NRM Regions Australia

Committee Secretary Senate Standing Committees on Environment and Communications PO Box 6100 Parliament House Canberra ACT 2600

8 August 2014

Dear sir/madam

Senate inquiry into National Landcare Program

NRM Regions Australia has prepared the attached submission for the Committee's consideration.

We would be happy to support our submission by appearing before the Senate Committee at any of its hearings. Our Executive Officer (Danny O'Neill) can assist with arranging attendance.

Yours sincerely

Max Kitchell Chair, NRM Regions Australia & Chair, NRM South, Tasmania

Introduction

NRM Regions Australia is the national representative group of Australia's 56 regional NRM bodies.

Our member organisations work to maintain healthy and productive country that support viable communities and industries. Natural resource management (NRM) is the responsible use of our land, water, soil, plants and animals to provide a good quality of life for current and future generations. We work from the paddock to the regional scale to address issues that require a landscape perspective. Our approach enables community and landcare activity to better address long term strategic issues of national importance.

56 regional NRM organisations cover all of Australia. Many have been in existence since the mid-1990s and were established either by State Governments or the Federal Government as part of its Natural Heritage Trust program. The organisations are governed by a Board – appointed by State/Territory Ministers in South Australia, New South Wales, Victoria, or elected/ appointed by the community in Western Australia, Tasmania, Queensland and the Northern Territory. The ACT Environment and Planning Directorate is the regional NRM organisation for the Territory and the ACT NRM Council to provide advice to the Directorate.

56 Chairs of regional NRM bodies hold an annual national Forum to provide a collective opportunity to: meet with government and other stakeholders; report on progress against the annual work plan; and to set direction for the NRM Regions Australia the following year.



Background

Australia is a world leader in integrated natural resource management. We can trace our efforts back to the 1940s and 50s were State and Territory governments invested in in soil conservation, pest plant and animal management, water quality works and environmental protection works.

Since then our knowledge of biophysical processes has grown and new techniques for working with the community have emerged. By the mid to late 1980s there was a growing awareness that sustainable natural resource management required:

- An integrated approach which recognised that natural resource management issues are linked, for example water quality's relationship to land management practices;
- Recognising that the productivity of our agricultural businesses relies on healthy soils, water security and good water quality and our ability to demonstrate to markets that production systems are "green and clean';
- Collective action by many farmers to address landscape issues;
- Coordinated approaches across all levels of government.

In 1999 the then Standing Committee on Agriculture and Resource Management released a discussion paper, *Managing Natural Resources in Rural Australia for a Sustainable Future*, outlining a possible overarching policy framework for natural resource management. Many of the elements of that paper remain relevant today:

- Working together effectively requires a partnership framework and agreements around cost sharing;
- Devolving authority and empowering regions based on planning, negotiating, implementing and monitoring regional strategies;
- Investing strategically at the regional scale requires strategies that suit regional circumstances, the identification of larger scale regional projects and arrangements for sharing the costs of these investments in regional outcomes;
- Facilitating fundamental change in land manger practices: how do we determine and provide incentives and signals to change? This requires engaging with industry and identifying the synergies between production and the environment;
- Building on landcare, the promotion of the landcare ethic was recognised as enormously important. Not only does landcare provide practical opportunities for communities to work collectively on-ground but landcare groups are well placed to embrace a broader agenda involving landholder information exchange, rural development, promotion of change and identification of opportunities. Capacity building and knowledge sharing were seen as fundamental to sustainable natural resource management;
- Enhancing knowledge and information continues to be central to the regional NRM programs promoting achievements and sharing information about sustainable production systems, technologies and management approaches requires an interdisciplinary approach were skills from different sectors are brought together to address regional issues.

