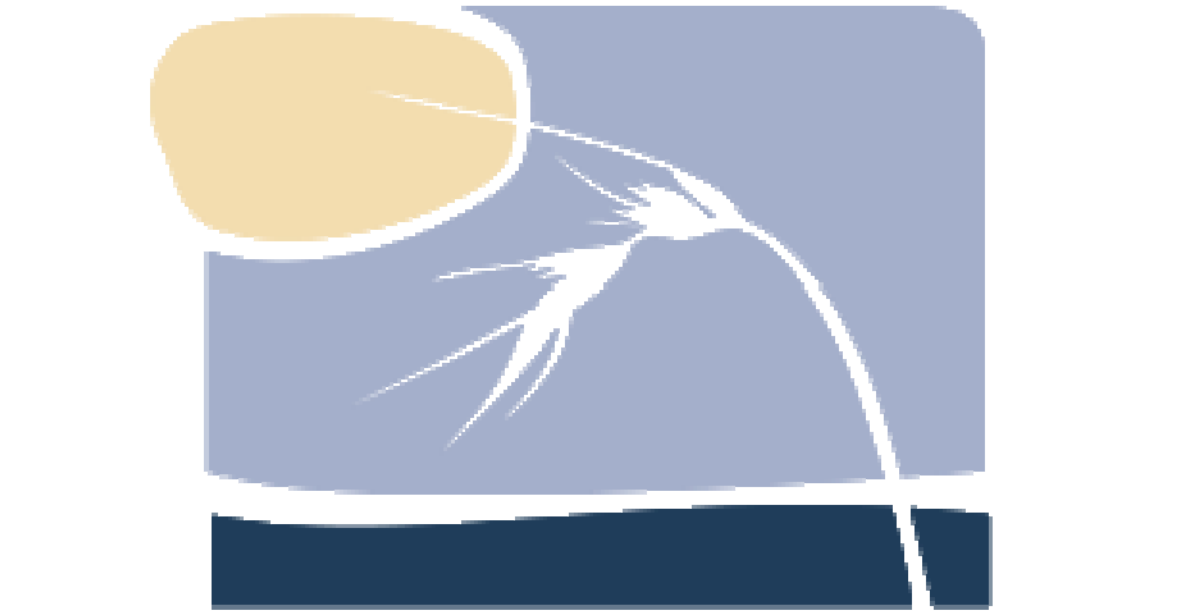

Compilation of Final Reports

Caring for Our Country –

Communities in Landscapes Project

Compiled by

Landcare NSW Inc

Landcare New South Wales

CARING FOR OUR COUNTRY

Communities in Landscapes

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Forward – M Stevenson

Snapshot of the Project

Setting the Scene - Participatory Rural Appraisal

Australian Government - Caring for our Country Final MERI Report

Socio Cultural Evaluation Report

Forward by Mandi Stevenson - Landcare NSW Inc

The Communities in Landscapes Project was an initiative that aimed to increase native habitat and achieve landscape scale conservation across Blakely's Red Gum, Yellow Box- and White Box-Gum Grassy Woodlands and Derived Native Grasslands (Box-Gum Woodlands). The area of the project spread across three core Natural Resource Management regions in NSW where these Box-Gum Grassy Woodlands (BGGW) occur, notably Central West, Murrumbidgee and Lachlan.

The Project was also designed to bring together key agencies involved in the conservation and management of these BGGW areas, and would include conservation, production and social aspects to reflect the complicated nature of people managing the natural environment, and those that work with them.

The project was made possible through $4.2m funding from the Australian Government's Caring for our Country, with contributions from each of the partners bringing the value of the whole project closer to $10m.

There were three core areas this project focussed on:

1. Improved targeting of information and management support for land-manager and community groups
2. Improved knowledge base to inform and support management decisions in Box-Gum Woodland landscapes
3. Implementation of on-ground activities across multiple properties in priority local landscapes.

The partners in the project were Landcare NSW Inc, Grassy Box Woodland Conservation Management Network – hosted by NSW Dept of Conservation Climate Change and Water (DECCW now OEH), DECCW Threatened Species Unit and National Parks & Wildlife Service, NSW Dept of Primary Industry, University of NSW (later University of Sydney), Greening Australia, CSIRO, STIPA Native Grasses Association, Birds Australia and WWF. A huge project that if successful, at best, could provide a model for these major partners working together in true partnership to achieve multiple joint outcomes, and as a fall back would see all these agencies working collaboratively to achieve their own outcomes, with separate agendas and operational activities.

Landcare NSW Inc was nominated to act as the Lead Agency, as it was deemed that there was no affiliation to any particular agency or government, and it could provide the key link to community groups and landholders as these BGGW occur mainly on private land. In order for Landcare NSW Inc to adequately manage this project and endeavour to develop true partnerships across a range of disciplines three part-time Community Woodlands Officers were employed as well as a Project Manager for a time. During the project a system of management by teams was initiated to include involvement by the key partners across all aspects of the project.

Each individual agency also had responsibility for delivery of certain aspects of the project as well as the expectation of cross disciplinary involvement. These activities included

Benchmarking, Participatory Appraisal and Landscape Function Analysis completed by University of Sydney, Florabank information material developed by Greening Australia, multiple trials established by CSIRO, Woodland DVD 's etc., biodiversity studies were initiated across most areas by the Threatened Species unit. Numerous training events and field days were carried out jointly by CMN, DPI, STIPA, Community Woodlands Officers, CSIRO and others covering such topics as identification, conservation management, grazing management and healthy farm dams. This list of activities is by no means comprehensive but gives an indication of the breadth possible across multiple agencies and disciplines offered through a single project.

One of the key successes of the project was the Cross Property Biodiversity Planning carried out in 7 different locations. This enabled landholders to develop their own whole farm plans as well as link in with neighbouring properties to achieve broader outcomes and connectivity. This re-kindled for many what Landcare is all about, sharing ideas and expertise outside the farm gate and across the fence. This required a huge commitment from the operational staff involved in this process especially within DPI and NPWS and project staff. As with all projects those that became most involved, including partners, staff and landholders, gained the most from the project.

A great collection of Woodland resources was produced by the project partners such as videos, DVDs, Fact Sheets, Plans, Best Practice Guidelines, Fliers & Newsletters. The small grant program also enabled community groups to develop resources directly targeted to their needs. Each small grant recipient has also developed a pictorial representation of their project, some through Place Stories and others with the use of DVD etc. A comprehensive list of all resources is available on our website, as well as a list included in the promotional pack

Landcare in NSW has benefited greatly from this project and Landcare groups and members overall in many areas have been reinvigorated and inspired again to work collectively and collaboratively to achieve more for the environment as well as for their own properties. Sustainability of this is dependent on adequate support for groups of landholders to maintain a focus and generate a reason for their collaboration.

Landcare does not have a uniform structure across the landscape and the networking ability both within and across groups of landholders is varied. This project has facilitated a co-ordinated approach with support from multiple agencies to provide a one-stop shop for landholders making understanding and integrating disciplines a much easier process than individual agencies all vying for their attention and time.

Landholders have been an integral part of this project and while the benefits to each of the partner organisations has been great, the environment and the landholders involved have ultimately been the winners in this project which is the ultimate aim of Landcare.

Overall this project has been one of the great highlights of my career, and while consuming many hours of volunteer time the rewards of working with a very professional team and developing some very strong partnerships will have lasting benefits well into the future. My heartfelt thanks go to all involved in the project.

Mandi Stevenson

A SNAPSHOT OF THE PROJECT

The Overall Aim of the Project

Increasing native habitat and landscape scale conservation within White-Box, Yellow-Box & Blakely's Red Gum Grassy Woodlands (BGGW) and derived native Grasslands, through community engagement and participation, for both biodiversity and production outcomes

FOCUS AREAS –

IT'S ABOUT THE PEOPLE

1. Improved targeting of information and management support for land managers and community groups (field days, workshops, resources)
2. Improved knowledge base to inform and support management decisions in BGGW landscapes (research surveys etc)
3. Implementation of on-ground activities across multiple properties in priority LOCAL landscapes (stuff on ground)

A KEY STRATEGY WAS CONDUCTING A PARTICIPATORY APPRAISAL EARLY IN THE PROJECT –

"Asking people early what they wanted and how they wanted to be involved"

Targets

Increasing Native Habitat:

Increase areas of Box-Gum Woodland managed to reduce critical threat by 55,390 ha (actually achieved over 66,000)

Increasing Landscape Scale Conservation:

60 farmers adopting practices that contribute to on-going conservation and protection of biodiversity (actually achieved 70 +)

ADOPTING practices means changing the hearts and minds of people.

$4.2 m from the Australian Government equates to around $64/ha investment – total investment including agency and landholder contribution to $10m providing a leverage of 2.4 times initial investment.

A Solution to a Wicked Problem

"Reflecting the complicated nature of people managing the natural environment and those that work with them. Including partners involved in conservation, production and social aspects of natural resource management."

Landcare linking people with agencies as a one stop shop

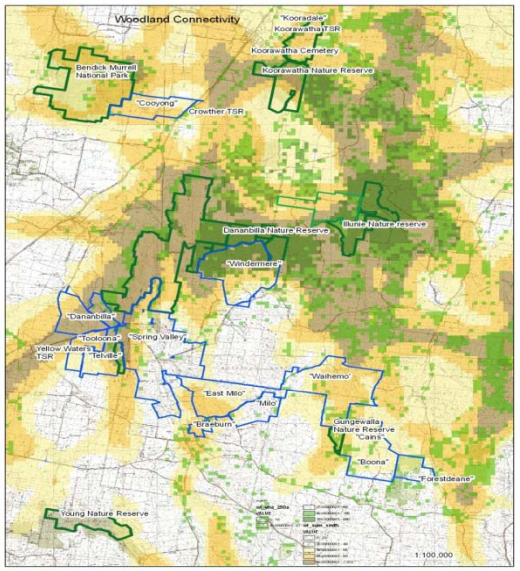

HEALTHY HABITATS
Don’t remove it
It won’t improve it
Hang onto our hollows
they take over 100 years to form.
CARING FOR OUR COUNTRY
Communities IN LANDSCAPES
GRASSY BOX WOODLAND CONSERVATION MANAGEMENT NETWORK
www.gbwcmn.net.au

Milestone: benchmark properties surveyed, results collated and published on the web

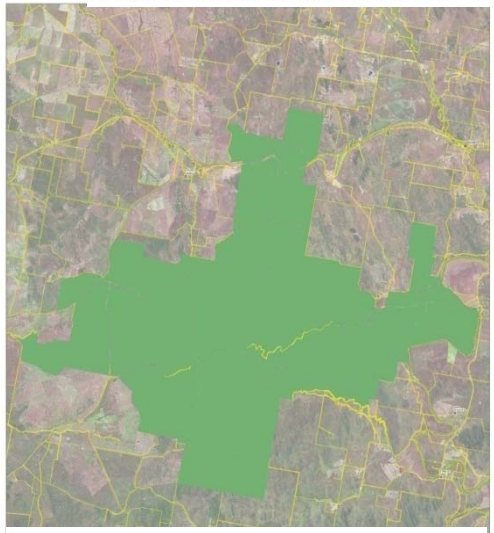
Conclusions of the Benchmark Study which included LFA

- The innovators achieved more perennials and litter in their systems by using short, intense grazing followed by 'enough' rest/recovery. These strategies are very likely to mean:
  - less water will run off, more water will soak in (like obtaining a higher rainfall) and there will be plants to convert increased moisture into growth;
  - more nutrients will be cycled and overall fertility will increase even without applying fertilizers (at least in the short term);
  - soil carbon will increase, microbes will become more numerous and more diverse;
  - It is possible to cause a shift to a dominance of native perennial grasses, with the return of more productive and palatable species over time.

Milestone: 60 Farmers involved in cross property plans



Dananbilla-Illunie



Uamby

Humula

- 7 groups across three catchments – Kyeamba & Humula, Limestone Creek & Dananbilla Illunie, and Uamby Creek, Belgravia & Heifer Creek.
- 10 connected landholders per group
- Covering around 65,624 hectares
- Seed funding offered to assist with on-ground works

Farmers engaged through

- Paddock Plants field day
- Connectivity workshop
- Flora and Fauna survey
- Grazing management day
- Farm visits
- Soil testing

Baseline Surveys

- Flora and Fauna surveys

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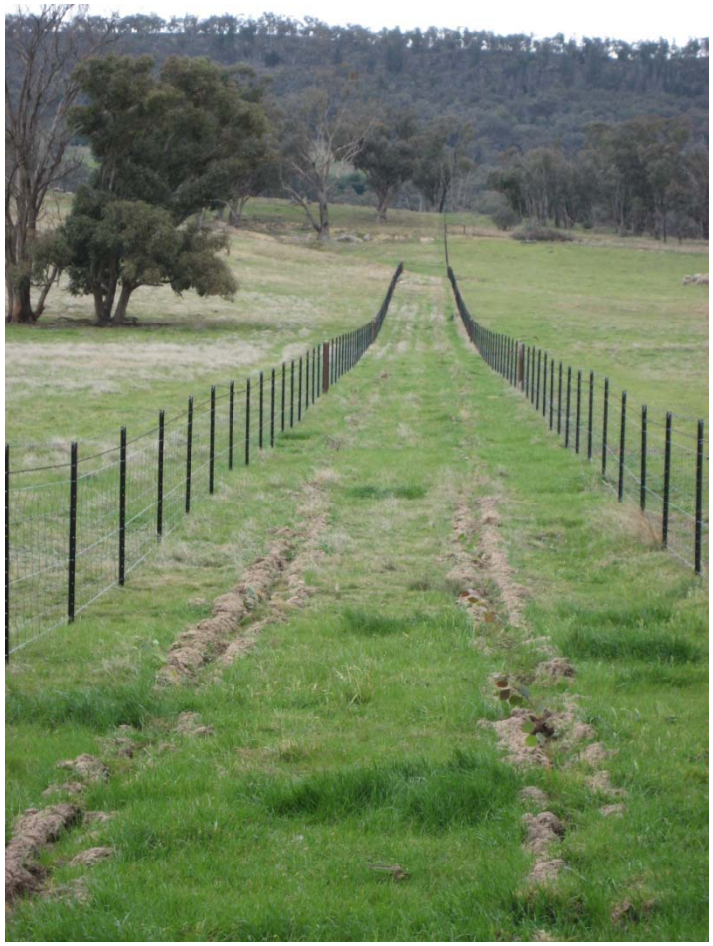
On-ground works completed at “Spring Valley”, Murringo



Tree-line corridor

Scattered tree planting over 200 ha linking adjoining Nature Reserve ridges

"Allowing neighbours to work together towards a common goal" Roger Warren, Murringo

Milestone: 9 Woodlands Awareness/Management Field Days & 15 Training Events (actual 56 in total)

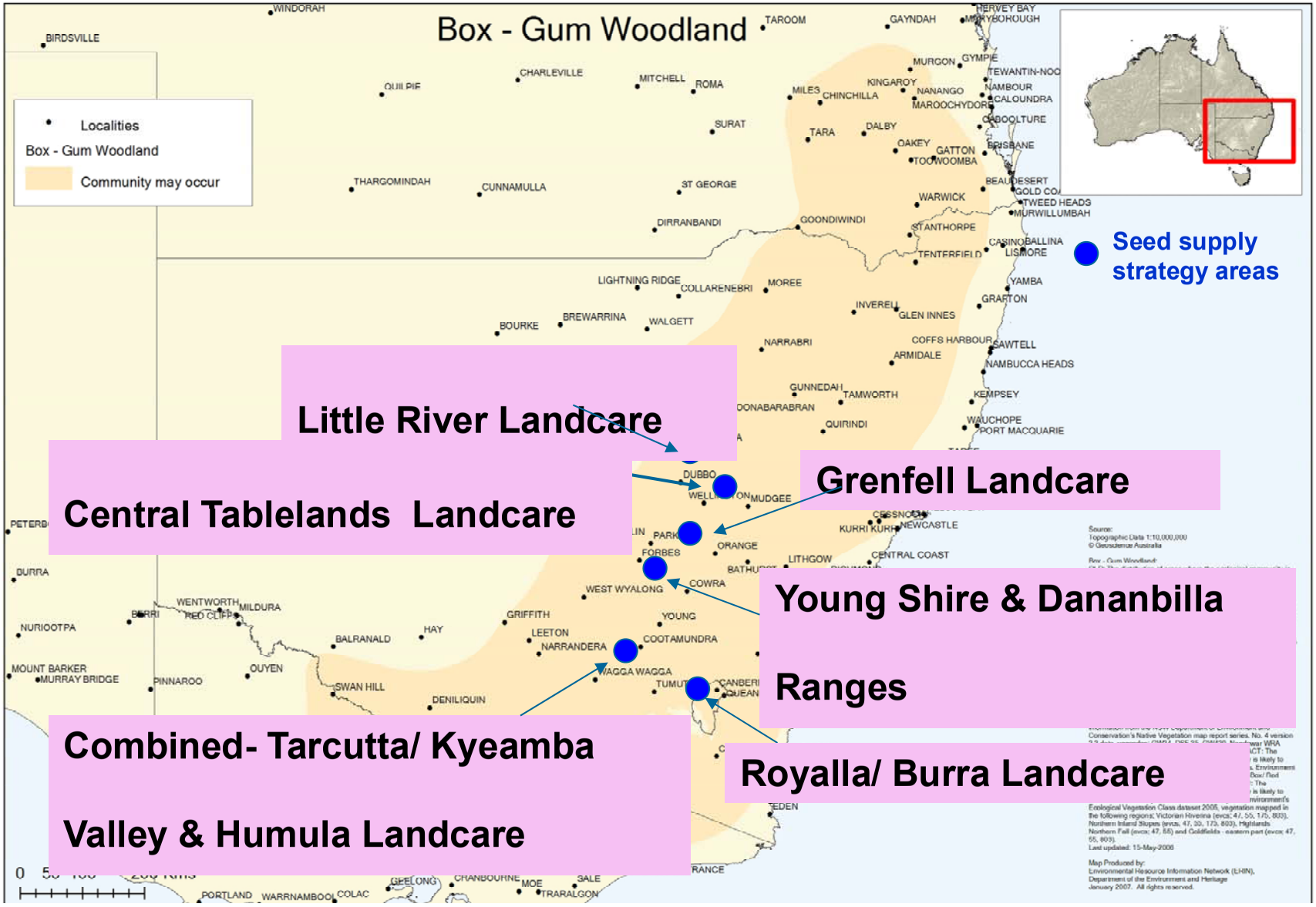
17 paddock plant workshops
22 grazing management Stipa & DPI
5 healthy water on healthy farms
4 frogs & florabank

Another 17 Workshops with Local Government and Project partners including: grazing & weed forums; Landscape Function Analysis (LFA) training; soil carbon workshops & Field Tours

Milestone: 40 Factsheets produced to update Florabank Species Navigator available on the Florabank website

Greening Australia

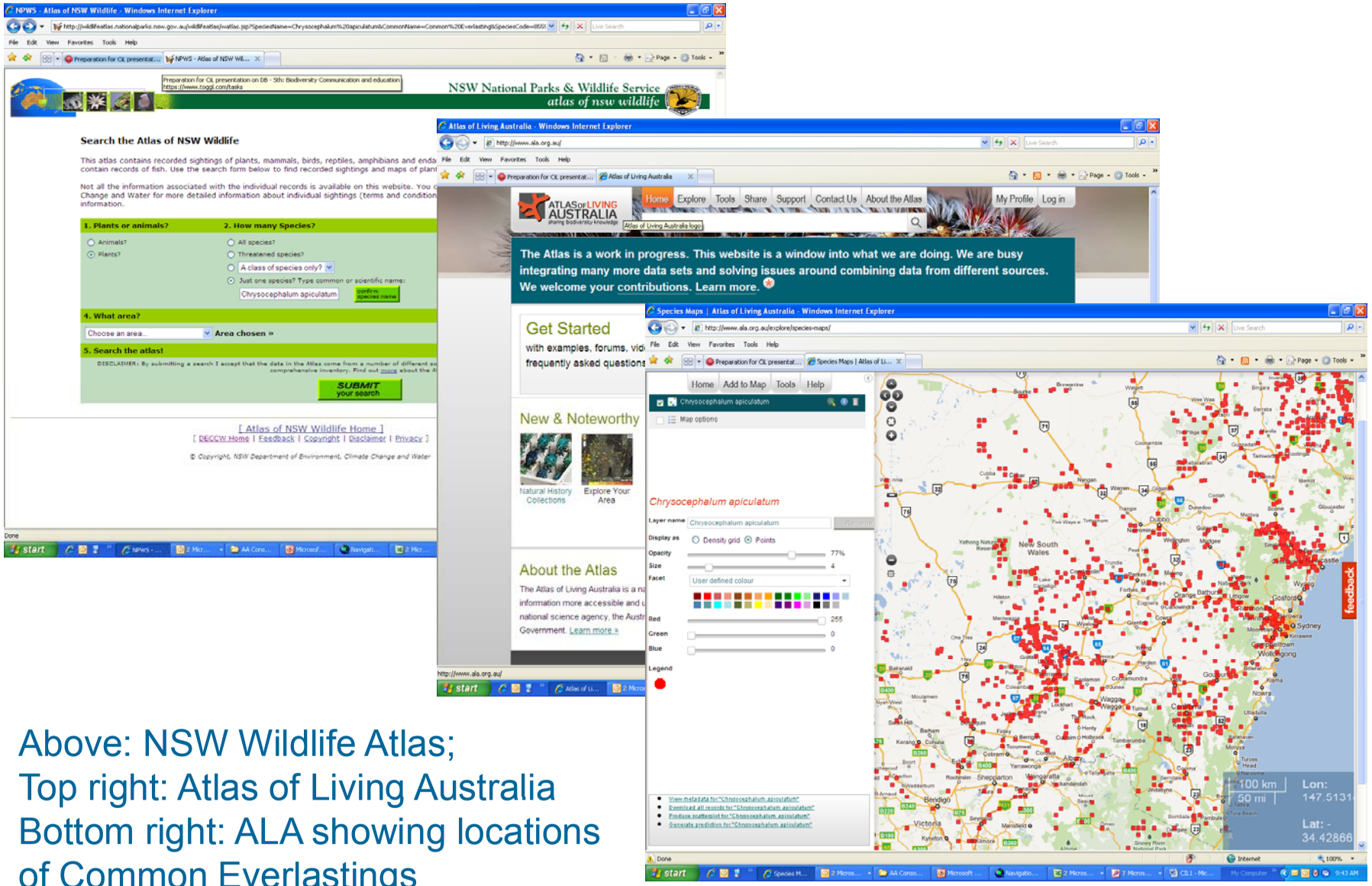
Milestone: 6 Seed Supply Strategies Produced
Achieved: 6 Greening Australia Seed Supply Strategies Produced across 3 catchments



Milestone: 30 frog site surveyed

Achieved: 55 Booroolong frog sites surveyed

Milestone: Data management system for grassy woodlands developed



Above: NSW Wildlife Atlas;
Top right: Atlas of Living Australia
Bottom right: ALA showing locations of Common Everlastings

Milestone: 60 Community Small Grants Devolved

Dr Dave at the Launch of Murray Darling Basin BGGW DVD and factsheets

HEALTHY HABITATS

Milestone: Erect project Signage

Photo by Susan Jackson

Image by Gavin Gatenby

Don’t remove it

It won’t improve it

Logs & litter provide food & shelter

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Communities IN LANDSCAPES

GRASSY BOX WOODLAND CONSERVATION MANAGEMENT NETWORK

www.gbwcmn.net.au

Milestone: Manage and Monitor 3 demonstration properties

1. Dananbilla-Illunie Biodiversity Demonstration Property
2. Indigenous Demonstration property at ‘Bimbadeen’, Cootamundra
3. Production Demonstration Property Glenwood at Wellington

Milestone: 30 management trial sites

CSIRO Objective: Climate resilient restoration of woodlands

Restoration of woodland soil and soil ecosystem function to positively influence the carbon budget and vegetation community

Three key project areas

- restoration experiment investigating 5 active interventions that may restore soil processes and assist re-establish plant diversity
- 70 field survey sites to collect baseline data
- 8 revegetation sites (eucalypt/acacia) using biochar addition to enhance seedling survival

Targets

- Improving Knowledge & Skills of Land Managers
- Increasing Participation in Natural Resource Management

Communications

- CiL Project Communication through YouTube, iTunes, webpages (eg. PlaceStories at www.digitallandcare.com), Presentations (conferences and field days) print (Newspaper and conference proceedings) and radio interviews


knowledge sharing
Central Tablelands Landcare
LANDCARE
CENTRAL TABLELANDS
conservation

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Communities
IN LANDSCAPES

Understanding the context for the Communities in Landscapes project

Report following three Participatory Appraisals from November 2009 to February 2010

By Peter Ampt, Rebecca Cross, Sarah Doornbos

THE UNIVERSITY OF SYDNEY

CARING FOR OUR COUNTRY

Working together to integrate conservation and production across Box–Gum Woodlands

http://cil.landcarensw.org.au

A multi-partner collaboration including Landcare NSW Inc, Conservation Management Network, Department of Environment Climate Change and Water, Industry & Investment NSW, CSIRO, University of Sydney, STIPA Native Grasses Association Inc, Greening Australia's Florabank and Birds Australia.

Disclaimer

This project is supported by the Communities in Landscapes team, through funding from the Australian Government's Caring for our Country. The views expressed in this publication do not necessarily represent those of Caring for our Country. While every effort has been made to ensure that the information in this report is accurate at the time of printing, neither Landcare NSW Inc nor the Communities in Landscapes team can accept responsibility for errors and omissions.

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The authors would like to acknowledge the contribution of the CiL project partners to the Participatory Appraisals (PAs) and this report by providing contacts of potential interviewers and interviewees through their local networks, offering assistance with logistics and transport, committing their time to be part of the interview team and providing feedback to the report. Additionally we would like to thank all the landholders who agreed to be interviewed as part of this process as well as everyone who attended the workshops.

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Executive Summary

The federally funded Communities in Landscapes (CiL) project is a partnership of nine organisations working together to improve the condition of Box Gum Grassy woodlands on a landscape scale. To achieve this CiL works with landholders and communities in the Lachlan, Murrumbidgee and Central West catchments to identify and advise on management strategies that integrate production and conservation across Box Gum grassy woodlands.

The project has a strong focus on working with people to achieve its aims and increase community capacity to carry on practices beyond the life of the project. Therefore, it was critical that the project team engaged with landholders from the beginning of the project to learn from them and get an in-depth understanding of the social cultural environment in which land managers operate in the target areas. In addition, it was important that the project partners generate a shared perspective and coordinated approach, and understanding of the local context of the project. To achieve this CiL conducted three Participatory Rural Appraisals (PRAs), one in each target area, between November 2009 and February 2010. The PRAs consisted of up to 30 interviews over three days in each area, with a wide range of local landholders, conducted by five pairs of interviewers made up of project personnel and local people. Each interviewing day was followed by a feedback session with the team and every PRA concluded with a workshop.

The interviews yielded information on the following topics:

- landholders and their physical, social and economic environment;
- attitudes to the future;
- sources of information and on-farm research;
- environmental management; and
- community networks and Landcare.

The PRAs brought project personnel together as a team and through the interviews, feedback sessions and workshops, the CiL team generated valuable insights that will help guide the project and ensure that the project aims are in line with the wants and needs of landholders:

1. The timing and approach of the CiL project is right – strong sense of urgency among landholders to adapt to a changing environment and the participatory approach was well received.
2. CiL should maintain a participatory approach, both seeking and providing feedback on a continuing basis, focus on shared-learning rather than adopting a top-down approach and building long-term relationships.
3. There is great diversity in landholders and their physical, social and economic environment within and between target areas - CiL should acknowledge this diversity and tailor project activities accordingly.
4. All landholders expressed some environmental values – CiL needs to tap into the quiet environmental side of people and provide opportunities for them to take small positive steps, implemented in their own time.

5. Hands-on learning experiences such as field days, trials and courses are highly valued by landholders. CiL should incorporate that in its approach and provide time for interaction and informal learning in activities offered to landholders.
6. Emphasis on community is very important – the project should aim to help build and reinforce networks and connections.
7. Community Woodlands Officers (CWOs) are a worthy investment for the outcomes of this project – landholders expressed an overwhelming desire for localised information, consistency in advice and consistency in a local advisor who is physically present and is not working towards a hidden agenda.
8. Holistic Management (HM) and other similar approaches stand out as key interventions influencing a change in thinking and practice towards an approach that integrates production and conservation.
9. Many of the practices arising from this intervention focus around grazing management and increasing diversity and resilience of grasslands – CiL needs to further explore these strategies and assess their potential impact.

1. Introduction

1.1 What is Cil?

The "*Communities in Landscapes*" (CiL) project is funded through the Australian Government's Caring for Our Country (CFOC) program. CiL uses the logic that landscape-scale change can be achieved by working with farmers and their communities to identify and advise on management practices that will benefit ecosystem function and biodiversity in Box-Gum Woodlands, have positive outcomes for production and increase community capacity to carry on these practices beyond the life of the project.

CiL's nine project partners are *Landcare NSW Inc, Grassy Box Woodland Conservation Management Network (GBWCMN), Stipa Native Grasses Association, CSIRO, Sydney University, Industry & Investment NSW(I&I), Department of Environment, Climate Change & Water (DECCW), Greening Australia-Flora Bank and Birds Australia.* The range of networks, skills and opportunities provided by these partners and the collaborative model established to prepare and manage the project enables strategic and efficient delivery of services.

The CiL project addresses three of the six priority areas of CFOC:

1. Biodiversity and natural icons
2. Sustainable farm practices, and
3. Community skills, knowledge and engagement

CFOC targets are achieved by increasing native habitat and landscape-scale conservation within national priority White Box-Yellow Box-Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands (Box-Gum Woodlands) in all its conditions through community engagement and participation and in ways that benefit both the ecosystem and agricultural production. CiL will be working in the Central West, Lachlan and Murrumbidgee Catchment Management areas.

The project aims to achieve the following CFOC objectives:

1. *Increase Native Habitat* **-** increase by 55,390 hectares the area of Box Gum Woodlands managed to reduce critical threat.
2. *Increase Landscape Scale Conservation* **-** 60 farmers adopting practices that contribute to ongoing conservation and the protection of biodiversity.
3. *Improve Knowledge and Skills of Land Managers* **-** increase by 3,040 the number of land managers that have improved knowledge and skills in Natural Resource Management. Numbers will be accumulated through events held during the project life and direct contact with Landcare NSW members.
4. *Increase Participation in Natural Resource Management***-** increase by 800 the number of volunteers involved in Community groups

To achieve these objectives the CiL project aims to generate outcomes in three key strategic areas:

1. Improved targeting of information and management support for land-managers and community groups;
2. Improved knowledge base to inform and support management decisions in Box-Gum Woodland landscapes;

3. Implementation of integrated on-ground activities across multiple properties in priority local landscapes.

1.2 Objectives of the CiL socio-cultural component

As CiL is essentially about behaviour change, our Monitoring, Evaluation, Reporting and Improvement (MERI) strategy requires a systematic and thorough approach to researching with people. As a team we need to generate a rich picture of the social and cultural environment in which land managers operate in the target areas and use it to integrate project components and activities. This means that we need to engage, both personally and as a team, with a diverse range of landholders and other stakeholders in the target areas. The Social Cultural component of the CiL project aims to meet this need and addresses the objectives outlined below.

A key aspect of the CiL project is to identify and promote management strategies that effectively integrate production and conservation across Box Gum Grassy Woodlands landscapes. We think it would be useful to apply an analysis of the public and private benefits of adopting the management practices/principles that we identify according to the Investment Framework For Environmental Resources (INFFER) process (Pannell 2008; Pannell, Roberts et al. 2010). Conservation is generally perceived as primarily of public benefit and production as private benefit. The CiL emphasis on regenerating landscapes AND businesses anticipates that there could be a coming together of both. As a result we are particularly interested in 'bottom-up' innovations that are endeavouring to integrate conservation and production – thus aligning both public and private benefits.

We also anticipate that particular innovators will be an important part of the project and that establishing a relationship with them as co-researchers is in line with the aims of the project. It has been argued that relying on hard science and top-down technology transfer has not made the changes necessary in agriculture because we are not focusing on the individual farmer or recognising agriculture as a socio-cultural practice (Vanclay 2004). Understanding why people are able to embark on strategies that aren't 'business-as-usual' is important. We are interested in the origins of the innovation and the experience of the innovator over the time they had been innovating.

The literature on changing the behaviour of land managers suggests that adoption of such innovative, sustainable practices is not a simple linear process but a dynamic learning process. According to one of the most widely cited articles on this topic (Pannell, Marshall et al. 2006), adoption of a new practice is more likely to occur when the landholder perceives that the innovation in question will enhance the achievement of their personal goals – which may be economic, social and/or environmental. Therefore, a main objective early in the CiL project is to gain an understanding of the personal and family goals of landholders to help us generate adoption strategies that are more likely to be complementary.

In addition to compatibility of an innovation with personal goals of the landholder, the nature of the innovation is also considered an important factor in the likelihood of adoption (ibid). For example, an innovation is more likely to be adopted when it has a high relative advantage compared to the current practice (perceived superiority to the idea or practice that it supersedes) and is readily trialable (easy to test and learn about before adoption). Many of the sustainable practices CiL is likely to focus on have been around for a while. It is therefore important for us to understand whether these innovative practices are perceived by landholders to have a relative advantage and

whether they can be (or have been) used on a trial basis in practice. Recent research recognises that rural land ownership and management can fulfil multiple goals and Australian agriculture, while still possibly dominated by primary production, is becoming more multi-functional. This argument is extended with a characterization of rural Australia as undergoing a multifunctional transition (Holmes 2006), with the identification of seven distinct modes of occupance:

1. productivist agricultural
2. rural amenity
3. small farm (or pluriactive)
4. peri-metropolitan
5. marginalized agricultural
6. conservation
7. indigenous

We believe it is important to understand the extent to which land managers fit into one or other or a combination of these modes and the relative proportion of the different modes.

