



# National Landcare Program

Condamine Alliance Submission

Senate Committee Inquiry into National Landcare Program

06/08/2014

## Introduction

The health of the environment across the globe is in decline due to human activities, with rising species extinctions (Proença & Pereira, 2013), risk of desertification (Núñez et al., 2010), and natural disasters (IPCC, 2012). Humans have played a critical role in this decline and must play a critical role in its reversal if our species is to survive into the future.

“The Economics of Ecosystems and Biodiversity (TEEB) study, hosted by UNEP, estimates that, if deforestation and land use change continue as at present, the world will suffer losses in “natural capital” worth between 1.3 and 3.1 trillion Euros. That is more than the financial capital wiped off Wall Street and London City Banks in 2008, the worst year in their history. And it will happen every year.” (Langdale, 2010, p. 18)

This response explores Australia’s regional approach to natural resource management, and provides a snapshot of the challenges, successes, and learnings of this national experiment.

## The history, effectiveness, performance and future of the National Landcare Program, including: *The establishment and performance of the Natural Heritage Trust*

- Community-based natural resource management has existed across the globe in various formats since the 1980s (Prager & Vanclay, 2010). The community-based model is held to have developed as a bottom-up approach that brought local issues into focus for collaborative action. Critical political changes recognising the decline in the nation’s natural resources occurred in the 1990s, and involved the signing of bilateral agreements by the Australian and state/territory governments for delivery of investment programs implemented through a new, catchment-based approach to natural resource management. The Australian approach involved the recognition—and in some cases creation—of 56 regional natural resource management organisations (regional bodies) across the country, with regional scale planning and investment programs developed by each for their allocated area of responsibility. The models adopted in each state and territory varied, with some adopting statutory arrangements and others non-statutory. The regional approach was initially implemented as a grand experiment (Lockwood, Davidson, Curtis, Stratford, & Griffith, 2009), which since inception has provided significant material for analysis of the approach’s successes and failings (e.g. Robins & Dovers, 2007; Taylor, Robinson, & Lane, 2009; Wallington, Lawrence, & Loechel, 2008).
- Natural Heritage Trust (NHT) was a useful program - positives included: the scale and scope of the program - adequate resources and flexibility to strategically invest as well as undertake on-ground works. On the down-side it lacked some of the focus and targeting that improved in the initial CFoC programs.
- Unfortunately, the flexibility of the NHT programs was not well handled by many organisations/groups who received funding through the program. The quality of outcomes was extremely variable - from both government and community stakeholders - which was



demonstrated in reviews during and after the program. Many issues were simply due to low performing community based groups having poor governance and performance standards. While there is much 'lip service' paid, it was (and still is) politically naive to overtly challenge or enforce governance and/or performance standards with voluntary community groups.

### *The establishment and performance of the Caring for Our Country program*

- The challenges and successes facing Australia's regional NRM organisations can be grouped under four headings:
  - Stability and longevity
  - Science and Impact
  - Engagement
  - Knowledge management

CHALLENGES	SUCCESSSES
<p>Stability and longevity</p> <p>Stability and longevity challenges are those that impact on the momentum, constancy, and legacy of activities undertaken by the regional bodies. These challenges include:</p> <p>a general heavy reliance on government funding, which is inherently changeable with policy and election cycles (<a href="#">Dovers, 2013</a>; <a href="#">Lockwood et al., 2009</a>; <a href="#">Robins &amp; Kanowski, 2011</a>);</p> <p>reliance by some regional bodies on State/Territory government staff/researchers as key technical advisors and as knowledge and information providers (<a href="#">e.g. Richardson, 2012</a>), access to which changes as government staffing policies ebb and flow; and</p> <p>for statutory regional bodies, government cycle influences on organisational structure and purpose. Restructure can lead to internal knowledge and skills loss</p>	<p>Stability and longevity</p> <p>Successes in the area of stability and longevity include:</p> <p>many government funding programs have moved from annual negotiations to 3-6 year agreements. This provides better continuity and the ability to stage engagement around community interest and capacity, while retaining the flexibility to address emerging issues (e.g. <a href="#">Australian Government, 2013a</a>; <a href="#">Department of Environment, 2013</a>);</p> <p>in non-statutory states, the separation from government has allowed some regional bodies to maintain structural stability and internal decision-making around organisational focus (e.g. refer to Condamine Alliance case study);</p> <p>the regional plans, developed in collaboration with stakeholders have provided consistent regional focus that supports identification of commonalities between community and investor priorities; helping maintain momentum towards longer term targets when shorter term investor changes occur; and</p> <p>governance practices and business models of the regional bodies have matured over time, with some individual results approaching broader business best practice standards (<a href="#">Vogel, 2013</a>).</p>