That discussion paper was the first to canvass the role of regional NRM bodies in delivering national programs. It recognised:

The devolution of decision making will enable regional communities to determine the mixture of mechanisms-economic instruments, projects, regulations, and so on that is most appropriate in their region

The paper identified a number of instruments that can be used to encourage changes in land use and to improve soil, water, vegetation and biodiversity management from a regional perspective:

These sentiments were echoed by Phillip Toyne and Rick Farley in their influential paper: *The Decade of Landcare Looking Backward - Looking Forward*. As part of their 10 point plan they proposed:

- Landcare activities should be consolidated into clearly identified and appropriately resourced regions. Each should be responsible for the production of Regional Plans and strategies that would be given effect by legislation.
- Localised catchment or other plans and property plans would be developed within the regional framework and only landholders with activities proposed in accordance with the broader regional goals would be eligible for grants.
- Catchment and property plans should be based on a full suite of economic, agronomic and ecological considerations.
- The process should be transparent and the plans certified by third parties.
- There should be generous incentives (especially in transition) for landholders owning critical habitat or salinity recharge areas for example, to act in the long-term public interest. Where landholders in such areas refuse to change practices that are contributing to resource degradation, regional bodies or state agencies should have sufficient authority and resources to require them to do so.

10 years later, the 56 Chairs of Regional NRM bodies, at their annual Forum, called for the preparation of a report on the role of regional NRM bodies. The subsequent report, *Australia's NRM Governance System – Foundations and Principles for meeting future challenges,* was adopted by the Chairs in 2010.

In that paper we argue that natural resource management (NRM) governance is about mechanisms that enable all people and organisations connected to NRM to influence decisions about the sustainable use of Australia's lands, seas and waters. Our current governance arrangements are a complex mix of: organisations and relationships; rules and strategies; practices and behaviour; and beliefs and understandings. Chairs believe that there are opportunities to improve effectiveness through addressing issues of complexity, discontinuity, lack of linkage across scales, and uncertainty about the roles of all participating people and organisations.

To guide our efforts the paper proposes 10 principles for NRM governance (see Appendix 1).

Inquiry Terms of Reference

a. the establishment and performance of the Natural Heritage Trust

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The first phase of the Natural Heritage Trust (NHT) ran from 1996–97 to 2001–02 and allocated \$1.5 billion to NRM and environmental activities. This was followed by a second phase that extended the program until 2006-07 investing a further with \$1 billion funding (to be matched by State/Territories) and the funding of an additional program – the National Action Plan for Salinity and Water Quality.

The NHT was the first major investment by the Australian Government in natural resource management and led to the establishment of the regional infrastructure to work with regional communities in developing regional Natural Resource Management Plans.

The plans were accredited by both governments. The accreditation requirement turned out be overly complicated because of the wide scope of those plans and the number of agencies across governments that had an interest in different elements.

The process reinforced the value of having a one-stop-shop in the form of a Joint NRM Team within the Australian Government where regions could interface with one agency rather than the many different parts of government.

The Joint Team approach was also seen as a positive example of Government integration - policy and programs were focussed on the landscape as a connected whole rather than a form of landscape apartheid with different parts of government separately addressing conservation and production issues.

The matching requirement strengthened the role of regional NRM organisations in their efforts to align the efforts of State and Territory governments with those of the Australian Government.

But there were challenges:

- the multiple streams and funding and the lack of integration, despite the efforts of the Joint Team, at the Government level created high transaction costs;
- matching funding did slow down the approval processes when Ministers across jurisdictions didn't agree.

b. the establishment and performance of the Caring for Our Country program

In 2008 the Australian Government announced its Caring for our Country program that continued the high level of Australian Government investment in natural resource management with funding of \$2 billion for the period 2008 to 2013.

While the renewed effort was welcomed by regional NRM bodies and many of the elements of the NHT program were retained in the new program, the regional bodies were concerned about the lack of opportunity to have input to the program design particularly in relation to the changed arrangements for funding landcare groups, the loss of State/Territory matching requirements and the separation of salinity and other water quality programs from Caring for our Country funding.

The loss of matching funds from States was a big loss, not only in terms of funding but in the alignment of investment and the re-emergence of different reporting systems.

We did welcome the regional delivery funding initiative and the move towards longer term funding arrangements that reduced the funding transaction costs for regional NRM bodies.