1.3 Why Participatory Rural Appraisals (PRAs)?

While there were pre-existing links between project partners, the Cil Steering and management committees were brought together specifically for the project. We come with a range of experiences and perspectives and represent a number of organisations with different priorities and cultures. Before the project could generate a coherent and coordinated approach, the team needed time together to generate a shared perspective. The project also employed a Project Manager and three Community Woodlands Officers, all of whom needed an induction program. The project also needed to make contact with people in the target areas, and to understand from them the context of the project. Further, as the team developed its understanding of the local context, it needed to test its ideas with local people.

Participatory Rural Appraisal (PRA) methodologies were designed for such purposes, have been tested in Australia and overseas and found to be successful (Ison and Ampt 1992; Ampt 1993). Including key project personnel and locals on the interviewing teams, engaging with a number of key informants at each location, choosing interviewees to include as wide a range as possible, conducting the interviews over a short period, scheduling daily feedback sessions and concluding each appraisal with a workshop with local people are all part of PRA procedures in the literature. Based on this, we judged that PRA type approaches fitted the project aims very well.

As the project is targeting three catchments, it was important that a separate PRA be conducted in each catchment, thus covering a north to south temperature and rainfall gradient (from summer to winter dominant rainfall) and reflecting different Catchment Management priorities.

2. Methods

2.1 Selecting the interviewing teams

Interviewing teams were chosen to maximise exposure of CiL partners, Steering and Management committee people and CiL employees to the local context of the Cil project, to provide expertise in coordinating, observing and analysing the process, and to include local Landcare and NRM agency people. Each team varied slightly as can be seen from the lists below.

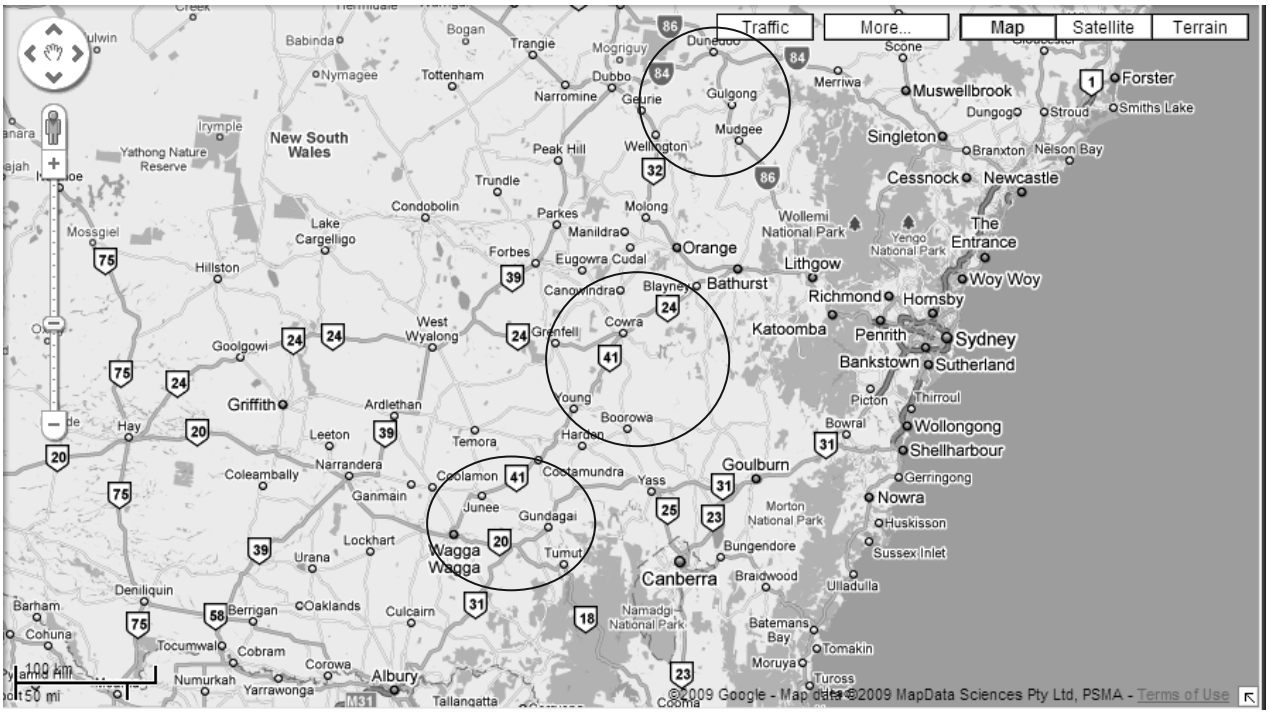
Interviewer	**Affiliation**	**Member of Interview team:**		
		Young	**Wagga Wagga**	**Wellington**
Peter Ampt	Sydney Uni, CiL Steering Committee (SC)	Yes	Yes	Yes
Sarah Doornbos	Sydney Uni Project Officer	Yes	Yes	Yes
Rebecca Cross	UNSW PhD Student, research ass.	Yes	Yes	Yes
John Dalton	CiL Project Manager	Yes	Yes	Yes
Toni McLeish	BGGW Conservation Management Network, CiL SC	Yes	Yes	Yes
Lori McWhirter	I&I Agronomist, Goulburn	Yes	Yes	
Susan Jackson	NPWS Ranger, CiL SC	Yes		
Chris Cuddy	Mid-Lachlan Landcare	Yes		
Heather Williams	Young Landcare	Yes		
Leanne Leihn	Boorowa Landcare	Yes		
Graeme Hand	Stipa Native Grasses, CiL SC		Yes	
Samantha Vine	Formerly WWF, CiL media officer		Yes	
Penny Atkinson	Greening Australia Florabank, CiL SC		Yes	
Daryl Weston	Tarcutta Landcare		Yes	
David Read	Wagga Wagga City Council		Yes	
Maryanne Smith	Community Woodlands Officer (CWO), Central West			Yes
Megan Harris	CWO, Lachlan			Yes
Kimberley Beattie	CWO, Murrumbidgee			Yes
David Walker	Landcare NSW Inc, CiL SC			Yes
Greg Brooke	DPI Agronomist Wellington			Yes

For each PRA,the interview team was divided into 5 pairs (except in Wagga Wagga which had one trio). Pairs were selected to give a balance of local knowledge, expertise/experience with interviewing and knowledge of the CiL project.

2.2 Selecting the interviewees

The following process was used to generate a list of contacts from which interviewees were selected for each PRA:

1. The target areas for the PRAs in the Lachlan, Murrumbidgee and Central West catchments were defined, as shown on the map.



2. Project participants were asked for a list of contacts of people available through their networks, who were willing to act as key informants.

3. The Sydney University team made contact with key informants and requested additional contacts from them to provide as wide a range as possible of property sizes, conventional/innovative landholders, well established/new to the district, cropping/grazing, production/conservation orientation, private/public landholders, different social networks. In some cases key informants provided information on the people on their list, in other cases just the name, location and contact number.

4. Searches were done to determine whether other participatory research had been done in the area. Where this was the case plans to avoid over-surveying people were put into place.

5. The Sydney University team then compiled a master list of landholders and began calling. A typical 'script' for the conversation was:

> *Hello, I am from a new project funded by the federal government called 'Communities in Landscapes' – we were given your name by .... The project aims to*

improve Box Gum Grassy Woodlands across their former range using strategies that integrate conservation and production. We will work with and support existing community networks. We are coming to your area soon and would like to come and interview you and any members of your family who contribute to working the property. The people in the project want to learn from local people at the very beginning of the project so we understand what is going on in the district and what the project should concentrate on.

In the course of organising the three participatory appraisals in the three target areas, only one landholder refused for a reason other than being unavailable at the times on offer. For each of the three PRAs, 30 interviews with landholders were scheduled over the course of three days. A total of 84 interviews took place out of a scheduled 90 interviews. The interviews that didn't go ahead were last minute cancelations due to unforeseen circumstances.

2.3 Conducting the interviews

Prior to the commencement of the PRA the interview team was given a briefing about logistics, objectives and the interview process. Each pair were given a schedule, consent forms, interview pro forma and directions and set off to interviews. Each pair usually did three interviews per day.

Before starting the interview, the interviewee was given a short summary of the CiL project and the interview process and asked to sign a consent form. While one person conducted the interview, the other took notes. The interviews were not recorded. We took a personal approach in order to tease out the complexities of trying to understand how individuals interact with their communities and with their environment. The interviewer needed to facilitate a conversation and have a very relaxed and flexible attitude towards the interview to explore research questions such as:

- How do individual/family/community world views, hopes and aspirations affect environmental management?
- How do community norms act as barriers to or triggers for change?
- What other socio-cultural factors act as barriers or triggers for change?
- How do history/local knowledge/or future plans affect current and future environmental management?
- Does a strong community connection lead to collective action?
- Are innovators isolated?

The semi-structured interviews started with open-ended questions, subsequently exploring the issues raised. These open questions were followed with more specific, focused questions. After every interview each interview pair took a moment to debrief the interview and share perceptions and insights.

2.4 Conducting the feedback sessions and workshops

Every interview day was concluded with an audio-taped feedback session, during which each interviewing pair presented a brief summary of their interviews in turn, with issues discussed as they were raised. During the first PRA based in Young, local people who were outside the interview team were invited to the feedback session. This proved awkward in that for ethical reasons it was

important to maintain confidentiality and so having to refer to interviewees without identifying them created a stifling formality not conducive to open exploration of the issues raised. For subsequent PRAs the feedback sessions were for the interviewing team and project personnel only.

Following the final feedback session of each PRA interviewers were asked to reflect on the interviews and the feedback sessions and identify the key insights they had gained as a result, and to describe ways in which the experience would impact on their practice such as the role of themselves and their agency as part of the CiL project.

Each PRA concluded with a workshop attended by some of the key informants (consulted in preparing for the PRA) and local NRM facilitators. At these events CiL participants described the project and the PRAs. Interviewers described their key insights and lessons for the project, then feedback was invited from the workshop participants. These workshops were audio-recorded.

2.5 Analysing the data and reporting back

The notes of interviews and debriefing sessions were typed up and analysed to extract the key themes as outlined in the results section. The tapes and notes from the feedback sessions and workshops were transcribed and key themes summarised in the results section.

Within 1-2 weeks of the conclusion of each PRA, an 'insights of interviewers' document was produced, edited by the interviewers and then circulated to the interviewees, key informants and workshop attendees. This report is also for circulation to all CiL contacts.

Data from the PRAs will be further analysed by the Sydney University team and will be published as part of the outputs of the project.

3. Results of the interviews

This chapter presents the results of the 84 interviews conducted across the three target areas (Young, Wagga Wagga and Wellington) in the Lachlan, Murrimbidgee and Central West catchments respectively. The information is based on interview notes and feedback sessions of interview teams. The interview results have been synthesised into five themes; landholders and their physical, social and economic environment; attitude to the future; information and research; environmental management; community groups and Landcare. Where relevant, extracts from interview notes are provided to illustrate the more generalised statements. Note that these are not direct landholder quotes, but derived from interviewer notes. Please note that this was a qualitative process. The sample of landholders was not chosen at random but in an attempt to represents the diversity of views. As a result, quantification was not appropriate.

3.1 Landholders and their physical, social and economic environment

While interviewers were aware that we purposefully selected interviewees to reflect diversity, they nonetheless unanimously expressed being 'blown away' by the differences between land managers and their physical, social and economic circumstances. These differences included:

- Time in the district - from recent arrivals to long-term, multi-generational dynasties;
- personal and family goals and preferences;
- personal, family and financial circumstances;
- size and nature of the property;
- range of enterprises;
- approach to environmental issues and
- degree of connectedness with the local community.

Despite this, the following generalisations were made:

- Landholders are open, independent and proud.
- Drought has had and is continuing to have a major impact on the physical landscape and the personal and financial situation of landholders.
- Depression and suicide are prevalent and have a continuing impact. There were strong indications that some people were being pro-active in dealing with these issues.
- Deriving income from farm activities is viewed as important, yet many rely heavily on sources of off-farm income.
- Production/survival/profitability is generally the highest priority.
- Landholders across the landscape have an interest in conservation, to varying degrees. If asked if they believed they had increased the environmental viability of their land, landholder answered in the affirmative. The former range of the Box Gum Grassy Woodlands is a superb landscape which has been very productive and apparently has huge regeneration potential.

- Interviewees were of the view that only a small number of managers in each location could be identified as being very poor environmental managers or 'floggers' of the land. Apart from these few examples, where examples of recent land degradation were mentioned they were largely associated with adverse events such as drought or intense storms.

Of great interest to the CiL project were landholders who were aiming to maintain greater groundcover and encourage grassland diversity as this was seen as an attempt to integrate conservation and production. These people were usually using some forms of rotational or cell grazing and pasture or no-kill cropping.

3.2 Attitude to the future

3.2.1 Future

The Young and Wagga Wagga based PRAs both took place in November 2009 when drought was impacting heavily on both districts. In southern NSW there had been a succession of 5-8 years of dry winters leading to many winter crop failures in areas where they had historically been quite reliable. The intense pressure applied by this run of seasons had clearly taken its toll on the interviewees. Many were extremely pessimistic, expressing the view that the majority of people were only just hanging on, and if the current run of seasons continued much longer then 'all bets are off'. Major change was forecast in the coming years.

'The future – of the area and in agriculture; they feel frightened' (Interview 7, *Wagga Wagga area*)

'Future of farming – dismal; it's going to be a very lonely place in 15 years; because of lack of succession of family...lots of families have no one coming home to the farm in the future.' (Interview 15, *Wagga Wagga area*)

Climatic uncertainty, poor grain prices and rapidly increasing prices for inputs such as herbicides and fertilizers were all reasons for pessimism. Many people were recognising that they were now gambling on rain during the growing season, borrowing money and increasing their debts to put a crop in the ground.

'There will be demands on food and fibre that are unprecedented; the other issue is that farmers are dependent on the weather and can't control that; many farmers are optimists and think it's gonna be better next year, and it often isn't' (Interview 5, *Wagga Wagga area*)

'The main issue I see is that the price of all commodity and farm produce is not realistically high enough; farmers are being screwed for all they are worth and the supermarkets are raking it in' (Interview 27, *Wagga Wagga area*)

'Land increased in value – doubled since coming here. So have equity there, but debt still the same when they started – bank keeps lending, but have to decide whether they want to keep going or cut losses, pay off debt and go' (Interview 21, *Wagga Wagga area*)

'Need a handle on climate variation – no figures, how do we plan and manage for that?' (Interview 1, *Young area*)

'The young people have not seen any good years. Wheat farmers have the shortest memory on earth.' (Interview 2, *Wagga Wagga area*)

One highly respected manager made the observation that he now considered it a good result if a crop broke even. Attempts at establishing a pasture phase using introduced species had been relatively unsuccessful, reducing the value of the pasture in the rotation. It was widely recognised that business-as-usual was coming to an end and conventional wisdom was not working, leading to a regularly expressed view that the next generation should not return to the farm.

'*On crossroads – need to make a decision about whether to stay on the property. Nice property, but have to stay on top of things'* (Interview 1, *Wagga Wagga area*)

'Confident with future – (I'm) not confident if we keep doing the same things; the only way we will be successful in the future if we change the way we do things' (Interview 3, *Wagga Wagga area*)

'Future – won't encourage (children) to come home' (Interview 4, *Young area*)
'Not hopeful about future of farming – handing it on not encouraging' (Interview 12, *Young area*)

'We expect that larger operators would buy up the land and incorporate it into their production systems' (Interview 2, *Wellington area*)

In stark contrast, there were others who were optimistic and were encouraging their children to consider continuing on.

'Future of agriculture - Struggle a bit, but we all have to eat' (Interview 14, *Wagga Wagga area*)

'Is pretty optimistic; his confidence is growing all the time; he feels he has had a good life farming, and he'd like to think he doesn't have to send all his kids away' (Interview 6, *Young area*)

'Feels good about future, confident about future of property. Worried about climate, but has a positive outlook.' (Interview 13, *Young area*)

Around Young and Wagga Wagga these people were almost exclusively either embracing or influenced by the 'Holistic Management' approach. These people had responded to the challenges by embarking on, to varying degrees, a very different approach characterised by a desire to work with rather than against nature and to doing the hard thinking about their personal and family goals. Most were strongly pragmatic and practical – recognising the logic behind what they were hearing from courses such as 'Holistic Management' and 'Grazing for Profit' and testing them on their properties.

People following this path consistently expressed the view that there was little or no future in more conventional approaches. They reported problems with introduced pasture systems often to the point where they had failed completely. They talked about climatic uncertainty causing successive years of crop and introduced pasture failures that brought them to the conclusion that conventional approaches exposed them to excessive risk. They also pointed to the increasing cost of inputs and price variability leading to poor economic returns even when reasonable yields were achieved. Whilst it was clear that the prolonged run of dry winters down south had contributed to these problems, many were convinced that they had to manage in the expectation that of increasing uncertainty.

The result was a strong endorsement of the approach and reinforcement of the principles they were adopting. The number of interviewees taking this approach was very low around Wagga Wagga and slightly more around Young.

> *'When I got onto HRM it really clicked for me; it was the goals that were critical, it has given me a focus'* (Interview 6, *Young area*)

> *'In a good season, the conventional are much more profitable, but this system is much more risk adverse'* (Interview 1, *Wellington area*)

The PRA based in Wellington took place in February after some of the best rains of the past decade. Wellington area had apparently not suffered from drought to the same extent and the pessimism so striking down south was barely evident. We encountered landholders who were expanding using conventional practices, as well as a significantly larger proportion than in Young and Wagga Wagga who were applying HM type approaches. An observation made by interviewers was that around Wellington, production-orientated farmers were generally looking at expansion to build resilience, others were looking to build resilience through changing management to more sustainable practices while some were expanding AND shifting to lower input strategies. Some observations about the Wellington area were:

- Landholders across a wide range of farming philosophies and practices are running successful enterprises and have a generally positive outlook on their farming practice now and in the future.
- There may be an emerging problem with cropping and introduced pasture paddocks, with a shift away from annual cropping as a result of crop failures and falling pasture productivity due to dry years. This has also been strongly influenced by good lamb and sheep prices which have influenced decisions to shift sheep from cropping.
- A group of landholders has experienced rapid change in terms of farming philosophy and practice in this area. Many landholders are opting for a low input systems using grazing to manage pastures and encourage perennial native grasses. The proportion of people in this category appears to be significantly higher than around Young and Wagga Wagga.
- There are some landholders who are looking for the next step in refining their integration of production and conservation to varying degrees.

3.2.2 Succession planning

There was wide acknowledgement, explicitly or implicitly, that handling succession well was critical to the future. Where a managed and successful succession from a previous generation had recently occurred or where the next transition was still a long way off, managers were more likely to be embarking on long-term thinking and were more focussed on stewardship. We came across many examples of people in this situation.

> *'Would like son to take over – also three daughters. But viability? Self-esteem for boys, friends out there earning more not farming, living and loving life – farming stressful at the moment, therefore these ones struggling –all frustrating'* (Interview 13, *Wagga Wagga area*)

> *'There are two states of mind you can have: a poverty mentality that we are losing things, or an abundance mentality that we are gaining things, I can't operate under a loss mentality*

because I would worry too much and lose my drive so I have to believe that we are improving things' (Interview 8, *Wellington area*)

Where there was no logical succession plan or where succession issues were less resolved and imminent, managers were more likely to be marking time and continuing with practices that may not be achieving results rather than seeking to adapt. A significant number of interviewees had young children and were facing several decades of high household expenditure and this was another factor that influenced a focus on strategies that set them up for secure incomes over the medium to long term.

In many cases, embarking on the 'Holistic Management' process was a key stimulus to developing a succession plan, and this in addition to adopting rotational grazing management seemed to result in an outbreak of optimism for the future. People often expressed a feeling of liberation as a result of changing their emphasis from 'locked in' family traditions which were no longer generating positive outcomes.

'He can do his own thing here with no family looking over his shoulder. Taking on new things – not handicapped with old-fashioned things' (Interview 12, *Wellington area*)

People also were encouraged by what they saw as the country responding to their changed management. Replacing high cost inputs with grazing management was viewed by many as an opportunity to step off the 'productivity treadmill' and take greater control of their future.

3.3 Information and on-farm research

3.3.1 Sources of information

A broad range of views were expressed about the availability of information and how to deal with it. Some were bewildered by apparently contradictory information and were unsure of how to sort it and apply it to their own circumstances.

'Sometimes feel overwhelmed by the amount of information' (Interview 2, *Young area*)

Others went to the same small group of trusted sources and were comfortable in how they were applying it. There were some highly trusted sources and advisors.

There were many instances of people using face-to-face encounters with other farmers to get their ideas sorted and for these people field days, courses and farm visits are highly valued as they gave time for interaction and informal learning:

'Face to face is the best method, especially with regards to new technology. People need to see what works. Most people are interested in water efficiency' (Interview 8, *Wagga Wagga area*)

'Most info from talking to farmers and field days' (Interview 21, *Wagga Wagga area*)

'Important that people come to the farm, face to face contact' (Interview 26, *Wagga Wagga area*)

'Seeing with your own eyes, and talking about it with your peers, and your mindset changes over time' (Interview 10, *Wellington area*)

'Dad and brothers are all successful farmers, good knowledge base. I Look at other farmers for new ideas' (Interview 4, *Wellington area*)

Many expressed frustration about being told what to do by "outsiders" and the top-down approach adopted by agencies. They expressed the need for shared-learning, consultation and facilitation.

'Concerned about the level of interference on my property' (Interview 6, *Wagga Wagga area*)

'Some great, some not – boring on and on, treat you like a cabbage' (Interview 13, *Wagga Wagga area*)

'What doesn't work is scare tactics (e.g. global warming doom scenarios), and getting 'experts' telling farmers what to do' (Interview 25, *Wagga Wagga area*)

However there were some mentions of well-known personalities such as Peter Andrews, Christine Jones and Maarten Stapper:

'Christine Jones is obviously a major source' (Interview 3, *Wagga Wagga area*)

'(I) go to Peter Andrew's talks, (he's) not traditional...and to Tony Coote, a natural sequence farmer' (Interview 6, *Wagga Wagga area*)

Generally, landholders liked to see concrete results of new management strategies before they consider adoption:

'I'm a little wary of alternative products that don't have scientific evidence behind them' (Interview 5, *Young area*)

'Like to see what other people do and if it's working' (Interview 13, *Young area*)

'Can start from the outside, but needs to get a local foothold' (Interview 1, *Wellington area*)

Many perceived inconsistencies and conflicts between different sources of information and between the desires of landholders and agency policies and funding schemes:

'Market rewards one set of behaviours and yet environmental stuff requires another set of behaviours' (Interview 7, *Young area*)

'Tends to be suspicious of commercial interests and people who use NRM to build careers.....Most frustrated by lack of continuity of environmental management. Seems to be linked to the political cycle. Sometimes expenditure proceeds best practice' (Interview 8, *Young area*)

'An agronomist is like a doctor, you can't leave their office without a prescription....Only treat symptoms' (Interview 3, *Wellington area*)

'Has a major concern about the integrity of the science of the CSIRO' (Interview 8, *Wellington area*)

The Box-Gum Grassy Woodland Stewardship Program was raised at most interviews because it is a recent government initiative in the target areas with similar objectives. One landholder had had a successful bid to have most of his property under this program because his grazing rotation had very long periods of rest that he judged to be compatible with the program; others had small blocks

included while others were resistant to bid at all, didn't know whether they would qualify or were unsure about how to apply.

> *'(I) feel confounded by stewardship program prescriptions. They (CMA) need to understand it's a dynamic process and management needs to be adaptive/flexible'* (Interview 1, *Wagga Wagga area*)

> *'Covenants scared them off at first'* (Interview 24, *Wagga Wagga area*)

> *'Doesn't like the idea of trying to holistically manage a property while part of it is 'locked away' like an 'island' for environmental reasons'* (Interview 5, *Wellington area*)

3.3.2 On-farm monitoring and research

The teams encountered several examples of people doing on-farm monitoring or research. Whilst many acknowledged they weren't very systematic about it there were some notable examples of people undertaking detailed and systematic long-term monitoring and many expressed positive views about the need for it:

> *'(My) philosophy is "if you can't measure it, you can't manage it"'* (Interview 15, *Wagga Wagga area*)

> *'We now pasture monitor – have now (7 years later) fixed monitoring sites'* (Interview 19, *Wagga Wagga area*)

> *'Wants to conduct farm monitoring on covenant area more – incorporate other management practices'* (Interview 11, *Young area*)

Many expressed a very positive view of and interest in on-farm research and interaction with researchers. :

> *'Research – can't do our own as not statistically valid. We want to see results from biological farming on our property'* (Interview 4, *Wagga Wagga area*)

> *'Farmers are looking for new alternatives/new technologies – (there is an) increased interest in research'* (Interview 8, *Wagga Wagga area*)

However, some had had bad experiences with previous projects, particularly with respect to a failure on the researchers' part to provide promised feedback or study results.

> *'Don't get any feedback and never hear what happens'* (Interview 20, *Wagga Wagga area*)

3.4 Environmental management

Almost all landholders expressed a stewardship ethic in some form or other and expressed great satisfaction if they believed that their management was generating environmental benefits.

> *'Passing on – have to be good stewards for their own wellbeing, not just for them. Has to look good, feel good, and be efficient and productive. Would be depressing if you let it run down.'* (Interview 11, *Wagga Wagga area*)

'Don't want to leave the farm burdened – leave it better than what it was given – custodians. If they sold, they would tie a covenant into the title to ensure future conservation' (Interview 1, *Young area*)

'Lovely to see native animals, birds, lizards, black wallabies, possums. Biggest thing are lizards and birds in this area. Few superb parrots from time to time definitely have more birds. Psychological thing that treelines just look so much better – morale boost to see green and then when you see the little birds it is lovely.' (Interview 11, *Wagga Wagga area*)

'I am doing it mostly for the aesthetics and I love the birds' (Interview 15, *Wagga Wagga area*)

'Aesthetics, self-satisfaction, bring the land back to a healthy state' (Interview 26, *Wagga Wagga area*)

Most have adopted some environmental management practices and often perceived that these practices were having a beneficial impact.

'Groundcover – has a rule of thumb – doesn't want to see any bare patches' (Interview 5, *Young area*)

'Overall the environment is improving – the soils are moe stable and fertile from direct drilling' (Interview 8, *Young area*)

'Have seen huge improvements in my ative pastures, even on home block which I've only had for 3 years and I put that down to grazing management' (Interview 12, *Wagga Wagga area*)

The idea of integrating conservation and production was strongly in accordance with landholders' aims, with the catchcry "Need to be in the black to be green" being frequently expressed. Some landholders expressed the view that the drought and the resulting levels of debt prevented people from changing over to more environmentally sound practices.

'Farming is on its knees and Interviews can't afford to make mistakes while changing over to a new system' (Interview 3, *Wagga Wagga area*)

For many, reducing input costs was a strategy to maximise profit even if it didn't maximise production, and if they saw environmental benefits as well that was very encouraging. While most clearly valued producing food and fiber and getting fairly recompensed for it, there was considerable emphasis on other values and other potential sources of income.

'Production is bread and butter, but getting paid for Soil C and ecosystem services would be the cream' (Interview 3, Wellington area)

'Views himself as an asset manager' (Interview 5, *Wellington area*)

'Doesn't like the fact that farming industry and community focuses on aspects they can't control and ignores profitability/cost of production' (Interview 6, *Wellington area*)

'*Money is a bit of an incentive, but not the main incentive*' (Interview 10, *Wellington area*)

Many were already involved in some form of rotational grazing and this was generally perceived by them to be a strategy that was environmentally beneficial and already or potentially profitable. There was a wide range of strategies that could be broadly termed rotational grazing. Duration of grazing ranged from one day to several weeks; intensity of grazing from several thousand

DSE/ha/day to quite low; and periods of rest ranging from 40 to 300 days. While some proponents of this strategy were quite dogmatic and strictly adhered to a formula, others were very flexible and attempting to adapt to circumstances. Many expressed the view that while they were convinced they were heading in the right direction, there were many unknowns. They were working towards the ideal strategy for their situation but hadn't yet found it. They used analogies and described broad philosophies that guided them, following HM or RCS type approaches or trying their own path to try to work out what suited them.

'(My) philosophy is 'randomness' – the environment is dynamic and random, therefore we have to tap into this diversity' (Interview 7, *Wagga Wagga area*)

'Have to be able to identify cause and effect' (Interview 7, *Young area*)

'Learned how to improve property by learning about larger areas rather than micro-managing' (Interview 12, *Wellington area*)

Many people we interviewed clearly identified themselves as having a primary focus on production, expressing conventional views on grazing and cropping management and a reluctance to be identified as or associated with "greenies". Despite this, production focused people clearly expressed environmental values even though they don't necessarily identify themselves or their actions in environmental terms. They appeared open to incorporating/integrating environmental and production values, even if they haven't done so in terms of biodiversity they may have done so in terms of functionality (e.g. fencing off creeks, planting tree lines etc)

3.5 Community networks and Landcare

3.5.1 Community networks

In most locations visited, people expressed a strong desire for greater community connections. Many landholders talked of the demise of the local community institutions, activities and resources the most common being tennis, church, and social community celebrations.

'Community – not really one at all, tennis club is on its last legs (insurance costs).' (Interview 23, *Wagga Wagga area*)

However in many locations particularly around Wellington and Young, people did express a strong sense of community and attachment to the people and places around them.

'Very strong network of people with strong community focus. Both next door neighbours as well as wider community. Driven by a lot of people taking courses and exploring new things.' (Interview 1, *Wellington area*)

Many farmers mentioned the community sense of Landcare and described a sense of community through local group meetings about production or conservation. In some cases, landholders mentioned that they had very good social connections locally and therefore felt they personally had a sense of community; whilst other landholders mentioned the cliques and divisions that they felt had polarised the sense of local community. Interestingly, in the Wellington area there was evidence of community polarisation based on differences in philosophies and farm management – the 'cell-graziers' and the traditionalists were two distinctive groups of farmers. However, some still socialise together and leave conversation about farm management at the door.

'Has never had a neighbour ask him about HRM, he feels a bit isolated.' (Interview 6, *Young area*)

'Generally positive attitudes from other people towards his practices, but scepticism out there as well.' (Interview 16, *Wellington area*)

'Early 2000 there was a divide between HMers and non-HMers. Became a bit cliquey and evangelical. It has changed since then, everyone speaks their mind.' (Interview 1, *Wellington area*)

In some locations landholders reported the desire for increased interaction with the local community in terms of multiculturalism and creating a rural identity, or in terms of being involved in helping solve social health and welfare issues present in regional centers.

'Very keen to 'rescue the little ones' in the wider community, get them away from drugs and negative influences in town.' (Interview 11, *Wellington area*)

Further associated is an apparent shift from communities of place to communities of interest. With this loss of community of place, some landholders found that they had become more isolated.

'Wagga Wagga is too close for a cohesive local community....Tend to use town independently of neighbours' (Interview 2, *Wagga Wagga area*)

'Community borders around town, you got to be in there all the time to be a part of it.' (Interview 21, *Young area*)

Others found that they were either travelling to various areas for different social activities, or mentioned being connected to like-minded farmers/extensionists/people in general via regional or state-wide informal/formal groups. These communities are based on wider geographical connections, and were often maintained by phone or the internet.

'*Quite conservative approach, although there was a community group of farmers which made the change easier...a community approach.'* (Interview 21, *Wellington area*)

'Finds people that think like him – it's hard – eventually found people around Mudgee (STIPA) – more refined idea of what he wanted – but distance' (Interview 9, *Young area*)

Changes in land-use have also affected changes in the community structure. Many farmers, especially those closest to regional centers, mentioned the hobby farmers and/or townies who are increasingly occupying rural spaces. In some cases, the increase was viewed as being positive for the reinvigoration of community, whilst in others it was associated with the loss of a sense of rural community.

'20-30acre block holders seem to be more community minded. Maybe have moved out of town to find that sense of smaller community' (Interview 28, *Wagga Wagga area*)

'Not much community here now...lots of people have 100 acre blocks.....Getting new landholders to mix with the community is hard to do. The older farmers mix a lot.' (Interview 7, *Wagga Wagga area*)

'Social landscape has changed – non-rural people buying for non-agricultural reasons. Eg – storing machinery and hunting...Absentee landlords' (Interview 18, *Wagga Wagga area*)

'Issues with absentee landholders...lack of willing hands pitching in ...fire, community.' 'Fracturing the fibre of the community.' (Interview 17, *Young area*)

'Immediate area is becoming peri-urban – 'there's a housing site near our shearing shed!' (Interview 8, *Wellington area*)

Farmers explained that in many cases these landholders work and/or live in regional or city centres and therefore do not socialise with the 'locals'. Absence from the property was widely considered to be a bad thing, with local tensions occurring due to issues with weed control or the poor-handling of stock and associated diseases. It is now apparently more common for neighbours to not know each other, making resolution more difficult. The increase in this type of land-use was also raised when landholders mentioned the future of their community; they expect hobby farmers to increase across productive land. There have also been issues with agricultural and forestry corporate land use;

> *'The community has changed a lot; a lot of the country to the south of here has been taken up by pine plantations and that has torn the heart of the area.'* (Interview 3, *Wagga Wagga area*)

3.5.2 Landcare

Landcare was still relevant in most locations, and where it wasn't, landholders expressed nostalgia for it. Landcare not only provided community solutions for landscape scale environmental degradation but it also provided the function of connecting people again at the local level. It was this connection and group effort that most landholders found most satisfying about Landcare, and in some cases there are present Landcare groups that persist solely due to this sense of community. Interestingly, in one location Landcare has always remained irrelevant due to the number of other grass-roots groups located previously in the area, and the existing strength of local connections.

