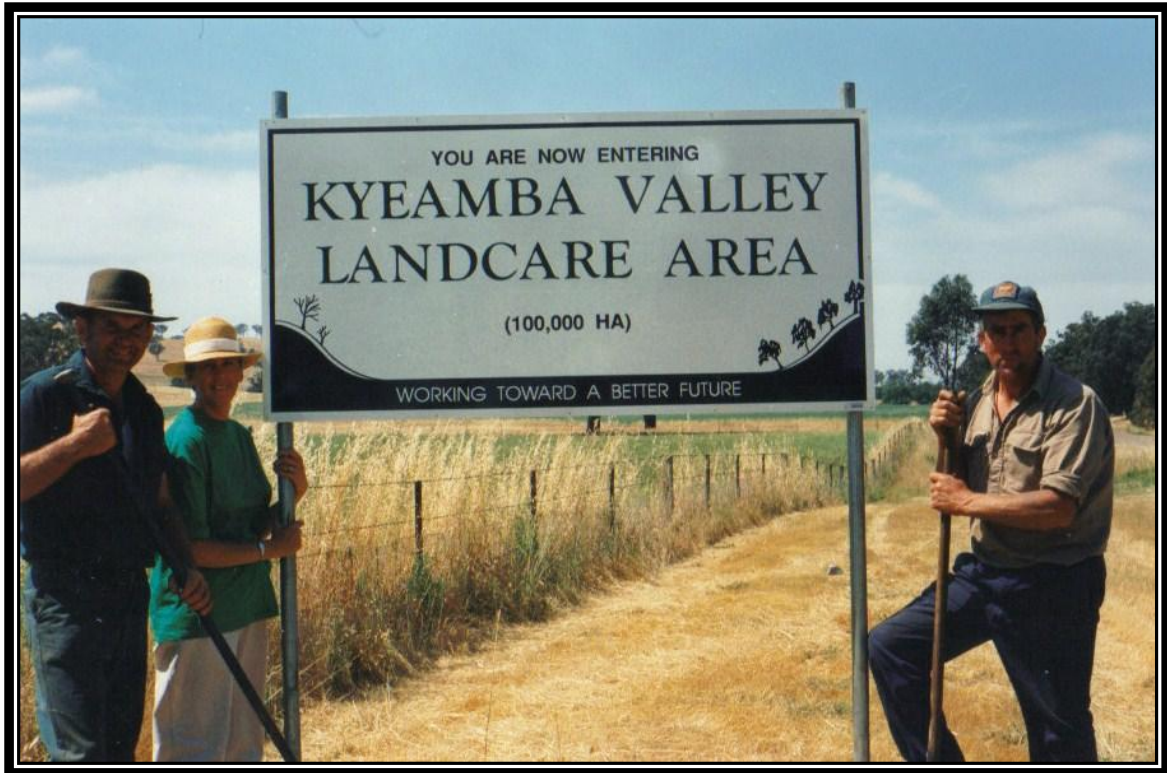


Kyeamba Valley Landcare Group

25 years of Landcare(rs) in the landscape



Compiled by Kimberley Beattie

Kyeamba Valley Landcare Group: 25 years of Landcare(rs) in the landscape

Compiled by Kimberley Beattie on behalf of Kyeamba Valley Landcare Group

Project supported by EH Graham Centre for Agricultural Innovation and Murrumbidgee Landcare Inc.

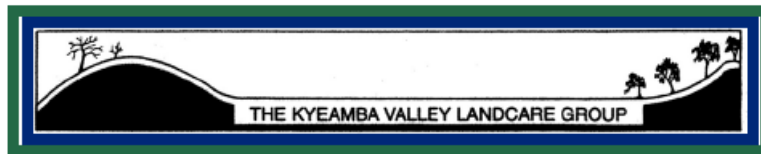
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Cover photo: Members of Kyeamba Valley Landcare Group installing Landcare area signage beside the highway, mid-1990s. (From left: Jim Dumaresq, Helen Dumaresq, and Sid Clarke.)