Targets also moved away from capacity building and social capital which left a fundamental area without resources and created difficulties with regional NRM bodies being blamed for landcare groups not receiving funding, but this was often because under the Caring for our Country targets regional NRM bodies were unable to fund local capacity building projects. There was a serious attempt to rectify this in stage 2.

The first stage of the Caring for our Country program proposed a fundamental change to the role of regional NRM bodies in that they were regarded more as a service delivery agency rather than a partner in the process of determining investments. Agencies felt compelled to honour the competitive neutrality principles and so were unable to receive advice from regional NRM bodies on

regional priorities (alignment of projects with regional NRM plans) nor access the "local knowledge" of regional NRM groups in allocating funding to organisations.

The competitive process also resulted in: high transaction costs - with many organisations chasing fewer grants; and competition between regional NRM bodies and other regional organisations undermining partnerships that are essential to the long-term sustainable management of natural resources.

While regional NRM bodies feel this strict interpretation of competitive funding principles has relaxed over the term of the Caring for our Country program, it still lingers and the value of regional NRM plans to Government investment decisions needs to be reinforced for new programs. For example we unsuccessfully pressed for the plans to be used to guide investment from the Biodiversity Fund established in 2011.

The transition from stage 1 to stage 2 of the Caring for our Country Program was well managed with regional NRM bodies and other stakeholders being actively engaged in the design of the new program. Again the final outcome resulted in mixed implications for regional NRM – regional delivery funding was maintained but the concept of a Joint NRM Team within the Australian Government was abandoned.

At the same time the Australian Government recognised the value of regional NRM plans in its NRM Planning for Climate Change initiative and provided additional funds for regional NRM plans to be updated to reflect potential climate change impacts on natural resources.

c. the outcomes to date and for the forward estimates period of Caring for Our Country

We note the Australian Government has reported annually on progress towards the Caring for our Country outcomes through the production of scorecards and that a substantial investment has been made by the Government and regional NRM bodies in developing monitoring and reporting plans that establish a program logic framework for identifying outputs.

In 2012 NRM Region's Australia produced its own scorecard based on the 2011/12 year. The text box illustrates aggregated outputs across Australia for that year.

While output measures are important they do not provide the full picture in relation to outcomes from achieving activities. Regional NRM Chairs have longed called for a system of National Environmental Accounts and this will be discussed later in our submission.

Regional NRM Achievements 2011/2

- The ABS estimates that approximately 94% of farmers actively undertake natural resource management on their farms and 36% of farmers have set aside 9.2 million hectares for conservation/protection purposes
- This activity requires a significant investment by farmers. In 2008 this was estimated to be \$3.5 billion which represents \$2.60 for every government dollar invested.
- Nearly 20 million hectares of land is under improved management for healthier food and fibre production
- Across 54 regions, 231,129 people have been engaged in practice change.
- 359 Indigenous groups have been engaged in regional natural resource management and protecting enhancing cultural heritage.
- 70,060 school children have been involved in hands on learning about our natural resources and how to manage them for future generations
- 17,687 of waterways and coastlines have been improved for water quality, riparian habitat and biodiversity by regional communities across Australia

d. the implications of the 2014-15 Budget for land care programs, in particular, on contracts, scope, structure, outcomes of programs and long-term impact on natural resource management;

The Government's National Landcare Program, building on the Caring for our Country program, reflects its election commitment to enhance the role of landcare and other volunteer community groups in the delivery of natural resource management outcomes. NRM Regions Australia accepts that the 2014 Federal budget has resulted in 26% reduction funding over the next four years for regional NRM and Landcare compared with the former Caring for our Country funding for the same period.

These reductions are in addition to the loss of funds (initially \$946 million over 6 years) for regional NRM programs provided from the Biodiversity Fund established by the previous Government's Clean Energy Future - Land Sector Package. The previous Government reduced this by \$213 million in May 2013, the Coalition Government has abolished the fund to save a further \$152 million.