Waning enthusiasm for local Landcare was associated with a number of factors:

1. The introduction of the Catchment Management Authorities (CMAs) as the new regional facilitators of Natural Resource Management and funding opportunities was perceived to have 'taken the teeth out of Landcare'. Previously, Landcare group funding and the employment of facilitators provided not only coordination, but opportunities for communication which lead to sharing of ideas and awareness of different management strategies. Many landholders perceived that the CMA introduced a funding system based on individual grant applications, strict deadlines, too much red tape and lack of contact and communication. With this, many ex-Landcare groups place the blame on the CMAs as to their group's disintegration.

> *'Landcare – CMA impact – declining due to a feeling of lost relevance....CMA funded project – does not have the flexibility and is government, not community. Under Landcare money could be carried forward if conditions were inappropriate.'* (Interview 22, *Wagga Wagga area*)

> *'In the 80s Landcare came – it was exciting, then the enthusiasm waned as it became political.'* (Interview 1, *Young area*)

> *'(I was) Landcare president, but Landcare has gone by the wayside as people have to turned to the CMA'* (Interview 16, *Wellington area*)

'Biggest killer to Landcare groups was individual CMA funding – no more need for groups!' (Interview 26, *Wellington area*)

In some locations, where Landcare was still effective, this was attributed to either a fantastic facilitator, or to the determination of a few committed locals.

'Landcare dissolved due to key local identities being removed from the area – changed dynamics for the group.' (Interview 11, *Young area*)

Interestingly, the individual funding schemes also created other divisions in communities, where a few exclusive farmers were seen to be accessing the majority of funding opportunities. However, there were mixed experiences with CMA staff individually, with the majority of landholders reporting positive experiences with what contact they did have.

2. In some locations, salinity was the main focus of effort for Landcare groups. Many landholders commented on the fact that this environmental issue brought together the community. With the current drought conditions persisting for the last ten years, salinity issues have decreased with the lowering of the water table, and similarly community efforts to combat this problem decreased.

'Can't wait for salinity to be a problem again! Brought community together and environmental issues to the forefront.' (Interview 19, *Wagga Wagga area*)

'Salinity – best thing that could have happened to community' (Interview 25, *Wagga Wagga area*)

3. The drought was also seen as a factor in the demise of Landcare groups, as added financial stress and time constraints made it difficult for people to commit to community efforts. In some cases however, Landcare was used as a support mechanism during the drought.

4. With the continual and rapid decline of many rural communities, coupled with the aging population staying in these locations, there is also a lack of fresh faces and new ideas. This lack of new people has meant that members of Landcare groups simply became burnt out. Certain landholders explained that in some cases, presidents and treasurers had been in the position for longer than a decade and that when positions came up there were simply no hands to put up.

'Landcare is failing on new members, i.e. too big now – amalgamation with Junee, too big' (Interview 13, *Wagga Wagga area*)

'Getting time makes it hard to go away. Was the president, but very busy so can't do it. Landcare is getting busier – you end up getting involved in more and more until it ends up being too much. One person goes to everything, the next president is disconnected – doesn't know what has happened beforehand.' (Interview 22, *Young area*)

5. Some landholders explained that Landcare groups, in order to survive, began amalgamating with larger groups in other townships. In many cases, this form of

Landcare was perceived to be irrelevant for localised problems, and so many landholders withdrew participation.

In general, most landholders expressed the desire to increase their sense of community through increased interaction and connection either locally, or across the landscape. This need was also reported by landholders to be important for aiding integration of different groups living in the same landscape, for example: different age groups, 'cockies and blockies', rural and regional peoples, people with different ways of thinking, and different cultures.

The inherent importance of community and community networks was expressed by all landholders. The relevance of Landcare is clear. Not only have many Landcare networks survived, but in several places where they haven't, the community has developed its own network without any public support. Community networks can be resilient in the face of changing policies, providing continuity in times of institutional change.

4. Lessons for CiL

This section describes what the CiL project gained from the PRA in terms of team building and training as well as insights yielded from the interviews and workshops. All the information provided in this section is therefore based on interpretations and insights from the CiL project team, rather than direct results from the interviews. These insights can help guide the project and ensure that the project aims are adapted to the local situation in the three catchment areas and in line with the wants and needs of landholders.

4.1 Training of partners and staff and team building

There was unanimous agreement that involvement in the PRAs had been very beneficial for the people involved. Participants made the following observations:

- Good that the PRAs are early in the project as they encourage collaboration in the team.
- Feel inspired – there is a clear stated need for CiL.
- Feel despair – due to size of job/broader politics, fighting for community role in NRM.
- Contact with land managers is excellent to aid understanding.
- Important to keep ourselves well – interviewing land managers and experiencing their difficulties has an impact on us.
- There is a sense of unity and cohesion among CiL partners.
- PRAs highlighted areas of potential conflict between partners and provided an avenue for exploring differences. Resolving the differences and arriving at consistent information and recommendations has been progressed through the PRAs.
- Community Woodlands Officers reported that involvement in the Wellington PRA (they had not yet been appointed for the Young and Wagga Wagga PRAs) provided an excellent orientation to the project and enhanced their settling in to their positions.

4.2 Differences between catchments/locations

The differences between catchments and locations within the catchments were discussed during the PRA workshops. There was a difference in the physical landscape depicted in each of the three catchments based on different farming enterprises. Young is characterized by a dominance of mixed farming whereas in Wagga there is an emphasis on cropping and a more industrialized landscape. This differed greatly from the Wellington area where traditional cropping is very limited, pasture cropping is widely practiced, and the landscape is dominated by grazing enterprises.

Drought featured more prominently in interviews in Wagga Wagga than in Young or Wellington. Issues raised included the physical landscape, levels of debt and incidence of stress and depression. There was also a strong sense in Wagga that the drought was impairing a shift in land management towards a more environmentally friendly approach. However, in Young environmental management seems to be more readily embraced as the way forward amongst a coherent group that probably comprised a 'community of interest'. In Wellington, a similar community of interest evolved much earlier and has now transformed into a community of place as well.

Wagga landholders identified a wide variety of threats to the farm and were generally more pessimistic about their future in farming than landholders in Young or Wellington. Farmers in the Wagga region felt that they had no control over the systems which caused the increase in risk and stress. This differed from the Young region, where farmers were generally more optimistic about the future of agriculture in the region. Wellington landholders were also optimistic about the future and related this optimism to succession planning, the integration of production and conservation, and the strong social networks in certain locations.

In Young many landholders have shifted to using low input systems and integrating production and conservation whereas in Wagga traditional agricultural practices still appear to dominate. This could be due to many factors, however it seems that HM is more prevalent in Young than in Wagga, where it is just starting to take off; this could partly explain the difference. In the Wellington area there have been a number of very active groups running programs regularly for over a decade including HM, Grazing for Profit, STIPA Native Grasses Association, Central West Conservation Farmers Association (now Conservation and No-till Farmers Association or CANFA) and the very influential Farming Systems Groups run for several years by the *Wellington area*. These initiatives and other integrative programs have had a significant impact on nearly all the landholders interviewed in Wellington resulting in a large number of innovators being peer identified in the area.

Similar innovators in the Wagga region appeared to be more socially and geographically isolated than in around Young, while in Wellington they had formed communities within communities.

In Wagga, environmental conservation was mainly focused around the marginal areas, whereas in Young there was more of a shift towards integrated conservation and production. It was in Wellington that this shift had taken place much earlier, and many farmers were heavily involved in new ways of farming environmentally.

There seemed to be better awareness and understanding of Endangered Ecological Communities and Box Gum Grassy Woodlands in Young and Wellington than in Wagga. However, this was identified as a key action for CiL extension in all three catchments.

4.3 Identification of innovations and innovators

For the purposes of this project, innovations and innovators of greatest interest are those that integrate conservation and production. Holistic Management (HM) stands out as a key intervention that stimulated a change in thinking in landholders leading to a new direction that is very relevant to CiL. Courses run by Resource Consulting Services (RCS) were also influential, as were Farming Systems courses run by *Wellington area*. It was noted that some people who adopted HM approaches may fail because they made the change too late.

Many of the practices arising from these interventions focus around grazing management and increasing diversity and resilience of grasslands. Landholders adopting them report clear evidence that convinces them that these practices are beneficial, both for production as well as conservation. There is already considerable research interest in these practices, and while many scientists and advisors remain sceptical, it is clear from this work that the landholders themselves will continue to develop along these lines. A clear insight shared by interviewers was that these innovators had a greater sense of optimism and were more confident about the future. Conflicts between this community of practice and official recommendations are dealt with in section 5.6 below.

The history, nature and experience of innovators is a focus for ongoing PhD research. Some of the characteristics of these innovators as described by interviewers were:

- Very strong sense of integrating production and conservation;
- Very lifestyle orientated with integration of the family and the farm;
- Some do not have a production or conservation focus, so much as a profitability focus – i.e. creating local economies through self-marketing, or currently thinking about how to get into this – environmentally sound goods;
- Felt they had more control over their enterprise with current practices *vs* previous practices;
- Diversity of innovation – related to the influence of many environmental farming movements prevalent in the landscape;
- Had adopted practices that made their farming less reliant on rain;
- Were thinking about the farm in a holistic manner – were, or were attempting to 'over-ride the fragmentation of systems';
- Some landholders taking on direct marketing their product – tapping into a niche market for healthy, environmentally sound local produce in an attempt to move from being price takers to becoming price makers.
- Key attributes of successful innovators are: responsive, observant, analytical, opportunistic, know own limitations.
- Native grassland managers were integrative of production and biodiversity conservation and expressed optimism in a practical, environmental and profitability sense for their own property.
- We need to be wary of elevating some innovators to 'cult' status. Many do not want to be 'champions' but would be more comfortable with more modest role such as farmer-to-famer communication.
- Some expressed the feeling of liberation when they released themselves from family and/or community expectations and focussed on regenerating their land.
- Many were already involved in research and farmer-to-farmer education. It was a strongly held view that introduced pasture species were performing worse than natives in the current run of seasons.

4.4 Orientation of CiL project

The information gathered in the interviews as well as the discussions within the interview teams and with local people during the workshops yielded several insights that are significant for the CiL project as a whole.

General:

- Interviews have reinforced the philosophy behind CiL and the need for integration between biodiversity conservation and production, based on a culture of stewardship

and responsibility for both the environment and the community, including enterprise profitability.

- The timing is right for this project. There is a strong sense of urgency among landholders brought on by the ongoing drought and many are looking for alternatives to adapt to a changing environment. There is a sense of needing to help 'get over the hump', and developing principles and practices that improve the environment AND generate profits are the key to the future.
- Emphasis on community is very important – the project should aim to help build and reinforce networks and connections.
- Overwhelmingly positive response to the first stage of the project. The approach taken by the CiL team to talk to a wide range of landholders and getting their perspective has been very well received.

Working with landholders:

- CiL should maintain an attitude of working with landholders, both seeking and providing feedback on a continuing basis and focus on shared-learning rather than adopting a top-down approach.
- CiL needs to acknowledge the high diversity among landholders and aim for the right activity at the right level in the right place.
- There is some tension with varying philosophies on farming either between generations or between different groups –this polarisation may intensify. CiL has a chance here to provide something for everyone whilst acknowledging these differing opinions.
- Hands-on learning experiences such as field days, trials and courses are highly valued by landholders. CiL should incorporate that in its approach and provide time for interaction and informal learning in activities offered to landholders.
- Efforts to expand and support on–farm monitoring seem justified and there is a clear opportunity for strong collaboration between researchers and landholders.
- All landholders expressed some environmental values – CiL needs to tap into the quiet environmental side of people and provide opportunities for them to take small positive steps, implemented in their own time.
- Even though the management strategies needed to regenerate native grasslands are a work in progress they are a significant innovation and sufficiently promising for CiL to work with landholders to help clarify strategies pending the results of the benchmark study.
- We need to focus on shared learning, not be 'top down' in our approach – sharing, facilitating and farmer-to-farmer learning is best, using a range of resources and approaches; 'group learning doesn't work for everyone'.

CiL management and operations:

- There is a need to clearly communicate the place of CiL among various other agencies and programs (e.g. CMAs, Landcare, Environmental Stewardship Program) and state the aims of the project in clear, unambiguous and simple terms.

- CiL will provide an opportunity to develop ways to describe and measure social and community benefits from networks and to recommend strategies for adding value to existing networks and for instigating new networks.
- In order to be successful with land holders who face a multitude of issues (including depression), CiL needs to provide small, simple projects that are short term and non-bureaucratic. In conjunction, CiL needs to strengthen networks so that short term projects and changes have the ability to transform into long-term changes.
- CiL needs to be cautious about elevating innovators to "cult status" and portraying them as champions of conservation management as this can be off-putting for both innovators as well as other landholders.
- The importance of feedback and follow up with landholders was reinforced. Several landholders expressed frustration about participating in environmental projects that failed to provide promised feedback or study results - there is a need to investigate why other programs in this location have failed/succeeded. All landholders interviewed indicated that they would like to receive feedback and continue to be informed about future CiL activities.
- Community Woodlands Officers (CWOs) are a worthy investment for the outcomes of this project – landholders expressed an overwhelming desire for localised information, consistency in advice and consistency in a local advisor who is physically present and is not working towards a hidden agenda.
- Long term relationships are better, as people are more likely to invest (time and energy and resources) if an activity is ongoing. CiL should tap into existing social networks that are working well. We need to stay in touch, both seeking and providing feedback.
- We need to be strategic and cost effective to ensure that we don't waste resources and people's time –we need to aim for the right activity at the right level in the right place.

4.5 Direction for partners and integration of project

In addition to the information that is important for the CiL project as a whole, some more specific insights were gained that will inform the different project components. The CiL partners that participated in the Participatory Appraisal in Wagga each identified several key insights that are relevant to their respective roles in and contribution to the CiL project.

Greening Australia (Penny Atkinson)	- Seed supply planning still relevant - Methods that encourage natural regeneration are best for native grasses so there will be little need for using grass seed - I.d. species that make greater difference - Arrange with landholders regarding access to seed - Support local industry - Unclear regarding level of training for seed collection
Landcare NSW (Marion Benjamin & Daryl Weston)	- Good that PRA is early in the project – encourages collaboration in team - Strike the right note with regards to communication with landholders – "walk beside them" - Feel inspired – there is a clear stated need for CiL - Feel despair – due to size of job/broader politics, fighting for community role in NRM - Woodlands Officer for 3 days/wk – too little
WWF/CiL (Sam Vine)	- Contact with land managers is excellent to aid understanding - We are better able to understand "floats their boat" - Land managers have a strong connection to nature - We need to find the right hooks and keys to get attention and engagement - Flyers, field days
Stipa Native Grasses (Graeme Hand)	- Keeping ourselves well – interviewing land managers and experiencing their difficulties has an impact on us. - Train the trainer/stimulated awareness on regeneration of grasslands - On-farm project kicked off in Wagga – learning to regenerate (by doing)
Grassy Box Woodland Conservation Management Network (Toni McLeish)	- Strong need for community Woodland Officers - Responsive, not imposing, available, flexible, non-bureaucratic - BGGW – come in all shapes and sizes - Successional information is very important: cropping > grassland regeneration > perennial grasses > forbs - We need to providing multiple options - Where to get info
I&I (Peter Orchard & Lori McWhirter)	- Need to reorganize info and re-jig resources - Species i.d., management 340 ag facts - Monitoring process - Slim down Land Scan, property plan - Tailor resources to CiL – dedicated officer full-time - Lori, Peter and new officer to work on it - Need to keep production focused people in - Good that I&I is in from the start

4.6 Possible conflicts between agency policy and advice and what we are hearing from landholders

The following points were made during the PRA process and discussed by the team:

- Holistic Management is being picked up by LH who report how well it is working for them, whereas I&I maintains there is insufficient evidence in support of HM to recommend it broadly.
- CMAs have been funding HM courses and providing ongoing support for those following an HM path.
- Strategies that provide long periods of rest from grazing and generally use no fertilizers or herbicides are strongly advocated by many landholders widely recognised as innovators and good managers. They report that regeneration of native grasslands occurs as a result and see this as a better long term strategy than introduced pasture species which require both herbicide and fertilizer inputs to realise benefits. I&I still advocates introduced species and regular fertilizer application where there is good soil depth and reasonable soil fertility, and advises on herbicide applications as part of integrated weed management.
- The impact of grazing is disputed – it is considered a threatening process by some conservationists and a cause of compaction by some croppers, while many landholders hold to the view that with good management, grazing can regenerate native grasslands. This view is strongly held by those who have implemented HM. Resolving this apparent conflict is a key aspect of this project. Aspects such as type of livestock, type of grazing management and adaptive strategies are all important.
- Prograze™ recommends strategically reducing cover in autumn to allow clovers to regenerate in a trade off between cover and smother, whereas many landholders try to maintain 100% cover and aiming to increase depth of litter with the aim of improving function and increasing soil carbon.
- Details may get in the way of broad strategies being properly assessed. E.g. low soil P levels, presence of weeds, presence or otherwise of rare forbs may be given greater prominence while broader benefits of a strategy are discounted. Reliance on some forms of evidence – e.g. traditional agronomic field plot trials - may be restrictive when other forms of evidence may also be informative.

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6. Appendix: Interview guide

Own history

- Tell me why did you decide to be a farmer and how long have you been managing land?
    - *Experiences in life*
    - *Personal History*
- Tell me a bit about your history here on this property:

  (Family history)
    - How long have you lived on this property/in this area?
    - Do you have a family history in the area? In rural Australia? In agriculture? How did you get into farming?

  (Enterprise history)
    - How long has your property been used for farming/conservation etc?
    - Do you make a living from the property? About what % of your income?
    - Do you know what sorts of activities have taken place on your property in the past?

Community

- How would you describe your local community here? Where are the boundaries?
- What communities lie next to you? Do you have any formal/informal ties with these communities or others?
- Do you know anything about the general history of the area?
- How would you describe the culture of your community?
- What sorts of people live in your community?
- What sorts of people would you like to see living in your community?
- What about community spirit?
- What sorts of groups/activities take place? Is there a local meeting point? Anything you have achieved together as a community?
- Are there informal 'groups' in your community?
- Where do you feel you fit in? Do you know of people who don't feel they fit it?

Future

- How do you feel about your future here?
    - Are you worried about your future? What do you think will happen?
    - What do you want to see happen? How do you envisage it occurring?
        - Future plans for enterprise
        - Future plans for family (heir?)
        - Future plans for the community?
            - What would you like to see happen in the future to your community? Or this area?
            - Are you worried about the community's future?
    - What are your personal aspirations and aims?

        - For yourself? Your family?
        - For your farm?

Sources of Information

- Where do you go for information? How easy/hard is it to find useful information? How have you received information about the environment?

    - Firstly, have you done any research of your own/tried things out?
    - Have you ever received info from outside sources (from neighbours/family/media/government etc)?
        - Where?
        - Content?
        - Usefulness?
    - Has anyone/a group ever approached you about anything to do with environmental management?
        - Who and where from?
        - What was their purpose?
        - What impression did/do they give you?
        - Did they listen to your needs and ideas?
        - Was/has their advice been useful? If not why?
        - What sort of characteristics would you like to see in a person approaching you about the environment? What characteristics have you seen?
    - Are you involved in any networks or groups associated with environmental management?
        - What motivated you to join this group/network?
        - Who was involved? How would you describe the group?
        - What characteristics would you like to see in a local environmental management group? Who would be involved?
        - Have groups failed to stay together? Why? If not, how do you think they have stuck together?
    - Have you ever been involved in any trials/field days/courses/workshops of any kind to do with the environmental management of your farm?
        - Where and with whom?
        - What did you learn? Was it useful? Has is led to any changes?
        - What would you like to gain out of field days/workshops/trials?
        - Do you think these programs/projects were in line with what the community needed?
        - What would get you to attend a field day?
            - Focus? Topics? (environmental/production)
    - What do you think about the coordination of the information you have received?
        - Consistent? Ad hoc? Reliable?
        - What do you want to receive?
    - What do you think would motivate you to join a group/get more information/try out different practices?

- What types of formal processes do you think could be put in place to help continue projects/groups that are formed within your community?
- What sort of research would you like to see be conducted in terms of rural land managers and their relationship with the environment?
- What do you think frustrates you the most about environmental management? (People/programs/advice/government/limited options etc)
- What about environmental management do you find most interesting and what would you like to know more about? Is there anything you are confused about?

Environmental Management

- What do/would you want to gain from environmental management?
  - On a personal level
  - On an environmental level
- What sorts of environmental management do you practice on your property?
  - What and why?
  - Where on property?
  - Do you have plans for further developments?
  - How has the landscape changed here in terms of the physical environment?
  - How do you think the environment is going on your property at the moment?
  - What sort of things have you tried to change on your property in terms of the environmental management practices you have adopted? Has anything gone really well? Or been difficult? Have there been any benefits?
  - Is there any evidence of environmental degradation or areas you want to improve?
  - What do you think was the main motivation for your adoption of these changes?
  - How do you think the community would respond if you wanted to make changes to your property/enterprise in terms of environmental management? Why?
  - Any local people you would consider are innovative? What do think of them? What do others think of them?
  - Is there anything people are doing differently around the area?
    - Who (without naming names!) and what?
    - What do you think of it? What do other people think?
  - What sorts of changes do you think have to take place for environmental management in this area in general? Could these changes take place easily?
  - What would you want to gain from a project concerning the improvement of the Box Gum Grassy Woodlands ecological community? (mention CiL components – possibility of cross-property plans?)

Final Checklist

- How many years have you been a land manager?
- What would you say the main function of your property is?
- Are you interested in being involved in further interviews/surveys associated with this project – or receiving information about the Communities in Landscapes project, including results from these interviews and information on events such as workshops/field days?
- What do you think is the best way to informs others about this project?

FINAL CARING FOR OUR COUNTRY PROJECT REPORT

Final Report for the period 1 July 2009 to 30 June 2012

Project ID:	**BP01179**
Grantee Name	**Landcare NSW Incorporated**
Project Name	**Communities in Landscapes – Working together to integrate conservation and production across Box-Gum Woodlands**
Project completion date	**1 September 2012**
Project final report due date	**1 September 2012**
Contact person for more information	**Jacinta Christie – DPI Cootamundra**
Report authorised by:	***Mandi Stevenson – Chair Landcare NSW Inc***
	

1. Report on MERI Implementation

1. Overview of Project Progress

This report is the Final Report for the Project and assumes knowledge and understanding of the activities presented in all previous progress reports.

1. The overall management of the project will be outlined first followed by the three key strategic areas that were noted in the application and program logic with activities and outcomes reported against them in this section. Those three areas were:
    - i Information and Management Support - Improved targeting of information and management support for land managers and community groups
    - ii Improved Knowledge Base - Improved knowledge base to inform and support management decisions in Box Gum Grassy Woodlands (BGGW) landscapes
    - iii Implementation of integrated on-ground activities across multiple properties in priority local landscapes.

2. The Whole of Project Management was undertaken through various means:
    - i Quarterly steering committee or Whole of Project meetings were held in September and November 2010, February, May, August and November 2011 with a final gathering in March 2012.
    - ii Project Management was undertaken by Management Teams as from June 2010, with the role of co-ordination of MERI and many of the administrative aspects for reporting and co-ordination contracted by Landcare NSW Incorporated (LNI) to NSW Department of Primary Industries (NSW DPI). As Lead agency, Landcare NSW Inc (LNI) assumed the role of Project Management as opposed to a Project Manager. This was undertaken

by the Executive Management Committee, who assumed various operational, co-ordination and strategic roles as well as the fundamental governance and financial roles. LNI also had an operational responsibility as a partner in the project. During the course of the project the Management Committee remained constant while members of the Executive changed and ultimately the 2012 Treasurer assumed the final role for collation, reporting and submission for audit of the financial aspects of the whole Project.

iii The Management Committee within Landcare NSW met monthly either face-to face or by teleconference.

iv The convenors of the Management Teams held monthly teleconferences.

3. Sydney based consultants Community Solutions and Michael Williams & Associates were contracted by University of Sydney during the period September 2011 – March 2012 to complete an evaluation of the social and cultural aspects of the Communities in Landscapes (CiL) project focussing on key questions relating to the impact, effectiveness, appropriateness and efficiency of the socio-cultural approaches undertaken. The survey consisted of semi-structured telephone interviews with 20 project partners, 20 institutional service providers and stakeholders, and 40 active land-holder participants and parallel survey using a self-completed on-line Survey Monkey service which attracted a further 45 responses. A full copy of the report of the survey entitled 'Evaluation of the social and cultural aspects of the project' is attached and was used to help complete the 'Lessons Learnt' and 'Improvement' sections of the final CiL report.

Information and Management Support

1. Nineteen Woodland Awareness/Management Field Days were conducted throughout the Central West, Lachlan and Murrumbidgee Catchments involving multiple partner agencies with 241 participants. The field days included 5 Healthy Water on Healthy Farms; 6 Frog Community Awareness presentations; 2 Fauna Friendly Farm Workshops; and 6 Survey Introduction and spotlighting workshops.
2. Review and development of fact sheets and other BGGW resources for landholders and extension staff to improve targeting of information. Resources include:
   i. Florabank, through Greening Australia (GA) have completed 40 fact sheets to update the Florabank species navigator. Factsheets are currently available on the Florabank website (http://www.florabank.org.au/default.asp-V_DOC-ID=1043) with links on the CiL website and the CMN website.
   ii. GA developed a VET accredited Native Seed Procurement Training Unit for the Conservation and Land Management qualification.
   iii. The Conservation Management Network (CMN) and the Office of Environment and Heritage (OEH formerly DECCW) produced a series of Box-gum Grassy Woodland educational videos to support a Virtual Woodland Excursion held on Threatened Species Day in 2011. The excursion was attended by over 200 rural students from 17 rural schools. Videos included: Woodlands; Woodland Ecological Communities and Plants; Woodland Mammals; Woodland Frogs and Reptiles; and Woodland Birds.
   iv. A six chapter DVD produced in May 2012 on Woodland History and Management from pre-European settlement to current day. 1500 copies printed and made available to Project land holders and stakeholders and posted directly to CMN members and CIL project participants.
   v. '*Adaptive Management Guidelines'* brochure updated and reprinted by CMN, OEH and NSW DPI. Reviewed by CSIRO. 1500 copies of each publication made available to Project land holders and stakeholders and posted directly to CMN members and CIL project participants.
   vi. '*Grazing as a tool for biodiversity conservation in temperate grassy ecosystems*' developed by CSIRO in partnership with CMN and NSW DPI. 1500 copies of each publication made available to Project land holders and stakeholders and posted directly

to CMN members and CIL project participants.

vii. '*Recovering Box-Gum Grassy Woodland: the Way Forward – State and Transition Model*' brochure completed, based on CSIRO research. 1500 copies printed and made available to Project land holders and stakeholders and posted directly to CMN members and CIL project participants.

viii. '*Small Farms: Balancing Production & Biodiversity*' brochure printed in May 2012. 1000 copies printed and publication made available to Project land holders and stakeholders and posted directly to CMN members and CIL project participants.

ix. OEH have developed a Glove Box Guide for frog identification including photos and calls of various woodland frog species.

x. Sydney University has material from the Innovators Benchmarking Study Reports and Participatory Rural Appraisals (PRA) report available for the development of extension packages and linked to the CiL website.

3. OEH has completed 55 Booroolong Frog Surveys. Information brochures about the Booroolong Frog were disseminated to property owners and managers. Frog habitat and management discussed when possible

4. The CMN, Florabank and CiL websites have been maintained. CMN have added 4 woodland videos developed for Threatened species day. In addition CSIRO have developed a website to be hosted on the main CSIRO website which includes a 4 minute vodcast to be available via the Web or iTunes. . Located at http://www.csiro.au/Organisation-Structure/Flagships/Sustainable-Agriculture-Flagship/Box-Gum-Woodlands.aspx

5. Communities in Landscapes (CiL) Website has been maintained by Landcare NSW Inc. The website hosts resources developed throughout the project and some PlaceStories from recipients of Community Small Grants. Many of the Place Stories also remain on the Place Stories website

6. Three 'Woodlands Wandering' Newsletters produced by the CMN (Autumn 2010, Spring 2010, Autumn 2011) distributed by mailing 200 x 3 issues to regional Landcare and 1400 x 3 to network members. Final newsletter replaced with an information folder on Project Outcomes and Resources which was distributed in May 2012.

7. OEH developed an accessible data management system for grassy woodlands through the consolidation of existing data for BGGW from disparate sources into a single database resource.

8. Community Woodland Officers (CWO) have provided BGGW information and technical assistance and support to 3002 landholders, community members and government and non-government officers through sites at major field days (Orange, Mudgee, Henty, Murrumbateman), meetings, conferences, and field trip.

Improved Knowledge Base

9. To improve the knowledge base to inform and support management decisions in BGGW landscapes, Sydney University completed an Innovators Benchmarking Study. The selection of the participants in the innovators study was predominantly by peer selection, to ensure a ready acceptance of the results by landholders. The study showed that when compared across a fence line with more traditional continuous grazing, the type of rotational grazing practised by the 10 innovators increased perennial grass and litter cover. This resulted in improved landscape function (water infiltration, soil stability and nutrient cycling) as measured by Landscape Function Analysis. There was also an increase in native grass diversity on 8/10 sites. On the 4 sites where soils sampling was done, there were statistically significant improvements in soil C, P, N, pH (higher) and bulk density (lower) and positive changes in soil ecology on the innovator sites. These changes were compatible with maintaining or improving the commercial viability of the grazing enterprise.

10. Results and implications of Benchmark Study of Innovators were also discussed and work-shopped at: 3 whole of CiL project meetings during 2011 including the final meeting 2-3

November; to about 50 people at 'Reading the landscape: linking biodiversity, research and management' conference (CWCMA, WCMA, NSW OEH) in Dubbo 11-12 Oct; to about 30 people at the 7th National Native Grasslands Conference (Stipa Native Grasses Association) in Holbrook 9-10 Nov.

11. Project Benchmarking workshops on Land Function Analysis (LFA) were held at Orange and Wagga in August 2011 with 23 participants coordinated by Sydney University and usingDavid Tongway as a consultant.
12. To improve the knowledge base to inform and support management decisions in BGGW landscapes 76 training events were held involving 823 participants. Training events included: 17 NSW PDI Paddock Plant workshops with 217 participants across the Central West, Lachlan and Murrumbidgee Catchments; 24 STIPA Native Grass Regeneration workshops across 3 catchments with 219 participants; 8 Florabank seed collation training courses across the three catchments with 118 participants and 8 other Greening Australia presentations and workshops with 153 participants; 11 Train the Trainer for Frog Habitat Recognition with 33 participants; and 10 DECCW (OEH) training events covering assessing weed threats, BGGW identification and assessment, grazing management forum, and Biodiversity Incentive Tool training with 201 participants.
13. In addition DECCW (OEH) provided Threatened Species Management training workshops for 25 participants
14. CSIRO held one workshop 'Climate Resilient Restoration and Management of Box Gum Grassy Woodlands' at the Cowra Experimental Research Site.
15. CSIRO provided review and comment on project partners documents intended for public information; provided expert advice in responses to queries from partner organisations (OEH, NSW DPI, and other land managers) regarding management of BGW estates (eg. private landholders and Yass Area Landcare groups, ACT Parks and Conservation, Yass Valley Council, Southern Tablelands Livestock Health and Pest Authority); and in conjunction with Greening Australia and the NSW Roads and Transport Authority organised a 10 ha planting of 2000+ Box-Gum Woodland trees and shrubs by 90 Landcare and GA volunteers to restore habitat and create connectivity for biodiversity as part of the Gounyan Curves Road/Barton Highway bypass between Murrumbateman and Yass.
16. CSIRO in partnership with CMN and OEH have developed a "Birds Of Box-Gum Grassy Woodlands" DVD. CSIRO and OEH developed a list of BGW bird species for inclusion on the CD, CSIRO sourcing bird calls through liaison with the CSIRO Australian National Wildlife Collection curator for the National Sound Library. Simon Ferguson was contracted by Landcare NSW to source images and create the DVD under the supervision of the CMN
17. The CMN coordinated 40 formal baseline property surveys including flora and woodlands birds across the Murrumbidgee, Lachlan and Central West Catchments.
18. GA has completed six seed supply strategies across three catchments with local groups. Strategies have been developed for Little River Landcare, Central Tablelands Landcare, Grenfell (Weddin) Landcare, Young Shire and Dananbilla Ranges, Royalla/Burra Landcare and Combined Tarcutta/Kyeamba Valley and Humula Landcare.
19. GA has completed an evaluation of the six seed supply strategies. Each seed supply was tailored to meet the individual group requirements in a flexible manner. Strategies were reviewed by each group and the template was modelled from Border River Gwydir CMA Seed Supply Strategy. Second evaluation was completed by Dr David Freundenberger, Director of Science, GA. Seed provenance text was reviewed by Linda Broadhurst, CSIRO.
20. The Stipa Native Grass regeneration workshops introduced the CPCP groups to adaptive management that ensures that decisions made over the whole property are based on evidence that will ensure landscape function and perennial grass diversity are increasing. Stipa also introduced to partners, CPCP groups and other interested farmers to skills such as: control of weeds by promoting increased perenniality and diversity; evaluating the viability of soil seed banks of native perennial grasses; and how to monitor and improve animal health and performance on native pastures.
21. CSIRO undertook soil surveys of 69 sites including production paddocks, travelling stock reserves, roadsides and crown land, to better understand constraints to restoration and

revegetation in woodlands in differing states of degradation. Preliminary results confirm that, in comparison with good-condition reference woodlands, some states of degradation are indicators of compromised capacity to capture and store soil water, potentially hindering restoration in a drying climate. In particular, woodlands and native pastures dominated by the native grasses *Austrostipa scabra* and *Austrodanthonia* species typically showed reduced levels of particulate and soluble soil carbon and loss of fine soil particles (important for moisture holding capacity), and reduced soil water infiltration. These findings point to a range of potential amelioration activities to improve restoration success in these environments.

