climate Change and Water (2010), *New South Wales Natural Resources Monitoring, Evaluation and Reporting Strategy 2010-2015*, December

¹⁸ The Common Spatial Information Initiative (CS2i) is a whole of government initiative that provides a framework where government, business and the community can access spatial and related information and services, as well as links to a number of spatial industry groups. For further information refer to <http://www.cs2i.nsw.gov.au>.

Conservation (EPBC) Act 1999,¹⁹ is promoted by the Planning Institute of Australia,²⁰ and was included in a review of 'leading practices' in a recent Productivity Commission report, *Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments* (see diagram below prepared by the Planning Institute of Australia).²¹ A Legislative Council Standing Committee review of the planning framework in 2009 also found consistent support for a regional strategic planning framework to guide local planning across the state.²²



Source: <http://www.planning.org.au/documents/item/1867> accessed 14 February 2011.

Figure 1: Changing the focus of planning efforts (Planning Institute of Australia, reproduced by the Productivity Commission)

The NRC supports many of the other principles benchmarked by the Productivity Commission as leading practice for plan making, specifically that **plans should be: whole-of-government; part of a consistent hierarchy of aligned, nested plans; integrated across different levels of government; able to be adjusted in response to changing circumstances; and developed with early and effective community engagement** (some of these are discussed later in this submission).

Integrated, strategic planning at a scale more in line with important ecological and social systems is where different demands on landscapes should be debated and reconciled. At a site or development proposal scale, and in some cases the local government scale, most of the opportunities for effective landscape management have already been missed.

The recent review of the *EPBC Act* drew the same conclusions, and most of the Australian Government's planned changes to the legislation are aimed at taking a more strategic approach with decisions focussed on outcomes at a regional or ecosystem level.²³

¹⁹ Commonwealth of Australia (2011), *Australian Government Response to the report of the independent review of the Environment Protection and Biodiversity Conservation Act 1999*. Available at <http://www.environment.gov.au/epbc/publications/pubs/epbc-review-govt-response.pdf>

²⁰ The NRC supports the position of the Planning Institute of Australia, that there needs to be increased emphasis and commensurate resources for strategic planning and policy as the basis for sound decision making. Planning Institute of Australia (2009), *Development assessment position statement*. September. Available at <http://www.planning.org.au/documents/item/240>

²¹ Productivity Commission (2011), *Performance benchmarking of Australian business regulation: Planning, zoning and development assessment*, Research Report, Canberra.

²² New South Wales Legislative Council Standing Committee on State Development (2009), *The New South Wales Planning Framework*, December.

²³ Commonwealth of Australia (2011) op.cit. The planned amendments propose the use of regional environment plans and strategic assessments to identify at the regional scale where development can occur and which areas are environmentally important. Under these, broad classes of actions can be approved and when subsequent individual projects are consistent they will not require individual approval.

A clear hierarchy of nested plans can then be developed that are consistent with the directions agreed in the strategic plan.²⁴ Objectives and expected outcomes should be aligned between all plans to achieve consistency²⁵, and to allow for effective governance at the different scales.

Challenges remain for NSW in nesting LEPs developed by 152 local councils into meaningful regional frameworks. There are lessons to be learnt from the experience of Victorian and Queensland amalgamations and from the New Zealand experience of regional governance.

The statutory *South East Queensland Regional Plan 2011-2031*²⁶ provides a good example of a strategic, regional planning approach in Australia, which has created explicit links between land use and natural resource management priorities. It is the pre-eminent plan for the region and takes precedence over all state and local instruments. It has delineated areas for future growth and designates Regional Landscape and Rural Protection Areas, which aim to protect regional landscape, rural production and other non-urban values from inappropriate development, particularly urban and residential development. This plan is explicitly linked to the non-statutory *South East Queensland Natural Resource Management Plan 2009-2031*, which contains targets that are aligned to the desired regional outcomes and policies in the statutory plan.²⁷

An approach that protects landscape function and ecosystem services must **recognise that landscapes are complex systems**, and the analysis cannot be simplified to bilateral trade offs. **Major drivers of change** such as population growth and climate change should be integrated into any new planning framework.

Spatially defining an area for planning based on landscape function and ecosystem services is challenging. The functions of the landscape do not relate to traditional administrative boundaries. However, the geographic boundaries chosen for strategic planning are less important than the analytical framework underpinning the planning which should focus on the functionality of the landscape and its ability to provide ecosystem services. The relationship of people and communities with the biophysical characteristics of their landscapes will also influence how the landscape can be conceptualised.²⁸

A further challenge of planning for function is in identifying the attributes that communities value, then understanding the underpinning ecosystem services that support those values. An ecosystem services approach is starting to feature in policy making in the United Kingdom,²⁹ and the *South East Queensland Regional Plan 2011-2031* contains principles, policies and programs for maintaining and enhancing the capacity of landscapes to supply services.³⁰ NSW could build on these existing examples.