Contents

Foreword	
A Decade of Landcare	p1
The Right Idea at the Right Time	p2
Getting Started	p5
Demonstration sites	p6
Salt – a double curse	p9
Landcaring, learning and sharing	p9
Landcare Co-ordinators – an invaluable asset	p13
Salt Action	p14
Inspiring the next generation	p14
Sub-groups	p16
Participatory Rural Appraisals	p17
A Strong and Committed Organisation	p19
Dairy Waste Resource Management Project	p19
Kyeamba Valley Land and Water Management Plan	p22
The Landholder Guide to Land and Water Management	p23
A Third Participatory Rural Appraisal	p24
Heartlands	p25
Kyeamba Action Plan	p29
Small Projects	p30
Community Action and the Ripple Effect	p32
Facing Hard Times	p37
A Drop of Rain and a Breath of Fresh Air	p40
Communities in Landscapes: Cross Property Conservation Planning	p40
Getting it right: flood mitigation that balances environmental, production and infrastructure needs	p42
Changing Landscapes and Changing Minds	p43
A Research Resource	p46
Looking to the Future	p48
Acknowledgements	p49
References	p50
Appendix 1- Map of Kyeamba Valley erosion and salinity ‘hot-spots’ 1990	p53
Appendix 2 - Map showing Kyeamba Valley Landcare Group official boundary	p54
Appendix 3 - Satellite images of Kyeamba Valley 2013 showing evidence of on-farm plantings	p55

Foreword

A model of resilience: 25 years of Landcare in the Kyeamba Valley

Much of the work of community Landcare is out of the public eye, is undocumented and, in the past, often not monitored or evaluated. The community has a sense of change. The landscape has changed just as their knowledge, skills and practices, often developed through collaborative endeavours, have changed, striving for a more careful balance between production and natural resource management.

That this story of change and achievement was important was a topic of conversation from 2008. The point of telling the story was manifold. The community's achievements should be applauded and they should be reminded of them. Why? The Landcare movement has struggled through the trials of drought; the ebb and flow of community involvement and the vagaries of government policy and funding to support community action. But Landcare has been resilient. Landscape-scale change, crucial to long-term, sustainable natural resource management depends on continued action by landholders. A crucial cog in the wheel for change is community Landcare. Documenting the history of Kyeamba Valley Landcare Group provides us with an opportunity to be impressed by what can be achieved by landholders working collaboratively to change thinking and practice. Governments and their agencies, at all levels, charged with NRM, would be unwise to forget the power of community.

In 2009, the Graham Centre supported Murrumbidgee Landcare Inc to begin a project documenting the achievements of Landcare. This Kyeamba Valley Landcare project grew out of that work.

The author, Kimberley Beattie, is to be congratulated on telling the tale of the Kyeamba Valley Landcare Group. Equally, the Kyeamba Valley Landcare Group is to be congratulated on having such a great tale to tell.

Marion Benjamin, Murrumbidgee Landcare Inc & Peter Orchard, Graham Centre for Agricultural Innovation.

A Decade of Landcare

Landcare – communities working at a 'grass-roots' level to tackle environmental issues – has been an active part of Australian land management since the 1950s, and possibly earlier, but was formally recognised in 1989 when the Landcare movement officially began. Rick Farley of the National Farmers Federation and Phillip Toyne of the Australian Conservation Foundation successfully lobbied the Hawke Government to commit itself to the emerging movement and in July 1989 Landcare became a national program.¹

The Australian Government, with bipartisan support, launched the *Decade of Landcare* initiative in July 1989 in Prime Minister Hawke's Statement on the Environment, entitled *Our Country, Our Future*. This document “emphasised the importance of self-help, relying heavily on local community groups, within a framework that recognised the responsibilities of the Commonwealth, state and local governments”², and committed \$320 million to “land care and related tree planting and remnant vegetation conservation programs”³. The Australian Soil Conservation Council, in negotiation with the Federal Government, developed a Plan for this 'Decade of Landcare', a strategic framework within which Landcare could operate to achieve definite objectives. The Decade of Landcare Plan was finalised in 1992.^{1,2}

Today, over two decades since it was officially launched, Landcare remains “an amazing grass roots movement that harnesses individuals and groups under the ethic of caring for the land”,¹ and “a uniquely Australian partnership between the community, government and business”.⁴ The estimated 200 Landcare groups in existence in July 1989 multiplied to an estimated 6,000 nationally by December 2013^{1,3,5}.