22. Many of the 60 Community Small Grants were focussed on gathering and dissemination of knowledge through group and educational opportunities and resources that informed not only the group developing the information, but also the recipients of the completed products.

Integrated on-ground works across multiple properties in priority local landscapes

23. Six Cross Property Conservation Planning (CPCP) groups have been funded with individual whole farm plans as well as cross property plans at Limestone Creek, Belgravia, Humula, Kyeamba, Uamby and Dananbilla-Illunie involving 60 landholders and covering 62,000 hectares. A seventh cross-property conservation group at Heifer Creek was funded through the Community Small Grants Scheme. The formation and support of the CPCP groups required considerable time and a full time CPCP project officer was appointed within NSW DPI to ensure this crucial aspect of the project was achieved with maximum success. The overall approach in these groups has been to target zones within and between properties on which actions can be instigated to increase biodiversity connectivity at a landscape scale. Actions included changing grazing management according to the Benchmark Study and CSIRO guidelines to increase perennial native grass cover, improve function and enhance habitat for biodiversity; strategic planting of trees and shrubs; improving the habitat quality of dams and watercourses and increasing the knowledge base of landholders to encourage ongoing actions. Within the Dananbilla – Illunie group, mixed tree and shrub plantings were undertaken by 11 landholders, focussing on restoration of scattered paddock tree and shrub groves into key corridor zones, planting over 6000 tubestock plants over approximately 10,000 ha. Survey of local shrub & forb populations was undertaken in 2010 & 2011, and seeds harvested from genetically viable populations, consistent with the GA seed supply strategy. This stock was grown and planted out over seven properties in winter 2012, restoring over 1000 of these trees & shrubs to the landscape. All other CPCP groups have implemented on-ground works including wildlife corridors and scattered trees for connectivity, construction of farm dams and fencing to enable rotational grazing, restoration of existing remnant BGGW through livestock restriction and buffer plantings, and development of biodiverse farm dams through restriction of stock access, addition of logs and structures to dam edge to create niche habitats and introduction of native reeds, understorey and shrubs for fauna habitat.

24. Voluntary Conservation Agreements (VCA) negotiations and cross-property planning in Protected Area Networks (PAN) area to support the formal National Reserve System reserves was completed. OEH & CSIRO identified local farmer sites for research - to create a different learning opportunity as well as increase habitat and enhance connectivity in the PAN.

25. Three demonstration properties were identified, specific strategies introduced and field days held. The first property ‘Bimbadeen’, Cootamundra in the Murrumbidgee catchment was identified for Indigenous Best Management Practice. An action plan was developed for the property in conjunction with the Young Local Aboriginal Lands Council (YLALC) board members and the current manager to protect existing high conservation value areas of BGGW and restore degraded areas of the property. On-ground works were completed in November 2011 and consisted of fencing, improving stock water access through the addition of a tank and troughs, and enhancing existing areas through scattered tree and connectivity plantings. Two field days have been held at the site (November 2010 and April 2012).

26. Work undertaken for biodiversity enhancement has continued at the second demonstration area at Dananbilla-Illunie. This work has included control of dense regeneration; chemical control of perennial exotic sweet vernal grass infestations and exotic annual species; spreading of native grass seed following exotic annual control; spreading of native grass seed and sterile hay mulch over eroded areas; monitoring of pre established ground layer diversity plots; and establishment of monitoring plots for benchmarking results of regeneration thinning. Over 650 locally rare shrubs and forbs have been grown and restored to this area. A field day was held to present the opportunities and challenges of managing box-gum grassy woodland to the local community. Topics for discussion at the field day included: key attributes of box-gum grassy woodlands and plant identification; regrowth vegetation, control of water points and kangaroo grazing pressure; weed issues and management; edge effects and nutrient enrichment; and habitat and connectivity.

27. An alternative Production demonstration property was selected in late 2011 after issues with tenure at the original property. "Glenwood" is a 2800 hectare property situated 29 kilometres east of Wellington. "Glenwood" was selected due to the commitment and enthusiasm of the owners who had participated in multiple CiL components (Participatory Rural Appraisal, Benchmark Study, a CSIRO study, and cross property conservation planning) and because it is an excellent example of integration of conservation and production in box-gum grassy woodlands. A field day was held at the property on 14-15 March 2012.

28. Eight revegetation sites (each 0.25ha) managed by CSIRO which trial the potential for biochar to improve establishment of trees, and a further 3 sites with 72 trial plots evaluating 5 novel methods to improve climate-resilience of restoration and revegetation efforts . These sites are also a focus of field days, communicating restoration techniques and other woodland conservation issues.

29. Sixty-six Community Small Grants (CSG) were devolved covering around 6734 hectares. Over the two rounds of funding, 75 CSG applications were received; 5 were rejected and 4 withdrew. CSG involved landholders, community groups and local councils and involved a range of activities. Outcomes included:

    - Extensive revegetation projects within the 3 catchment regions enhancing the BGGW community with over 6,000 trees and shrubs planted.
    - Thirty-three interpretative signs developed and installed at BGGW sites – increasing public awareness to the importance of these sites and our environment as a whole. Sites included Royalla, Brooke Moore Reserve, Adam's Lead Reserve, Forest Aranda Bushland, ACT and Lake Burrendong State Park
    - Construction and installation of 363 nesting boxes in BGGW sites for woodland birds with some interpretation signage to raise awareness that mature trees are essential for habitat for our native fauna and nest boxes installed are simply an interim measure to help where natural habitat has been lost, and should not be considered a suitable alternative.
    - Eight BGGW sites rehabilitated
    - Two BGGW gardens constructed at Yeoval and Temora and one arboretum at the Australian Rural Education Centre
    - Five field trips and training events funded for community members including one seed collection workshop for five schools; two workshops and field visits by schools to the Henty Fiveways Reserve; 'Green Day' at Mudgee for 17 schools in the Central West; and one land holder bus trip to visit sustainable agriculture sites within BGGW systems.
    - One survey of vegetation and habitat in BGGW at Williamsdale/Burra.
    - Two BGGW remnants protected at Dunedoo (113 hectares) and fencing to protect BGGW remnants from over-grazing.
    - Educational brochures developed for the Royalla Swainsona Reserve; Royalla; Adam's Lead Reserve, Dunnedo; Brooke Moore Reserve, Orange; and Superb Parrots.
    - Learning package developed in conjunction with the Murray Darling Basin Association and Burrumbuttock Public School which consisted of worksheets, posters, stickers, class plan, and DVDs. These resources were produced and distributed to several schools and environmental education centres across BGGW areas in NSW and northern Victoria with DVD video segments made available online.
    - Superb Parrots and Box-Gum Grassy Woodlands educational material produced by the Orange Field Naturalists and Conservation Society for use in the Central West, Lachlan

and Murrumbidgee catchment areas. Resources included: A4 brochure, posters, 1 Superb parrot oval sticker and 6 different Superb Parrot bumper stickers.

- The Riverina Environmental Education Centre (REEC) revised the box-gum grassy woodlands lesson on the REEC web site (www.reec.nsw.edu.au).
- Eleven species of BGGW native animals were prepared by a taxidermist for educational purposes
- Funding to support construction of a shade house for BGGW seedling propagation and improvements to existing irrigation systems.
- Development of a seed bank in the Weddin Shire
- Support for the production and distribution of four editions of the Kyeamba Valley Landcare Group Newsletter which included local BGGW information.
- Thirteen community generated PlaceStories (web delivered, audio-visual stories) developed, with eight publically available on the CiL website.

30. Development and dissemination of Project signage (3 designs and 100 available)

Promotion of Project

31. Numerous presentations have been made at conferences, workshops and meetings. Landcare NSW Inc (LNI) provided CiL Project reports to at Quarterly Landcare NSW Inc meetings; Landcare Australia Limited Advisory Committee meetings; and National Landcare Network and other state bodies at which LNI is represented and makes regular reports to. These quarterly reports are also circulated to the Landcare NSW network representing over 2000 groups in NSW, although there is currently no way to measure how widely this distribution is received.
32. LNI presented CiL information at the NSW Landcare Forum "Thinking Differently" held in Parkes in September 2011 to approximately 250 people as part of the Landcare NSW presentation; the 2011 Muster – a gathering of Landcarers – to promote the benefits of a state-wide approach to projects; the National Resource Management conference; and NRAC meetings.
33. CiL was used as a case study for Landcare and cross-property planning for Landscape-Scale connectivity conservation at the 'Linking Landscapes' Summit held at Queenscliff NSW in October 2009 and at the 'Collaborative Decision-Making in NRM' Conference held in Sydney June 2011.
34. LNI produced one *Landcare in Focus* article and promoted the Project through the Community Woodlands Officers who hosted sites at major field days in 2011 and 2012 including Henty, Murrumbateman, Orange and Mudgee.
35. CSIRO has also published over 13 papers in the scientific literature made possible in part by CiL funding, that will help improve the knowledge base to inform and support management decisions in BGGW. Findings include that fencing to exclude livestock in woodlands can be valuable for biodiversity conservation but that additional interventions will often need to be applied because recovery of native plant species richness is constrained by exotic plant species that persist at higher topsoil nutrient concentrations (Prober, Standish and Wiehl 2011). However effectiveness of weed control of exotic annuals will require different interventions in sites of comparable nutrient concentrations dependent on disturbance/grazing history (Prober and Wiehl 2011). Epigaeic beetle assemblages in paddocks respond rapidly to revegetation and have high functional resilience in agricultural landscapes (Gibb and Cunningham 2010) and significant benefits are achieved for beetle abundance and species richness (and potentially flow on effects for insectivorous vertebrates) when a combination of reduced grazing and addition of logs are used in woodlands (Barton et al 2011).
36. CSIRO contributed to the Box Gum Grassy Woodlands Symposium at the Ecological Society of Australia Conference December 2010 (audience of approx 120 people including land managers and researchers).

37. CSIRO presented information on CiL project to Murrumbateman Landcare Group at monthly meeting and at the Murrumbateman Field Days (approx. 80 people). Exchanged property management ideas with landholders in Humula and Ladysmith Cross Property Planning groups (approx. 15 people at each). Project members liaised and exchanged information, provided biodiversity/farm management advice and kept property owners informed on various stages of experiment and data collection. CSIRO advised 30 different landholders on grazing management, connectivity and restoration issues.

38. CSIRO received significant radio coverage in late July 2010 following their presentation in Dubbo to the NSW Grasslands conference and produced a press release around the establishment of the restoration trials

39. CSIRO wrote an article on the project, published in ECOS magazine, and on their website: http://www.ecosmagazine.com/?paper=EC12255) promoting the ecological restoration aspects of the project

40. CSIRO presented at Kosciusko to Coast AGM on ecology and role of native mycorrhizal fungi in Box Gum Woodlands (approx 20 people).

41. CSIRO have developed a website on the project to be hosted on main CSIRO website including a 4 minute vodcast to be available via download from the web or iTunes; participated in an advisory capacity at a field day to develop an Box-Gum Woodland restoration management plan for newly acquired NPWS estate (McLeods Nature Reserve) and reviewed or advised on the Draft Plan of Management for Goorooyarroo NR; provided advice, BGW plant identification display and distributed information to 150+ landholders at Murrumbateman Field Days including CSIRO habitat connectivity experts; and organised and facilitated presentation by a CSIRO Landscape Ecologist as expert speaker on soil carbon issues in land management at a Landcare group meeting (20+ attendees).

42. Greening Australia promoted the project through the development the six seed supply strategies with the community and CiL partners. In total 271people attended 8 Seed Collection workshops and 8 other professional training presentations and events.

43. Sydney University presented the following invited papers: "*Beyond remnants and single properties: Landscape scale improvement in Box Gum Grassy Woodlands*" at the Ecological Society of Australia Conference in December 2010; "*Working with Nature to Increase Profits and Improve the Environment*' at the Merino 2020 Conference in August 2011 to approximately 200 attendees; '*Beyond remnants and single properties: Landscape scale improvements in BGGWs*' at the 'R*eading the landscape: linking biodiversity, research and management*' conference (CWCMA, WCMA, NSW OEH) in Dubbo to approximately 50 attendees; and '*Communities in Landscapes: Benchmark Study of Innovators*' at the 7th National Native Grasslands Conference (Stipa Native Grasses Association) in Holbrook to approximately 30 attendees.

44. CMN – made presentations to the Australian Government, Director General of Office of Environment and Heritage (OEH) as well as numerous other opportunities and conferences.

45. NSW DPI presented an invited paper at the Australian Pacific Extension Network (APEN) National Forum "*Hitting a Moving Target*" at Armidale in November 2011 titled "*Cross-property Planning*".

46. NSW DPI and the CMN presented papers during the '*Preserving and Creating Biodiversity at the Landscape Level*' session of the Murrumbidgee Landcare Forum at Ladysmith in October 2011.

47. STIPA promoted the outcomes of the project at the Stipa Annual Conference at Holbrook in November 2011 and through the Stipa Newsletter in December 2011. A report was also provided at the Stipa AGM in 2011.

48. CiL project information was presented at the 2009 LHPA rangers conference, at the Dunedoo Woodland Educational Site launch and to key Lachlan CMA staff, the Murrumbidgee CMA board, the CW NRM Working Group and Lachlandcare (both regional networks of leading community Landcare and production groups in Central West & Lachlan regions, respectively).

49. Five PlaceStories (web delivered, audio-visual stories) were completed for the project in using narration and photographs of CPCP group members. 'Spring Valley" can be viewed at

http://ps3beta.com/story/16976; 'Regeneration' at http://ps3beta.com/story/16975; 'A community of practice' at http://ps3beta.com/story/16974; 'A little tweak of management' at http://ps3beta.com/story/16973; and 'Cross-property planning' at http://ps3beta.com/story/17569

50. A further thirteen community generated PlaceStories were developed by Community Small Grant recipients, with eight publically available on the CiL website.
51. Nine newspaper articles and three radio interviews were conducted by CSIRO, CWOs, NSW DPI and CMN – weed bus.
52. NSW DPI briefed Minister for Primary Industries and Small Business, the Hon Katrina Hodgkinson MP, on the use of CPCP within the CiL project in 2012.

2. Lessons learned

The socio-cultural evaluation (attached) allowed for the exploration of the key MERI evaluation questions relating to the impact, appropriateness, effectiveness and efficiency of the CiL project.

1. To what extent were the changes (social/attitudinal/management) directly or indirectly produced by the project's interventions?

Participants in the socio-cultural survey clearly indicated that the CiL project had both direct and indirect impacts on the ways in which they manage rural landscapes for conservation and production (Lambert and Williams 2012:29).

Particular aspects of the project that increased acceptance included:

- The project's commitment to integration of conservation and production and the bringing together of people from different background and different agencies to achieve that outcome
- A project design that provided a diversity of activities enabling different points of engagement by landholders; and with that
- Providing opportunities for direct access both to sound science and to opportunities for peer-to-peer learning.

(Lambert and Williams 2012:34).

Participants indicated both direct and indirect benefits including an increase in skill and knowledge that they had either already or intended to act upon. Landholders saw benefits in being able to integrate conservation management with their production needs and were able to trial different approaches and observe the outcomes (Lambert and Williams 2012:29). Whilst many landholders already indicated that they were active in integrating aspects of conservation management with their rural production, they benefited from the social and psychological value of recognition and affirmation that they received through the CiL project.

In particular the cross-property conservation planning (CPCP) methodology has been a very effective method of engagement and it is worth noting the lessons learnt such as:

- Provision of a long lead time with both partners, operational staff and landholders to ensure the best outcomes:
  - For exposure and assimilation of new information
  - To build trust
  - To refine, improve and consolidate farmers' visions for their properties

- Offering landholders a mentored, tailored planning process
- The use of a multi-agency approach which provides groups with a range of perspectives and provision of opportunities to discuss alternative ideas and approaches to specific landscape issues amongst land managers and partners.
- Use of existing groups to maximise outcomes and minimise lead times for development.

The lead times were reduced in areas where there were stronger social frameworks supported through Landcare

The CPCP approach also provided social benefits both to existing groups and through the creation of new groups and has the potential to reinvigorate Landcare. The CPCP process has been likened to the original ethic behind Landcare and its success indicates the value of taking this type of approach with adequate resourcing and methodologies is still as valid today as It was through the 'Decade of Landcare' through the 1990s. The key lesson is to ensure that the support of the social framework continues into the future to maximise the peer learning and cross property outcomes for the longer term. The baseline flora and fauna surveys provided to the CPCP group members have also been a driver for change on properties

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Another successful aspect of the project that provided useful insights was the Benchmarking Workshops. Lessons learnt and issues included:

- Grazing management, as advocated by Stipa and a range of other organisations, can regenerate structural and functional properties of native grasslands and as a result is a strategy that integrates conservation and production in BGGWs. Landholders who successfully implement managed grazing like the innovators are contributing to the improvement in extent and condition of BGGW and derived grasslands across their range
- In the CPCP groups, grazing management practised by the innovators was included as a useful strategy in areas designated for improved biodiversity connectivity
- DPI to continue to work with farmers to implement lessons learnt from study. Techniques and approaches developed in this study are being used and adapted in other projects.

2. In what ways and to what extent has the program contributed to changing asset condition and management practices and institutions

Landholders generally indicated that the CiL project has had both direct and indirect positive effects on the ways they manage rural landscapes for production and conservation. Although many participants were already actively integrating aspects of conservation with their rural production management, the affirmation received through the CiL project was valued (Lambert and Williams 2012:29).

The on-ground focus of changed practice for actively involved landholders has primarily changed management for biodiversity conservation as a result of increased understanding to the biodiversity values of particular sites, and the ways in which connectivity can be enhanced (Lambert and Williams 2012:9). Knowledge and skills in the understanding and use of Landscape Function Analysis; management of farm dams and waterways for healthier outcomes; grazing management; and conservation of native seed in pasture areas were also identified by actively involved landholders.

3. What, if any, unanticipated positive or negative changes or other outcomes have resulted?

Unanticipated positive consequences

The socio-cultural evaluation (Lambert and Williams 2012:18) found that unanticipated positive consequences included the collaboration between agencies and organisations involved in the CiL project. Project partners listed better than expected collaboration; the opportunities to develop wider networks and value-add to their own knowledge; the ability to engage different audiences from those that they usually access; the development of future collaborative research project; the revitalisation of struggling local Landcare groups; and the value of cross-property planning as a way of building respect and commitment to landscape scale perspectives as unanticipated positives from the project.

The survey also found that actively involved landholders valued the revitalisation of local Landcare groups; the value of cross-property planning; and the extent of new knowledge about the flora and fauna on their own and/or adjoining properties (Lambert and Williams 2012:18-19)

Perceived negative consequences of the CiL project

Negative consequences were identified primarily by project partners and centred on difficulties in governance and management of the project in its early stages. Themes included inadequate investment in the building of partnerships, establishment of agreed governance arrangements and appropriate management, and the consequences for paid staff and volunteers and organisations committed to seeing the project succeed (Lambert and Williams 2012:19).

Another area of concern identified in the evaluation was the failure to adequately engage with CMAs in some areas and to gain their commitment and support for complementary activities (Lambert and Williams 2012:19). This could have been addressed if a more concerted effort was made to work with CMA staff to ensure that CiL activities were viewed as complementary rather than in competition with CMA activities.

Active landholders indicated that the relatively short timeframe for the project and the implications of this both for recruiting people to the project and for on-ground follow-up work were negative consequences of the project.

Another potential negative consequence is the increased expectations of landholders and communities who wish to maintain their cross-property enthusiasm and activities, without any follow-up support and no formally resourced Landcare structure.

4. To what extent did the project contribute to CFoC outcomes?

Significant progress towards identified CFoC outcomes has been achieved (see activities in section 1 and the tables below) despite the initial start-up difficulties addressed below.

5. To what extent did CiL improve knowledge and skills of CiL partners, NRM practitioners and BGGW collaborators?

Key components of the CiL project included: capacity-building, site-based information services, cross-property conservation planning, devolved grant incentive funding, demonstration sites and a Monitoring, Evaluation, Reporting and Improvement (MERI) framework, which had a significant emphasis on best management practice research in understanding behaviour change among land managers (Lambert and Williams 2012:i).

The socio-cultural evaluation found that "landholders, organisational staff and project partners were all seen to have increased their knowledge and skills as a result of their participation in the CiL project" (Lambert and Williams 2012:30). The CiL project adopted a diversity of different strategies for engaging with rural landholders, agency staff and others with an interest in conserving NSW Box Gum Grassy Woodlands within agricultural production landscapes (Lambert and Williams 2012:21). Strategies to effectively engage stakeholders included: workshops, field days and training events; site-based information services; cross-property conservation planning; devolved grant incentive funding; and demonstration sites.

Data from the socio-cultural evaluation (Lambert and Williams 2012:21), showed a wide variation in participant's assessment of the usefulness of each strategy, reinforcing the importance of using a range of engagement strategies. Those strategies most valued by actively involved landholders included cross-property planning; benchmark surveys and small incentive grants, whilst CiL partners ranked cross-property planning groups and workshops and other training events most highly. Positive aspects of the projects delivery included: the mix of mechanisms available; flexibility to accommodate differing landholder needs; and the collaborative design of the CiL project.

The evaluation found that the bringing together of agencies with different cultures and priorities and the ways in which the agencies involved interacted with participating landholders and scientists was also an innovation that proved to be valuable to all participant groups (Lambert and Williams 2012:29).

The flexible and adaptive approach, both to the collaborative management of the project and to its on-ground implementation, were viewed favourably by landholders and seen as critical to the ability of the ongoing success of the project (Lambert and Williams 2012:29). This approach ensured effective stakeholder engagement and provided great leverage to engage with the community through their own social-community frameworks and the capacity to access and provide new information and methodologies with project partners. This was evidenced by Lambert and Williams (2012) who found that the "CiL project generally worked well for a majority of participants, whether landholders, government agency staff and the project team members" (p.33) and "the CiL project has invigorated some local Landcare groups and strengthened community networks" (p.35).

The flexibility of the approach also ensured that the CiL project could be conducted alongside other programs with a similar focus. For example, while the CMAs in the regions involved had been carrying on their own BGGW projects, there has been no synergy across these efforts, as required to drive enhanced landscape scale changes across the areas.

Project partners were engaged through the provision within the project for opportunities to build relationships with other participants through an initial familiarisation bus trip and shared participation in workshops and other events. These events were allowed project partners to share their views, reach a level of consensus and develop a shared vision and goal for the project.

The survey also found that two-way learning and the commitment of several of the project partners to ensure this happened were also valued by several participants; along with accessibility of CiL partners; and having direct access to scientists and experts in the field which lends credibility of the project (Lambert and Williams 2012:22).

The CiL website was not generally accessed by landholders and some project partners commented on the lack of adequate maintenance of the CiL website in the early stages. This could be partially addressed by the earlier implementation of an effective communications plan.

Specific lessons learnt in relation to planning successful training events and workshops include:

- The need to implement a system to coordinate and link workshops
- The importance of providing days which included both production and conservation and involve a number of project partners
- The value in providing days which involve a number of project partners, which provides a range of views and expertise to enable wider ranging, stimulating discussions with landholders about their issues.
- The value of individual property visits where landholders can discuss their issues and be provided with alternatives and solutions based on their situation.
- The need for landholder input into content of information packages and field days to ensure relevance and focus on landholders interests and issues.
- Presentation of a range of information and alternatives enables landholders to make their own decisions about management of their land to suit their own goals.
- Use of project partners expertise and input into the development of field days and training events
- The value of having existing resourced networks to work with where possible.

6. To what extent is the program aligned with the needs of the intended beneficiaries?

Although landholders were widely seen as the major intended beneficiaries of the CiL project, several other groups were also identified as beneficiaries. Irrespective of which target audience was identified, the project scored strongly in its perceived alignment with the needs of those beneficiaries (Lambert and Williams 2012:29).

Landholder reasons for involvement with the CiL project included: integrating conservation and production; flexibility to trial different approaches; caring about sustainable land management; access to good science; access to shared learning; and through their involvement with their local Landcare group or network. Other recurring themes for landholder involvement included: a congruence with and affirmation of conservation farming already being done or planned; a desire to address major management issues in their local landscape; and an opportunity to work with like-minded people. CiL partner reasons included: opportunities to work with Landcare; the opportunity to work in partnerships embracing a diversity of interests; and opportunities to expand networks' and the reach of existing work. In most cases the needs identified by landholders were met, but the assumption by landholders and project partners of the existence of a Landcare framework or network upon which to build delivery is a systemic need requiring attention.

7. To what extent does the program reflect recognised best practice processes in the field?

The CiL project adopted an innovative approach to multi-stakeholder conservation management in rural landscapes by integrating conservation and production across the landscape (Lambert and Williams 2012:27).

The project routinely utilised the best available science to inform decisions. Examples include:

- The use of connectivity modelling to verify the suitability of priority landscapes for Cross-Property Conservation Planning.
- The use of scientific studies of group function to inform the social processes involved in Cross Property Conservation Planning groups.
- The use of scientific studies on effectively engaging with landholders was to design and analyse the Participatory Rural Appraisals.
- The use of scientific studies on environmental monitoring and assessment, grazing management, soil sampling and analysis, soil microbial analysis and invertebrate sampling to design, conduct and

analyse the Benchmark Study of Innovators.

- The use of scientific studies, expert knowledge and on-ground work to develop extension resources and update existing materials for BGGW.
- The use of CSIRO scientists to review communications being developed for provision to landholders, ensuring that communications reflected the current state of knowledge.

8. To what extent has the program attained the highest value out of available resources?

By adopting a multi-dimensional approach and a range and diversity of strategies for engaging stakeholders with an interest in conserving NSW Box Gum Grassy Woodlands within agricultural production landscapes, the CiL project has attained the highest value out of available resources.

The CiL project more than succeeded in meeting all CFoC targets and project outcomes. All project partners have also contributed significant in-kind contributions and many of the outcomes and outputs from the project extend well beyond the project objectives.

In addition to meeting MERI requirements, the CiL project has also provided stakeholders with additional training and workshop opportunities and additional BGGW resources. On-ground works continues with CPCP groups across the three catchments, although the project has effectively finished.

Participants in the socio-cultural evaluation rated small incentive grants, networks, cross-property planning, surveys/benchmarking, training events, and written information all highly.

9. How could the resources be used more productively and efficiently?

Project governance

In a project of the scale and complexity of CiL, sound governance arrangements are an important factor both for success in meeting project objectives and in the efficient use of resources invested in the project (Lambert and Williams 2012:24). Project partners "recognised and acknowledged the challenges faced by the CiL project in relation to governance arrangements especially early leadership and project management style" (Lambert and Williams 2012:24).

Project partner concerns regarding early governance of the project included: an ineffective project manager who operated in a less collaborative/administrative model than anticipated by project partners; tensions between expectations of a 'lead organisation' as identified in the project documentation and contracting, and the desire for a collaborative team leadership of the CiL project; lack of adequate initial planning and preparatory work in relation to team-building and development of shared understanding. Some partners thought that a government agency or well-established and resourced NGO would be better equipped to manage such a large, multi-faceted project rather than a volunteer-based organisation, such as Landcare NSW especially with that organisation in its formative years. However, project partners generally agreed that having Landcare NSW as the 'lead' organisation also brought benefits such as a broader acceptance by community and agencies and no direct ties to government at any level, (Lambert and Williams 2012:20).

A recognition by core project partners of the impacts that these issues were having on the whole of the CiL project led to a subsequent restructure and changes to the management structure and management style. The Project Manager was replaced with Project Management by small Management Teams co-ordinated by Landcare NSW. This was embraced by all CiL partners, with representatives forming operations, communication, and MERI and administration teams. The team approach enabled greater shared

understanding, trust and mutual respect among partners and as a consequence all governance indicators were seen to have improved considerably over the life of the project (Lambert and Williams 2012:26).

The need for a Project Coordinator to work with the Management teams was also important to the success of the project. Partners in a project of any scale can be heavily involved in their own aspect of the project creating possible discontinuity and dysfunction. The use of a coordinator can help alleviate this risk. Adequate consideration of the time and resources that needs to be invested in cross project management by partners to develop strong partnerships and understanding of the whole project, needs to be factored into the planning and budgeting phase of the project.

Early investment of project partner time and energy in project planning

Project partners identified a failure to invest time in "*real project planning… with the Steering Committee making input to project component design*" (Lambert and Williams 2012:25). Consequently, there was a "lack of shared clarity of project direction in the early phases" which was "exacerbated by a lack of standard operating procedures to guide all project partners in their contributions" (Lambert and Williams 2012:25-26)

The socio-cultural evaluation identified the need for "*a longer gestation time"* to enable building of trust, shared understanding and commitment among the partners, as well as an initial skills audit to inform the appointment of the initial project manager (Lambert and Williams 2012:20). The early investment in project planning and partnership building would have also allowed an investigation of project partners' capabilities and limitations.

Community Small Grants (CSG)

The assessment, approval and implementation of community small grants and on ground survey works are very labour intensive and time dependent and should be tailored to delivery after initial project components are completed. However, CSGs are highly valued by landholders (Lambert and Williams 2012) so need to be considered as an important component of any landscape scale change management project. This is supported by Ecker et al. (2011 quoted in Lambert and Williams 2012:32) who studied the drivers of practice change in land management in Australian agriculture, and found that "financial benefits and environmental factors" are valued higher than "personal motivations and availability of support" among landholders who sought to change their practices.

Lessons learnt include the need for dedicated personnel to concentrate on this aspect of the project; the need for the development of templates and standard procedures to be adopted to streamline the process; and the importance of importance of good financial systems and timely payment of funds for the commencement of on-ground works.

Cross-Property Conservation Planning Groups

The cross-property conservation planning (CPCP) methodology can be employed in a wide range of projects (e.g. weed, pest management) to achieve landscape scale outcomes. Development of the methodology for cross-property planning required time and skills enabled through this project and successful engagement of landholders within cross-property groups requires skilled and experienced staff. These groups operated effectively as a Landcare group (as some already were) with a social capital asset, and ongoing ownership of the process and function.

Lessons learnt from this process include:

- the need for an identified project facilitator from the project team and a designated group coordinator from within the group
- the importance of financial incentives for on-ground work
- the need for tailoring training workshops for individual groups rather than supplying generic training packages

In terms of achieving landscape scale change the following points are also critical:

- To improve biodiversity outcomes we have to engage land managers whose main focus is production.
- Even small management changes are worth making, particularly if they are cumulative across a landscape.
- Focussing on individual sites/paddocks means we are only focussing on symptoms, focussing on what is happening across the landscape provides the opportunity to discuss ways to start actively managing for sustainability and address the causes of degradation.

Inclusion of socio-cultural aspects

It is important to consider aspects beyond the impact, appropriateness, effectiveness and efficiency as they can be measured and reported on in a structured process such as the MERI framework (Lambert and Williams 2012:33) as the integration of conservation and agricultural production is driven by environmental, social and economic factors and this information needs to be captured.

The CiL project invested time and energy in understanding behaviour management change through the inclusion of participatory rural appraisals, innovator benchmark studies and a socio-cultural evaluation of project stakeholders.

Results from the socio-cultural evaluation (Lambert and Williams 2012) align closely with Pannell *et al*. (2006) who identified a number of factors that are likely to assist in maximising adoption of conservation practices by rural landholders. These included: the need for "a high relative advantage" to the landholder over what they are currently doing and an ability to trial the new approaches being proposed; encouragement of participatory approaches; "looking constructively at what landholders are already doing"; and careful consideration of the economic, social and psychological issues surrounding landholder decisions along with the biophysical factors involved (Pannell *et al*. 2006 quoted in Lambert and Williams 2012:32).

The CiL project enabled affirmation and confirmation of what landholders were already doing and allowed those landholders who had adopted a new approach the opportunity to be heard and to interact with like-minded landholders and engage with technical experts in the field (Lambert and Williams 2012). These finding from the project also align well with Greening Australia's (2007) work on adoption of NRM practices and a study from Ison & Russell (2000) that found being listened to is important in generating and sustaining landholder enthusiasm (Lambert and Williams 2012:32).

Therefore whilst biophysical outcomes generally labelled as 'ecosystem services' may be achieved through improved land management, the CiL project has highlighted the importance of human interactions in developing and sustaining the required pool of motivated landholders (Lambert and Williams 2012:35). When Landcare is adequately resourced these "pools" become highly productive.

3. Improvement

The socio-cultural evaluation (Lambert and Williams 2012) identified a number of areas for improvement that would have increased the impact and outcomes of the CiL project without significantly increasing project costs.

Project Funding Arrangements

Project time-lines should consider allowing 3-6 months at the outset to accommodate Head Funding Deed negotiations and to finalise partner Service Agreements. As these agreements must be finalised prior to any project implementation such start-up delays can impact on seasonal activities planned within the project. The project application process also allowed little real opportunity for consideration of project management structures appropriate to a dispersed multi-partner project.

The project scope allowed an inadequate amount of time for development of partner relationships, particularly considering the involvement of volunteer partner organisations and landholders. Project partners need to provide input into the whole project, not just the individual partner activities to maximise the partnership approach.

Consideration also needs to be given to the time and legal costs involved in negotiating and finalising multiple partner Service Agreements. In any large partnership project involving multiple, geographically separated partners from different backgrounds with varied institutional cultures, personal perspectives and project perceptions significant time and effort must be allocated from the outset for partnership development.

Particular attention needs to be given to the development of project milestones. For example, milestones for Flora bank were established only for completion of an entire process; rather than component parts. This created difficulty in reporting milestone progress. The complexity of developing two Florabank Seed Supply Strategy plans in each region was also underestimated due to the lead role undertaken by relevant CMAs in similar prior activities. This was further exacerbated by the additional detail requested in seed supply strategies.

During the planning and budget development phase of the project, partners also need to check contracts for in-kind contributions such as steering committee travel, time and accommodation.

Project Planning

Early investment must be given to project planning to ensure project partners have a shared understanding of the project goals and their own roles and responsibilities in achieving those goals.

The importance of building trust & shared understanding among the project participants, and in particular among the project partners is crucial to any project of the scale and complexity of the CiL project and a recognition of the diversity of knowledge, skills, values in such projects indicates a need for project development timeframes that enable this shared development.