²⁴ Planning Institute of Australia NSW Division (2010) op.cit. The Planning Institute of Australia advocates a sensible hierarchy of plans including: a state plan that is endorsed by Parliament and incorporates any relevant national policies; regional planning strategies approved by state cabinet; and local plans approved by Councils.

²⁵ Productivity Commission (2011), op.cit. pg. 365.

²⁶ Queensland Government (2009), *South East Queensland Regional Plan 2009-2031*, June.

²⁷ State of Queensland (Department of Environment and Resource Management) (2009), *South East Queensland Natural Resource Management Plan 2009-2031*.

²⁸ One approach to thinking defining spatial regions that relate to how a landscape works is described in Brunckhorst, D and Reeve, I (2007), Spatially bounded regions for resource governance, *Australasian Journal of Environmental Management*, Vol 14, Issue 3, pp. 39-51. This defines 'eco-civic' regions based on: the nature and reach of environmental externalities; areas of greatest interest and importance to local residents; and relatively homogenous biophysical characteristics.

²⁹ Department for Environment, Food and Rural Affairs (2010) *Delivering a healthy natural environment: An update to 'Securing a healthy natural environment: An action plan for embedding an ecosystems approach'*, London.

³⁰ Queensland Government (2009), op. cit. pg. 71.

Importantly, to support good strategic planning, the interaction of mining legislation with the planning system should be reviewed. The planning system should consider how cumulative environmental and health impacts, and infrastructure needs, related to mining projects could be better managed through integrated strategic planning. For example, significant resources are invested in exploration licences, but detailed environmental studies are done towards the end of the project approval process and these are project specific rather than regional in nature. For resources such as coal that occur at a regional-scale, a strong case could be made for investing some of the revenue raised from exploration licences into strategic regional assessment and planning, with subsequently streamlined processes for dealing with individual mine proposals.³¹

Principle: Whole-of-government alignment

There is a need to create **better linkages between land use planning system, and other parts of government** both to improve efficiency of decision-making, and to ensure that decisions made by one part of government support (and don't undermine) the efforts of other parts of government. In particular, planning for future landscapes and communities must comprehensively consider the interactions between land use, catchment management, water allocation, extractive industries, climate change, infrastructure, health risks, education and other services at the regional scale. The strategic policy intent then should be linked with budget allocations to support the policy, especially for infrastructure.

Within the natural resource management sector, government agencies and catchment management authorities are pursuing a whole-of-government approach to regional planning for catchment management. Experience has shown that the strategic planning outcomes are better, but that such an approach is resource intensive and often dependent upon personal relationships and good will. **Therefore, an imperative for whole-of-government planning must be clearly articulated.**

The natural resource management priorities articulated in catchment action plans are often not considered in major project approvals. A simple mechanism for improving alignment between planning and natural resource management, in the absence of a more strategic approach, would be to **ensure that conditions on major project approvals require the proponent to consider the catchment action plan.**

There has been progress in aligning regional catchment action plans with relevant water sharing plans and the NSW draft Biodiversity Strategy. However, some significant issues remain, including the long-term security and tracking of biodiversity offsets negotiated for project approvals. A revised planning regime will need mechanisms that coordinate with existing biocertification and biobanking initiatives to ensure the long-term security of offsets.

The governance system should also be designed to **facilitate alignment from the national through to local scale**, as the planning system involves the interplay of legitimate state, regional and local interests.³² As the scope of issues changes (local up to national) governance structures are not sufficiently flexible to manage the scale and complexity of issues.³³ Roles and responsibilities at

³¹ The 2009 Legislative Council Standing Committee review recommended that 'the process for the granting of mining exploration licences be amended so that at the same time that a licence is granted, the government appoint an independent committee of stakeholders to determine the terms of reference and manage a strategic and scientific assessment of natural resource constraints, which is to be funded by the mining company.' New South Wales Legislative Council Standing Committee on State Development (2009), op.cit.

³² Planning Institute of Australia NSW Division (2010), op.cit.

³³ Productivity Commission (2011), op.cit., pg. 362, citing Local Government and Planning Ministers' Council (2009).

different scales can be clarified, and the principles of subsidiarity implemented – that is, decision-making should be devolved to the lowest scale with the capacity to conduct it satisfactorily.