The Right Idea at the Right Time

In the late 1980s, as Landcare was starting to get underway and multiple groups were establishing themselves in Victoria and parts of New South Wales, landholders from near Ladysmith in the Wagga Wagga Local Government Area grew concerned over the saline patches and other signs of land degradation establishing in paddocks on their properties. Several landholders met together in Sid and Patricia Clarke's dairy shed "one wet afternoon" to discuss the problem and what could be done to address it.^{6,7,8} They approached the Wagga Wagga branch of the Soil Conservation Service for advice, only to learn that salinity in non-irrigated areas was largely unheard of and few answers were available. Undeterred, they cast their net wider and found that dryland salinity was emerging as a hitherto unknown problem in many areas of highly cleared farmland.⁸

In April 1989 Charlie Bell from the Soil Conservation Service organised a bus trip for 30 landholders from the Wagga Wagga region to visit the Benalla-Wangaratta region of Victoria, where they viewed the effects of dryland salinity and met members of the Benalla Landcare group, who were taking action to mitigate their salinity problems. Inspired by the efforts of the Benalla Landcare Group, a public meeting was proposed to discuss the possibility of forming a Landcare group in the Ladysmith area. Word was spread amongst friends and neighbours in the Valley, in the hope of gathering a couple of dozen interested parties together to discuss the idea.⁸

On May 1st 1989 over 70 local landholders gathered at Ladysmith Memorial Hall. They decided on the spot to form the Kyeamba Valley Landcare Group (hereafter, KVLG or the group). Two days later, the newly elected steering committee, with Jim Dumaresq at their head as the first Group President, met again to determine the outcomes the group hoped to achieve and to set the physical boundaries of the group's active area. It was decided that the area of the Book Book-Ladysmith Fire Brigade "plus areas of adjoining land which may be pertinent" would serve as the new Landcare group's formal boundary.^{6,8,9,10,11,12}

The objectives of the group, as laid out at that initial meeting were as follows:

- Reduce and repair erosion
- Control and reduce salinity
- Encourage the re-establishment of trees and perennial grasses to control the level of the water table.
- Monitor ground water levels

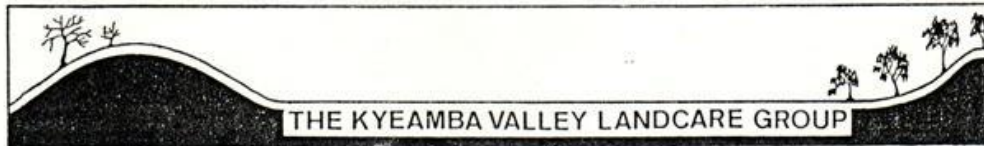
The new committee also determined that the Soil Conservation Service should be approached for financial assistance to: establish a water table monitoring system; employ a post-graduate student to “carry out [an] intensive survey of the total area of regional saline areas, property sizes and any land degradation”; and subsidise perennial pastures, trees and “repair of damage already showing”.⁹

On the 16th May 1989 a second, equally well attended, public meeting was called at Ladysmith Hall, to make the objectives of the first committee meeting a reality and officially register members. A copy of the flier distributed to the local community inviting people to attend this meeting is included on the next page.

To meet the requirements of the Landcare Council and become incorporated as an official Landcare Group, the group needed a 50% or greater membership of landholders in the area.⁹ With the membership fee set at \$5 and such great interest in the local community this goal was easily met and the Kyeamba Valley Landcare Group was officially born. Twenty-five years later, the group is still active, with meetings held at Ladysmith Memorial Hall on the second Wednesday of each month.

Jim and Helen Dumaresq are still somewhat amazed at how quickly Landcare was embraced by so many in the local community, “We had no idea that Landcare would take off the way it did ... It was just the right idea at the right time”.⁸

Below: The first Kyeamba Valley Landcare Group publication ever produced.