## Condamine Alliance Submission Senate Committee Inquiry into National Landcare Program

CHALLENGES	SUCSESSES
<p>(<a href="#">Hillman &amp; Howitt, 2008</a>).</p> <p>Science and Impact Science and impact challenges are those that affect the technical appropriateness of activities, and understanding of activity outcomes. One of these challenges is difficulty in accessing and interpreting the best available science as the basis for program design, for example: variable/lack of investor desire to fund research and development within natural resource management programs (<a href="#">e.g. Australian Government, 2013b</a>); lack of access to, and lack of resources or skills to interpret, the latest science presented in relevant journals (<a href="#">Land and Water Australia, 2006</a>); and lack of tools and experience for incorporation of socio-economic aspects of natural resource management (<a href="#">Richardson, 2012</a>; <a href="#">Seymour, Pannell, Roberts, Marsh, &amp; Wilkinson, 2008</a>).</p> <p>A second challenge relates to difficulties in assessing the impact of activities on the natural resources. For example, <a href="#">Richardson (2012)</a> identified the following overarching barriers to effective monitoring and evaluation by regional bodies: investors' general short-term program focus on outputs (e.g. number of participants, length of fencing etc.) rather than outcomes (<a href="#">also Lockwood et al., 2009</a>); long timeframes before changes in the natural resources are evident and measurable (e.g. regrowth of native vegetation can take decades)</p>	<p>Science and Impact Successes in the area of science and impact include: Australian government funding of dedicated research projects to support regional plan updates to incorporate climate change adaptation and mitigation, which is building relationships between regional bodies and researchers and focusing research outcomes on regional knowledge needs (<a href="#">Department of Environment, 2014</a>); Australian government adoption of a single online data capture portal, MERIT (refer to <a href="https://fieldcapture.ala.org.au">https://fieldcapture.ala.org.au</a>), which supports the capture of the geographic locations and nature of funded activities, and resource condition data (where possible) for longer term analysis of impact; and Specific examples exist across the country that shows positive impacts and new scientific knowledge from regional body activities. One example is the River Rescue program as a flagship for Condamine Alliance.</p>



## Condamine Alliance Submission Senate Committee Inquiry into National Landcare Program

CHALLENGES	SUCSESSES
<p>variable capacity to include monitoring longer term resource condition change within funding agreements; and</p> <p>complexity of system interactions leading to issues in isolating program impact from other influences (e.g. seasonality and other programs' effects).</p> <p>A final challenge is the difficulty in balancing political agendas and scientifically identified priorities. Conflicts between these two agendas can take investor focus away from natural resource priorities and increase the complexity of communication requirements placed on regional bodies to explain priorities to their communities.</p>	
<p><b>Engagement</b></p> <p>Engagement challenges are those that impact on the involvement of regional stakeholders in natural resource management programs. These challenges include:</p> <p>due to many of the issues listed above, challenges in obtaining and retaining stakeholder trust (<a href="#">Lockwood et al., 2009</a>);</p> <p>mismatches between regional priorities and the investors' scales of priority, which may be quite different (<a href="#">Crabb &amp; Dovers, 2007</a>);</p> <p>in States with statutory regional bodies, the mix of regulatory roles and engagement with the same stakeholders for voluntary action can lead to trust issues (<a href="#">Lockwood et al., 2009</a>);</p> <p>unaligned boundaries across stakeholders (<a href="#">Herr, 2007, as cited in Larson &amp; Brake, 2011</a>) and natural resources,</p>	<p><b>Networks and engagement</b></p> <p>One great success achieved through the regional approach was seen in the rapid response to the 2010/11 floods in Queensland. These floods affected more than 78 percent of the State (an area bigger than France and Germany combined) and over 2.5 million people, with damage estimated as totalling more than \$5 billion (<a href="#">Queensland Floods Commission of Inquiry, 2012</a>). In Queensland, the regional bodies in affected areas quickly instigated response support programs with their communities (e.g. establishment of volunteer clean-up crews; acquisition of satellite and aerial imagery; and undertaking field surveys for damage assessments and recovery planning) and later received funding from the Queensland government to implement recovery activities. The community networks of the regional bodies allowed quick access to affected landholders and facilitated the rapid flow of information and support to assist with recovery efforts.</p> <p>The networks held by some of the regional bodies provide great capacity to direct information and engagement to very specific target audiences with confidence. In many regions, the regional body "knows someone, who knows</p>