Project Governance

Project partners agree that it was important to have a coordinated and collaborative effort involving different partners bringing different expertise and the provision of different opportunities for involvement (Lambert and Williams 2012:23). However, half believed that the existing CiL model could be fine-tuned with improvements in project leadership, component aspects and timing, particularly in the early stages of the project.

To ensure a collaborative management approach, the relationships between the identified 'lead organisation' and actual project leadership needs to be determined prior to project commencement. The selection and expectations of the lead agency and project management roles also need to be clearly defined in the project design phase.

Given the complexity of the project, the lead agency should ideally be an organisation with an adequate support and administration framework to ensure smooth implementation and a strong buffer for management. Whilst Landcare has the skills and capacity to deliver this type of project, difficulties with inadequate resourcing for this framework meant a huge input was required from the skilled volunteer base for management and delivery. This placed an inordinate amount of pressure on a volunteer organisation which also has to deliver its own components of the projects as a partner as well as aims and objectives outside the project. Ongoing resourcing of the structure of Landcare would provide such long-term benefits to multi-partner projects as well as providing a conduit of networks to facilitate communications, government support and a framework for delivery.

For future projects of this magnitude, volunteer agencies when given the tag of 'lead agency' need to be provided with additional funding for project management as a wholly contained self-managing project, outside the required activities as a project partner, or it should sit within an agency that has existing financial and project management structures.

The success of a mid-term restructure of the CiL project's governance arrangements indicates the value of a co-management arrangement in these large and complex projects. However, if co-management is to succeed, it is important that role, responsibilities and operating procedures are clearly understood and shared among the partners. Even so, co-management requires recognition of final accountability based on contractual arrangements from all parties.

Communication plan

The socio-cultural evaluation found that the development and implementing of an "agreed communication plan, addressing both within-project and external communication and assigned responsibility for that communication would have aided efficiency by raising awareness of community engagement with the project and by addressing internal management issues" (Lambert and Williams 2012:28).

The development of a communication plan is important and needs to be included upfront as a project partner responsibility. The plan would clarify assumptions on networks available, and also have addressed the language that was to be used within the project when presenting new or complex ideas and would have assisted project partners' to develop a shared vision for the project. More effective use of the media to promote CiL components and events was also recommended by participants in the socio-cultural evaluation and the dissemination of results and project outcomes to the wider community.

CiL branding

One of the challenges faced by the CiL project was in developing and maintaining its own identity (Lambert and Williams 2012:12). This was probably not helped by the early failure to implement a partner approved communication strategy.

Whilst CiL has multiple components, actively involved landholders surveyed commonly identified "*cross-property planning*", "*wildlife corridors across properties*" and/or "*connectivity*" when asked to name the project components (Lambert and Williams 2012:12). The integration of conservation and production, bringing people together to discuss ideas and learn from each other and flexibility to trial different approaches, were also commonly mentioned.

Improved branding of the CiL project, which would have reduced effort in engaging landholders, would have benefited from a formal project launch (Lambert and Williams 2012:20), the early preparation of print media and advertising of proposed project activities; and the increased direction and clarity of roles and responsibilities of Community Woodland Officers.

Continuity of the project

The CiL project invested significant resources into achieving on-ground works, particularly with CPCP groups and this raises expectations of continuity within the community. In addition the investment in building the social infrastructure necessary for success is now in place and provides an excellent starting point for future work. Future re-investment in building this infrastructure will be unnecessary if basic on-going support is provided to work with community, not for community.

Project partners and actively involved landholders interviewed in the socio-cultural evaluation identified the need for a continuity of the project beyond its current funding for follow-up and longer term monitoring (Lambert and Williams 2012:21). Continuity would require the identification of key personnel with the necessary time, commitment and resources. In conjunction, the possibility of engaging volunteers ("*local, regional and in the city"*) to assist landholders in implementing some of the components was proposed as a two-way process for greater outcomes at minimal cost (Lambert and Williams 2012:21).

Use of models, precedents and templates

A majority of the challenges faced in the CiL project can be traced back to absence of precedents, models and templates to assist in developing governance, project management and coordination arrangements in its early phases (Lambert and Williams 2012:30).

Financial accountability was seen to lack systems and procedures in the early stages. Templates and clear reporting procedures were not developed early in the project and were seen as contributing to payment delays to project participants (Lambert and Williams 2012:25).

Knowledge of existing templates and operating procedures relevant to the CiL project (e.g. small grants processes and contracts) could also have increased efficiency.

Monitoring, Evaluation, Reporting and Improvement (MERI)

The MERI development process that occurred after funding and prior to implementation was also seen as confusing and flawed by project partners (Lambert and Williams 2012:25). This early confusion and lack of clarity regarding project milestones and the roles of the project partners created delays in early reporting and created tension between project partners. Management changes early in the project sought to rectify this situation.

The MERI process as required as part of the CiL project's funding contract also did not provide a comprehensive framework to capture social and cultural aspects of the project. The project partners recognised that the CiL project is essentially about behaviour change so commissioned an external socio-cultural evaluation.

Socio-cultural Considerations

Although government policy and programs place emphasis on the use of market-based instruments to 'purchase' conservation outcomes in rural landscapes, the inclusion of a strong socio-cultural component in project design and management appears to provide a complementary pathway, which if well planned can achieve community participation and commitment (Lambert and Williams 2012:35).

References

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Pannell, D.J., Marshal, G.R., Barr, N., Curtis, A., Vanclay, F. & Wilkinson, R. (2006) Understanding and promoting adoption of conservation practices by rural landholders. *Australian Journal of Experimental Agriculture*, 46, 1407-1424.

Project name: Communities in Landscapes – Working together to integrate conservation and production across Box-Gum Woodlands **Project ID:**

2. FINAL Progress and achievements against Caring for our Country Targets and approved milestones / outputs / activities as at 30 June 2012

1 Caring for our Country targets	2 Approved objectives / objects (include units of measure)	3 Actual quantity achieved (current reporting period)	4 Actual cumulative quantity achieved (to date)	5 Cumulative quantity to have been achieved from funding deed (to date)	6 Scheduled milestones/outputs/activities (current reporting period or carried over from the previous reporting period)	7 Percentage of scheduled milestone / output / activity achieved (current reporting period)	8 Activity Reporting	9 Spatial information available for location of on ground works
Increasing Native Habitat – To increase by at least 400,000 hectares over the next two years, the area of Native Habitat and vegetation that is managed to reduce critical threats to biodiversity and enhance the condition, connectivity and resilience of habitats and landscapes in priority regions.	Increase by 55,390 hectares, the area of Box Gum Woodlands managed to reduce critical threat		77,735 hectares	N/A	9 Woodland awareness/management field days held	211%	**Description of activities during this reporting period** 19 Woodland awareness/management field days held including: 2 Fauna Friendly Farm Workshops; 5 Healthy Water on Healthy Farm Workshops; 6 Frog Community Awareness Presentations; and 6 Survey Introduction and Spot Lighting	Murrumbidgee, Lachlan and Central West Catchments
					15 training events held (conservation management, flora and frogs)	507 %	76 Training Events Held including: 17 Paddock Plant Workshops; 24 STIPA Native Grass Regeneration Workshops; 11 Train the Trainer for Frog Habitat Recognition; 8 Florabank Training Courses and 6 other Greening Australia Presentations. 10 OEH training events covering assessing weed threats, BGGW ID and management, Grazing forums, Biodiversity Incentive Tool training, and cultural values of BGGW.	Murrumbidgee, Lachlan and Central West Catchments
					Maintain BGW website	100%	CMN website maintained, Florabank website maintained and CiL website maintained. In addition CSIRO have developed a website to be hosted on the main CSIRO website which includes a 4 minute vodcast to be available via download via the Web or iTunes. Located at http://www.csiro.au/Organisation-Structure/Flagships/Sustainable-Agriculture-Flagship/Box-Gum-Woodlands.aspx	
					40 fact sheets produced to update Florabank species navigator	100%	Completed and published on the Florabank website (http://www.florabank.org.au/default.asp-V_DOC-ID=1043) with links on the CiL website and the CMN website.	
					30 frog sites surveyed	184%	55 Frog sites surveyed	Murrumbidgee and Central West Catchments
					30 project partner sites surveyed	133%	40 project partner sites surveyed	Murrumbidgee: 18, Lachlan 8, Central West 14

1 Caring for our Country targets	2 Approved objectives / objects (include units of measure)	3 Actual quantity achieved (current reporting period)	4 Actual cumulative quantity achieved (to date)	5 Cumulative quantity to have been achieved from funding deed (to date)	6 Scheduled milestones/outputs/activities (current reporting period or carried over from the previous reporting period)	7 Percentage of scheduled milestone / output / activity achieved (current reporting period)	8 Activity Reporting	9 Spatial information available for location of on ground works
					60 grants devolved		***Description of activities during this reporting period*** 66 Community Small Grants devolved over two funding rounds covering around 6734 hectares	Murrumbidgee, Lachlan and Central West Catchments
					2 workshops on Management Trials	50% (on track for 100% delivery by Jun 30,2013 as per contract)	First workshop "Climate Resilient Restoration and Management of Box Gum Grassy Woodlands' held on 21st May 2012 at the Cowra Experimental Research Site by CSIRO. Second workshop planned for Autumn 2013.	Lachlan Catchment
					3 Demonstration Property field days with specific strategies to be implemented	100%	Field Day held at the Indigenous Demonstration Property at 'Bimbadeen', Cootamundra on 19 April 2012; the Protected Area Network (PAN) reserves at Dananbilla, Koorawatha, Gungewall and Illunie in late 2011; and at the Production Demonstration Property near Wellington on 14-15 March 2012.	Murrumbidgee, Lachlan and Central West Catchments
					Data management system for grassy woodlands developed	100%	Existing grassy woodlands data and newly collated data transferred to OEH data management system. Grassy Ecosystems Database (GEDB) collates information from many sources and can be used to map location of sites, distribution of species, management information, mapping of EECs, and planning information.	Queanbeyan
					Erect project signage	100%	100 corflute signs designed and produced (400 x 600 cm). Signs disseminated free of charge to project participants and at field days. Project signage erected at CSIRO experimental research sites.	Queanbeyan
					2 Project Benchmarking workshops conducted	100%	Project Benchmarking workshops on Land Function Analysis (LFA) held at Orange and Wagga in August 2011 with 23 participants	Orange and Wagga
					6 Seed supply strategy plans produced	100%	6 Seed Supply Strategies across three catchments completed. Strategies developed for Little River Landcare, Central Tablelands Landcare, Grenfell Landcare, Young Shire and Dananbilla Ranges, Royalla/Burra Landcare and Combined Tarcutta/Kyeamba Valley and Humula Landcare.	Murrumbidgee: 2 Lachlan: 2 Central West: 2

					Provide evidence from annual evaluation undertaken to measure increase of landscape scale conservation i.e. Number of attendees at management field days and training events. Number of hectares achieved through above activities.		19 Woodland awareness/management field days with 241 participants @ 1ha/participant 76 training events with 823 participants @ 10 ha/participant 60 landholders involved in CPCP groups with a total of 62,000 hectares 66 Community Small Grants covering 6734 hectares 3 demonstration property field days held with 50 participants @ 1 ha/participant 2 Project Benchmarking workshops conducted with 23 participants @ 10 ha/participant 25 people trained Threatened Species Management @ 10 ha/participant Total increase in landscape scale conservation for CiL project is 77,735 hectares	
Increasing Landscape Scale Conservation – to increase by 6,700 farmers in priority regions adopting activities that contribute to the ongoing conservation and protection of biodiversity over four years.	60 farmers adopting practices that contribute to ongoing conservation and the protection of biodiversity		126 landholders	60 landholders	30 farmers completed 3 cross property management plans	200%	60 Farmers involved in 6 CPCP: Limestone Creek, Uamby, Belgravia, Humula, Kyeamba, and Dananbilla-Illunie.	Murrumbidgee:: 2 Lachlan: 2 Central West: 2
					30 management trial site survey results collated	75% (on track for 100% delivery by Jun 30,2013 as per contract)	All baseline survey results and ongoing monitoring have been collected and collated for the experimental restoration experiment and the 8 revegetation sites, with final surveys scheduled to be undertaken in October 2012. 70 sites were sampled (around 10 core benchmarks sites) for floristics and soil function (ie. Bulk density, infiltration, micro-invertebrates, phobicity, plant wilting point, organic carbon 0-5 cm, 0-10cm, total N, nitrate, ammonium, Colwell P, pH, field texture and soil bacteria (using MicroResp) in April and May 2012.	Murrumbidgee and Lachlan Catchments
					30 management trial site survey results published on website	On track for 100% delivery by Jun 30,2013 as per contract	Data is not scheduled to be completed until the end of 2012. Survey results will be published on the website when data and results are finalised. Some preliminary reporting was made available to land managers in February 2012.	
					20 benchmark properties survey results published on website	100%	All 10 individual comparisons (20 properties) and the final combined report have been published on the CiL website http://cil.landcarensw.org.au/pra/reports	Lachlan: 3 Murrumbidgee: 3 Central West: 4
					Provide evidence from annual evaluation undertaken to measure increase of landscape scale conservation i.e. number of attendees and management field days and training events. Number of hectares achieved through above activities		60 landholders actively involved in CPCP groups across the three catchments 66 individuals and community groups involved in Community Small Grants Total of 126 landholders and managers adopting activities that contribute to on-going conservation and protection of biodiversity	

1 **Caring for our Country targets**	2 **Approved objectives / objects** **(include units of measure)**	3 **Actual quantity achieved** **(current reporting period)**	4 **Actual cumulative quantity achieved** **(to date)**	5 **Cumulative quantity to have been achieved from funding deed** **(to date)**	6 **Scheduled milestones/outputs/activities** **(current reporting period or carried over from the previous reporting period)**	7 **Percentage of scheduled milestone / output / activity achieved** **(current reporting period)**	8 **Activity Reporting**	9 **Spatial information available for location of on ground works**
Increasing Participation in Natural Resource Management – To increase the recruitment and retention of volunteers in community groups involved in managing natural resources, over the next two years.	To increase by 3040 the number of land managers that have improved knowledge and skills in Natural Resource Management. Numbers will be accumulated through events held during the project life and direct contact with NSW Landcare members.		5944 land managers	3040 land managers	Maintain BGW Website	100%	***Description of activities during this reporting period*** CMN website maintained, Florabank website maintained and CiL website maintained. In addition CSIRO have developed a website to be hosted on the main CSIRO website which includes a 4 minute vodcast to be available via download via the Web or iTunes. Located at http://www.csiro.au/Organisation-Structure/Flagships/Sustainable-Agriculture-Flagship/Box-Gum-Woodlands.aspx	
					Upgrade BMP Guidelines for BGW	100%	'*Grazing as a tool for biodiversity conservation in temperate grassy ecosystems*' developed by CMN in partnership with CSIRO and DPI. 1500 copies of each publication made available to Project land holders and stakeholders and posted directly to CMN members.	
					Produce BGW succession State brochure	100%	Succession State brochure completed entitled '*Recovering Box-Gum Grassy Woodland: The Way Forward – State and Transition* Model'. 1500 copies printed and made available to Project land holders and stakeholders and posted directly to CMN members.	
					Produce DVD on Woodland history and management	100%	A 6 chapter DVD produced in May 2012 on Woodland History and Management from pre-European settlement to current day. 1500 copies printed and made available to Project land holders and stakeholders and posted directly to CMN members.	
					Produce (4 of 4) Woodlands Wanderings newsletters	100%	3 Woodland Wanderings produced (Autumn 2010, Spring 2010 and Autumn 2011). Final newsletter replaced with an information folder on Project Outcomes and Resources which was distributed in May 2012.	
					3 land managers monitoring demonstration properties	100%	Land managers are monitoring the three demonstration properties. The biodiversity demonstration property has monitoring of pre established ground layer diversity plots and establishment of monitoring plots for benchmarking results of regeneration thinning. The production demonstration property at Glenwood has been continuously monitored by the landholder for over 10 years, and at the indigenous demonstration property, the Young Local Aboriginal Land Council in conjunction with the tenant discuss grazing management decisions to protect high conservation areas of the property throughout spring and summer.	Murrumbidgee, Lachlan and Central West Catchments
					First evaluation of Florabank seed supply strategy	100%	Seed supply strategies were reviewed by each group (see acknowledgments). Template modelled from Border River Gwydir CMA Seed Supply Strategy; seed provenance text reviewed by Linda Broadhurst, CSIRO.	Murrumbidgee, Lachlan and Central West Catchments
					7 (of 7) press releases to relevant media groups	143%	9 newspaper articles and 1 press release.	

					5 (of 5) radio interviews Second evaluation of seed supply strategy plan Provide evidence from annual evaluation undertaken to measure the increase in improved knowledge and skills of land managers.	60% 100%	3 radio interviews conducted by CSIRO, CWOs, NSW DPI and CMN – weeds bus. Four recorded interviews with four land holders within the Dananbilla-Illunie and Kyeamba CPCP groups to develop four PlaceStories. A second evaluation of all seed supply strategies was conducted internally Dr David Freundenberger, Director of Science, Greening Australia 871 landholders and managers participating in training events and workshops 291 landholders and managers participating in woodland awareness and demonstration property field days 1500 copies of the BMP guidelines for managing BGGW, the BGGW succession state brochure and a DVD on Woodland history and management 3 'Woodland Wanderings' newsletter produced and disseminated and an information folder on Project outcomes and resources. Total of 1162 landholders, managers and other stakeholders engaging in training and field days to develop their skills and knowledge of natural resource management. In addition the Community Woodland Officers have provided information to 3402 landholders, members and government and non-government officers through sites at major field days (Orange, Mudgee, Henty, Murrumbateman), meetings, conferences, and field trip. The project also increased the knowledge and skills of possible future land mangers through activities associated with Threatened Species Day which involved 13 schools and 277 school children. The CiL project has indirectly increased the knowledge and skills of land managers through the CiL, Florabank and CMN websites, the BGGW resource and reference material produced through the project, the project newsletter and final outcomes folder distributed to CMN members and Landcare groups and networks (estimate from 09/10 annual report were 1380 land mangers increasing knowledge and skills) Total of 5,944 land mangers increasing their knowledge and skills as a result of the CiL project.	

Improving knowledge and skills and land managers – to increase by 42,000 land managers and farmers over 4 years who have demonstrated an improved in knowledge and skills in Natural Resource Management	To increase by 800 the number of volunteers involved in community groups		851 community volunteers	800 community volunteers	Increase membership of community groups managing natural resources by 800 of 800	106%	***Description of activities during this reporting period*** 851 individuals in community groups managing natural resources. Community Small Grants awarded to 66 community groups. Assuming a minimum of 8 volunteers per community group, gives 528 individuals in community groups managing natural resources. In addition the Conservation Management Network has 263 additional members as a result of the project. 60 land holders within the six CPCP actively involved in managing natural resources, within six community groups.	
					Produce educational packages for schools, industry groups and local councils.	100%	CMN and OEH completed a Threatened Species Education package which was used to create a 'Threatened Species Day Virtual Excursion' on 7 September 2011. 13 schools participated on the day with 277 school children. VET accredited Native Seed Procurement Training Unit for the Conservation and Land Management qualification completed Through the Community Small Grants Scheme: 1. educational material on box-gum grassy woodlands was produced in conjunction with the Murray Darling Basin Association and Burrumbuttock Public School 2. Superb Parrots and Box-Gum Grassy Woodlands educational material produced by the Orange Field Naturalists and Conservation Society for use in the Central West, Lachlan and Murrumbidgee catchment areas. Resources included: A4 brochure, posters, 1 Superb parrot oval sticker and 6 different Superb Parrot bumper stickers. 3. The Riverina Environmental Education Centre (REEC) revised the box-gum grassy woodlands lesson on the REEC web site (www.reec.nsw.edu.au).	
					Produce brochure for peri-urban dwellers	100%	'*Small Farms: Balancing Production & Biodiversity*' brochure printed in May 2012. 1000 copies printed and publication made available to Project land holders and stakeholders and posted directly to CMN members.	
					Reprint brochure on Identifying Threats and Action for BGW	100%	'*Adaptive Management Guidelines*' brochure updated and reprinted by CMN, OEH and NSW DPI. Reviewed by CSIRO. 1500 copies of each publication made available to Project land holders and stakeholders and posted directly to CMN members.	

Communities in Landscapes: 'Working together to integrate conservation & production in NSW Box-Gum Grassy Woodlands'

Evaluation of the social & cultural aspects of the project

A Caring for Our Country project
Funded by the Australian Government

Report prepared for the Project Steering Committee

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March 2012

Executive Summary

The 'Communities in Landscapes' (CiL) project is a multi-stakeholder project directed to increasing native habitat and landscape-scale conservation within the NSW Box-Gum Woodlands in rural production areas of New South Wales, Australia. The geographic area of focus was in the Murrumbidgee, Lachlan and Central West catchments of NSW. Seven partner organisations came together to complete the CiL project.

The project focuses on three key areas:

- Improved targeting of information and management support for landholders and managers and community groups;
- Improved knowledge base to inform and support management decisions in Box-Gum Woodland landscapes;
- Implementation of integrated on-ground activities across multiple properties in priority local landscapes.

The CiL project intentionally took a multi-dimensional approach, in which partnerships provided an underpinning foundation, with a 'one-stop shop' approach for clients. Key components of the CiL project were: capacity-building, site-based information services, cross-property conservation planning, devolved grant incentive funding, demonstration sites and a Monitoring, Evaluation, Reporting and Improvement (MERI) framework. The project team identified the need for delivery to be based on contemporary and systematic social research and included these in its project design.

Sydney-based consultants Community Solutions and Michael Williams & Associates were contracted during the period Sept 2011–March 2012 to complete an evaluation of the socio-cultural elements of the CiL project, focusing on the key questions relating to the impact, effectiveness, appropriateness and efficiency of the socio-cultural approaches deployed as part of the larger CiL project.

Survey-based telephone interviews and a parallel survey using a self-completed on-line Survey Monkey service were the main instruments used in the project evaluation. Twenty interviews were conducted with project partners, 20 with other participating staff from government and non-government organisations and 40 with landholders actively involved in the CiL project. A total of 45 responses (from almost 200 invitees who had participated in a CiL project event) were obtained on-line.

Although landholders were widely seen as the major intended beneficiaries of the CiL project, participants in government agencies, Landcare and other organisations, as well as local communities and their environments were considered to have benefited from the project. Participants from all sectors reported that the project aligned well with the needs of beneficiaries.

Landholders, staff in participating organisations and the project partners were all seen to have increased their skills and knowledge relevant to the integration of conservation and production. The mix of mechanisms available, flexibility to accommodate differing landholder needs, and the collaborative design of the CiL project were all seen as positive aspects of its delivery.

Participants generally indicated that the CiL project had had both direct and indirect positive effects on the ways they manage rural landscapes for production and conservation. Although many participants were already actively integrating aspects of conservation with their rural production management, the affirmation received through the CiL project was valued.

The early stages of the CiL project presented real challenges in project management and governance. However, the lessons learned and the changes made as the project progressed, are valuable not only to this project but to other multi-stakeholder project teams seeking to achieve collaborative, adaptive management. The experience of the CiL project reinforces recognition of the need to invest early in building shared understanding and trust within partnerships, and the importance of developing mutually agreed project management and coordination arrangements. A monitoring, evaluation, reporting and improvement process well-designed to accommodate the socio-cultural aspects of such projects is important.

In summary, the CiL project demonstrates the importance of socio-cultural, as well as financial, incentives in building on-ground capacity to integrate conservation and production outcomes. Affirmation of those who are 'pioneers', a facilitated multi-disciplinary approach that brings together technical and experiential knowledge, and an investment in team-building among those who bring to adaptive, collaborative projects a valuable mix of skills and knowledge are all crucial to success.

While the full impacts of the CiL project may yet remain to be realised, revitalisation of local community networks and positive changes in government agency approaches may well bring enduring change in the ways that integration of conservation and agricultural production are managed in rural landscapes.

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Abbreviations

BGGW: Box Gum Grassy Woodlands

CFoC: Caring for Our Country

CiL: Communities in Landscapes

CMN: Conservation Management Network

CSIRO: Commonwealth Scientific and Industrial Research Organisation

DPI: Department of Primary Industries (NSW)

MERI: Monitoring, evaluation, reporting & improvement

NPWS: National Parks & Wildlife Service (NSW)

NRM: Natural resource management

PRA: Participatory Rural Appraisal

Acknowledgements

The authors of this reports wish to thank all those CiL project participants who gave generously of their time and insights through interviews or completion of the Survey Monkey survey.

Project team members, particularly those in the socio-cultural evaluation Steering Committee (see Attachment 1) provided guidance and advice when it was requested. The contributions of those who completed interviews or Survey Monkey responses are greatly valued but have not been acknowledged by name due to the Human Research Ethics requirement that their right to remain anonymous be respected.

Expert technical advice from Professor Frank Vanclay of the University of Groningen (The Netherlands) enhanced the quality of the project.

This project is supported by Landcare NSW Inc, through funding from the Australian Government's Caring for our Country program.

Overview of the Communities in Landscapes (CiL) project

This section provides background information on the CiL project to place this socio-cultural evaluation in context.

As described in the 'Caring for Our Country' funding deed entered into with the Australian Government by the project's 'lead' organisation Landcare NSW, the Communities in Landscapes (CiL) project, conducted in the Box Gum Grassy Woodlands of New South Wales, Australia aims to:

> "increase native habitat and landscape scale conservation within national priority White Box-Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands (Box-Gum Woodlands) in New South Wales. The project assumes that landscape-scale change can be achieved by engaging and advising farmers and their communities on practices that: are known to benefit resilience in Box-Gum Woodland landscapes; have positive outcomes for production; and increase community capacity to carry on these practices beyond the life of the project".

The project focuses on three key service areas:

- Improved targeting of information and management support for land managers and community groups;
- Improved knowledge base to inform and support management decisions in Box-Gum Woodland landscapes;
- Implementation of integrated on-ground activities across multiple properties in priority local landscapes.

Nine partner organisations initially came together in the CiL project: Landcare NSW; NSW Department of Environment, Climate Change & Water (now Office of Environment & Heritage) which included NPWS staff, threatened species officers and the Box-Gum Woodland Conservation Management Network; Industry & Investment NSW (now NSW Department of Primary Industries); University of Sydney; Greening Australia; CSIRO; Stipa – the Native Grasses Association; WWF Australia; and Birds Australia. Shortly after commencement of the project, both WWF Australia and Birds Australia withdrew due to a need to prioritise because of pressures of other work and their funding was reallocated to other partners to achieve the same outcomes. In agreeing to work in partnership, the participating organisations committed to shared decision-making whilst acknowledging the accountability of the lead organisation – Landcare NSW Inc. – as the signatory to the contract with the Australian Government.

The CiL project intentionally took a multi-dimensional approach, in which partnerships provided an underpinning foundation, with a 'one-stop shop' approach for clients. Key components of the CiL project were: capacity-building, site-based information services, cross-property conservation planning, devolved grant incentive funding, demonstration sites and a Monitoring, Evaluation, Reporting and Improvement framework. This MERI had a significant emphasis on best management practice research in understanding behaviour change among land managers.

The place of socio-cultural aspects in CiL

The project team identified the need for elements of systematic social research and included these in its project design. This was in recognition of the importance of socio-cultural factors in the adoption of sustainable practices by individuals and in the dynamics of communities that provide continuity in the face of constant change and uncertainty.

Early in the project, team members undertook a Participatory Rural Appraisal to develop a rich picture of the social and cultural environment in which land managers operate in the target Box-Gum Grassy Woodland areas of New South Wales, with a focus on the Murrumbidgee, Lachlan and Central West Catchments. As part of the process several landholders were identified as "innovators" because their land management integrated conservation and production. These people were interviewed as part of a Benchmark Study of Innovators and some were included in additional research aimed at understanding the experience of the innovators. Project team members then facilitated the formation of seven cross-property planning groups each of which is progressing plans to improve biodiversity connectivity across their landscape and this process was monitored, documented and will subsequently be evaluated.

Finally, in the study reported here, Sydney NSW-based consultants Community Solutions and Michael Williams & Associates Pty Ltd were contracted during the period September 2011 – March 2012 to complete a socio-cultural evaluation of the CiL project, focusing on the key questions relating to the impact, effectiveness, appropriateness and efficiency of the socio-cultural approaches deployed as part of the larger CiL project. The brief for this study is at Attachment 2.

While the CiL project was designed and run by the project partner organisations, the importance of end-user participation was fully recognised and addressed through ongoing opportunities for interaction between landholders and agency extension staff. This provided a continuous opportunity for adaptive management and generated the flexibility for different landholders to adopt different approaches, better suited to their own needs. As this was a deliberate design feature of the project it was also evaluated.

Methodology used for the socio-cultural evaluation

> This section describes the essential features of the approach taken in evaluating the socio-cultural aspects of the CiL project.

After an initial scoping meeting with the Steering Committee for the socio-cultural aspects of the CiL project, and a review of relevant project documentation, the principal data collection instrument was developed. This survey (see Attachment 3) was the basis by which semi-structured telephone interviews were conducted by experienced interviewers. A total of 80 interviews were undertaken, stratified into the following three categories:

- CiL partners (P) - 20 interviews with project partners (those representing the partner organisations in the core project team) and staff employed by the CiL project;
- Involved Organisation staff (O) - 20 interviews with participants from government agencies and non-government organisations who were not project partners;
- Active Landholders (AL) - 40 interviews with actively-involved landholders from different aspects of the project.

Following each interview, interviewees were given seven days to check, and if necessary amend the record of interview. Those who had not responded after seven days were contacted once more, after which the responses were included in the socio-cultural analysis database.

Concurrent with the interviews, a parallel version of the survey was placed on Survey Monkey (a self-guided survey website) and almost 200 people who had registered as attending one or more CiL activities were contacted to invite them to complete the on-line survey. After an initial individual alert and two reminder messages, 45 responses were obtained, which was considered to be a reasonable response rate for an email survey relating to an event completed some time previously).

The quantitative results from the interviews were analysed using the SPSS statistical package and as provided by Survey Monkey. Further qualitative analysis of responses to open-ended questions was completed using a process of manual inspection and classification (coding). Analyses were conducted across all participants and for each category of participants. This was done to capture separately the different perspectives of each category generated by their specific contexts.

The CiL project received Australian Government Caring for Our Country funding for the period from 31 July 2009, through to 1 September 2012, with some modules scheduled to finish much earlier than the final completion date. The socio-cultural evaluation completed by Community Solutions and Michael Williams & Associates was scheduled towards the end of the project, during the period from September 2011 to March 2012. Both funding and reporting requirements meant it was not possible to conduct the evaluation after the project had been completed since it was necessary to collect the data while personnel were still in place and while partners were still available to the project.

Results

The results presented in this section provide information about the participants in the socio-cultural evaluation, then moves on to address the critical questions presented in the project brief, before assessing the value-add resulting from the inclusion of explicit socio-cultural aspects in the CiL project.

The socio-cultural evaluation participants

Almost all of those who participated in the socio-cultural evaluation had attended at least one CiL event (such as a workshop, field day or other project-related activity) and several had been part of several project-related activities. More than half of the responding landholders had been part of a cross-property planning group, in which several rural production properties came together to plan conservation initiatives at a local landscape scale. Details of the respondents' participation in the CiL project are in Table 1, below.

Table 1. Involvement of evaluation respondents in the CiL project

No. of respondents					
	Interviewees				Survey Monkey respondents
Attended Event/activity	Active Landholders (AL)	Involved Organisation staff (O)	CiL Partners (P)	Total interviewed	Survey Monkey (SM)
Attended event	29	15	16	60	18
Cross-property group member	24	5	0	29	6
Received small grant	16	4	0	20	10
Benchmark study participant	14	2	0	16	2
PRA** interviewee	11	2	0	13	11
Agency staff working c. CiL	0	10	5	15	4
CiL project partner	0	4	17	21*	1
CiL Steering Committee member	0	1	15	16	1
Other involvement	14	15	15	44	3
Total***	40	20	20	80	45

*One respondent identified primarily as an organisation representative also self-identified as a Project Partner on the basis that his organisation was a Partner and he played an active role in some activities.

**Participatory Rural Appraisal

***Many were involved in more than one activity so columns do not add up to the totals

Approximately 20 people contacted for interview declined on the basis that they were not sufficiently aware of the CiL project or had insufficient knowledge of the project to contribute meaningfully. When made aware of the CiL activities they had taken part in, several still declined on a basis of insufficient knowledge or awareness of the CiL project.

Almost 200 landholders who had not been interviewed but had participated in a CiL event were invited to complete the Survey Monkey questionnaire. Forty-five Survey Monkey responses were received and many of the respondents did not address every question.

Reasons for becoming involved in the CiL project

In seeking to gain insights into the reasons why landholders, government agency staff and others might engage with and become involved in a complex multi-partner project such as CiL, participants were asked to think back to their decision to get involved, and how important various aspects of the CiL project were to that decision. The options provided (see Attachment 3 for details) were identified as important socio-cultural aspects of the project.