On May 1st 1989 a public meeting of interested persons and rural landholders was held to discuss, and to be informed, of the damaging effects of dryland salinity. At this meeting it was agreed that a local steering committee be formed and that the problem of soil salinity and land degradation in general be monitored and inturn remedied in a similar fashion to that of other LANDCARE groups presently operating in Victoria and elsewhere.

It was agreed that our local LANDCARE group was to be called-

THE KYEAMBA VALLEY LANDCARE GROUP (incorporated with adjoining areas - for example the catchment area of the Coreinbob Creeketc) A list of voluntary steering committee members was formed, and on WED. MAY 3RD the first meeting of this committee took place. The minutes of this meeting were as follows:

Minutes of the KYEAMBA VALLEY LANDCARE GROUP
3/5/89

- 1) To be incorporated a boundary has to be decided upon. Boundary to be approximately the area of the Book Book - Ladysmith Fire Brigade plus areas of adjoining land which may be pertinent.
- 2) Objectives
 - a) Reduce and repair erosion.
 - b) Control and reduce salinity.
 - c) Encourage the reestablishment of trees and perenial grasses to control level of water table.
 - d) Monitor ground water levels.
- 3) Submission to Soil Conservation Service for financial assistance to:
 - a) Establish monitoring service/system for water table levels.
 - b) Employ part time Post Graduate Student to carry out intensive survey of total area of regional saline areas, property sizes, and any land degradation.
 - c) Subsidy toward perenial pastures, trees and repair of damage already showing.
- 4) a) Public Meeting to be held 16th May 1989 at 8pm.
b) Invitation to Ron Cathcart Regional Director to visit area accompanied by Soil Conservation Representative and local members.

IMPORTANT : To make the objectives of the first committee meeting a reality another public meeting has to be held of concerned citizens and landholders. To give our submission to the LANDCARE COUNCIL some credence we must get a 50% or more membership of landholders in the area. Membership will be in the form of a \$5 fee and voluntary participation in future LANDCARE group activities. Our submission for financial assistance to the LANDCARE Council has to be in by the 1st June 1989.

- To give our submission backing we urge all interested persons and landholders attend the next:

PUBLIC MEETING

OF THE KYEAMBA VALLEY LANDCARE GROUP

on Tuesday 16th May at 8pm in the Ladysmith Memorial Hall.

Note: Remember to bring your \$5 membership fee if you wish to become a member at the meeting.

also

We hope as many women as possible can attend. We also hope to see children there as it is their future we are trying to protect.

If you are unable to attend the meeting, expressions of interest in writing and membership fees can be forwarded to:

Jim Dumaresq
"Mona Vale"
Ladysmith 2652
N.S.W. ph 22 1520

Getting Started

At the same time that the Kyeamba Valley Landcare Group was forming, several neighbours were forming a Landcare Group of their own near Downside north of Wagga Wagga. On June 20th 1989, members and potential members of both new Landcare groups, along with representatives from the Soil Conservation Service and Water Resources Commission, undertook a bus tour of sites in the Ladysmith and Downside areas that exhibited signs of dryland salinity. Two coach-loads of landholders learned to recognise the symptoms of dryland salinity in the paddock, along with some of the causes of salting and the importance of working together as a community to combat a serious problem that ignored boundary fences. The day was a resounding success. Jim Dumaresq was later quoted in the *Daily Advertiser*: “People who went on the field day are now getting back to me to say they are finding patches of salinity on their own properties... Many people just didn't know how to recognise dryland salinity before this field day”.^{12,13}

This was just the beginning. Over the next twelve months, the KVLG ran numerous field days and farm walks; sent representatives to Western Australia to attend the 5th Australian Soil Conservation Conference; obtained grants from both the Soil Conservation Service and the Commonwealth National Soil Conservation Program; hosted guest speakers from agricultural and research organisations across the country; developed a group newsletter; were featured regularly in local and regional media; and established three demonstration sites to trial different methods of combating land degradation.^{8,14,15}

Demonstration sites

Over the decades of the group's existence, the KVLG have developed a number of trials and demonstration sites, displaying different methods of countering the problems of dryland salinity, erosion, and water-logging, as well as sites for farm forestry trials, monitoring groundwater, improving biodiversity and more. The first of these were three demonstration sites developed in 1989-1990 on the properties of the Clarke, Strong, and Dunn families, utilising a combination of voluntary self-funding, and assistance from the Soil Conservation Service and the Commonwealth National Soil Conservation Program.