## Condamine Alliance Submission Senate Committee Inquiry into National Landcare Program

CHALLENGES	SUCSESSES
<p>which adds to the complexity of management, engagement and priority-setting; lack of whole-of-government approach to support decision-making (<a href="#">Mitchell, Norton, Grenfell, &amp; Woodgate, 2007</a>); and mismatched devolution of power compared with task responsibilities (<a href="#">Lockwood et al., 2009</a>).</p>	<p>someone, who knows someone; so you can get to the person you really want to engage. This depth and breadth of networks has never existed with such strength" (pers. com. P. Hamilton, 17 April 2014).</p>
<p><b>Knowledge management</b> A key knowledge management challenge for the Australian natural resource management sector as a whole, is the lack of collaborative information systems (within the regional body network, at State and national program levels, and including private sector data) to support cross-regional sharing of activity records, impact information and learnings (<a href="#">Fero, Duncan, &amp; Spry, 2013</a>; <a href="#">Lockwood et al., 2009</a>; <a href="#">Roberts, Seymour, &amp; Pannell, 2011</a>). Such a system (or systems) could compound the rate of program improvement over time to greatly increase efficiencies and outcomes. See comment above re CfoC providing better focus and targeting - the business plan and value proposition was well articulated and there was a clearer plan than before for purchasing public benefit environmental outcomes. This was no doubt due in part to the maturity of the people, knowledge and processes around environmental investment priorities and decisions. Unfortunately, the 'opening up' of investment to a wider group of stakeholders (i.e. not NRM groups) brought new challenges. The concept is a good one - i.e. to bring in competition and pursue efficiencies, however many of</p>	<p><b>Knowledge management</b> Successes in the area of knowledge management include: Spatial data portals being implemented by some states (e.g. NSW) and some national investment programs (e.g. Biodiversity Fund and Caring for Our Country) for whole-of- state or program natural resource management activity data collection; Annual national conference for natural resource management knowledge sharing (refer to <a href="http://www.conference.nrmregionsaustralia.com.au/">http://www.conference.nrmregionsaustralia.com.au/</a>); and National and State-based communities of practice among practitioners, which facilitate the sharing of opportunities and learnings, and the identification of common interests where collaboration can lead to efficiencies.</p>



CHALLENGES	SUCCESSSES
<p>the new players had (and still have) little or no understanding of environmental systems or how to achieve on-ground practice change. As a result, much of the investment was wasted on initiatives and tools which by their nature could not achieve the required results.</p> <p>The common negative legacy of CfoC and NHT is the plethora of activities and tools that didn't work - because they were fundamentally flawed in their design. This is a common type of failure in public good programs - well intended 'perpetrators' are enabled to inflict inappropriate solutions on 'victims' for the life of a project (i.e. 3 to 5 years) and rarely suffer any penalty. In the real world, customer/sales signals and other commercial considerations usually result in corrective action much sooner. The fundamental difference is in the performance indicators used - commercially viable models consider customers value propositions - no value means no sales.</p>	

*The outcomes to date and for the forward estimates period of Caring For our Country*

- Through the Caring For our Country, there have been some key learnings that can be taken from the Australian experiment. From the literature, these learnings include:
  - Maintain autonomy through diverse funding sources that increase autonomy and longevity (Lockwood et al., 2009; Prager & Vanclay, 2010), and an identity distinct from related government agencies (Lockwood et al., 2009)
  - Ensure good governance through effective administrative procedures and institutional arrangements (Prager & Vanclay, 2010), and monitoring and evaluation that focuses on outcomes rather than outputs (Lockwood et al., 2009);
  - Ensure power is devolved to match the assigned tasks (Lockwood et al., 2009), shared through cooperation at multiple scales (Larson & Brake, 2011), and balances cooperation and competition (Lockwood et al., 2009);