The budget announced funding for the Green Army initiative. NRM Regions Australia acknowledges that this will assist with delivering NRM outcomes, but see it is a different program to that delivered through regional NRM and landcare. The Green Army will be constrained by: the costs of running the program, particularly in rural and remote areas; attracting young people to these areas; the capacity of inexperienced teams; and the ability to provide the longer term follow-up required of tree planting, weed management, fencing etc.

The reduced overall quantum of funding and the requirement that existing regional delivery funding be redirected presents challenges for regional NRM bodies in terms of renegotiating existing contracts. There are significant opportunity costs, particularly for smaller regions, relating to the increased administrative burden resulting from renegotiation with existing project stakeholders, replanning projects and revising MERIT plans.

But we recognise the overall directions being pursued reinforces the importance of regional NRM bodies' planning and investment functions and our ability to tailor regional NRM programs to reflect the unique characteristics of regional communities and their different NRM challenges.

e. the Government's policy rationale in relation to changes to land care programs

On 4 August 2014 the Government released a consultation paper on the design of the National Landcare Program. NRM Regions Australia was pleased to have had the opportunity to have input to that paper, particularly in relation to the requirement that 20% of regional delivery funding is used to support for community group and farmer effort. Regional NRM bodies have expressed support for this initiative noting that many, if not all, already meet this requirement.

The Consultation Paper calls for ideas about how we can achieve greater participation by the community, including landcare, in planning, priority setting and decision making. While NRM Regions Australia understands the efforts currently being made by regional NRM bodies to engage regional communities and landcare, we welcome the renewed focus on this critically important issue and look forward to considering the proposals generated through the consultation process.

f. analysis of national, state and regional funding priorities for land care programs

We make several observations in relation to this term of reference:

- By "land care" programs we assume the scope is land care in the broadest sense (that is all the natural resource management efforts) and not just community group support;
- In 2012 the Working Group, with the assistance of the Australian Government undertook a desktop analysis of the priorities in all 56 regional NRM plans. That study found:
 - a. Regional plans identified pest plants and animals as a significant threat to biodiversity;
 - b. Regional plans (77%) identified aboriginal and cultural heritage assets as a critical asset;
 - c. The 10 main threats to sustainable NRM (in terms of the number of regional plans identifying those threats) were:

- i. Feral animals (93%)
- ii. Invasive weeds (89%)
- iii. Climate change (88%)
- iv. Soil degradation (77%)
- v. Unsustainable agriculture (75%)
- vi. Fire management (66%)
- vii. Water pollution (64%)
- viii. Unsustainable groundwater use (54%)
- ix. Alteration of natural flows (50%)
- x. Unsustainable riparian practices (48%)

We accept that not all regional priorities identified through the community based regional NRM planning process are priorities for Australian and State/Territory government investment. Our plans seek to identify issues that regional communities see as having an impact on their long term sustainability. This reinforces the NRM challenge – the need to align the national and state/territory government priorities and with those of the regional communities.

g. how the Department of the Environment and the Department of Agriculture have, and can, work together to deliver a seamless land care program

As previously stated, regional NRM bodies supported the Joint Team approach where officers from the Departments of Environment and Agriculture were co-located. This facilitated efficient access to the Australian Government by having one point of entry for regional NRM bodies and ensured consistent advice on issues.

This approach was abandoned in 2012 and while the relationship built up between officers from the different departments has ensured consistency and on-going communication between those departments, regional bodies are concerned that this may diminish over time due to staff changes.

h. the role of natural resource management bodies in past and future planning, delivery, reporting and outcomes

As we have established in the Introduction, the need for regional arrangements remains as strong today as they did when first established in the mid 1990s. Emerging issues of particular importance include:

- The Government has recognised the significant contribution agriculture makes to the Australian
 economy and the potential for increasing that contribution is response to growing world
 demand for food the need to support farmers with the development and extension of
 sustainable farming systems will be critical to the long-term profitability of farmers.
- We are also facing significant impacts from Climate Change. Medium to long term landscape resilience, primary production, biodiversity conservation and sequestration and avoidance opportunities will have a direct impact on natural resources. NRM Regions Australia welcomed the Government's commitment to complete regional NRM plans for Climate Change – this program requires all regional NRM bodies to update their regional NRM plans to take into account both the implications of a changing climate on current programs and targets and the

identification of sequestration and emissions reduction opportunities within landscapes that avoid the potential of perverse outcomes.