Principle: Community engagement

Community engagement in the planning process is essential to **allow debate and agreement on a shared future**. It is useful for gathering information about community values, and also for building support for the final result of a planning process. Challenging though it might be, the emphasis in community engagement should be shifted more towards the strategic end of the planning process, so that subsequent, more local decisions at the development assessment stage that are consistent with the agreed strategy or policy require less community involvement.³⁴ This should also reduce the likelihood of conflict at the development proposal stage,³⁵ or at least provide a more robust framework within which specific local conflicts can be more credibly addressed.

Successful engagement strategies **assist in building understanding of community values, educate, raise awareness, enable participation, anticipate and resolve conflict and increase the knowledge of social and economic impacts of land use planning decisions.**

Community engagement should:

- be matched to the complexity, scale and likely impacts of decisions
- make reasons for decisions clear and accessible
- include mechanisms for involving the community in review and adaptation of plans in response to changing circumstances and new information.

Principle: Risk management

The current emphasis on development assessment, rather than strategic planning, means that planners struggle to consider the risks of particular land uses or developments because they are not working at the right scale. **The strategic planning process should enable consideration of cumulative risk across the landscape, and over time.**

The risks of development proposals are often considered on a case-by-case basis, rather than cumulatively across the whole landscape, risking ‘death by a thousand cuts’. For example, managing exploration and exploitation of wide-spread coal and gas resources by considering proposals individually risks significant cumulative health, social and amenity impacts, and makes inefficient demands on transport and other infrastructure. A coordinated approach of staged exploration, exploitation and risk management across a region would provide more scope for better mitigating these impacts and efficiently providing for infrastructure needs.

There are strong links between environmental degradation and risks to future socio-economic opportunities for communities. For example, when considering a mining activity that may pose risks to a groundwater sources, the decision-making must consider the current and future economic risk of damage to an aquifer. The interactions between environmental, social, and economic risks should be integrated, rather than separate considerations, analysed only by way of short term economic modelling or narrowly focussed cost benefit analysis.

³⁴ Planning Institute of Australia NSW Division (2010), op.cit.

³⁵ New South Wales Legislative Council Standing Committee on State Development (2009), op. cit.

Application of resilience theory involves **identifying thresholds, beyond which there are risks of irreversible changes in the way the landscape functions**. We need to understand where we are in relation to important thresholds or 'tipping points' in order to effectively manage risk and manage development within the functional capacity of the landscape. All catchment management authorities are upgrading their catchment actions plans,³⁶ and most will use resilience thinking to identify some of these important limits or triggers, while bringing together community and government priorities.³⁷ This knowledge should be used to inform risk management in land use planning.

Principle: Independent audit, monitoring and evaluation

Independent oversight and accreditation of strategic plans and their implementation can promote sound practice, enhance the credibility of plans and build public trust in the planning and decision-making process. The system should be underpinned by an accountability system of standards, reviews and audits for strategic planning and the implementation of plans through subsidiary planning instruments.³⁸

There is also a difficult **balance to strike between prescription (certainty) and flexibility** so that poor planning decisions are not locked in forever, and plans can be adjusted in response to new information and changing community values, the results of monitoring and evaluation programs, or major changes in government policy. This flexibility will be critical for local and state authorities managing risk in the face of significant environmental influences, such as climate change, sea level rise and changes in the frequency and severity of extreme weather events. These risks will change in predictable and unpredictable ways over time.

Principle: Open access to information

The planning system should be underpinned by **effectively managed and openly accessible scientific, economic, social and cultural information**. Information management systems should accommodate the needs of users and suppliers operating at different scales and with different capacities.

The review should consider how to **make the most of substantial quantities of ecological assessment data generated for environmental impact assessments** during environmental impact assessments for site specific development approvals. At the moment, while made publicly available in reports, it is not easily accessible and is not contributing to regional-scale knowledge about the landscape that could inform future decision-making or strategic planning. This is inefficient and risks significant duplication of effort.

The review should also consider the kinds of oversight processes that could be put in place to reduce the perception that data collected by project proponents is 'tainted' or biased. Independent audit and periodic synthesis of the science in impact assessments could be one mechanism for making this information more widely used.

³⁶ One of the priorities in *NSW 2021: A plan to make NSW number one* is for 13 upgraded catchment action plans to be in place by March 2013.

³⁷ Some draft upgraded catchment action plans are available at: a) Namoi Catchment Management Authority (2011), *Draft Namoi Catchment Action Plan 2010-2021*. Available at <http://www.namoi.cma.nsw.gov.au>; b) Central West Catchment Management Authority (2011), *Central West Catchment Action Plan 2011-2021; draft for community consultation*, Wellington. Available at <http://cw.cma.nsw.gov.au>.

³⁸ The system of Standard, targets and independent audit in the natural resource management sector is a model that can be adapted to be appropriate for the land use planning system.