## Condamine Alliance Submission Senate Committee Inquiry into National Landcare Program

- Maintain focus on what's really important through long term thinking (Larson & Brake, 2011) that allows for creation and sharing of knowledge to tackle the complex issues (Measham, 2013), and considers the complexity of the systems involved (Cotching, Sherriff, & Kilpatrick, 2009);
- Balance the value placed on local and scientific knowledge in decision-making (Larson & Brake, 2011; Lockwood et al., 2009) and include all relevant stakeholders to build ownership and comprehensive issue identification (Prager & Vanclay, 2010);
- Invest in the socio-economic and human aspects required for long-term change (Dovers, 2013), including effective staff training (Prager & Vanclay, 2010);
- Understand your stakeholders; what you can expect of volunteers (Prager & Vanclay, 2010), how they like to communicate (Cotching et al., 2009);
- Implement programs that change the social meaning of land management practices (Minato, Curtis, & Allan, 2012), turn participants into champions (Cotching et al., 2009), and build trust (Sharp, Thwaites, Curtis, & Millar, 2013);
- Get the most out of available information through effective knowledge management systems (Land and Water Australia, 2006; Lockwood et al., 2009), systematic use of available information (Land and Water Australia, 2006; Seymour et al., 2008), use of local experts to translate the science (Cotching et al., 2009), and ensuring systems facilitate two-way information flow through and between organisations (Land and Water Australia, 2006; Prager & Vanclay, 2010; Roberts et al., 2011);
- Cannot speak for other regions/funding recipients but outcomes to date in this region are on track for full delivery - on time. This is despite a much delayed start in several program areas due to problems with the MERI process negotiations initially and subsequently with the 'clunky' implementation of the on-line MERIT.
- From a service provider perspective it appears the MERI process was used to re-negotiate and re-align projects after contracting based on an initial proposal - which has not happened before. Previously, changes were requested and negotiated prior to approval of the project concept and then the MERI was developed to align with the agreed outcomes and activities. On this occasion there was no indication the projects were required to be changed until gaining agreement on MERI plans became problematic. Had it been made clear from the outset that the initial approval of proposals was not an approval of the specific objectives and activities, which we had assumed, the process could and would have been managed very differently?
- Given we have experienced a precedent of project scope 'creep' after initial approval, it is unclear what expectations service providers should have for the remaining contracted period of current projects and for future programs.





## Condamine Alliance Submission Senate Committee Inquiry into National Landcare Program

### *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 full implication for programs is as yet un-known because of the lack of detail available in relation to proposed changes. The reduction in overall funding and significant re-alignment of some existing funding will no doubt have an impact on how environmental capacity building and practice change services are delivered going forward. However, the cumulative impact on individual service providers will depend on their individual investment portfolios. Those with more diverse sources of investment will have different opportunities and risks to those without.
- An as yet unknown factor is the extent to which service providers and their individual business models are susceptible to resourcing thresholds. Depending on the services they have been contracted to deliver and the delivery platforms they are using to do so, the reduction in available funding will have different impacts. I.e. service providers using more sophisticated program designs which exploit linkages and leverage from other similar programs are potentially more at risk when some programs cease than those who utilise the older less efficient 'silo' delivery approaches. Synergistic programs are much more efficient and effective but rely on the availability of multiple streams to achieve the leverage. The silo approach trades the efficiency and effectiveness of collaboration for the lower returns and risks of a single source.
- Given the points above, it is clear that a reduced investment could potentially have a disproportional impact on the achievement of natural resource outcomes. Because of the interconnectedness of productivity and environmental issues; and the thresholds involved in achieving beneficial outcomes, even small changes in the availability or targeting of resources can have a devastating result.