The development of these plans reflects the partnership and collaborative approaches used by regional NRM bodies – there are extensive links to scientific institutions to ensure that plans are based on the best available science.

 The growing awareness that achieving biodiversity outcomes requires a primary care, whole of landscape approach. Regional NRM bodies focus on off-reserve "conservation" to develop a connected landscape. Islands of biodiversity with a focus on threatened species and reserves will not work in the long-term.

The diagram below illustrates the complex operating environment for natural resource management in Australia. There are clearly many stakeholders and the challenge is how best to coordinate efforts of these stakeholders with farmers and other land managers to efficiently deliver natural resource management outcomes tailored to the regions' NRM challenges.

The regional scale allows for collective planning and delivery of programs to address landscape issues. Defining those regions takes account of the diverse social, economic and environmental conditions across the continent.



Regional NRM bodies deliver a range of services depending upon the institutional arrangements in the different States/Territories, but common to all regional NRM bodies are two core functions:

- Engaging regional communities in natural resource management
- Preparing regional NRM plans to align investments made by governments and communities

Community Engagement

Building the capacity of farmers and other land managers to sustainably manage their natural resources requires a range of strategies and programs, i.e. awareness raising, extension, support for volunteer group work, design and implementation of new farming systems, incentives for practice change etc. The optimum mix of these programs to respond to regions' NRM challenges and diverse communities are determined through the development of the NRM plan.

Farmers are central to this process. Not only is their local knowledge important but they are significant investors in terms of time and money in responding to regional NRM challenges. Engaging farmers in the planning process helps ensure their awareness of the challenges and ownership of the solutions.

Engagement of Indigenous communities in Land and Sea Management has been given particular attention by regional NRM bodies. Indigenous communities and their unique knowledge and understanding of Australian land and seascapes are critical to developing regional NRM plans. Through indigenous engagement opportunities are developed for programs that empower indigenous communities and engage them directly in natural resource management.

While investing in building community capacity remains a central goal for regional NRM bodies we are aware that we need to better understand the outcomes from our capacity building efforts. In March 2014 the National NRM Chairs Forum asked NRM Regions Australia to investigate opportunities for improved measurement of capacity building outcomes.

NRM Planning

In 2014 the National NRM Chairs' Forum received a report *Regional NRM Planning in Australia* that described the basic characteristics of regional NRM plans and how they relate to other planning activities. The report identified three core characteristics, or underpinning objectives, that are widely shared by NRM plans across the nation, whether specified by State or Territory governments, or defined by community-based NRM organisations:

- With the underpinning aim of sustaining the natural resource base for current and future generations, the plans take a long view into the future. They recognise that landscape change can be slow, but that clear guidance is needed on the priority actions that need to be taken now. The plans therefore also spell out intermediate objectives and clear pathways from the present to the future.
- The plans are highly integrative. They involve all land uses and their socio-economic values across their regional landscapes, and they take into account the ecological interactions that influence natural resource outcome. In this way the plans are distinguished from, but complementary to, those that deal with single industries, single issues or single natural resources.
- The plans are built with broad stakeholder and community involvement so that they reflect local knowledge and aspirations, gain local credibility, commit local organisations to a role in implementation and empower local communities to be involved. The broad directions for each plan come from relevant overarching plans and strategies at higher scales so that the result is an alignment of interests and opportunities across multiple scales.

Challenges identified for our regional NRM planning effort include:

- Developing frameworks for better achieving integration of NRM components in plans shifting the focus from planning on the basis of biodiversity, land and water assets to an ecosystem basis where dynamics and functions are better incorporated.
- Incorporating carbon mitigation actions and adaptation to climate change into plans.
- Growing the capacity (human and social skills, and knowledge management) to deliver a high standard of planning.
- Reducing duplication of effort across regional NRM planning and other natural resource and land planning activities. There are some 54 regional NRM plans, 55 Regional Development Plans, 59 State-based Regional Development Strategies and 564 local council plans with varying degrees of overlap, as well as other government plans and agreements, like offsets policies, that impact on NRM outcomes.
- Building community engagement skills, including Indigenous engagement, and beginning the move from community engagement to community decisions about trade-offs.
- Better closing of the adaptive management loop that is making better use of existing knowledge, and designing monitoring programs to better support planning decisions.