Above: Sign marking a KVLG demonstration site.

Salt - Bob Clarke's property 'Springfield', near Ladysmith, furnished the site for the group's first demonstration trial. Twenty acres of salt-affected land were fenced off in late 1989, incorporating four or five hectares of salt-affected flats as well as unaffected higher ground. A working bee in December saw more than twenty KVLG members erect 600m of fencing, rip a tree-line and plant 200 trees using a Hamilton Tree Planter, utilising fencing materials, trees and tree-guards provided by the Soil Conservation Service. Trees and deep-rooted perennial pasture species, such as lucerne, were established on the higher ground and mid-slope areas to utilise groundwater and

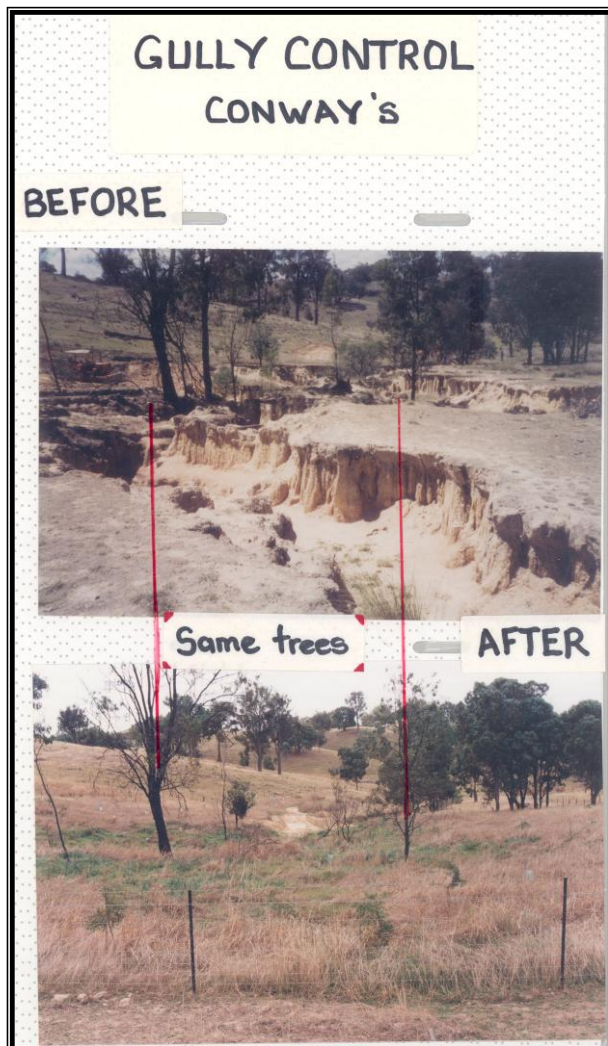
minimise recharge, while salt-tolerant grasses, including phalaris, rye, and tall wheat grass, were sown on the salt-affected areas. Piezometers were also installed on the site to monitor the water-table.^{6,14,16,17} Before these amelioration activities were undertaken, Sid Clarke says, a person crossing the paddock with their eyes closed could believe they were at the beach, due to the strong salt smell.⁶ At the 14th Murrumbidgee Landcare Annual Forum held at Ladysmith in 2011, Sid told attendees “If I took you there now, you'd say 'where was it?’” - a definite success story!



Above: Clarke's salt demonstration site in 1990.