### *The Government's policy rationale in relation to changes to land care programs*

#### *Some positive aspects*

- The program has an underpinning philosophy of engaging and enabling responsibility, taking and purposeful action by communities
- The approach is based around local community action, which Condamine Alliance strongly supports because it has been demonstrated to work
- The key elements reflect good foundational principles for effective engagement and participation of both community stakeholders and service providers
- Grass roots engagement is encouraged which ensures inclusion and involvement of all relevant stakeholders

- The program recognises the role and value of volunteerism and stewardship in delivery of locally relevant on-ground outcomes
- The Landcare organisation and its ethos has been restored as a core component of the national framework and approach
- The idea of decadal change and decadal investment in NRM outcomes is fantastic - it gives a long enough time frame to see change and also reflects the reality of achieving significant and permanent shifts in awareness, attitudes and practices.

### *The Challenges*

- Current Capacity of Landcare and other volunteer groups:
  - It would be an incorrect assumption that the new program vision reflects the current situation for voluntary community networks and other stakeholders. To be successful, the program should aim to build an improved Landcare going forward. There is a significant gap between where the community is and where the program aspires for them to be which will require time for change to accommodate the cultural shift
  - In this region and many other areas the 'health' of traditional Landcare groups has deteriorated over the last 10 years largely due to the widening gap between the capacity of community groups and the requirements of current investment programs. The Landcare approach articulated in the framework is what many individuals and groups aspire to but does not reflect the reality for most groups.
  - The lack of planning and organisational structure for Landcare to operate within is an issue. The Landcare network does not currently have the capacity for high level strategic planning and management.
- Availability of volunteers and volunteers groups
  - It may be an assumption that there are sufficient volunteers available for the anticipated extent of on-ground action. Volunteer group's feedback to us is there are insufficient numbers of volunteers for current initiatives in most areas. Growing the number of initiatives will require an aligned recruitment process.
- Adequate resources
  - Resourcing will be essential to make this work. The volunteer capacity exists but only in the short bursts - gone are the days where people commit for 'committees' - this is a common trend across all community groups
  - The 7 key elements are strong but will require significant resources and strategic focus to turn them into tangible on-ground outcomes.

- Resourcing ‘locally driven approaches to local issues and self-determination’ could have impact on expected NRM outcomes but to do this the framework needs to clearly articulate the link between local actions to global solutions as this is currently missing.
- Macro level problems are articulated (eg. increasing populations) however the solutions offered are micro level (eg. Weed and animal pest control, salinity management). To be effective against the major environmental challenges the solutions need to be meaningful and the connections/logic clear on how they contribute
- Further planning around implementation should recognise the significant transaction costs associated with coordination of community/volunteer group based approaches. Recognising and resourcing the community engagement and coordination will be essential for a successful program.
- Links to planning and action
  - The way the program reads it appears to be all bottom up with not strategic linkages to the national agenda, regional NRM plans or national NRM targets. Making the strategic linkages more overt would strengthen the program.
  - Needs to be a strong balance between planning and action. In the 1990’s it was all about action; and the 2000’s were all about planning; let’s make the 2010’s about joining these two together to implement planned actions.
- Best Practice Project Management
  - Program and project designs and structures will need to be reconfigured to facilitate high-level participation of volunteer community groups to ensure the appropriate amount and type of support and capacity building. I.E. the risk is doing the same and getting the same.
  - There appears to be an assumption that an improvement in resource condition will be found when the actions and their impacts are measured - this is a large assumption if the actions are not informed and targeted.
  - The incorporation of a business enterprise approach (to complement the volunteerism and stewardship) would strengthen the framework
  - Statements about past Landcare achievements are overlooking the level of investment that was required to get the involvement and outcomes from the volunteers.
- Linkage to local networks
  - Moving away from a regional body framework (which integrates stakeholders at regional level, including Landcare) will decrease local involvement, reduce continuity through the existing systems and networks; reduce the broad engagement of all stakeholders.

- An approach without the regional body support limits the audience and creates critical risks by relying entirely on stewardship and volunteerism which are likely to be exhausted pretty quickly - other drivers for action will be required or momentum will die.
- The Green Army - promoting what appears to be an employment program as a dedicated environmental initiative is a high risk strategy. Feedback from community groups has been negative about this program - they believe it: disenfranchises local voluntary environmental groups (i.e. Landcare); is unlikely to have any positive environmental impacts; and is not a good use of resources.