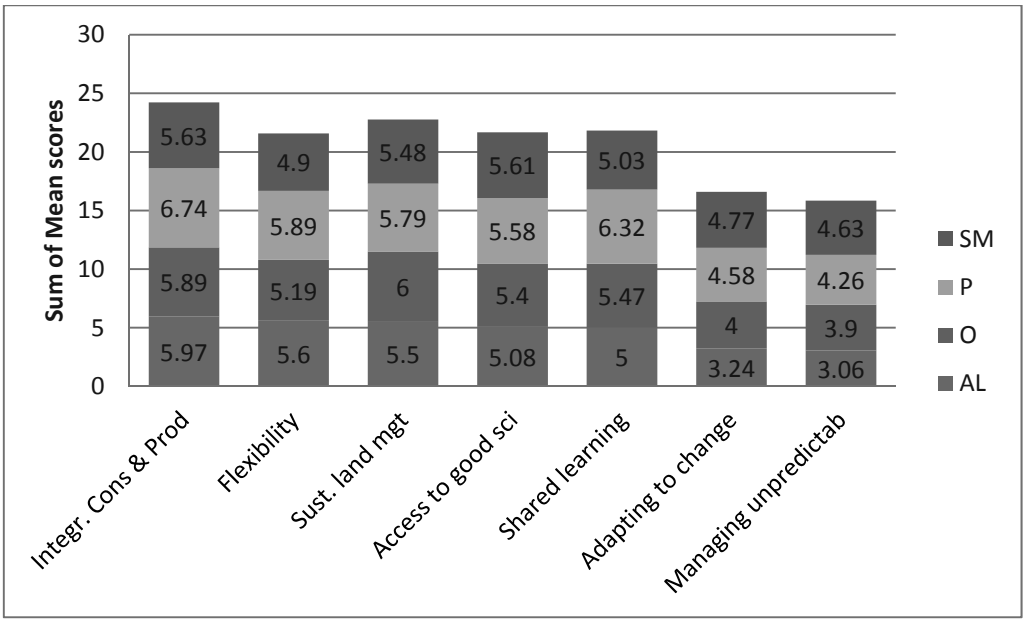


Figure 1. Socio-cultural factors influencing participant decisions by actively involved landholders (AL), Involved Organisation staff (O), CiL partners (P) and Survey Monkey respondents (SM) to become involved in CiL

(a)The scale used in this and several other questions was from 1= not at all important to 7= extremely important. Numbers within each histogram are mean scores for each participant group. In this figure results are expressed as a cumulative sum of group means. In some other figures below, cumulative score totals replace the means.

(b) While participants were encouraged at interview to interpret 'adapting' to change in any way meaningful to their circumstances, discussions suggest that a majority interpreted this to refer to a changing climate

As seen in Figure 1 (and Table A4.1 in Attachment 4), the relative importance of various socio-cultural factors varied between interviewed participant groups, as observed in the different rankings allocated by actively involved landholders, involved organisation staff and the CiL partners, Help in adapting to change and in managing unpredictability were generally less important than the other factors across all participant categories. Statistical analysis (using a single factor Analysis of Variance)

showed differences between these mean scores to be highly significant when measured across the 80 interviewees[1].

The relative importance of the various factors to those in different participant groups becoming involved also varied between groups. The average importance scores allocated to **shared learning[2], integration of conservation and production**, and **helping to adapt to change** were significantly different amongst the interviewed participant groups. Statistical comparison was not possible between responses provided by Survey Monkey respondents, who were less actively involved participants in the CiL project, and the actively involved landholders. However, inspection of these results suggests that actively involved landholders and those with less ongoing involvement were generally similar in their responses, except that the less involved landholders placed less importance on flexibility to trial different approaches and greater importance on help both in managing unpredictability and adapting to change. It is also worth noting that those in the various environment, NRM and agriculture organisations (the Involved Organisation staff (O) category) interviewed scored sustainable land management and the integration of conservation and production most important to their participation.

A broad range of other factors were also identified as important to the decision by various respondents to become involved in the CiL project.

Among those from **CiL partners,** work with Landcare, the opportunity to work in partnerships embracing a diversity of interests, opportunities to expand networks, and the reach of existing work were recurring themes.

One comment encapsulating various aspects of these other interests by partners was expressed as:

> *"CiL provided a very good professional opportunity – especially in its partnership aspects, with the different agencies and approaches coming together. It provided opportunities to help reconcile the different agencies and operate at a broader perspective".*

Landcare links were again mentioned by several of the **involved organisation staff** interviewed, as was the opportunity to work with local communities. Among organisation staff, the most commonly mentioned additional reasons for involvement in the CiL project related to alignments with existing or planned work, expressed by two participants as:

> *"Working with an agency, my skill set and interests overlapped with the intentions and delivery of the project".*
>
> *"The particular component we chose aligned well with what we were already doing or contemplating".*

[1] Single factor ANOVA for the difference in importance of the various socio-cultural factors across the whole interview group produced a highly significant result ($F_{(6,493)} = 28.8454$; $p = 1.31E\text{-}29$).

[2] * Differences between active landholder participant, organisation staff participant and project partners mean importance scores for shared learning approach ($F_{(2,53)} = 3.6720$; $p = 0.0321$), integration of conservation & production ($F_{(2,53)} = 3.9810$; $p = 0.0245$) and helping in adapting to change ($F_{(2,45)} = 3.9624$; $p = 0.0260$) were statistically significant.

Almost all of the 40 **actively involved landholders** interviewed also had additional reasons for becoming involved in the CiL project which indicated that they were those most willing to adopt integrated conservation and production practices. These reasons varied widely across different individuals, with an involvement in Landcare featuring often. Examples include:

> *"My involvement in the local Landcare network".*
>
> *"As a function of participating in a Landcare group".*
>
> *"My Landcare connection".*
>
> *"Through my involvement in the local Landcare group and the meetings where some of my neighbours were involved".*

Other recurring themes included a congruence with and affirmation of conservation farming already being done or planned, as reflected in the following comments.

> *"The project presented an opportunity to affirm what we had been doing on our property for 4 years or so. A lot of the concepts and methods were not new to us but an affirmation was welcome".*
>
> *"I was going to implement many of the components independently of CiL anyway so the project aligned with some of my intentions – it was a good fit but not a motivator, I long ago arrived at this point".*
>
> *"We've been going through great change management over the past 10 years and with outcomes incremental and slow to surface it was so nice to meet with a team such as CiL… It confirmed that our choices, experiments and risks were on the right track and that gave us confidence".*

These quotes suggest that the project worked with already active landholders and reinforced their strategies – an affirmation that was welcomed.

A desire to address major management issues in their local landscape was the key influence for some landholders.

> *"My primary motivation was that the project focus here was Uamby Creek, that my property is on and I wanted to be involved in caring for my catchment".*
>
> *"A hot fire about 5 years ago destroyed a lot of trees. This project was a chance to do something about that".*

Encouragement by core members of the CiL team and the opportunity to work with like-minded people were also reasons influencing some landholder participants.

Examples of other reasons offered at interview include:

> *"With farms being much bigger these days and the people who run them much fewer, any opportunity to commune with people of a similar mind is really valuable and valued…".*
>
> *"My neighbour persuaded me that getting involved would be worthwhile".*
>
> *"Taking care of generational farming – improving the environment and leaving things better and with more trees for the next generation".*

What impact has the CiL project had?

Changes resulting from CiL interventions

Participants in the socio-cultural evaluation of the CiL project were asked how their involvement in the CiL project had had an impact on their own approach to conservation management.

While a majority of CiL partners had already acted on things they had learnt from being part of the CiL project (see Figure 2, and Table A4.3 in Attachment 4), a greater proportion of both actively involved landholders and involved organisation staff had learnt new things but were still intending to act on them. A Chi-squared analysis of responses from the interviewees showed the differences between groups to be highly significant ($p<0.0005$). However, caution must be exercised in assessing these results because of the low numbers in some response cells.

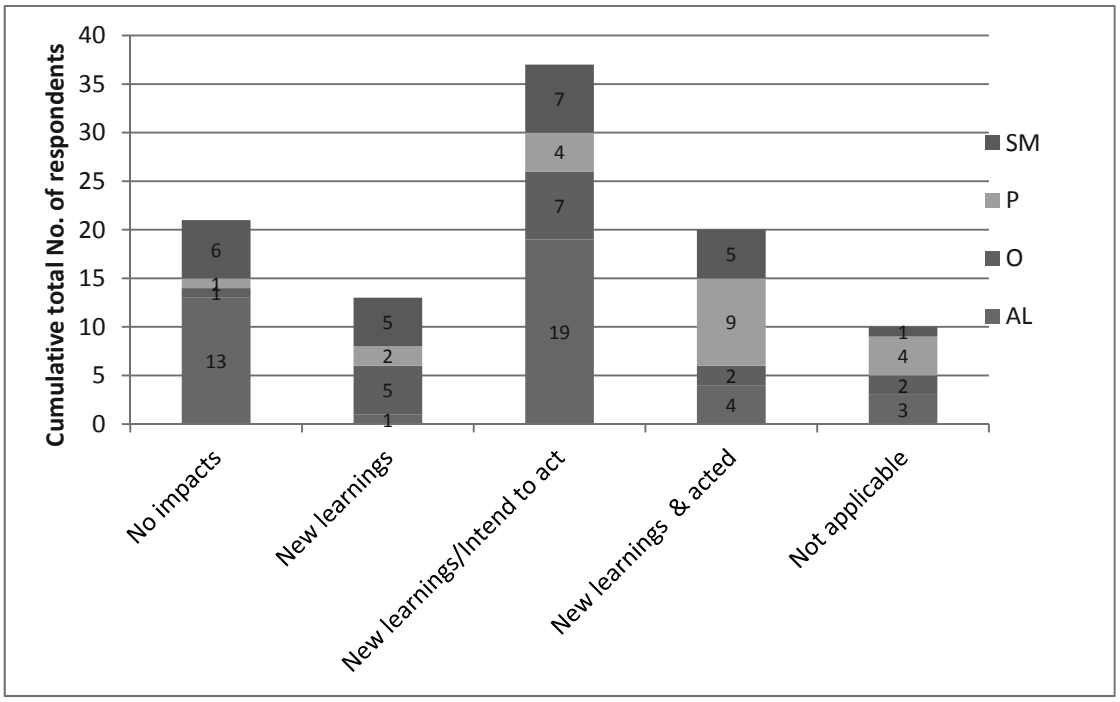


Figure 2. Impact of CiL involvement on conservation management by different participant groups

> **Note**: In this figure, the total numbers of respondents in each category, rather than mean scores, are presented.

Among the relatively high proportion (32.5%) of actively involved landholders who indicated that their involvement in the CiL project had no impact on their conservation management, the majority indicating that they were already practicing conservation farming prior to their involvement in CiL.

These landholder responses are typified by responses such as:

> *"As I had already been practising conservation on the property for some time and also being involved in the carbon farming initiative, the project was really just the icing on the cake and a continuation of a journey already under way".*

"No changes as we were already involved in what we believe to be a regenerative conservation farming system, but our involvement with CiL was an affirmation of our methods directly with the project team".

"It supported the continuation of our actions that had already been in train, particularly through the incentive grant".

"Many of us were already heading along the path of integrated conservation and production management but the CiL project provided valuable backup and working through a group provided confidence and a more intensified motivation for proceeding with on-ground works".

"I've been managing my property in parallel to the CiL principles for a long time, but there is always scope to learn and implement something new…".

DPI CiL Project Officer, Tony Cox, reports (paper in preparation) that in a post-event evaluation completed by almost 200 people who attended 'extension activities' associated with the project, 78.5% reported an intention to change management decisions as a result of information provided at the CiL event. That this is higher than the 56.4% reporting similar intentions or actions in this evaluation is not surprising. Numerous studies completed by the authors of this report (Lambert, pers. comm.) indicate that while rural participants leave workshop and training events with strong intentions to act on what they have learned, time pressures and other factors often intervene. The impact of these pressures on implementation in the current project is reflected in landholder comments such as:

"…landholders are time poor with so many imposts on their time e.g. government paperwork, BAS and other things that distract us from on-ground management".

"Perhaps enlist the on-ground help of volunteers, [both] local, regional and city, in implementing some of the components. This should be of two-way benefit – to landholders in assistance they received to get work done and to volunteers who learn and have new experiences".

Among comments from the **actively involved landholders**, the on-ground focus of changed practice was primarily changed management for biodiversity conservation as a result of increased understanding to the biodiversity values of particular sites, and the ways in which connectivity can be enhanced (e.g. "*The connectivity concept is now part of my thinking and approach… The project has helped put it together in a common sense and user-friendly way").*

Increased understanding and use of Landscape Function Analysis, management of farm dams and waterways for healthier outcomes, and grazing management and conservation of native seed in pasture areas were other changes mentioned by landholders.

In responding to a question about the nature of changes in their conservation management, several **CiL partners** focused on their increased understanding and knowledge of connectivity and of the connections between people and the environment. Typical responses included:

"Improved understanding of connectivity planning".

"Increased knowledge of connectivity planning… increased understanding of groups and the building of them to support each other on the journey".

"The changes are mostly about putting people together to provide connections across the landscape".

Other recurring aspects among the project partners included new learning about cross-property biodiversity planning, practices applicable on their own properties, and shared learning among the participants and the importance of communication in that.

Staff from organisations involved in the CiL project highlighted their development of new networks both among landholders and with other agencies, and to a lesser extent on grazing management for conservation outcomes.

Comments reflecting the importance of changed network outcomes included:

> *"Development and engagement with new landholder networks to exchange knowledge and materials".*
>
> *"I learnt a lot through my involvement with other presenters in the workshops, through collaboration with the leadership team and the process of working with the participants in a structure conducive to learning from each other".*
>
> *"The project allowed me to link into new professional networks".*
>
> *"It equipped me with networking opportunities and related information previously not afforded to me, mainly via the [benchmarking] survey group work".*
>
> *"I've learnt a lot about the approach of other agencies towards conservation management as it is related to agriculture".*
>
> *"We've taken the overall project concept across disciplines and applied it to new areas".*

How effective has the CiL project been in addressing its socio-cultural objectives?

The Communities in Landscapes project has as its overarching objective maintenance and enhancement of biodiversity across the NSW Box-Gum Woodlands through:

(i) Improved targeting of information and management support for land managers and community groups
(ii) Improved knowledge base to inform and support management decisions in Box-Gum Grassy Woodlands
(iii) Implementation of integrated on-ground activities across multiple properties in priority local landscapes.

Recognising that the CiL project is essentially about behaviour change, its MERI strategy required a systematic and thorough approach to researching with people. The project team sought to:

- *generate a rich picture of the social and cultural environment in which land managers operate in the target areas through the PRAs;*
- *apply findings of PRAs and other relevant socio-cultural research to the design of the project and to integrate project components and activities;*
- *systematically monitor socio-cultural aspects of the project to better understand the process of adoption of integrative practice.*

The socio-cultural aspects of the project were recognised as one important contributor in achieving project objectives within the broader mix of CiL activities.

Improved targeting of information and management support

In seeking to explore the extent to which the CiL project targeted information and management support to the needs of intended beneficiaries, interviewees and Survey Monkey respondents were asked which broad group or groups they saw as the intended beneficiaries of the CiL project.

While individuals used somewhat different language to express their responses, the perceived target or intended beneficiaries can be summarised as in Table 2.

Table 2. Intended beneficiaries of the CiL project, as perceived by the various participant groups

	No. of positive responses		
	Active landholders (AL)	**Involved Organisation staff (O)**	**CiL partners (P)**
Landholders (a)	29	16	18
The wider community (b)	16	7	8
Government agencies (c)	7	3	8
All project participants	5	2	1
Scientists	3	0	1
Landcare groups/networks	2	5	8
Governments (d)	0	1	1
Other (e)	6	2	5
The environment (f)	11	5	5

(a) Landholders include both those with a direct involvement in the CiL project and others who might benefit from neighbour or broader flow-on effects

(b) The wider community variously referred to the wider community within the focus areas, the wider farming or NRM community, and/or the broader Australian community

(c) Government agencies generally referred to those with a direct involvement in the project, or those with potential to be influenced by the project and its outcomes, in particular CMAs and others involving NRM practitioners

(d) Governments were distinguished from agencies by reference to funding bodies and those whose policy and programs might be influenced by the CiL project

(e) Other beneficiaries referred to in small numbers included: Local Government, TAFE, schools, the CMN networks (a project partner), future farming families and communities, and those living in cities and peri-urban areas where food security might become an issue in the future

(f) The environment was used during analysis of responses to address benefits identified as being to 'the land', ' biodiversity', 'farming landscapes', 'Grassy Box Woodlands' and other similar terms.

As seen in Figure 3, responses to a follow-up question on the extent to which respondents thought the CiL project aligned with the needs of these intended beneficiaries, the perceived alignment was generally high. Interviewees scored the alignment an average 5.42 (± 1.11) on a scale from 1 = 'did not align at all' through to 7 = 'aligned with needs extremely well'. There was no significant difference between the participant groups in this assessment, with actively involved landholders scoring the alignment an average 5.5, involved organisation staff scoring 5.2, CiL partners 5.4 and Survey Monkey respondents 5.2. Of 80 people interviewed, 73 responded to this question, while only 18 of the 45 Survey Monkey respondents answered all or part of this question.

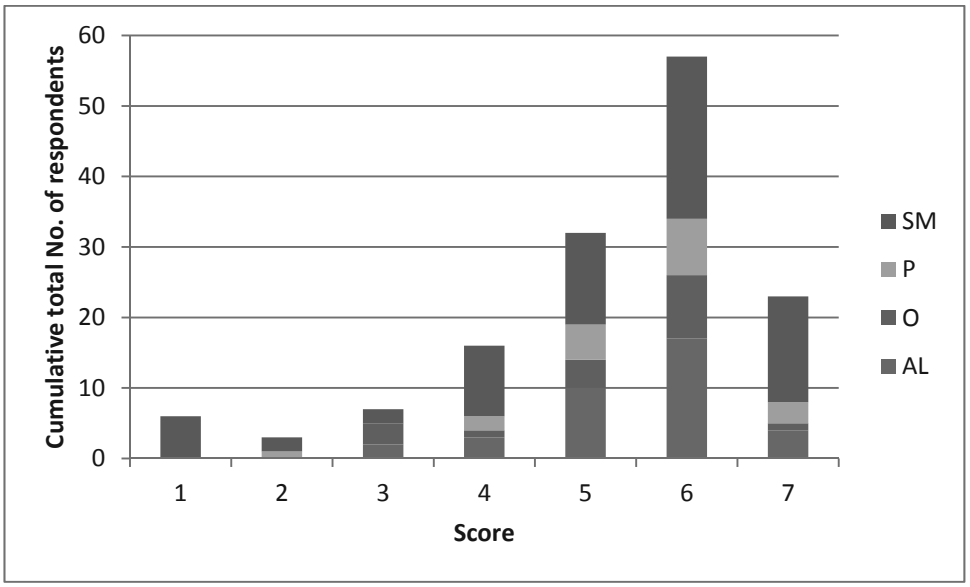


Figure 3 Perceived alignment of the CiL project with the needs of intended beneficiaries

One of the challenges for the CiL project was in developing and maintaining its own identity. This is reflected in the number of people (approximately 20) registered as active participants in one or more CiL activities who declined to complete a phone interview because they believed they did not know the project well enough to provide useful information.

It is also reflected in the fact that, when asked at the start of their interview, to name the components of the CiL project, few outside the core project partners were able to do so.

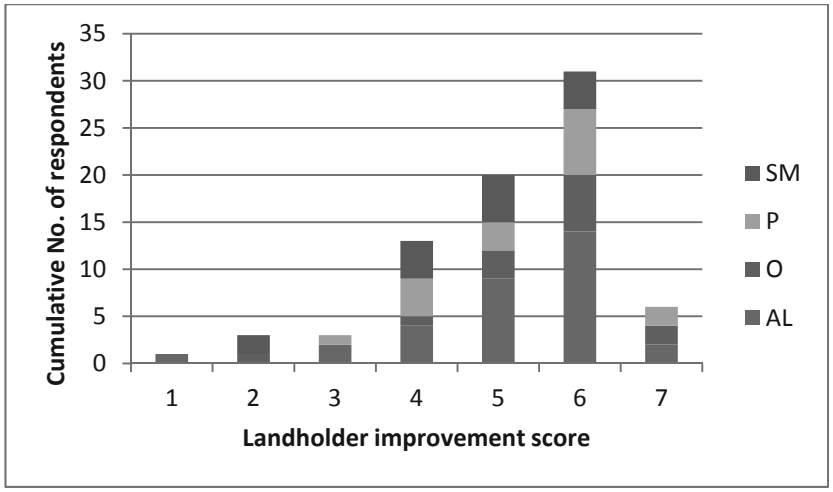
Among involved organisation staff involved in CiL activities, most could name some but certainly not all components. Their emphasis was generally on Box Gum Woodland management, multi-partner collaboration and a whole-of-community approach and the integration of conservation and production through cross-property planning.

Among the actively involved landholders, "*cross-property planning*", "*wildlife corridors across properties*" and/or "*connectivity*" were the most commonly identified of the project components. The integration of conservation and production, bringing people together to discuss ideas and learn from each other, and flexibility to trial different approaches, were also commonly mentioned, while specific components such as the initial Participatory Rural Appraisal, benchmarking, incentive grants, and Landscape Function Analysis were less often mentioned. This is not surprising as fewer landholders were directly involved in these activities.

Improved knowledge & skills of participants

All interviewees and Survey Monkey respondents, irrespective of their own role in the CiL project, were asked the extent to which they thought the CiL project had improved the knowledge and skills of CiL partners, NRM practitioners and participating landholders. As shown in Figure 4, scored on a scale from 1 = No improvement to 7 = Very substantial improvement, the mean improvement scores ranged from a 4.60 for the Survey Monkey respondents assessments of improvement in skills and knowledge of their less involved peers through to 5.5 for organisational staff assessments of improvement in involved landholder skills and knowledge. Survey Monkey respondents, being less

actively involved in the CiL project than participants in the other categories were less willing to score these improvements (as reflected in lower respondent numbers). While some individual responses from both interviewees and Survey Monkey respondents were low (minimum scores in several categories was 1), the mean scores are all positive, indicating that in general, the CiL project was seen to have positive impacts on the knowledge and skills of participants, not only in their own peer group but in each of the categories of participants.



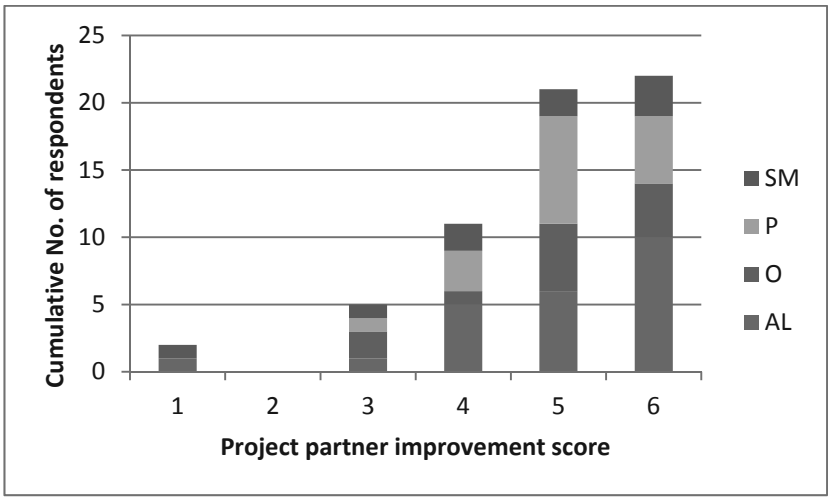


Figure 4. Increases in skills and knowledge of participant groups as perceived by interviewees in their own & other groups (a) Landholder improvements; (b) Organisation staff improvements; (c) Project partner improvements.

There were no statistically significant differences between the improved knowledge and skills of the different participating groups, as perceived by the interviewees. However, among **Survey Monkey** respondents, there is a reversal in the relative perceived impacts of the project on skills and knowledge of landholders, NRM practitioners and CiL partners from the relatively actively involved landholder interviewees.

Several of the respondents in each group felt that they were not sufficiently well informed about impacts of the project on the knowledge and skills of others involved to respond meaningfully to this question. This is reflected in the relatively low N values included in Table 4 at Attachment 4.

Implementation of integrated on-ground activities

Several of the hypotheses underpinning the CiL project relate to the benefits to be gained by integrating aspects of conservation management across the Box-Gum Grassy Woodlands. The CiL project team identifies these as:

1. An integrated, multi-organisation approach is more successful than any one organisation acting alone
2. The partnership structure in Communities in Landscapes helped to generate an integrated approach to management of Box-Gum Grassy Woodlands
3. Engagement with a multi-partner project that crosses production/conservation boundaries will have a positive impact resulting in a more coordinated and collaborative approach across environment (OEH) and agriculture (DPI) partner agencies
4. Activities that integrate conservation and production strategies improve the overall effectiveness and efficiency of management of Box-Gum Grassy Woodlands
5. Providing an incentive to collaborate across multiple properties and support in developing a cross-property biodiversity plan can generate landscape scale conservation outcomes.

With this strong focus on integration of conservation and production, the social-cultural evaluation placed some emphasis on the extent to which the CiL project has influenced the integration of conservation and production in the target areas (see Figure 5, and Table A4.5 in Attachment 4).

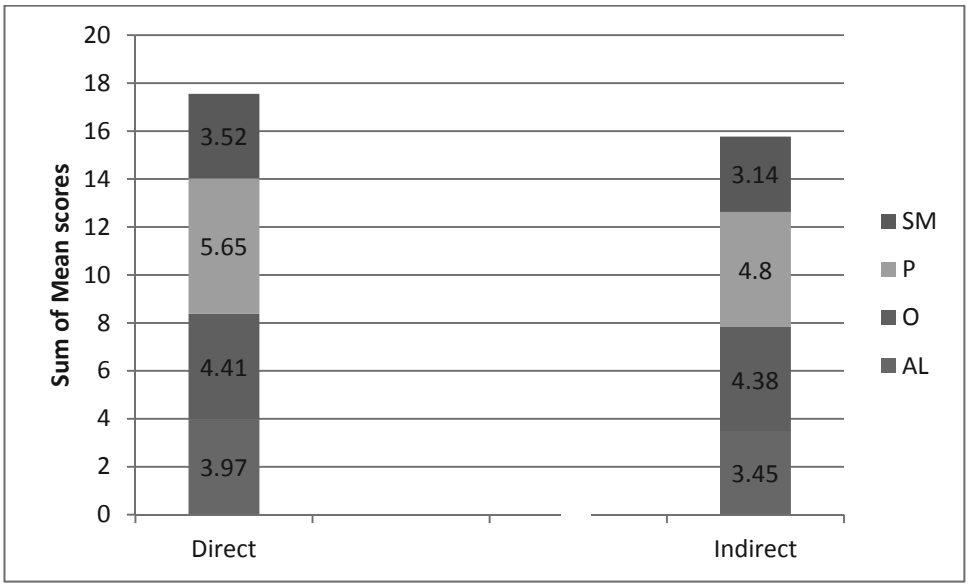


Figure 5. CiL project influence on integration of conservation and production in target areas, as assessed by different participant groups

Note: In this figure, as in Figure 1, the results are presented as mean scores.

The **differences between interview participant group assessments of direct influences on integration were significant** (p=0.002). In particular, the **CiL partners** rated the direct influences on integration highly (Mean = 5.65), while the less involved participants who completed a **Survey Monkey** response were less positive about this influence (Mean = 3.52). Although similar trends appear to exist in relation to indirect influences of the CiL project on integration of conservation and production there were no statistically significant differences between the participant groups in relation to indirect influences, the individual assessments in each group being highly variable. No additional information was collected about the direct benefits.

Among CiL partners who perceived indirect benefits to the integration of conservation and production, responses focused primarily on the building of partnerships and collaborations that change the way things are done. Examples include:

> *"Yes, it has influenced the thinking and future partnerships between NSW agency staff, specifically OEH and DPI".*
>
> *"Particularly through the partnership and the influences of partners on each other, which has led to change within the organisations. This is especially evident in the organisations that have invested most in the CiL project".*
>
> *"The enduring collaborations that have been built (e.g. between local Landcare, the CMN and DPI).*
>
> *Collaboration between DPI and Greening Australia which have included new research on native plant species, soil quality and production".*

While some **staff in the involved organisations** saw it as too soon to make this assessment, others focused on the influence the CiL project has had on landholders and their acceptance of the integration of conservation and production. More 'user-friendly' ways of involving landholders in these discussions were also identified as an indirect benefit.

Among actively involved landholders, the main indirect influences in integration were reflected in comment such as:

> *"Giving landholders the opportunity and interest to 'look over the fence' at what is happening beyond their own boundaries and learn about different methods and outcomes".*
>
> *"Facilitation of people getting together and talking through related issues and sharing their ideas and experiences in conservation farming".*
>
> *"The benefits of being involved with new people and getting to know their experiences, swapping information and buoying up motivation".*
>
> *"The project has managed to involve some neighbours who are very traditional in their farming methods and thinking".*
>
> *"Assisting in the normalisation of conservation farming".*

The importance of the "*semi-social*" aspects of the processes used and the resultant coming together of people bringing different perspectives was also mentioned by some participants.

The benefit to integration of conservation and production of bringing together people from different backgrounds was also assessed. In this instance, respondents were asked to rate the benefits on a scale from -2 = significant negative outcomes for integration, through a neutral point = 0 to +2 = significant positive outcomes for integration.

As shown in Figure 6, 30 of the 36 actively involved landholders interviewed, 13 of 16 organisation staff, and 17 of 19 CiL project partners scored the coming together positively (+1 or +2). There were no significant differences between the scores allocated by the various participant groups. Among the 23 Survey Monkey respondents who answered this question, one scored a negative (-1) influence, whereas 16 scored a positive influence (+1 or +2).

Only one actively involved landholder provided a strongly negative response (-2), seeing the collaborative process as impeding delivery of incentive funding indicated:

> *"Having so many agencies and personnel involved was very detrimental – it made it far more complicated overall and in my experience it just added unnecessary layers of bureaucracy and complications in getting funding".*

The one Survey Monkey respondent who provided a negative assessment (-1) of the approach used by CiL responded by indicating:

> *"I don't think it was beneficial, most land managers I know were managing well under a cell grazing platform and the CiL imposed a simplistic & possibly damaging grazing formula. Then they gave those with the required number of trees a fantastic economic windfall, ignoring those with the same/better management systems but with not enough trees per hectare".*

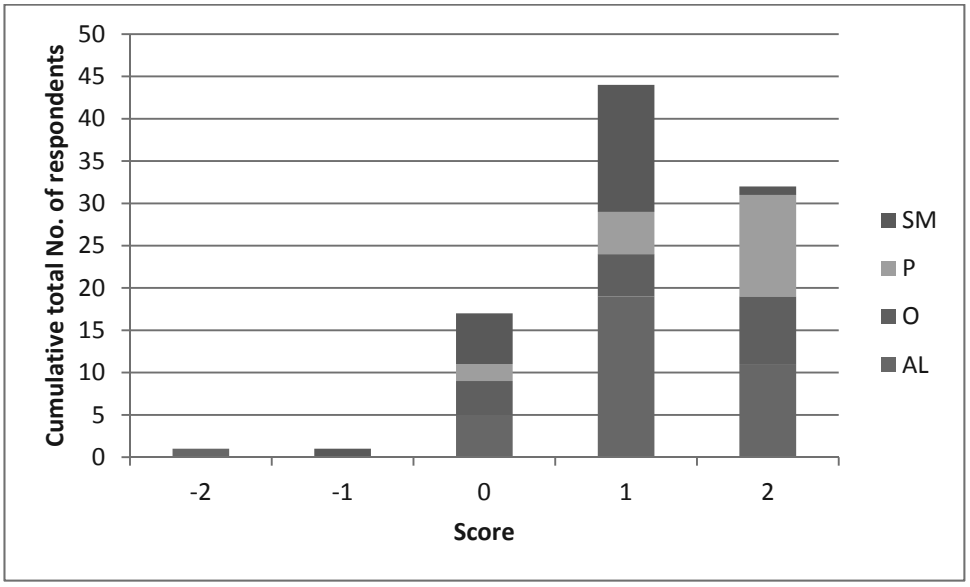


Figure 6. Perceived benefit to integration of conservation and production of bringing together people from different backgrounds

Unanticipated positive & negative consequences

In addition to the planned changes resulting from the CiL project, participants also identified a number of unanticipated consequences.

Asked if they were aware of any negative or unexpected positive consequences of the CiL project, a number of respondents in each participant group said that they did not know or were not able to respond to this question. As shown in Table 3, a majority of CiL partners interviewed (70%) identified some negative consequences as well as unexpected positive consequences (85%). By contrast only a minority (17.5%) of actively involved landholders identified negative consequences from the CiL project, while just over half (52.5%) identified unexpected positive consequences. Involved organisation staff involved reported both negative and unexpected positive consequences at

levels between those observed by the project partners and the actively involved landholders. As reflected in Survey Monkey responses, those who were less actively involved were less likely to report either negative (8.9%) or unexpected positive (13.3%) consequences of the CiL project.

Table 3. Participant group perceptions of negative and unexpected positive consequences of the CiL project

		No. of interviewee responses				No. of Survey Monkey responses
		Active landholders	**Involved Organisation staff**	**CiL partners**	**All interviewees**	**Survey Monkey respondents**
Negative consequences						
	Yes	7 (17.5)	9 (45)	14 (70)	30 (37.5)	4 (8.9)
	No	30 (75)	5 (25)	2 (10)	37 (46.3)	11 (24.4)
Unexpected positive consequences	Yes	21 (52.5)	13 (65)	17 (85)	51 (63.8)	6 (13.3)
	No	18 (45)	7 (35)	3 (15)	29 (36.3)	15 (33.3)
No of participants		40	20	20	80	45

A Chi-squared test showed the differences between participant groups to be statistically highly significant ($p<0.0005$).