Gully erosion - Stuart and Cynthia Strong's property 'Coolbaroo', and Robert and Margaret Dunn's 'The Reefs', were the locations of the group's first two gully erosion control demonstrations. The Strongs fenced off a gully head on their property, to exclude stock and allow natural regeneration of native vegetation to occur and stabilise the soil - a process they aided by planting trees on the site. The Dunns undertook a different approach; constructing a series of banks, lined with plastic, to control water flow down a badly eroded gully. Works on both sites were conducted with the assistance of KVLG volunteers and Soil Conservation Service staff.^{14,18}

These trials paved the way for many others, and many properties throughout the Valley and the surrounding landscape soon boasted fenced-off revegetation areas, tree plantings, earthworks, and other innovations to slow or reverse the effects of gully and streambank erosion, waterlogging, and rising salt. The success of these works varied. Several landholders have 'rehabilitated' gullies that continue to erode during major rain events, whilst Robert Dunn remembers one gully on 'The Reefs' as having once been deep and wide enough that "You could put a double-decker bus in it" which, twenty years after having been filled in and grassed over, cannot be identified by the casual observer and may be safely driven over.^{7,19,20}



Above: Robert Dunn in a gully at 'Book Book', showing the depth, 1993.

Left: A rehabilitated gully on Bernard & Margaret Conway's property.

Salt - a double curse

Lack of existing information was not the only challenge faced by the group in these early days, they also faced the stigma of Having Salt. Many landholders feared the potential repercussions of admitting they had discovered dryland salinity on their properties: the implication that they were poor managers, and the possibility their property values would decrease.^{6,8,21} Group members recall that having salt on one's property was “like being a leper” or “like having bad breath”, something that made one a pariah in the local community.^{8,21} In some cases merely being a member of the Landcare group, or even simply owning a property in the Kyeamba Valley, was enough to make people suspect that the landholder in question had salinity on their property.^{8,21} Sid Clarke recalls receiving late-night phone calls from landholders who suspected they might have salinity, but were afraid to be seen openly consulting the local 'salt expert', “...they'd ring me up at night time, 'can you come up and look at this patch of dirt up here, I think it might be a problem'. So I'd just go up, and y'know, after years of being on the job I could just drive up the road and tell you where salt was going to happen. You soon get used to it all. And I didn't mind that, I just enjoyed that, because you're sharing your knowledge and also helping your fellow farmer out.”⁶

Landcaring, learning and sharing

In the first few years, many working bees were held to develop trial sites, install piezometers and learn about new technologies and methodologies for establishing plantings and combating land degradation. Additionally, workshops and presentations were conducted to improve general knowledge of the causes and contributors of many of the problems faced by landholders in the Valley. Farm plans were developed; bus tours of the Landcare area were organised and run for locals, visitors, politicians and researchers; projects were devised and grants were applied for. Members of the group were kept busy showing visitors around their properties, attending meetings with representatives from the Soil Conservation Service and other organisations, organising and attending Landcare meetings and events, chasing up new information, setting up trials and all the while raising their families and running their farms.^{8,21,22} Jim and Helen Dumaresq remember spending up to three days out of every week solely on Landcare

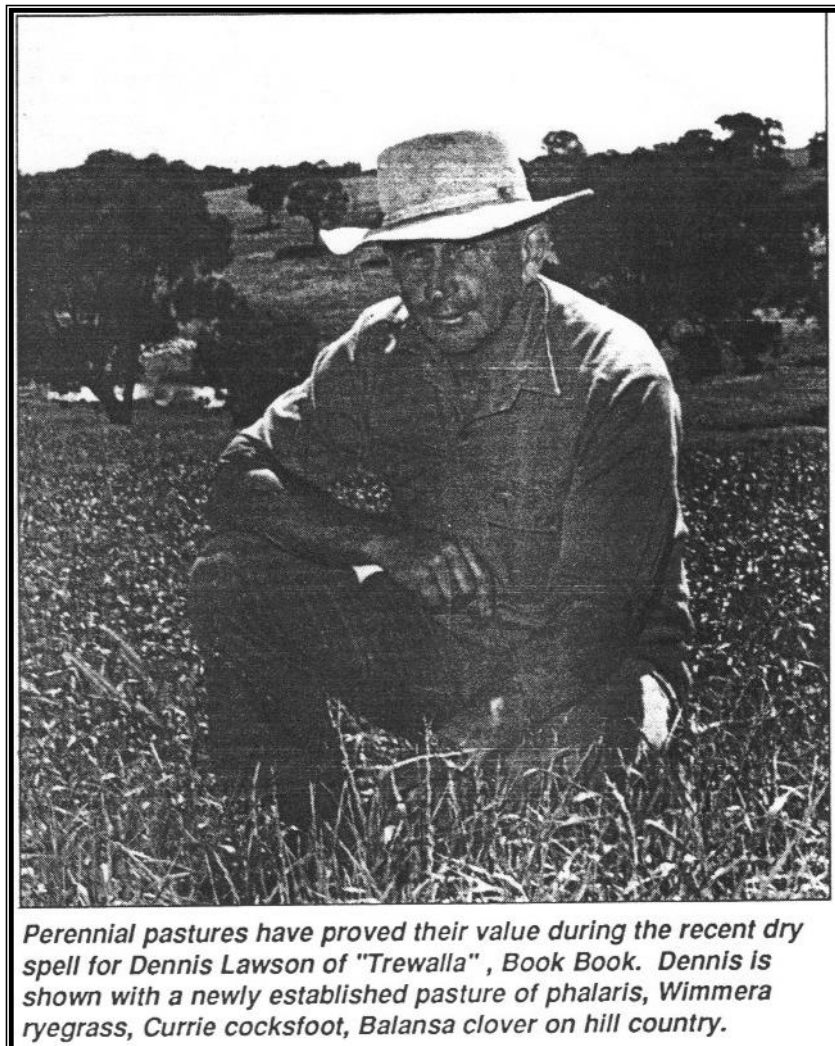
matters in those early years, often at short notice, “It was really taking over our lives. Our hat and coat hung at the door and we just put it on and ran”.⁸