Regional Environmental Accounts

NRM Chairs believe that reporting on the outcomes from the investment remains a challenge. Chairs, at their 2010 Forum, advocated for a national reporting system that can report on outcomes rather than outputs and decided to partner with the Wentworth Group of Concerned Scientists to pilot a system of regional environmental accounts. We have been conducting a continental scale trial to test the practical application of the science-based *Accounting for Nature* model for measuring the condition of our environmental assets over time, at all scales at which decisions are being made.

These trials have been assisted by scientists, economists and statisticians from the private sector, Commonwealth and state agencies, universities, the Australian Bureau of Statistics, the Bureau of Meteorology, the Wentworth Group of Concerned Scientists, the Ian Potter Foundation, and CSIRO.

The Accounting for Nature model creates a common (non-monetary) environmental currency that allows us to compare the relative condition of one environmental asset with another, and aggregate information at different scales and for different assets.

This concept of a common environmental currency represents a transformative shift in the business of environmental management, because it simplifies the complexity of natural systems using the rigour of scientific measurement. In our pilot we have adopted a common unit of measure, the common currency, called an Econd. It allows every environmental asset, at any scale, to be described relative to its undegraded "reference" condition, as an index between 0 and 100.

It does not imply a monetary value, nor does it describe a desired state: it creates the accounting framework to enable existing and new data to be aggregated to construct environmental accounts at multiple scales: property, local, sub-catchment, regional, state and national.

Supporting landcare and other volunteer groups

Community volunteer groups are essential to regional NRM programs. These groups have different names depending on where they are located – landcare being the most popular, but coast care groups, friends of groups, agriculture production groups all work towards sustainable management of natural resources.

Regional NRM bodies regard these groups as major partners in delivering the NRM outcomes through the development of regional NRM plans and determining regional investment priorities.

But we note that not all farmers are members of groups and that some groups form for a particular purpose and once that has been achieved they disband.

Each regional NRM body has developed engagement processes (engagement strategies, consultative frameworks etc) that work for their particular regional situation and target both individual farmers and volunteer groups. This leads to funding from the Australian government and State/Territory governments being applied to fund regional landcare facilitators, landcare network support staff, direct grants to farmers and technical support for on-ground works.

In 2012 the National NRM Chairs' Forum developed a Statement of Common purpose with the National Landcare Network that outlines a process for how landcare organisations and groups from the national level to the regional level can work together. We anticipate that these arrangements will continue to be reviewed and adapted to changing circumstances by NRM Regions Australia into the future. We will work not only with NLN but also Landcare Australia Limited and other peak organisations that support community groups addressing regional NRM issues.

Longer-term funding for regional NRM bodies

Regional NRM bodies welcomed the move towards five year funding under the second phase of the Caring for our Country program and the current commitment for three year regional delivery funding under the National Landcare Program. To build the partnerships and regional capacity necessary to plan and deliver sustainable natural resource management programs takes time and requires skilled staff.

A significant challenge for regional NRM bodies is the phasing up and down of funding and adjusting to the change in policy settings. Over the past 15 years we have had to work within and adjust to four major shifts in policy settings by the Australian Government as well as those pursued by State and Territory governments.

This presents a dilemma for regional NRM bodies in that we accept the need for all levels of government to review and revise their policy settings, but they come with a cost for how we build and maintain relationships with the community (a process that requires consistency over a long term).

As stated earlier, one outcome of the policy shift to Caring for our Country (phase 1) was that regional NRM bodies no longer had discretion for funding "capacity building". As a consequence they were perceived in some regions as not supporting landcare and community group engagement.