### *Analysis of national, state and regional funding priorities for land care programs*

- NLP feedback document deals with the national level
- State policy currently appears to be one of appeasement. Given they use the Regional NRM Delivery investment as a primary platform for the delivery of on-ground environmental outcomes, a policy has recently been introduced for NRM Groups to provide 20% of State funds they receive directly to 'grass roots voluntary groups'. This target was introduced following approval of investment programs which were explicitly designed deliver the outcomes contracted which while almost certainly involving them, may not be best delivered through grass roots community groups. The situation now is that Landcare groups are not happy because the available funds are tied very tightly to the specific activities and deliverables NRM groups are contracted to provide and NRM groups are not happy because their program designs have been compromised by a condition added to their contracts that appears to be an afterthought in response to 'political' pressure from a noisy minority. The overall impact is likely to be a reduction in the quality of outcomes caused by the imposed quota which requires the involvement of groups in delivering activities beyond their areas of interest and capability.
- Regional funding priorities recognise the appropriate involvement of local voluntary community groups. The delivery of on-ground practice change has always involved these and other key stakeholders. The challenge for the regional model is to help transition the thinking of local stakeholders as the expectations and priorities of the wider community in relation to environmental outcomes evolves. While this evolution is reflected in the objectives of public sector investment programs there appears to be a simplistic assumption that the same old activities and approaches will somehow deliver the new and quite different outcomes required. Not only are different actions required, in many cases the system relationships are counter-intuitive - i.e. the actual solution is not what you may logically expect. Given the challenges inherent in the delivery of high quality environmental outcomes, it is extremely unhelpful when program designs are flawed by counterproductive requirements for how they are delivered.



*How the Department of the Environment and the Department of Agriculture have, and can, work together to deliver a seamless land care program*

- Collaborative approach to caring for the land. Understand the systemic relationships between environmental objectives/issues and managed landscapes - and recognise the environment is a human system not just a biological system. Therefore programs should achieve social change which requires leadership, not just management.
- Understand that people change practices when they see the benefit of doing so and when they have the ability to do so - good programs link issues to opportunities and then equip people to realise their value proposition.
- The other challenge is to support initiatives that leave a legacy worth leaving - i.e. the capacity in the community has been enhanced and there is confidence that changes can and will be made. Poorly designed/managed initiatives with inappropriate methodologies or unrealistic aims have a net negative impact on communities. They wreck relationships, eroding trust and confidence which are essential ingredients for success of any program or project.

*The role of natural resource management bodies in past and future planning, delivery, reporting and outcomes*

- Key attributes of Regional Bodies:
  - Utilises the model of local 'communities of practice' that form, do the job, and then move on? This approach upholds all the principles outlined in the framework but allows for much stronger capacity than traditional Landcare/voluntary community groups - the emphasis must be on the 'relevant groups' not just Landcare. This reflects the current best practice model of volunteerism which has a supported coordinating aspect to facilitate/ be the catalyst for engagement and change. When operating correctly, the existing Regional NRM group network provides this function.
  - The model could be enhanced to better utilise the existing infrastructure and capital (social, intellectual, relationship) - i.e. the regional delivery network. An approach that does not utilise this asset is problematic by: being out of alignment with best practice for community engagement; failing to realise the return on investment of the current infrastructure; and, creating an unnecessary cost to establish alternative structures.
  - Contemporary community engagement approaches and models of volunteerism recognise the changed 'market' in which they operate - i.e. that many people prefer a more individual approach to volunteering and groups are now much more fluid in their interests and operation. Including principles of game theory and competitiveness would ensure that programs and involvement opportunities are both enjoyable and challenging for participants.

- The regional model is proven to be the most effective mechanism for achieving public good outcomes at the local level. The strength of the model is in its networks which enable highly effective and efficient communication and flow of knowledge. Maintaining these connections ensures any regionally relevant program can be delivered - immediately, no delay while identifying knowledge networks and key influencers; directly to target audiences, no unnecessary middle-men; effectively because we understand their value propositions and 'language'; and, efficiently, because we don't need to rebuild or duplicate project or human infrastructure.
- Regional groups play a role as the independent organisation - a local, known and trusted organisation whose single focus is to ensure a sustainable catchment environment for the whole community. Being a-political enables NRM groups to hold a unique position in their community - they are completely transparent and open, without a 'personal' agenda - and therefore are able to act without fear or favour.