As people looked into the causes of the problems they'd identified on their properties, new theories were developed on how to combat them, and some very surprising discoveries were made. In several areas in the Valley the water-table was found to be so high it was actually above the surface of the soil, to the extent that piezometers on some properties bore a distinct resemblance to fountains.



Above: Kyeamba Valley Piezometers, early 1990s.

Bold new ideas were trialled by Robert Dunn, Dennis Lawson and other landholders in the Valley. Perennial pastures were sown to combat salinity and improve financial returns on grazing properties; direct-drilling of pastures was adopted to decrease erosion of hill-sides and sloping ground; and tree seeds were direct-drilled to determine what effect this would have in the establishment of broad-scale tree plantings.^{23,24} Some members admit to having been sceptical at the time about how well some of these new ideas would succeed⁶ and, as with many a new endeavour, there were slow starts and failures mixed in with the successes, but two decades later it is easy to see the impacts these land-management innovations have had both within the Valley and beyond - indeed, some are now considered best management practices by the NSW Department of Primary Industries and other land management bodies.²⁵



Above: Excerpt from 'Landcare News', July 1991.

In their own words

“I was one of [Peter Cregan's] greatest critics when he started putting his seed trees in. He planted about 30 acres and I said 'you're joking, they're not going to grow'. The grass just came right up and in the first couple of years one or two popped up here and there, but ten years later, fifteen years later, you've got to get a loader in to try and thin them out, he couldn't get in there to get the stock out. Every year off-shears he put his lambs and sheep in there, never lost a one. It's just a nice canopy of trees, adding more shelter and shade; a changed environment.”

Sid Clarke.⁶

~ ~ ~

“Landcare made you more aware of how to look after your country. You like to hand it on better than you got it. We are improving the farm all the time.”

Margaret Conway²²

~ ~ ~

“It's been my experience in Landcare that there are always the people that are the movers and shakers, and the early innovators, and then there are their next-door neighbours who look over the fence for a couple of years and then decide they might do something, and then there are the people that ten years down the track look at how big the trees are on Joe Blow's property and think 'oh gee, that's alright I might do something', and then there are people who never do anything. So there is a big social benefit from those early innovators being open, ready and willing to host field days, farm tours, walks, all that sort of stuff, and invite people to look at what they've done. And that was fairly critical to the success of the [Kyeamba Valley] Landcare group.”