Unanticipated positive consequences

Among CiL partners the unanticipated positive consequences were varied. Several focused on collaboration between agencies and organisations involved in the CiL project. Responses included:

> *"Collaboration between agencies was better than expected, resulting in some breakdown of inter-agency barriers, especially within DPI".*
>
> *"Meeting other agency individuals and then organising networks, having joint training sessions and other meetings where we could all value-add to our own knowledge and strategies by gleaning from each other's knowledge and expertise".*
>
> *"The extent of engagement with different audiences from those we usually access".*
>
> *"A major shift in DPI in relation to NRM and landscape perspectives – managing for biodiversity as well as production. CiL was a catalyst for this".*
>
> *"New DPI/Greening Australia collaborative research".*

The value of cross-property planning as a way of building respect among participants and commitment to landscape scale perspectives was also a repeated theme:

> *"The cross-property planning component of CiL originated from Sydney Uni (Peter Ampt) but was taken on by the agencies (OEH and DPI) and has become a major success story of CiL, building respect".*
>
> *"The profound impact of cross-property groups, with strong practical application".*
>
> *"The social gains, especially in cross-property biodiversity component, were much stronger than expected".*

The extent to which the CiL project helped to make Landcare NSW "*a more professional and cohesive organisation*" and to revitalise struggling local Landcare were also mentioned several times. In relation to local Landcare groups, comments included:

> *"Especially positive was seeing groups re-establish as part of the cross-property project".*
>
> *"The renewal of Landcare groups with a new lease of life on their work as they focus on whole community".*

Staff in involved organisations also identified a diversity of unanticipated positive outcomes.

The extent of community participation and strength of commitment was one of the strong features identified by involved organisation staff. This is reflected in the following comments:

> *"Whilst it was inherent in the aim of the project, I was surprised at take up of the effect of bringing the community (all participants in the project) together to discuss and experiment with new paradigms. These were participants from a variety of backgrounds and with varying attitudes".*
>
> *"The extent of community involvement was unexpected. The way the project was designed and genuinely based within the community went beyond the mechanics of implementing the components of the project. It went to the heart of what will keep a community alive with the pressures and changes it is facing in a rural context…".*
>
> *"I felt that landholders did end up taking home a very strong message in regard to the integration of conservation and production… The project had a direct impact on bringing together a very diverse group to work together more closely than before".*

As with the project partners, organisation staff also identified the revitalisation of some Landcare groups as an important and unexpected outcome of the CiL project.

Although relatively fewer of the **actively involved landholders** identified unanticipated outcomes, several of those who did commented on the revitalisation of local Landcare groups and/or on the value of cross-property planning. Also of importance to several active landholders was the extent of new knowledge about the flora and fauna on their own and/or adjoining properties.

Perceived negative consequences of the CiL project

As noted in Table 3, above, the majority of negative consequences were identified by partners in the CiL project. Almost without exception these related to difficulties in the governance and management of the project in its early stages. Inadequate investment in the building of partnerships, establishment of agreed governance arrangements and appropriate management, and the consequences for paid staff and volunteers committed to seeing the project succeed were recurring themes that will be addressed further in the section on governance that follows.

Failure to adequately engage with CMAs in some areas and to gain their commitment and support for complementary activities was also raised as a concern by some of the CiL partners. This suggests that a more concerted effort could have been made to encourage CMAs to see CiL as complementary rather than in competition with their role. Where staff in involved organisations raised concerns, these generally related to administrative aspects of the project and the implications of these for on-ground delivery. A small number of these participants also raised concerns about

the relatively short timeframe for the project and the implications of this both for recruiting people to the project and for on-ground follow-up work.

Maximising impact of the CiL project

When asked what could have been done to increase the impact and outcomes of CiL, without significantly increasing project costs, the **CiL partners** focused strongly on project management (especially management style) and governance structures, predominately in the early stages of the project. Some thought that a government agency or well-established and resourced NGO would be better equipped to manage such a large, multi-faceted project rather than a volunteer-based organisation, such as Landcare NSW. However, project partners generally agreed that having Landcare NSW as the 'lead' organisation also brought benefits, and while there were some issues about providing early leadership and direction, there was no suggestions of mismanagement. These issues were more about management style and who had authority to provide the leadership and the accountability to adjudicate when partners had a diversity of strategic approaches and how a collaborative partnership should operate, given an initial agreement for shared decision-making in a situation where one organisation (Landcare NSW) bore the sole contractual and thus legal responsibility for the project. This early or formative creative tension was a significant part of the reason why the partners came together, evaluated their performance, adopted a modified governance structure and management style and Landcare NSW was able to so successfully project manage the ensuing collaborative process.

The need for "*a longer gestation time"* to enable building of trust, shared understanding and commitment among the partners, as well as an initial skills audit, which should have informed the appointment of the initial project manager were identified.

Putting in place an agreed communications strategy early in the project, identifying and resourcing a dedicated communications officer for the CiL project and the addition of a formal launch of the project were identified as actions that would have enhanced community awareness of the project and hence reduced effort in engaging landholders and other participants.

However, as one of the core project partners commented:

> *"The CiL project is a work in progress. It needed to be done and evaluated before we could gauge what would bear fruit and what would be less valuable. CiL tried and offered lots of different approaches, some more successful than others, so only now can we evaluate this".*

The section on governance of the CiL project (see below) further addresses some of these issues.

Staff from involved organisations also made some references to the capacity of the 'lead' organisation early in the project and the need to ensure sound management of the project. However, their focus was also on the on-ground delivery of the CiL project and how that might have been strengthened. Clear communications about the project, clearer branding around CiL components and events, and more effective use of the media and community and social networking to promote the project were all seen as both necessary and possible.

A need to provide some continuity beyond the CiL project's current funding was also seen by some organisation staff as important. Dissemination of results obtained, initially to all who participated, and ultimately to the wider community was also viewed as important.

Actively involved landholders also identified a need for a continuity of the project beyond its current funding. This was seen as particularly important in light of the significant set-up resources invested and the opportunity to now build on these to leverage more results on the ground. To achieve this will require the identification of key personnel with the necessary time, commitment and resources.

The possibility of engaging volunteers ("*local, regional and in the city"*) to assist landholders in implementing some of the components was proposed as a two-way process for greater outcomes at minimal cost.

Follow-up and longer-term monitoring were also identified as an important part of maintaining what has been achieved through CiL.

The contribution of the socio-cultural aspects of the CiL project to CFoC outcomes is not something that most participants were in a position to evaluate. This matter will be addressed in the MERI reports prepared by the CiL project team.

How appropriate was the approach taken?

The CiL project adopted a diversity of different strategies for engaging with rural landholders, agency staff and others with an interest in conserving NSW Box Gum Grassy Woodlands within agricultural production landscapes. In assessing the appropriateness of the various strategies, participants in the socio-cultural evaluation were asked how useful different elements of the project were to them.

The usefulness of the various elements, as assessed by individuals in each of the interviewee groups varied quite widely[3]. However, as shown in Figure 7 below (and in Table A4.2 in Attachment 4), mean cumulative scores for all elements except the websites, were above the midpoint possible score of 16, with small incentive grants rated the mostly useful and the project-related websites least useful overall.

These data reinforce the importance of making a range of engagement strategies available within the project.

[3]Differences between the overall usefulness of the various CiL project elements, as assessed by the whole interviewee group were highly statistically significant ($F_{(6,352)} = 11.3500$; $p = 1.33E\text{-}11$).

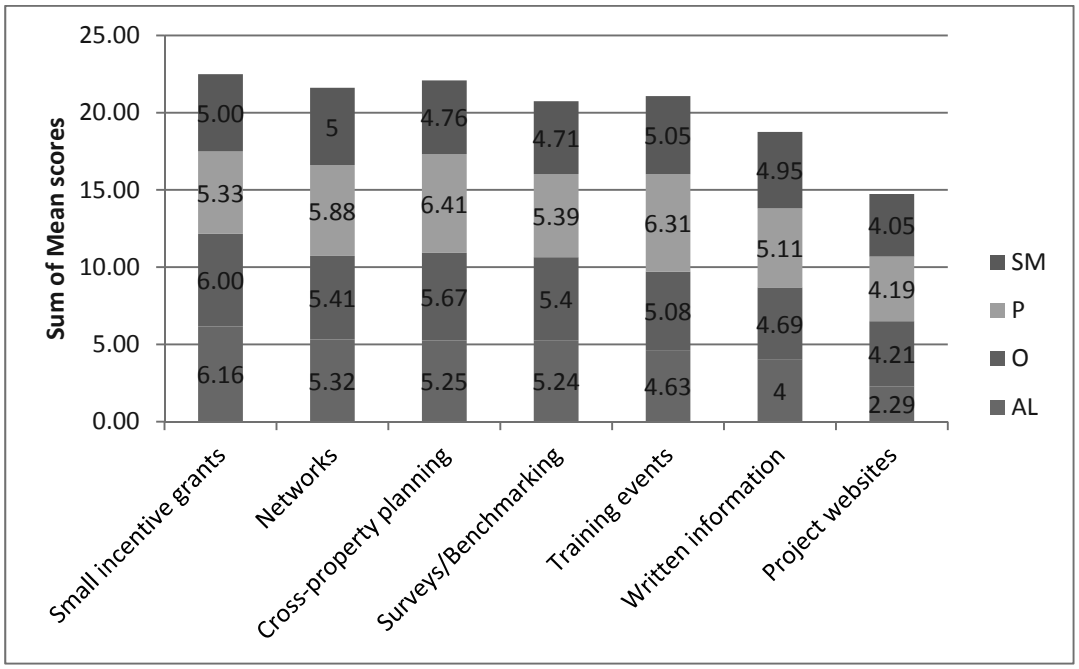


Figure 7. Usefulness of the various socio-cultural approaches of the CiL project to participants

Significant differences in perceived usefulness of the various project approaches between the different interviewee groups occurred for **cross-property planning**, **training events** and **websites**[4]. While the CiL partners ranked cross-property planning groups and workshops and other training events most highly, actively involved landholders and the staff from involved organisations favoured small incentive grants, cross-property planning and the benchmark surveys. Those who participated in only one or two events whose responses were collected using the on-line Survey Monkey have not been included in comparative statistical analysis, but their averaged (mean) scoring of the usefulness of the various approaches appears more uniform across the various social-cultural aspects than that of the more actively involved groups.

Opportunities to build relationships with other participants whether through an initial familiarisation bus trip for project partners, shared participation in workshops and other events, or through repeat visits by project partners to participating properties were seen by several participants as very useful.

Two-way learning and the commitment of several of the project partners to ensure this happened were also valued by several participants. Accessibility of several CiL partners was mentioned several times. Actively involved landholders also mentioned the benefits of direct access to the scientists as something that was useful to them and to the credibility of the project. This view is perhaps best captured in the comment of one landholder:

[4]Differences between actively involved landholder participant, involved organisation staff participant and CiL partner mean usefulness scores for cross-property planning ($F(2,36) = 4.4499$; $p = 0.0188$), training events ($F(2,39) = 8.1177$; $p = 0.0011$) and project-related websites ($F(2,33) = 5.4537$; $p = 0.0090$) were statistically significant.

"Being introduced directly to the CiL team of researchers and having direct on-ground interaction intensifies the understanding between farmers and scientists in a real-world context which is more meaningful than isolated theory being imposed upon practitioners or landholders".

This valued direct access does, however. Present challenges to the scaling-up of projects such as this CiL project to influence the majority of landholders.

During the interviews, several landholders commented on the fact that they do not generally access or rely on websites, while some project partners commented on the lack of adequate maintenance of the CiL website – in part reflecting a lack of early implementation of an effective communications plan.

In considering the appropriateness of the overall approach taken by the CiL project, CiL partners were asked whether there were other ways (besides the multi-partner team approach, offering a diversity of components designed to engage landholders in shared learning directed to better integration of conservation and production in rural woodland landscapes) in which the objectives of the CiL project could have been achieved. Responses were equally divided (10 'Yes', 10 'No"). Most of the CiL partners who felt that other approaches could have been taken were seeking what might be seen as 'fine-tuning' of the model used, rather than adopting a radically different approach. It was repeatedly mentioned that it was important to have a coordinated and collaborative effort involving different partners bringing different expertise and the provision of different opportunities for involvement.

Among those who saw opportunities for a different approach, the project leadership, component aspects and timing were the main focus, as reflected in comments that:

"One mature organisation could have done the project by sub-contracting other expertise, but that is unlikely to have achieved the benefits that have come from CiL and the partnerships built".

"In retrospect, the landscape-scale change could have been achieved just by working with the cross-property planning groups. We certainly needed to include the agriculture, the environment and the people and other programs such as Market Based Instruments or Ecosystem Services approaches would not have achieved that".

"Full devolution of funds to community groups could have been considered, but they would then have had to buy in multiple forms of expertise".

"We may have had a different approach if we had started with landholders, then involved CMAs then brought the agencies in to provide technical expertise and support".

"The project should not have started out so big in its early stages – better to focus on core agencies and to narrow the landscape on which it focused, then to grow it from there once under way".

That those at the core of the CiL project generally saw the model used as appropriate is captured in comments such as:

"Other approaches would have addressed only the NRM aspects of management in Box Gum Woodlands. The CMAs don't have the partnering capacity CiL had with Landcare in the lead role. If one government agency managed it would have been more difficult to get the agencies together working in a collaborative way".

"Suggestions that Market Based Instruments might have been an option are not valid since they would not have achieved the cross-agency changes and the social changes".

Governance of the CiL project

In a project of the scale and complexity of the CiL project, sound governance arrangements are an important factor both in success in meeting project objectives and in the efficient use of resources invested in the project. In evaluating the socio-cultural aspects of the CiL project, 'governance' has been used to include the broad spectrum of arrangements needed for sound control and direction of the project and include authority, accountability, stewardship, leadership, project management, management style, direction and control. As outlined on pages 19-20, while there were some issues about providing early leadership and direction, there was no suggestion of mismanagement.

Responsibility for good governance rests primarily with the managing body, which may adopt one of several different approaches, each with varying degrees of collaborative decision-making power, to the control and direction of the organisation or project. As discussed earlier, the CiL project, having agreed in its formative stages to adopt a shared decision-making approach, then faced challenges in implementing this while also respecting the accountability generally attached by funding bodies to the 'lead' organisation.

As part of the socio-cultural evaluation, members of the CiL Steering Committee and other members of partner organisations were asked to assess several aspects of the governance of the CiL project.

Both during interviews and in their evaluation scores, partners with only a very few exceptions, recognised and acknowledged the challenges faced by the CiL project in relation to governance arrangements especially early leadership and project management style.

These concerns are reflected in the evaluation scores (rated on a scale from 1 = not addressed at all through to 7 = extremely well addressed) at the start of the project, as presented in Figure 8 (and Table A4.6 in Attachment 4). These results are in response to a question on how well each of several aspects of governance were addressed at the start of the project and as it progressed towards completion.

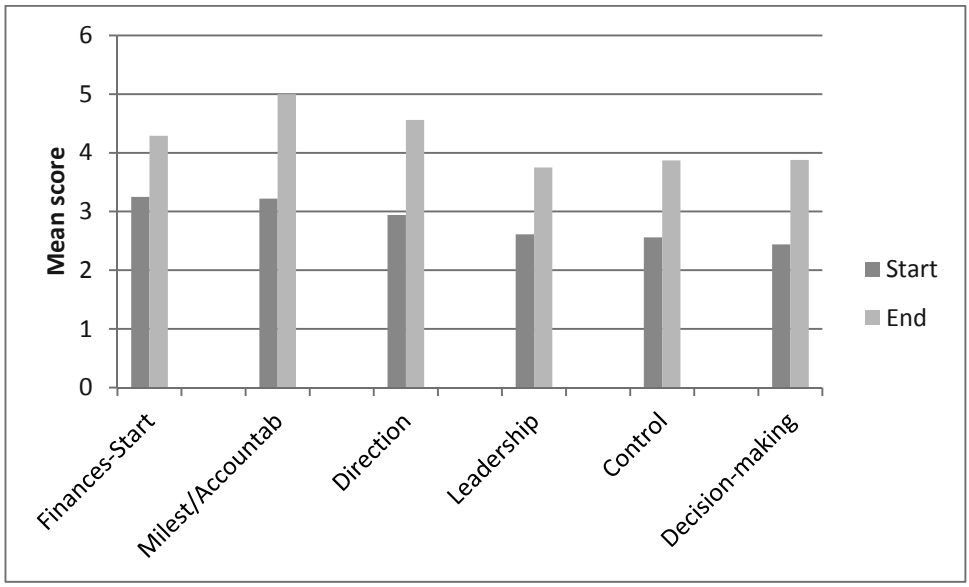


Figure 8. CiL project partner Mean scores for various aspects of governance at the beginning and towards the end of the project

Mean scores for each of these aspects of governance improved during the life of the project. With the exception of financial accountability and project leadership, the perceived improvements were statistically significantly[5]. These improvements appear to reflect the management changes made after partners came together early in the project, evaluated their performance, and adopted a modified governance structure and management style. These changed management arrangements introduced early in the life of the project embraced a more "whole of project" team approach thus improving the shared understanding, trust and mutual respect among the partners. Comments from project partners interviewed reflect a lack of adequate initial planning and preparatory work in relation to team-building and development of shared understanding and in several aspects of the project's management arrangements.

Financial accountability was seen to lack systems and procedures in the early stages, with templates and clear reporting procedures identified as necessary. In some instances, this was seen as contributing to delays in payment to project participants.

The MERI development process that took place after funding and before implementation was seen as confusing and flawed. Subsequently the MERI working group re-visited the MERI and clarified the situation. This early confusion and lack of clarity around the projects goals and objectives and the roles of various project partners in achieving those goals was rectified by the management changes made in the early phases of the project.

Project partners identified a failure to invest time in "*real project planning… with the Steering Committee making input to project component design*". As a consequence, there was a lack of shared

[5]Using paired t-tests to assess significance of the changes from project start-up scores to the present: financial accountability t (28df) = 1.9282, p>0.05, NS; accountability for milestones t(32df) = 3.5536, p<0.005; project direction t (32df) = 3.2621, p,0.005; leadership t (32df) = 1.2816, p>0.1, NS); project control t (32df) = 2.6579 (32df), p,0.05; decision-making t (32df) = 2.8645, p<0.01)

clarity of project direction in the early phases. This was exacerbated by a lack of standard operating procedures to guide all project partners in their contributions.

Early leadership of the project was a recurring subject of comment by the project partners. In particular, the Project Manager initially appointed was reported by project partners to have not worked effectively with the team and management was seen as being under-skilled and under-resourced. It appeared that he was operating to a less collaborative model than anticipated by project partners.

Landcare NSW, as a volunteer-based organisation, was also seen to need considerable support from project partners in fulfilling its leadership role. As a recently re-formed organisation at the time the CiL project commenced, this is perhaps not surprising, and all the more so given the project partner commitments to shared decision-making. Uncertainties about roles and responsibilities and lack of transparency in operating procedures in the early phases of the project made such support more difficult.

The tensions between expectations of a 'lead organisation' as identified in the project documentation and contracting, and the desire for a collaborative team leadership of the CiL project remained unaddressed in the early stages of the project and added to growing tensions.

These difficulties are encapsulated in the comment by one of the project partners that:

> *"It wasn't clear at first who was the leader – there was no-one in control or willing to take that role and the project did need an overall structure to bring it together".*

A recognition by core project partners of the impacts that these issues were having on the whole of the CiL project led to an externally facilitated project team workshop, a subsequent restructure and changes to the management structure and management style. The Project Manager was replaced with a small Management Team led by Landcare NSW. This was embraced by all CiL partners, with representatives forming operations, communication, and MERI and administration teams. As a consequence all governance indicators were seen to have improved considerably.

Project partner comments at interview included:

> *"Leadership within Landcare NSW is now under a firm and steady hand… She brings to the task a steady management hand and an ability to work with people.*
>
> *There was a big shift once the early problems were finally addressed, then we made good progress towards active, adaptive management".*

The recognition of challenges being faced, the changes made within the early stages of the project and the improvements in governance (as broadly defined here) provide significant learnings for complex multi-partner projects in which people and organisations from different backgrounds and cultures come together to achieve shared outcomes. The importance of clarity of communications, shared understanding of goals and expectations, clarity around the governance model and management structures being adopted and the implications of that for decision-making and accountability, and agreed documentation of administrative procedures all become enhanced in such situations.

'Best practice'

Each of the twenty CiL partner representatives interviewed as part of the socio-cultural evaluation of the CiL project was asked to score the extent to which the project had achieved 'best practice'. Assessed on a scale from 1 = not reflecting best practice at all through to 7 = fully reflecting best practice, participants provided a score averaging 5.11 (± 0.90).

Much of the discussion about this question focused on the extent to which the project was adopting an innovative approach to multi-stakeholder conservation management in rural landscapes by integrating conservation and production across the landscape.

While several partners interviewed commented that because the project is not yet completed, it was difficult to fully assess this aspect, the general perception was of a project defining new aspects of "best practice in adaptive co-management for change".

Several partners commented that 'best practice' had not been defined for this project, but rather that it was being identified through the project.

> *"Having, sharing and combining expertise and knowledge across the agencies and, together, presenting training and workshops that propose and demonstrate best practice in production and biodiversity conservation as twin goals".*
>
> *" Best practice in CiL was about being diverse and inclusive in our approaches and we've done that well. We've achieved partnerships (learning from each other), rather than just collaboration".*
>
> *"The CiL project itself, by its nature is pioneering and developing best practice. The access of the project to partners and associates who are highly involved in research and research collation has meant easy access to latest thinking".*
>
> *"CiL is a multi-faceted and unusual project, so 'best practice' has not been identified for what it sought to do. We are putting that together through this project. As an intervention in a complex socio-economic system we did pretty well. It was both participatory and adaptive".*

In addition to the socio-cultural aspects of 'best practice' in the CiL project, several project partners also commented on the important contribution of integrating conservation and rural production.

Efficiency of resources use in the project

All participants in the CiL socio-cultural evaluation were asked to what extent they thought the CiL project had obtained good value for money. One-third (27/80) of interviewees and two-thirds (30/45) of Survey Monkey respondents did not feel they had sufficient information to answer this question. Among those who did respond, interviewees rated this quite highly, with an average 5.62 (± 1.24) on a scale from 0 = poor value to 7 = extremely good value, while Survey Monkey respondents rated the value for money 4.93 on the same scale. There were no statistically significant differences (see Figure 9) between the groups in their perception of value for money obtained from the CiL project.

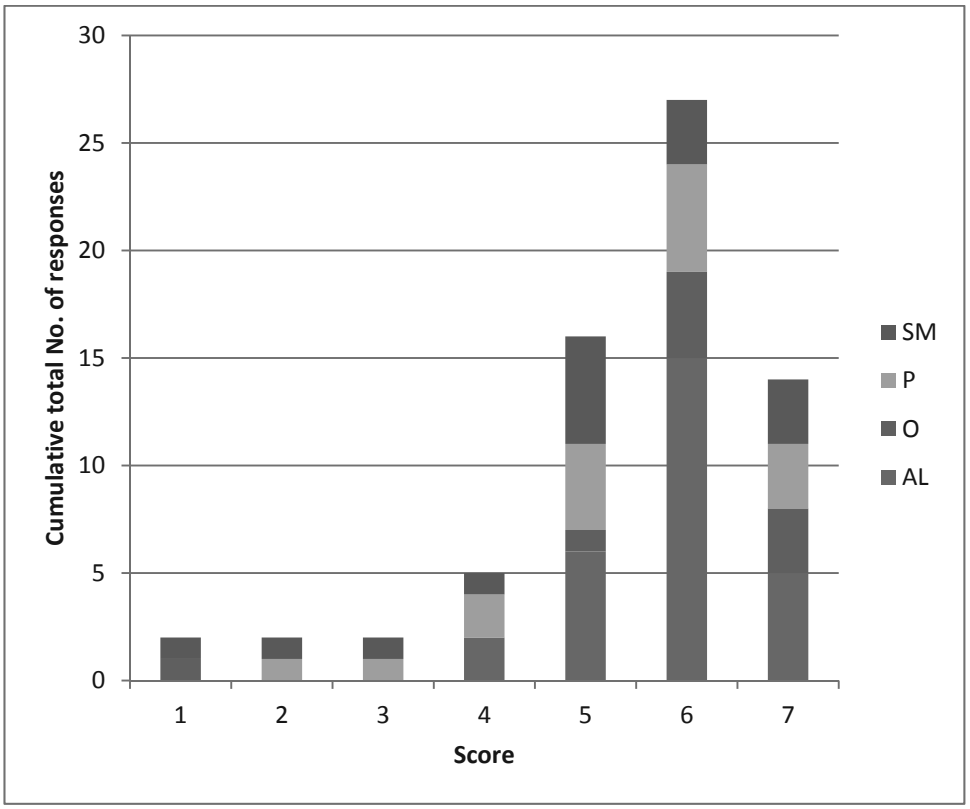


Figure 9. Value for money of the CiL project as perceived by different participant groups

Increasing efficiency of the CiL project

Sections on Maximising impacts of the CiL project (p.20) and on Governance of the CiL project (p.24) largely address these issues.

Sound project management and governance structures would have been assisted by an understanding of the capabilities and limitations of each partner organisation. Knowledge of existing templates and operating procedures relevant to the CiL project (e.g. small grants processes and contracts) could also have increased efficiency. Early investment in ensuring that the project partners have a shared understanding of the project goals and their own roles and responsibilities in achieving those goals were clearly important underpinnings to increased effective and efficiency in the CiL project.

Since a collaborative management approach was intended, the relationships between the identified 'lead organisation' and actual project leadership needed early attention. In its absence, tensions escalated and partner time was used dealing with this aspect in the early phases of the project. This contributed to a slow and at times inefficient early implementation of the CiL project.

An agreed communication plan, addressing both within-project and external communication and assigned responsibility for that communication would have aided efficiency by raising awareness of community engagement with the project and by addressing internal management issues.

The Community Woodland Officers, employed part-time as a direct link to landholders in the target communities, would have benefitted greatly from both increased direction and clarity of roles and responsibilities and from more time available to fulfil their roles.

Despite these challenges, interviewees who commented on the project's efficiency and value for money seemed generally in agreement with the comment of one project team leader that:

> *"All project partners did what they were supposed to do but CiL did not achieve all the synergies that were anticipated. It met the stated outcomes (a minimum) but did not reach its full potential".*

What have we learned about multi-stakeholder partnerships in NRM?

Revisiting the questions posed in the socio-cultural evaluation project brief, key points derived from both quantitative and qualitative data collected during participant interviews and survey results can be summarised as follows.

…..Impact

Participants clearly indicated that in the CiL project had had both direct and indirect impacts on the ways in which they manage rural landscapes for conservation and production. Although the nature of these changes varied both within and between participant groups, many participants indicated both direct and indirect benefits. A majority of those involved responded that they learned new things that they intend to act upon, or that they had already acted on new things learnt through participation in the CiL project.

That landholders saw benefits in being able to integrate conservation management with their production needs and were able to trial different approaches and observe the outcomes, with input from other like-minded landholders were important aspects of the CiL project. Many were already active in integrating aspects of conservation management with their rural production. For these participants, the social and psychological value of recognition and affirmation received through the CiL project were a recurring theme. These findings align well with factors identified by Greening Australia (2007) and Pannell et al. (2006) as being important to the adoption of NRM practices.

…..Appropriateness

Although landholders were widely seen as the major intended beneficiaries of the CiL project, several other groups were also identified as beneficiaries – not least the broader community and the landscapes that support Australian agriculture. Irrespective of which target audience was identified, the project scored strongly in its perceived alignment with the needs of those beneficiaries.

Having available several mechanisms through which rural landholders could engage with the project was an important aspect of the CiL project. While the cross-property component was best represented among the interviewees, comments also indicated an appreciation of, and benefit from the other components.

The bringing together of agencies with different cultures and priorities and the ways in which the agencies involved interacted with participating landholders and scientists was also an innovation that proved to be valuable to all participant groups. Feedback suggests that the CiL project has

invigorated some local Landcare groups, strengthened community networks and changed the way in which the NSW Department of Primary Industries integrates natural resource management and agricultural production.

Adopting a flexible and adaptive approach, both to the collaborative management of the project and to its on-ground implementation were not only favourably viewed by landholders, but are also critical to the ability of the ongoing success of the project. This is particularly evident in the move early in the project from a Project Manager to a Project Management Team, involving representatives from three working groups within the overall CiL Steering Committee.

While the incentive grants made available to landholders participating in the project were recognised by project partners as being small in amount, they remain highly valued by a majority of the landholder recipients.

…..Effectiveness

Landholders, organisation staff and project partners were all seen to have increased their knowledge and skills as a result of their participation in the CiL project.

Among those involved, the CiL project mix of involvement mechanisms, flexibility to accommodate differing landholder needs, and collaborative design, were all seen as positive aspects of the project and its delivery.

When asked whether there were other ways in which the project outcomes could have been achieved, most project partners indicated a need for fine-tuning of the existing model, with its different opportunities for landholders to be involved, the flexible adaptive management approach and a strong emphasis on collaborative management rather than the adoption of a totally different approach. This result is important in light of the current emphasis of government programs such as Caring for our Country on purchasing outcomes (e.g. market based instrument) approaches to program delivery models – an observation that will be addressed further in Discussion.

…..Efficiency

While many of the project participants felt ill-equipped to assess the overall value for money resulting from the CiL project, those who did respond were generally strongly positive in their responses. However, it is difficult to place a value on such social outcomes such as the often-mentioned impacts of the CiL project in revitalising local Landcare groups and other NRM groups in local communities.

Results of the socio-cultural evaluation of the CiL project highlight the importance of early investment in building shared understanding and trust within the partnerships needed to deliver complex inter-disciplinary projects seeking changed conservation management behaviour in agricultural production landscapes.

Sound governance arrangements and appropriate management styles are critical to the efficiency and effectiveness of such large inter-disciplinary projects. A majority of the challenges faced in the CiL project can be traced back to absence of precedents, models and templates to assist in developing governance, project management and coordination arrangements in its early phases.

Lessons learnt: Beyond the readily measurable

It is important to consider aspects beyond the impact, appropriateness, effectiveness and efficiency as they can be measured and reported on in a structured process such as the MERI framework. The lessons learnt have the potential to benefit the design and implementation of future multi-stakeholder projects.

The importance of multi-stakeholder, inter-disciplinary partnerships in managing landscape scale projects has become increasingly recognised in recent years (see, for instance Lovett et al., 2008; Lindenmayer et al., 2008; The Nature Conservancy's Conservation Action Planning approach; Salt & Lindenmayer, 2008); Worboys & Pulsford, 2011; Wyborn, 2011; M. Williams, pers. comm.).

As the 2008 Bowral Checklist for ecological management of landscapes identified (Lindenmayer et al., 2008), these considerations "are often overlooked by many [other] researchers as well as managers in developing landscape plans".

Explicit inclusion of a socio-cultural component in the CiL project has provided information that highlights some of the key aspects of human interaction that are important to landscape scale projects especially those in agricultural production landscapes.

A progress workshop involving all members of the CiL project, held during the early stages of data analysis, provided an important opportunity for the project team members to reflect on lessons being learnt from the project and to consider the socio-cultural aspects most relevant to the completion of the project, to the life of CiL into the future and to the design and management of other inter-disciplinary projects seeking to manage rural landscapes in ways that bring together conservation and production outcomes.

The key issues identified at that stage of the project are at Attachment 5.

Discussion & observations for the future

In discussing the results of this socio-cultural evaluation of the CiL project, the authors have sought to identify those aspects of the project that will add strength to any future phase of this project, as well as to other multi-stakeholder projects seeking changed management in agricultural landscapes through collaborative, adaptive approaches.

Why a socio-cultural evaluation

As noted in summing up what we have learned from the CiL project and the evaluation of its socio-cultural aspects, there is, in recent years, a growing recognition of the importance of multi-stakeholder, inter-disciplinary partnerships in managing at a landscapes scale. However there remain substantial gaps between this recognition and the real inclusion of socio-cultural considerations in the design and implementation of these broad, landscape-scale projects, the majority of which are seeking to integrate conservation and production in rural landscapes.

Pannell et al. (2006) identified a number of factors that are likely to assist in maximising the adoption of conservation practices by rural landholders. Key among these were the need for "a high relative advantage" to the landholder over what they are currently doing and an ability to trial the new approaches being proposed; encouragement of participatory approaches; "looking constructively at what landholders are already doing"; and careful consideration of the economic, social and psychological issues surrounding landholder decisions along with the biophysical factors involved.

Cox's post-event evaluation of the CiL 'extension' activities lends weight to the need for both landholders to see an advantage over what they are currently doing and the importance of building on what they are already doing.

The importance of affirmation and confirmation of what landholders adopting new approaches are doing is a recurring theme in the feedback received from those participating the CiL project. Those who adopt new approaches appreciate having these approaches heard and gaining feedback from like-minded landholders and from others with relevant technical or professional expertise. As noted earlier, this aligns well with Greening Australia's (2007) work on adoption of NRM practices, but also with the findings by Ison & Russell (2000) that being listened to is important in generating and sustaining landholder enthusiasm.

Ecker et al. (2011) have taken this further in their study of drivers of practice change in land management in Australian agriculture, and have highlighted the greater importance of "financial benefits and environmental factors" over "personal motivations and availability of support" for those among whom change is sought. To the extent that landholders rated even small incentive grants highly in the CiL project, the importance of financial benefits aligns with Ecker's findings.

The CiL project provides real world application of these and other aspects of how to get the best out of complex projects that are seeking to involve people from numerous backgrounds and disciplines in an adaptive approach to changing management across landscapes. As identified by the

CiL project, integration of conservation and agricultural production has a central role to play in the success of these projects, which are environmentally, socially and economically driven.

The 'Realist' evaluation approach

As part of the background to this socio-cultural evaluation of the CiL project, CiL partner, Dr Peter Ampt (Sydney University) suggested that the 'realist' evaluation approach developed by Pawson and his colleagues (see Pawson & Tilley, 2004) may provide a useful framework for this work.

The Realist evaluation approach seeks to explore 'What works for whom in what circumstances'. This approach was used in designing the project interview questionnaire and the related on-line survey. It is within this framework that the majority of results in this report are presented separately for landholders (both those who were more actively involved in the project and those whose participation was generally only in one or two CiL events), those organisation-based staff (both in NSW government agencies and in community-based delivery organisations such as Landcare) who had an active role in some aspect of the project, and those who were core partners in the project. As demonstrated in the results presented above, the collaborative adaptive management approach adopted by the CiL project generally worked well for a majority of participants, whether landholders, government agency staff and the project team members. However within-group variability frequently masked any potential differences between these participant groups. Visual inspection of results from landholders involved in the different elements of the CiL project (cross-property planning, the benchmarking study etc) suggests that there were no significant differences between these sub-groups.