### References

- Australian Bureau of Statistics (2013a) *7503.0 - Value of Agricultural Commodities Produced, Australia, 2011-12*, Canberra, ACT, Australian Bureau of Statistics.
- Australian Bureau of Statistics (2013b) "Estimated Resident Population by Age, by Geographical Classification, Persons - 30 June 2011", *3235.0 Population by Age and Sex, Regions of Australia*, Canberra, ACT, Australian Bureau of Statistics.
- Australian Government (2013a) *Caring for Our Country 2013-2018*, Retrieved from <http://www.nrm.gov.au/about/caring/overview.html>
- Australian Government (2013b) *Caring for our Country Regional Delivery 2013-18: Applicant guidelines and how to apply*, Canberra, ACT, Australian Government.
- Condamine Alliance (2012) *Actions & achievements: Dewfish Demonstration Reach*, Toowoomba, QLD, Condamine Alliance.
- Condamine Alliance (2013) *Annual Report 2012-2013*, Toowoomba, QLD, Condamine Alliance.
- Condamine Alliance (2014) *Condamine Alliance*. Retrieved from [www.condaminealliance.com.au](http://www.condaminealliance.com.au)
- Cotching, W. E., Sherriff, L., & Kilpatrick, S. (2009) "Integrating farm production and natural resource management in Tasmania, Australia", *Journal of Agricultural Education and Extension*, Vol. 15, No. 3, pp 287-300, doi:10.1080/13892240903069611
- Crabb, P., & Dovers, S. (2007) "Managing natural resources across jurisdictions: Lessons from the Australian Alps", *Australasian Journal of Environmental Management*, Vol. 14, No. 4, pp 210-219.
- Department of Environment (2013) "Frequently asked questions", *Biodiversity Fund*, Retrieved from <http://www.environment.gov.au/cleanenergyfuture/biodiversity-fund/faqs.html>
- Department of Environment (2014) *Stream 2 NRM Fund. Reducing Carbon*, Retrieved from <http://www.climatechange.gov.au/reducing-carbon/land-sector-measures/nrm-fund/stream-2>
- Dovers, S. (2013) "The Australian environmental policy agenda", *Australian Journal of Public Administration*, Vol. 72, No. 2, pp 114-128, doi:10.1111/1467-8500.12013

- Fero, J., Duncan, D. H., & Spry, S. (2013) "Evaluating the performance of a centralised government geodatabase in capturing publicly-funded natural resource management activities in Victoria, Australia", *Australasian Journal of Environmental Management*, Vol. 20, No. 2, pp 101-115, doi:10.1080/14486563.2013.764590
- Hillman, M., & Howitt, R. (2008) "Institutional change in natural resource management in New South Wales, Australia: Sustaining capacity and justice", *Local Environment*, Vol. 13, No. 1, pp 55-66, doi:10.1080/13549830701581929
- IPCC (2012) *Managing the risks of extreme events and disasters to advance climate change adaptation: Summary for policy makers*, Cambridge, UK, Intergovernmental Panel on Climate Change.
- Land and Water Australia (2006) *Knowledge for Regional NRM: Connecting researchers & practitioners*, Canberra, ACT, Land and Water Australia.
- Langdale, G. (2010) "Nature of Value", *Our Planet, the magazine of the United Nations Environment Programme*, UNEP, pp 18-19.
- Larson, S., & Brake, L. (2011) "Natural resources management arrangements in the Lake Eyre Basin: An enabling environment for community engagement?", *Rural Society*, Vol. 21, No. 1, pp 32-42.
- Lockwood, M., Davidson, J., Curtis, A., Stratford, E., & Griffith, R. (2009) "Multi-level environmental governance: Lessons from Australian natural resource management", *Australian Geographer*, Vol. 40, No. 2, pp 169-186, doi:10.1080/00049180902964926
- Marketshare (2012) *Market Research Report: 2012 Stakeholder Survey*, Toowoomba, QLD, Report for Condamine Alliance.
- Measham, T. G. (2013) "How long does social learning take? Insights from a longitudinal case study", *Society & Natural Resources*, Vol. 26, No.12, pp 1468-1477, doi:10.1080/08941920.2013.799726
- Minato, W. L., Curtis, A. L., & Allan, C. (2012) "Understanding the role and influence of social norms: Lessons for NRM", *Local Environment*, Vol. 17, No. 8, pp 863-877, doi:10.1080/13549839.2012.714758
- Mitchell, D. P., Norton, T. W., Grenfell, R. I., & Woodgate, P. W. (2007) "Barriers to implementation of natural resource management at the landholding level in the intensive agricultural zones of Southern Australia", *Australasian Journal of Environmental Management*, Vol. 14, No. 2, pp 103-110.
- Núñez, M., Civit, B., Muñoz, P., Arena, A. P., Rieradevall, J., & Antón, A. (2010) "Assessing potential desertification environmental impact in life cycle assessment", *The International Journal of Life Cycle Assessment*, Vol. 15, No. 1, pp 67-78, doi:10.1007/s11367-009-0126-0
- Prager, K., & Vanclay, F. (2010) "Landcare in Australia and Germany: comparing structures and policies for community engagement in natural resource management", *Ecological Management & Restoration*, Vol. 11, No. 3, pp 187-193, doi:10.1111/j.1442-8903.2010.00548.x
- Proença, V., & Pereira, H. M. (2013) "Comparing Extinction Rates: Past, Present, and Future", *Encyclopedia of Biodiversity* (2nd Edition), Waltham: Academic Press, pp 167-176.
- Queensland Floods Commission of Inquiry (2012) *Queensland Floods Commission of Inquiry final report*, Brisbane, QLD, Queensland Floods Commission of Inquiry.