In summary transitional costs include:

- the discontinuity resulting from successive changes in policy and programs and the effects on fundamental relationships with community, landholders and investment partners it takes time to build trust with our communities and partners;
- Monitoring and reporting systems continue to change. New policy settings establish new reporting requirements and contributes to the failure of establishing a robust, long term, outcome reporting system;
- Retaining key staff. Transition between policies/programs create uncertainty for staff employed on short term project funding the loss of those staff substantially slows project implementation through the loss of skills, knowledge and networks.

Our ideal is for a bipartisan approach across all levels of governments for supporting the regional NRM approach.

Evidence based decision making

Achieving sustainable natural resource management outcomes is complex and requires both an appreciation of the biophysical processes at work and the long lead team between investing in actions and achieving landscape outcomes. Strong links to research and development are crucial and over the past 15 years regional NRM bodies have developed robust partnerships with research organisations to ensure that NRM plans and programs are underpinned by the best available scientific knowledge.

We also invest in sharing our own experiences. NRM Regions Australia holds biennial national Knowledge Conferences where board members and staff from the 56 regional NRM bodies meet to share information about their programs and projects.

Future funding for the national Landcare Program

We note and reject the recent Commission of Audit proposition that "National Landcare Program funding should be halved and better aligned to the goals of the Environment Protection and Biodiversity Conservation Act 1999". The Commission of Audit proposition is based on its view that the program provides funding for activities that deliver substantial private benefits and there is overlap between Commonwealth and State responsibilities and activity.

Through regional NRM bodies the Program uses sophisticated processes to identify cost sharing based on public benefit of those works. Various reviews illustrate that farmers spend \$3 to \$5 for every \$1 invested by government in adopting best practice and this reflects the split between public and private benefits arising from those activities.

The regional NRM approach is also specifically designed to address potential overlap issues between Australian Government and State/Territory Government activities by using regional NRM bodies and their NRM plans to align Commonwealth and State/Territory investments. The NRM plans, do as the Audit suggests and direct funding to "activities with the greatest environmental externalities that do not provide sufficient private benefits for landholders to fund themselves".

It has been our experience that many landholders do not take steps that provide environmental protection and increase biodiversity without the incentive of a grant or the technical and other support provided by project officers funded through the Program.

i. any other related matters.

Australia's regional NRM approach has been part of our national natural resource management effort for over 15 years and has enjoyed the support of all political parties. It has, and continues to, evolve in response to shifts in policy emphasis, new knowledge and our learning from experience with its implementation.

We are well placed to take advantage of our NRM achievements to support Australia's brand as a supplier of premium food, fibre and beverage products (meaning high quality, safe and sustainably produced) to the growing markets in Asia. This provides solid backing for all the Asian focussed marketing initiatives that we are seeing – ASA 100 – the Australian Sino 100-year Agricultural and Food Partnership, FTAs with China, Japan and South Korea, etc.

Sustainable agriculture, landcare and environmental programs delivered by regional NRM organisations support the competitive strength Australia has in the international marketplace as a 'clean, green' producer of food and fibre products. Increasingly, consumers in the wealthy markets of north Asia, north America and the European Union are demanding that the food they consume and the clothes they wear comes from farming systems that are environmentally benign. Retailers

are responding to consumer demands and are also requiring that the products that they sell meet high environmental standards. Access to these markets will continue to be fundamentally underpinned by sustainable natural resource use.

As regional NRM organisations, we are able to link our landscape protection and biodiversity conservation efforts to market signals by engaging our farming community and promoting awareness of the sustainability challenges. We value the input of farmers and their local knowledge into the solutions to meet those challenges.

Australia has the world's most highly developed regional NRM institutional arrangements applied across the nation and would be right up there in the most successful natural resource management in the world. As noted earlier, this is backed by experience going back to the 1940s and 1950s, and then the evolution of the national NRM approach in the 1980s. This has become a strong competitive advantage for Australia in selling our products to the world (and particularly Asia). We need to use it better in international marketing.