The MERI process and socio-cultural evaluation

As the project brief for this socio-cultural evaluation highlights in its opening sentence, "The project partners agreed that it was important to capture social and cultural aspects of the project, over and above what has been codified in the MERI" (The Monitoring, Evaluation, Reporting and Improvement reporting required as part of the CiL project's funding contract with the Australian Government).

This evaluation report seeks to address that need. Through project partner interviews and workshops with the project team and the evaluation Steering Committee it is clear that the MERI process, at least as defined at the beginning of the CiL project, did not provide a comprehensive framework to capture the richness of this important social and cultural information. It is hoped that the lessons learned from this socio-cultural evaluation, will help to guide future MERI requirements for landscape-scale projects that are seeking to improve conservation outcomes through better integration with agricultural production.

Conclusions and observations guiding inclusion of socio-cultural elements in future projects

While an evaluation of the socio-cultural aspects of a complex multi-stakeholder project such as the CiL project might not be expected to lead directly to changes in on-ground outcomes, there are a number of observations relevant to future planning for and implementation of partnership projects seeking changed management in rural production landscapes.

The results of this socio-cultural evaluation of the CiL project show wide-spread positivity of participants about the project, as reflected in relatively high mean scores for most socio-cultural aspects assessed. Aspects that increased acceptance of the project included:

- The project's commitment to integration of conservation and production and the bringing together of people from different background and different agencies to achieve that outcome (an inter-disciplinary approach leading to the development of a coherent story shared among participants, irrespective of their backgrounds or work situations)
- A project design that provided a diversity of activities enabling different points of engagement by landholders (flexibility enabling trialing of different approaches - a real commitment to the practice of adaptive management), and with that
- Providing opportunities for direct access both to sound science and to opportunities for peer-to-peer learning.

The importance of building trust & shared understanding among the project participants, and in particular among the project partners is a recurring theme, especially among the project partners. The scale and complexity of the CiL project (and many other inter-disciplinary projects addressing adaptive management in rural landscapes) and a recognition of the diversity of knowledge, skills, values in such projects indicates a need for project development timeframes that enable this shared development.

Specific governance issues were clearly a deficiency of the CiL project, especially in its early stages. In particular, issues relating to project leadership, the expectations placed on the organisation identified as 'lead agency' and the capacity of that organisation presented real challenges for the CiL project management team. The success of a mid-term restructure of the CiL project's governance arrangements indicates the value of a co-management arrangement in these large and complex projects. However, if co-management is to succeed, it is important that role, responsibilities and operating procedures are clearly understood and shared among the partners. Even so, co-management requires recognition of final accountability based on contractual arrangements.

Brown's collective learning cycle for transformational change (2010), developed through case studies in a broad range of multi-stakeholder projects striving for a more sustainable future, has much to offer CiL and other similar projects. Brown's learning cycle or spiral places strong emphasis on bringing together the different types of knowledge held by individuals, communities, technical specialists, policy personnel and those who have a holistic view of the complex problems involved in achieving sustainable outcomes. Beginning with an agreed vision developed through a shared process, moving on to identify the facts surrounding the project, jointly developing possible new futures and putting those futures into action with well-defined action plans, the cycle quite closely resembles both the Conservation by Design community action planning introduced by The Nature

Conservancy and the Connectivity Conservation Management Framework developed by Worboys & Pulsford (2011) for the World Commission on Protected Areas.

These recommendations emerging from the socio-cultural evaluation of the CiL project are reported to align well with principles for landscape-scale biodiversity management developed by a recent national workshop of specialists (M Williams, pers. comm.). At a time when government policy and programs place emphasis on the use of market-based instruments to 'purchase' conservation outcomes in rural landscapes, the inclusion of a strong socio-cultural component in project design and management appears to provide a complementary pathway, which if well planned can achieve community participation and commitment. While the biophysical outcomes generally labelled as 'ecosystem services' may be purchasable, the CiL project has highlighted the importance of human interactions in developing and sustaining the required pool of motivated landholders. Landholders already active in integrating conservation and agricultural product repeatedly highlight the value of affirmation and confirming of their actions to continued effort. The adaptive, interactive approach adopted by the CiL project is seen to have contributed significantly to the revitalisation of some local Landcare groups and to the energising of community networks and the benefits likely to result from a greater integration of NRM and rural production within State agencies (especially Department of Primary Industries) may be profound and long-lasting.

Although a large and challenging project, the current CiL project should be seen as a pilot project which has made a significant contribution to the definition of 'best practice' in multi-stakeholder, inter-disciplinary projects working adaptively for the integration of conservation and production in rural landscapes. This raises some challenges for the future. The time, effort and resources already invested and the outcomes to date raise expectations of continuity. The investment in building the social infrastructure necessary for success is now in place provides a sound starting point for future work.

In summary, the CiL project demonstrates the importance of socio-cultural, as well as modest financial, incentives in building on-ground capacity to integrate conservation and production outcomes. Affirmation of those who are 'pioneers', a facilitated multi-disciplinary approach that brings together technical and experiential knowledge, and an investment in team-building among those who bring to adaptive, collaborative projects a valuable mix of skills and knowledge are all crucial to success. While the full impacts of the CiL project cannot yet be evaluated, revitalisation of local community networks and changes in government agency approaches may well bring enduring change in the ways that agricultural production landscapes are managed.

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Attachments

Attachment 1: Socio-cultural evaluation steering committee members

Attachment 2: Socio-cultural evaluation brief

Attachment 3: Semi-structured interview questionnaire

Attachment 4: Data tables

Attachment 5: Project team socio-cultural reflections at evaluation progress workshop

Attachment 1:Socio-cultural evaluation steering committee members

Peter Ampt, Faculty of Agriculture, Food and Natural Resources, Sydney University
Tony Cox, CiL Project Officer, NSW Department of Primary Industries
Rebecca Cross, PhD candidate, University of New South Wales
David Freudenberger, Greening Australia
Toni McLeish, Grassy Box Woodlands CMN Officer, NSW Office of Environment &Heritage
Lorraine Oliver, NSW Office of Environment & Heritage
Peter Orchard, NSW Department of Primary Industries
Mandi Stevenson, Chair, Landcare NSW

> **Note:** The group which oversaw the socio-cultural evaluation was a sub-set of the broader CiL project Steering Committee, which included one or more representatives from each of hjte project partner organisations.

Attachment 2: Evaluation project brief

Communities in Landscapes: Socio-cultural evaluation brief

Prepared by Peter Ampt

The Project partners agreed that it was important to capture social and cultural aspects of the project, over and above what has been codified in the MERI (Australian Government's Monitoring, Evaluation, Reporting and Improvement framework). The original plan for the evaluation was interrupted following the withdrawal of the CiL PhD student due to health issues in June 2011. Following discussions amongst the convenors group (6 July) and at the Whole of Project meeting (10 August) the project decided to sub-contract the evaluation to a suitable consultant. Peter Ampt was given the task of coordinating the selection of the consultant and liaising with the consultant with input from CiL partners David Freudenberger (Greening Australia), Peter Orchard (NSW DPI formerly I&I NSW) and Lorraine Oliver (OEH formerly DECCW).

The project is seeking proposals from suitably qualified consultants to undertake the evaluation. We request that the evaluation be conducted in such a way that the project remains in touch with the process and has opportunity for input as the evaluation proceeds. This would be negotiated at the outset to ensure that it doesn't overly complicate the evaluation. Some background information, a suggested research framework and some suggestions about methods are included in this document.

As a starting point we expect that the proposal will address the following key evaluation questions contained in the Project MERI. Table 2 (below) describes the likely participants in the evaluation.

Impact

1. To what extent were changes directly or indirectly produced by the project's interventions?
2. In what ways and to what extent has the program or initiative contributed to changing asset condition and management practices and institutions?
3. What, if any, unanticipated positive or negative changes or other outcomes have resulted?

Effectiveness

4. To what extent did the project contribute to Caring for our Country outcomes?
5. To what extent did CiL improve knowledge and skills of CiL partners, NRM practitioners and BGGW collaborators
6. To what extent have the planned activities and outputs been achieved?
7. Are current activities the best way to maximise impact or are there other strategies that might be more effective?
8. To what extent is the program attaining, or expected to attain, its objectives efficiently and in a way that is sustainable?

Appropriateness

9. To what extent is the program aligned with the needs of the intended beneficiaries?
10. To what extent does the program reflect recognised best practice processes in the field— e.g. the type, level and context of investment and associated activities?

Efficiency

11. To what extent has the program attained the highest value out of available resources?

12. How could resources be used more productively and efficiently?
13. What could be done differently to improve implementation, and thereby maximise impact, at an acceptable and sustainable cost?

Some of these questions have already been partly addressed by other components of the project as summarised in the table below. Information from these components will be made available to the consultant.

Table 1

Activity	Description	When
Participatory Appraisals	Interviews of land managers on 3 sites and analysis over 3 days by team	Complete – report published
Participation in CiL activities - MERI	Partners contributing to ongoing data collection on participants	Throughout project
Benchmark survey of innovators	Interviews and on ground measurements of recognised innovators who have successfully implemented a system that regenerates landscapes and businesses	Complete – report for each site published, overall report draft submitted
Participant observations	Rebecca Cross (current PhD student) conducting interviews and making observations of innovators	Throughout project-summary submitted
CiL evaluation	Was to be undertaken by CiL PhD student who has withdrawn after 12 months. Propose employing consultant.	Last 6 months of project

Process for selecting the consultant

15-18 August 2011 Prepare brief and approach suitable consultants

19 August 2011 Circulate brief and key project documents to suitable and interested consultants

2 September 2011 Deadline for Evaluation Proposals from consultants

4 September 2011 Successful consultant informed and provided with draft contract

4-11 September 2011 Negotiation period

11 September 2011 Contract finalised and signed

Evaluation proposal

Key personnel

Identify key personnel, describe their role in the project and provide evidence of their suitability to carry out the project.

Description of proposal

Describe how you propose to carry out the research. We expect that the evaluation will involve contact with the following groups of people associated with the project (Table 2).

Table 2

Stakeholder Level	Possible evaluation activities
CiL steering committee, partners and staff	Interviews, facilitated workshop session 2-3 November
Agency stakeholders such as OEH, DPI and CMA staff who have been directly involved with CiL activities	Interviews
Landholder participants who have been directly involved in key CiL activities such as the Participatory Rural Appraisals, Innovators benchmarking study, Cross Property Planning groups, Small Grants Program	Interviews, focus groups at field days (dates TBC)
Landholder audience – attendees at CiL events	Quantitative mail, online or telephone survey

Each level would ideally have a question proforma which the consultant would devise in consultation with CiL with some common questions and some questions specific to each level. Ideally each interview should have a response transcribed next to each question, a separate summary for each level, identification of themes that emerge from the interviews that cut across levels, a description of what the data tells us about each theme, then key findings and recommendations. A plan for the involvement and briefing of key Australian Government Caring for Our Country personnel should be included.

Proposal timeline

Here are some suggested milestones for project that will allow us to deliver according our contract with Caring for Our Country. Some movement may be possible.

11 September 2011	Contract signed and work commences as soon as possible with consultations with partners and finalisation of the methodology.
2-3 November 2011	Report progress to Whole of Project meeting and facilitate session at that meeting
9 December 2011	Completion of data collection, report preparation workshop

3 February 2012	Submit draft report
17 February 2012	Receive responses to draft report
17-24 February 2012	Australian Government Joint team briefing period (to be confirmed)
2 March 2012	Submit final report

Proposal budget

The proposal should include an indicative budget in the range of $35-65k depending on your proposal. The detail in the budget will be finalised in the negotiation period prior to signing the contract.

Attachment 3: CiL evaluation survey

Communities in Landscapes (CiL): Evaluating the social & cultural aspects of the project

As outlined in the Participant Information Statement provided to you in this package, this phase of the 'Caring for Our Country' funded Communities in Landscapes (CiL) project is designed to evaluate what aspects of the project worked for whom and in what context. Your input to the evaluation of this project will be an important part of that evaluation and will assist in developing better natural resource management research and extension programs for rural and regional Australia into the future.

Community Solutions (the consultants working with Sydney University's Peter Ampt who is one of the partners in the CiL project) would like to do a telephone interview with you to discuss the questions in this survey and to get your responses to these and related questions. By talking through your answers we can gain a better insight into your views about the CiL project. The questions that we will be discussing appear below. You may wish to think about your answers before the interview, but we'd prefer to complete the survey when we are talking with you rather than you completing it ahead of the interview.

Heather Pearce from Community Solutions will contact you to arrange a mutually convenient time for your telephone interview, which will take around 30-45 minutes to complete. If you have any questions about the interview after you've received this survey, you can contact Heather on 02-9818 2684 (or contact Community Solutions Director Dr Judy Lambert on 02-9948 7862).

During each interview, Heather or Judy will have in front of them a blank copy of the survey sheet that they will complete. As the interview proceeds they'll write notes on your answers to the questions that they ask you (roughly along the lines of those below). The completed survey sheet will then be sent to you for checking to ensure that we've accurately reflected what you said. This will necessarily be a synthesis of what we heard rather than a verbatim transcription of what you said.
In preparing the report on this evaluation, we will respect your privacy by removing any information that identifies you as an individual.

In order to meet the tight timelines that exist for completion of the whole evaluation, we'd appreciate receiving your confirmation of the completed survey notes (by email to heather@sydney.net or by contacting Heather by phone on 02-9818 2684) within 7 days of you receiving it.

Thank you for your time and for agreeing to participate in this survey.

Interview date & time: / / **at** …….

Survey No. _____ Interviewer initials: _____

The Communities in Landscapes (CiL) project has been active in the Box Gum Grassy Woodland areas of NSW for the past two years.

1. Please tell us the names of all the CiL project components you are aware of?

……
……
……
……

2. With regard to your **involvement** with the CiL project,

- ❑ did you attend a CiL event?
- ❑ did you receive a CiL small grant?
- ❑ were you a member of a CiL cross-property planning group?
- ❑ were you a benchmark study participant?
- ❑ were you interviewed in CiL's Participatory Rural Appraisal (interview survey)?
- ❑ were you an Agency staff member working with CiL personnel?
- ❑ were you a CiL project partner?
- ❑ were you a CiL Steering Committee member?
- ❑ Did you have any other type of involvement?

3a. Thinking back to your decision to get involved in CiL activities, **how important** were each of the following factors? (Please score each on a scale from 1 = not at all important to 7 = extremely important):

	1 2 3 4 5 6 7
CiL adopted a shared learning approach to land management	I---I---I---I---I---I---I
CiL had the flexibility to allow different people to trial different methods	I---I---I---I---I---I---I
CiL was about integrating conservation and production	I---I---I---I---I---I---I
CiL brought together people who cared about sustainable land management	I---I---I---I---I---I---I
CiL enabled me to interact directly with good science	I---I---I---I---I---I---I
CiL helped me to accept and manage unpredictability	I---I---I---I---I---I---I
CiL helped me to adapt to change	I---I---I---I---I---I---I

3b. Were there other factors that made you decide to get involved in CiL? **Yes / No**

If so, please tell us briefly what they were.

……
……

3c. How important were these other factors? (Please score each on a scale from 1 to 7, as for the previous factors) ……

4. Tell us briefly in your own words what you think were the **main features** of the CiL project?

……
……
……
……

5a. The CiL project included a range of different elements. How **useful** were each of the following to you? (Please score each on a scale from 1 = not at all useful to 7 = extremely useful. If you were not involved with a particular aspect of the CiL project, we'll mark that N/A = Not applicable).

		1 2 3 4 5 6 7
Fact sheets, newsletters and other written information	N/A	I---I---I---I---I---I---I
CiL and/or Box-Gum Woodland website	N/A	I---I---I---I---I---I---I
Training events (e.g. flora, frogs, conservation management)	N/A	I---I---I---I---I---I---I
Site surveys, benchmarking study	N/A	I---I---I---I---I---I---I
Being part of a cross-property planning group	N/A	I---I---I---I---I---I---I
Receiving a small incentive grant	N/A	I---I---I---I---I---I---I
Working in networks (e.g. Landcare, CMN, Stipa etc)	N/A	I---I---I---I---I---I---I

5b. Was there anything else from the CiL project that was particularly useful?

……
……

6a. How did your involvement in the CiL project **impact** on your own approach to conservation management? Which is the **most relevant** response?

❑ No impact
❑I learnt new approaches
❑ I learnt new things and I intend to act on what I learnt from CiL
❑I have already acted on what I learnt from CiL
❑ Not applicable

6b. Tell us briefly about the changes in conservation management that happened for you as a result of being part of the CiL project.

……
……
……
……

7a. We are interested in the **integration** of conservation and production and what influences that. How strongly do you think the CiL project has **directly** influenced that integration in your area/district? (Please score on a scale from 1 = no influence to 7 = very strong influence resulting in more integrated management). 1 2 3 4 5 6 7

I---I---I---I---I---I---I

7b. Do you think the CiL project had **indirect** influences on the integration of conservation and production in your area/district? (Please score on a scale from 1 = no influence to 7 = very strong influence resulting in more integrated management) 1 2 3 4 5 6 7

I---I---I---I---I---I---I

If so, please tell us briefly what were those indirect influences.
……
……

8a. The CiL project brought together people from different backgrounds and organisations, many of whom bring with them different cultures, different management needs and different expectations. To what extent do you think this coming together of different state agencies, landholders, community groups, scientists and others has been beneficial to the integration of production and conservation management? (Please circle the most appropriate score, ranging from -2 (significant negative outcomes, through 0 = neither negative nor positive, to +2 = significant positive outcomes).

-2 -1 0 1 2
|----|----|----|----|----|

8b. Please tell us briefly your thoughts on why this was, or was not, beneficial to more integration of conservation and production.
……
……

9a. To what extent do you think the CiL project improved the knowledge and skills within the organisations that were **partners** in the project? (Please rate from 1 = no improvement to 7 = very substantial improvement. If you don't feel able to comment, please tell us you don't know).

1 2 3 4 5 6 7 Don't Know
|---|---|---|---|---|---|---|

9b. To what extent do you think the CiL project improved the knowledge and skills of **NRM practitioners based in government agencies or other organisations (**e.g. in Landcare, CMAs etc)? (Please rate from 1 = no improvement to 7 = very substantial improvement. If you don't feel able to comment, please tell us you don't know).

1 2 3 4 5 6 7 Don't know
|---|---|---|---|---|---|---|

9c. To what extent do you think the CiL project improved the knowledge and skills of **landholders** participating in parts of the CiL project? (Please rate from 1 = no improvement to 7 = very substantial improvement)

1 2 3 4 5 6 7 Don't know
|---|---|---|---|---|---|---|

10a. Do you think there were any **negative** consequences of the CiL project?

Yes / No / Don't know

If so, please tell us briefly about those negative consequences.
……
……
……

10b. Are you aware of any **unexpected** positive consequences of the CiL project?

Yes / No

If so, please tell us briefly about those unexpected positives.
……
……
……
……

11a. Which broad group or groups of people do you see as the **intended** beneficiaries of the CiL project?

……
……
……

11b. To what extent do you think the CiL project aligns with the needs of those intended beneficiaries?
(Please score on a scale from 1 = did not meet needs at all to 7 = met needs extremely well)

1 2 3 4 5 6 7
|---|---|---|---|---|---|---|

12. To what extent do you think the CiL project has obtained good value for money?
(Please score on a scale from 1 = poor value for money to 7 = extremely good value for money)

1 2 3 4 5 6 7 Don't know
|---|---|---|---|---|---|---|

13. Tell us briefly what you think could have been done to increase the impact and outcomes of the CiL project without significantly increasing project costs?

……
……
……
……
……

14. Are there any other comments you'd like to make about the 'people' aspects of the CiL project and its implementation? (Please comment briefly)

……
……
……
……
……

About yourself

15. Which of the following **best** describes your main involvement in rural land use?
(Please select one)

- ❑ Agricultural producer/farmer/grower
- ❑Small farm owner
- ❑Rural lifestyle living
- ❑Living on poor agricultural land, little production
- ❑City fringe block dweller
- ❑Conservation
- ❑Indigenous country
- ❑Other (please comment) ……..
  ……

16. For how long have you been a rural landholder/involved in rural land management?

- ❑0-5 years
- ❑5-10 years
- ❑10-20 years
- ❑More than 20 years

17. Which is your age group?

- ❑Under 25
- ❑26-40
- ❑40-60
- ❑Over 60

18. Are you

❑Male ❑Female

Thank You for taking the time to complete this survey with us.
We will send you a typed up version of our record of your responses within the next 4 days for checking.
We would be grateful if you can let us know **within 7 days of receiving the record** whether you are comfortable with its accuracy or if not, what changes you require. Please reply to Heather Pearce on 02-9818 2684 or email heather@sydney.net. If no reply is received we will assume that you are comfortable with our record of your interview.

Note: If you are a project partner in the CiL project, we'd like to address with you the additional questions that follow.

Survey No. _____ Interviewer initials: _____

For CiL project partner interviewees:

P1. Please tell us briefly what was your/your organisation's main reason for signing on as a partner in the CiL project?

……
……
……

P2a. How well did this align with the outcomes of the MERI process?
(Please score from 1 = no alignment, resulting in complete change of focus to 7 = fully aligned with MERI process outcomes for the CiL project) 1 2 3 4 5 6 7
|---|---|---|---|---|---|---|

P2b. Please tell us briefly what contributed to this score.

……
……
……

P3a. In a project as complex as CiL, the **governance arrangements** (the arrangements put in place for control and direction of the whole process) play a key role but are often challenging. There are several key features of good governance. Thinking back to the start fo the CiL project, please score (on a scale from 1 = not addressed in CiL to 7 = extremely well addressed)

(a) the extent to which each of these factors was addressed **at the outset** within CiL.

Then, thinking about the CiL project as it nears its end, please score

(b) how well each of the aspects of governance **as the project has progressed**.

	(a) Start-up 1 2 3 4 5 6 7	(b) During CiL/Now 1 2 3 4 5 6 7
Financial accountability	|---|---|---|---|---|---|---|	|---|---|---|---|---|---|---|
Accountability for meeting milestones & objectives	|---|---|---|---|---|---|---|	|---|---|---|---|---|---|---|
Decision-making authority	|---|---|---|---|---|---|---|	|---|---|---|---|---|---|---|
Project direction	|---|---|---|---|---|---|---|	|---|---|---|---|---|---|---|
Leadership	|---|---|---|---|---|---|---|	|---|---|---|---|---|---|---|
Control	|---|---|---|---|---|---|---|	|---|---|---|---|---|---|---|

P3b. Please tell us briefly about aspects of governance (or the way that things were organised and managed) that could have been changed for the better.

……
……
……
……
……
……

P4a. To what extent did the characteristics and needs of the CiL project change as a result of interactions during the life of the project? (Please score from 1 = no emerging changes to 7 = very substantial changes during the life of the CiL project) 1 2 3 4 5 6 7
|---|---|---|---|---|---|---|

P4b. Please tell us briefly about these changes.
……
……
……

P5. How well was the CiL project able to accommodate these evolving aspects within the MERI requirements for the project? (Please score from 1 = not at all accommodated to 7 = very readily accommodated) 1 2 3 4 5 6 7
|---|---|---|---|---|---|---|

P6a. How would you rate the **efficiency** of the CiL project in attaining its objectives?
(Please score from 1 = not at all accommodated to 7 = very readily accommodated)
1 2 3 4 5 6 7
|---|---|---|---|---|---|---|

P6b. Looking back over your experiences as part of the CiL project, please tell us briefly what could have been done more efficiently.
……
……
……
……

P7a. The CiL project started out intending to use 'best practice' in the mechanisms it has used? To what extent do you think CiL achieved 'best practice'? (Please score from 1 = not reflecting best practice at all to 7 = fully reflecting best practice) 1 2 3 4 5 6 7
|---|---|---|---|---|---|---|

P7b. Please tell us briefly your thoughts about 'best practice' as it applied in the CiL project.
……
……
……
……

P8a. Are there other ways in which the objectives of the CiL project could have been achieved?
Yes / No

P8b. Please tell us briefly what these other ways might have been and why they weren't used.
……
……
……
……
……
……

Attachment 4. Data tables from which figures included in the main report have been developed.

Table A4.1 Socio-cultural factors influencing participant decisions to becoming involved in CiL

	Interviewees Mean (± SD) (Range)				Survey Monkey respondents Mean (Range)
Influence (N=No. responding at interview & in Survey Monkey))	**Active landholders**	**Involved Organisation staff**	**CiLPartners**	**All interviewees**	**Survey Monkey**
Integrating conservation & production (N=76;30)	5.97 (1.06)	5.89 (1.08)	6.74 (0.56)	6.14 (1.02) (2-7)	5.63 (1-7))
Flexibility to trial (N=69;31)	5.60 (1.06)	5.19 (1.76)	5.89 (1.02)	5.58 (1.25) (2-7)	4.90 (1-7)
People caring about sustainable. land management (N=76;31)	5.50 (1.28)	6.00 (0.79)	5.79 (1.81)	5.68 (1.35) (1-7)	5.48 (2-7)
Shared learning (N=76;31)	5.00 (1.45)	5.47 (1.42)	6.32 (1.46)	5.43 (1.53) (1-7)	5.03 (2-7)
Interaction with good science (N=70;31)	5.08 (1.61)	5.40 (1.12)	5.58 (1.84)	5.29 (1.58) (1-7)	5.61 (1-7)
Help in adapting to change** (n=67;30)	3.24 (2.10)	4.00 (1.94)	4.58 (1.90)	3.73 (2.08) (1-7)	4.77 (1-7)
Help in managing unpredictability (N=66;30)	3.05 (1.61)	5.40 (1.12)	5.58 (1.84)	3.53 (1.98) (1-7)	4.63 (1-7)
Other factors (N=72; 19)					4.68 (1-7)

Table A4.2. Usefulness of the various socio-cultural aspects of the CiL project to participants

	Mean (± SD) (scale 1-7)				
CiL tools (No. of respondents)	**Active landholders**	**Involved Organisation staff**	**CiLPartners**	**All interview respondents** (Range)	**Survey Monkey Responses** (Range)
Incentive grant (N=44;13)	6.24 (1.34)	6.00 (0.93)	5.33 (1.50)	5.89 (1.37) (2-7)	5.00 (1-7)
Cross-property planning group* (N=51;17)	5.28 (1.70)	5.67 (1.58)	6.41 (0.71)	5.73 (1.48) (1-7)	4.76 (1-7)
Working in network (N=64;19)	5.13 (1.80)	5.41 (1.70)	5.88 (0.93)	5.41 (1.59) (1-7)	5.00 (1-7)
Surveys/Benchmarking (N=45;17)	5.24 (1.60)	5.40 (1.51)	5.39 (1.34)	5.33 (1.45) (2-7)	4.71 (1-7)
Training events* (N=53;21)	4.63 (1.88)	5.08 (1.71)	6.31 (0.79)	5.25 (1.72) (1-7)	5.05 (2-7)
Fact sheets etc-Written info (N=58;21)	4.00 (1.66)	4.69 (1.89)	5.11 (1.28)	4.50 (1.66) (1-7)	4.95 (1-7)
Websites (CiL& CMN)* (N= 44;21)	2.29 (1.38)	4.21 (2.26)	4.19 (1.64)	3.59 (1.97) (1-7)	4.05 (1-6)

Table A4.3. Impact of CiL involvement on conservation management by different participant groups

	No. of respondents (%)				
	Active landholders	**Involved Organisation staff**	**CiL partners**	**All interviewees**	**Survey Monkey respondents**
No impact	13 (32.5)	1 (5)	1 (5)	15 (18.8)	6 (24)
New learnings	1 (2.5)	5 (25)	2 (10)	10 (8)	6 (24)
Intending to act	19 (47.5)	7 (35)	4 (20)	30 (37.5)	7 (28)
Already acted	4 (10)	2 (10)	9 (45)	15 (18.8)	5 (20)
No applicable/Did not respond	3 (7.5)	5 (25)	4 (20)	12 (15)	1 (4)
Total	40	20	20	80	25

Table A4.4. Perceived increases in skills and knowledge of participant groups

	Increase in skills & knowledge Mean (± SD)				
Target group (No. of responses)	**Active landholder interviewee scores** (Range 1-7)	**Involved Organisation interviewee scores** (Range 1-7)	**CiL partner interviewee scores** (Range 1-7)	**All interviewee scores** (Range 1-7)	**Survey Monkey scores**** (Range 1-7)
Involved landholders	5.2 (1-7) N=32	5.5 (2-7) N=13	5.3 (3-7) N=17	5.27 (1.23) (1-7) N=62	4.60 (2-7) N=15
CiL partners	5.0 (1-6) N=23	5.1 (2-7) N=13	5.2 (2-7) N=19	5.07 (1.15) (1-7) N=54	4.70 (1-7) N=10
Agency/organisation NRM practitioners	4.8 (1-7) N=24	4.8 (2-7) N=16	4.8 (3-7) N=20	4.80 (1.29) (1-7) N=60	4.91 (3-7) N=11

Table A4.5. CiL project influence on integration of conservation and production in target areas.

	Mean (± SD)				
(N= No. of respondents among interviewees; and Survey Monkey respondents)	**Active landholders** (N=34)	**Involved Organisation staff** (N=17)	**CiLPartners** (N=17)	**All interview respondents** (Range)	**Survey Monkey** (Range)
Direct impact* (N=68;23)	3.97 (1.64)	4.41 (1.62)	5.65 (1.06)	4.50 (1.64) (1-7)	3.52 (1-6)
Indirect impacts(N=60;21)	3.45 (2.08)	4.38 (2.13)	4.80 (2.08)	4.03 (2.14) (0-7)	3.14 (1-6)

Table A4.6. CiL project partner assessments of governance arrangements in the CiL project

Mean score (± SD) (Range)			
Governance aspect	**At the start**	**More recently/Now**	**Change**
Financial accountability	3.25 (±1.57) (1-6)	4.29 (±1.38) (1-6)	↑1.04
Accountability for meeting milestones & objectives	3.22 (±1.56) (1-6)	5.00 (±1.37) (1-7)	↑1.78
Project direction	2.94 (±1.63) (1-7)	4.56 (±1.26) (1-7)	↑ 1.62
Leadership	2.61 (±1.65) (1-7)	3.75 (±1.65) (1-7)	↑1.14
Control	2.56 (±1.46) (1-6)	3.87 (±1.46) (1-6)	↑ 1.31
Decision-making authority	2.44 (±1.34) (1-6)	3.88 (±1.59) (1-6)	↑1.44

Attachment 5: **Project team socio-cultural reflections at evaluation progress workshop**

1. The extent of landholder involvement in the project's design/development and capacity to help landholders meet their needs

Project team comments: Noted that the design was not simply at start-up. Because the project took an adaptive approach, development continued throughout and landholders had ongoing opportunities to make input and to guide the direction of the project.

2. Consideration of the capacity of Landcare NSW (as a volunteer-based organisation) to lead and/or manage the project; and if not Landcare NSW, who else?

Project team comments: The issues was not about competency but rather organisational capacity. There was also a needed for clarity around what was intended of 'leadership' and the funding body's expectations/interpretation of a 'lead agency' in what was designed as a collaborative project.

3. Importance of adequate investment in team-building and understanding each other's expectations, needs, and skills

Project team comments: Did we address the question of how we wanted to run the project – as a partnership, team or collaboration? Needs drove the evolution of the project as it proceeded and we needed flexibility to achieve this. The identification of an NGO as 'lead' almost certainly assisted in successful application for funding and in landholder participation, but then raised different capacity issues from those that might have arisen if a state agency had led.

4. The challenges of adequate CiL investment in staffing - Project Management, Community Woodland Officers, and within-partner staffing

Project team comments: We needed a greater understanding of the work load and the volunteer commitment to deliver as compared with the fundable overheads identified at application time. Grant-funding constraints on staffing and administrative costs do not take adequate account of the investment needed, and the organisational structures required of both the 'lead' organisation and project partners to manage complex, multi-stakeholder projects.

5. Definition of operating procedures at the outset – what, how?

Project team comments: The project team should have identified 'go to' places, templates, roles & responsibilities of partners, government contacts and ways of dealing with changing guidelines (e.g. for MERI process).

6. The CiL project had a 'Best practice' emphasis – defining what 'best practice' meant (including in integrating conservation & production) and how it would be measured

Project team comments: Because the CiL project was about 'adaptive co-management' for change in managing conservation in agricultural production landscapes and integrating these two aspects of land use and management it was more about defining 'best practice' in this context and at what scale(s), rather than measuring or implementing it. At the same time, the CiL project was also seeking to identify/define 'best practice' in adaptive co-management – going beyond traditional partnerships.

7. Factors that enhanced partnership (rather than more usual collaborations)

Project team comments: The CiL project was about 'partnerships' in which there were shared positive learnings. This involved having a shared interest in the outcomes for other partners, rather than simply for each organisation's own interests, so that mutual benefit resulted. Using parallels with business, the CiL project was about investing our own resources in shared risk as well as benefits.

8 (i) Embedding the CiL 'culture' in partner organisations – legacy and continuity beyond the life of the current project

Project team comments: We need to look at what are the assumptions about Landcare and partner organisations into the future, and at what changes have occurred within each.

(ii) Delivery of knowledge and capacity building within the partnership

Project team comments: We have to ask ourselves 'Did we achieve change within the partnership?'. The indications are that there has been change in the way the agencies (especially DPI NSW) do business, with NRM and agricultural production now being seen as part of the one process, but this still has to be tested over time. Despite the challenges, the capacity of Landcare NSW to play a key role in such large and complex projects has also been enhanced.

9. The time available for the project – relationship building between partners and with landholders to achieve positive delivery within 2 years.

Project team comments: This is another important consideration in learning from the CiL project. Large and complex projects requiring multiple partners and adaptive management need time but at present funding cycles do not support this.