- Richardson, L. (2012) *Reviewing the monitoring and evaluation practices and perceptions of Australia's regional natural resource management organisations*, Master of Business Research thesis, University of Southern Queensland, Toowoomba. Retrieved from <http://eprints.usq.edu.au/23361/>
- Roberts, A. M., Seymour, E. J., & Pannell, D. J. (2011) "The role of regional organisations in managing environmental water in the Murray-Darling Basin, Australia", *Economic Papers*, Vol. 30, No. 2, pp 147-156, doi:10.1111/j.1759-3441.2011.00113.x
- Robins, L., & Dovers, S. (2007) "Community-based NRM boards of management: Are they up to the task?", *Australasian Journal of Environmental Management*, Vol. 14, No. 2, pp 111-122.
- Robins, L., & Kanowski, P. (2011) "'Crying for our Country': eight ways in which 'Caring for our Country' has undermined Australia's regional model for natural resource management", *Australasian Journal of Environmental Management*, Vol. 18, No. 2, pp 88-107, doi:10.1080/14486563.2011.566158
- Seymour, E., Pannell, D., Roberts, A., Marsh, S., & Wilkinson, R. (2008) "Decision-making by regional bodies for natural resource management in Australia: current processes and capacity gaps", *Australasian Journal of Environmental Management*, Vol. 15, No. 4, pp 211-221.
- Sharp, E. A., Thwaites, R., Curtis, A., & Millar, J. (2013) "Trust and trustworthiness: conceptual distinctions and their implications for natural resources management", *Journal of Environmental Planning & Management*, Vol. 56, No. 8, pp 1246-1265, doi:10.1080/09640568.2012.717052
- Taylor, B., Robinson, C. J., & Lane, M. B. (2009) *Contested country: Local and regional natural resources management in Australia*, Collingwood, Vic: CSIRO Publishing.
- The Estate of Dorothea Mackellar (2011) *My country*, Official Dorothea Mackellar Website, Retrieved from <http://www.dorotheamackellar.com.au/archive/mycountry.htm>
- Vogel, N. (2013) *Performance excellence reviews of regional NRM organisations: Analysis of findings 2011 to 2013*, Coolum Beach, QLD: AKM Group.
- Wallington, T., Lawrence, G., & Loechel, B. (2008) "Reflections on the legitimacy of regional environmental governance: Lessons from Australia's experiment in natural resource management", *Journal of Environmental Policy & Planning*, Vol. 10, No. 1, pp 1-30, doi:10.1080/15239080701652763