Australia's NRM Governance System – Foundations and Principles for meeting future challenges

PRINCIPLES

1. Continuity: for Australia to be sustainable, it needs an enduring, countrywide NRM delivery infrastructure

Maintaining healthy ecosystems needs an enduring NRM delivery infrastructure, one that can respond as NRM challenges change over time, but is based on skills and social capital maintained locally. The governance system needs structures and processes – from local to national, private to public – that are linked and stable in the medium term, but are also able to change and adapt in the longer term (see Principle 10).

2. Subsidiarity: devolve decision making to the lowest capable level

For best engagement of people's skills and effort, decision making needs to be devolved to the lowest capable level. However, because there is public benefit in looking after every piece of land well, governance design needs to recognise that governments have a legitimate interest in influencing local decisions. Their influence is better exerted through providing direction, standards, guidelines, incentives and sanctions, than through direct decision making at local level. All devolved decision makers need to be accountable for their decisions.

3. Integrated goal setting: base investments and governance mechanisms on coherent, nested and integrated goals

Clear and shared direction is crucial for good governance of any system. Goals must be linked across scales; and take account of the interactions in ecosystem processes, and tradeoffs between ecosystem services. Integrated goals will result in better targeted actions.

4. Holism: plan to address whole systems

All organisations and activities that impact on natural resources need to be considered. Within government, planning departments and planning decisions should be more included in NRM governance; water plans and agencies need to be better integrated with land management plans and agencies. At the local scale, landscapes must be better managed across tenures. Amongst investors, more inclusion of the community and private sector in governance design could result in mechanisms that would increase their investment.

5. Systems approach: match governance mechanisms to the nature of the linked social-ecological system

In 'complex' ecosystems, system behaviour emerges from interactions within the system and outcomes from interventions are not easily predictable. Experiments can probe for the interventions that work best and then be scaled up. Mixes of policy and delivery instruments can be used. A single 'institution' should only be used when the evidence is clear that this will address the issue and not produce perverse outcomes. Arrangements in remote areas need to be tailored to suit remote communities. Complex, contested and connected issues need to be dealt with thoughtfully and slowly so that rates of change are matched to the time scale of social capacity building.

6. Relationship orientation: recognise that relationships are as important as organisations

Connectivity across the governance system is crucial for integration across sectoral interests and between organisations at different levels. Responsibility and accountability for effective relationships need to be built into organisational objectives. Investment in relationships is crucial for the system to work as a whole and best captures the synergies within it.

7. Resilience: manage for resilience of ecosystems and communities

We need to draw on the developing knowledge and practice of ecosystem resilience for better targeting investments. A resilience approach aims to keep the slow controlling variables of ecosystems away from undesirable thresholds, or to take them over thresholds to a more desirable state. This approach needs ecosystem function to be relatively well understood (Principle 8) or an active adaptive management approach (Principle 10) to be taken.

8. Knowledge and innovation: equip the governance system with skills, capacity and knowledge, and encourage innovation

A strategic approach needs to be taken for developing the skills, capacity and knowledge that supports the governance system. Encouraging innovation – both in NRM governance and in ecosystem intervention – is crucial to development of healthier ecosystems. More connections need to be made within and between monitoring data, information and knowledge.

9. Accountability: base the case for investment and accountability on sound systems data and knowledge

Cases for government NRM investment and the choice of mechanisms need to be transparent and better quantified in order to compete with other demands on the public purse. They need to draw on good data and ecosystem understanding (from Principle 8) and where possible, be targeted using a resilience approach (Principle 7).

10. Responsiveness and adaptability: regularly review and adapt the whole Australian NRM governance system

Good corporate governance requires regular, strategic assessments of performance and achievements. Accordingly Australia's NRM governance system should be periodically and collaboratively reviewed. The review should recognise the effects of past decisions and investments, and apply an adaptive management approach, searching for innovation in governance mechanisms and testing and experimenting using case studies. It should recognise where the system is in the adaptive governance cycle (rapid growth, conservation, release or reorganisation) and formulate appropriate responses. Changes in governance mechanisms need to be collaborative and take account of the whole NRM governance system (Principles 4 and 6) in order to avoid perverse impacts and to retain productive relationships.