Lisa Glastonbury³¹

~ ~ ~

Landcare Co-ordinators - an invaluable asset

Some of the pressure on the Landcare group committee members was alleviated in February 1991 when the Kyeamba Valley, Tarcutta Valley and Downside Landcare groups were jointly awarded funding to hire a full-time co-ordinator for a period of three years.²⁶ Over forty applications were received but, according to Jim and Helen Dumaresq, Cheryl Paton “just stood out” from the rest and was an obvious choice for the role.⁸ Jim and Helen remember Cheryl as “a natural” in the role of Landcare Co-ordinator, and a real “can-do girl”, someone who knew where to turn when the group felt they were floundering, and who pulled everything together to make Landcare a success in the region.⁸ Over twenty years later, many of the early members of the KVLG still speak highly of their first co-ordinator and attribute much of the success of the group to the invaluable efforts of Cheryl and the hard-working co-ordinators who followed her.

KVLG Co-ordinators

Cheryl Paton

Deb Slinger

Hazel McInerney

Michelle Smith

Helen Reynolds

Wendy Nutt

Sean Cormack

Lisa Glastonbury



Above: Bruce Mutton, Ian Littlejohn and Deb Slinger looking over a property plan, 1994.

Salt Action

In 1991 Liverpool Plains and Kyeamba Valley were chosen by the Salt Action Task Force for a pilot program looking into landscape-scale salinity mitigation, and tackling the problem of dryland salinity “on a united front”. The Department of Agriculture and Fisheries, Department of Water Resources, and Department of Conservation and Land Management (CALM, previously the Soil Conservation Service and Department of Lands) all banded together to run the program. Working with landholders in the Valley, staff from these organisations conducted a survey to identify land degradation problems and 'hot spots' within the Valley.^{21,23,27,28} The findings of this survey, including a map highlighting areas within the Valley at risk of developing different forms of degradation, were collated into a draft Soil and Water Management Study report, and made available for public comment. This report was then presented to 56 local landholders, support staff and visiting dignitaries on a 'Problems and Findings' bus tour around the catchment, which visited several identified 'hot spots' and collected video footage of the degradation evident in the Valley.^{23,28} A copy of the map produced as part of this project is included in Appendix 1.

Inspiring the next generation

The interests, efforts and developing expertise of the KVLG served to inspire landcaring efforts on the part of the local schools. Both Ladysmith and Forest Hill public schools joined forces with the KVLG over the years to establish tree plantings and learn about biodiversity and salinity.^{15,21,23} Ladysmith school became involved in the NSW Salt Watch Pilot Program, a program first launched in Victoria and designed to educate students about the problem of salinity and how it could be monitored and addressed, and a piezometer was installed on the school grounds.^{15,21,23} By learning at school the same lessons their parents were learning and implementing on their properties, the next generation of Kyeamba Valley residents grew up with the principles of landcaring firmly entrenched.



Above: Tree-planting day with students from Ladysmith Public School, 1998.

Sub-groups

Over the first few years, it became apparent that interest in Landcare in the Valley was so great, the topics of interest so many, and the Landcare area – which swiftly outgrew the initial informal boundary of the Book Book-Ladysmith Fire Brigade area – was so vast that sub-groups were needed to best serve the needs and interests of the members. Subsequently, sub-groups arose in the Book-Book, Coreinbob, Big Springs and Borambola areas, offering targeted activities for the landholders in these areas.³⁴ Multiple groups often held activities at the same time, providing landholders across the Valley with a choice of options, depending on what issues held their interest. These sub-groups continued to thrive for many years, with many landholders finding the approach preferable to driving across the Valley to attend major meetings and events with a focus away from their own issues, interests and soil types, although some people did find it confusing to know which sub-group's area they lived within, and therefore which meetings they needed to attend.²⁹

A map of the Landcare Group's official boundaries is included in Appendix 2.



Above: Tree-planting day at 'Burnbank', 1994.

Participatory Rural Appraisals

A team of researchers from Charles Sturt University (CSU), led by Tony Dunn, approached the KVLG in September 1991 to conduct a Participatory Rural Appraisal (PRA). The PRA was conducted with the goals of forging closer links between Kyeamba Valley residents and local research and extension staff, as well as assisting the local community to identify and express the problems they faced in land management within the catchment. This work was written up in a paper that compared PRAs conducted with the Kyeamba and Downside Landcare groups⁶³. Ultimately the team hoped the process would assist the community and their supporters in improving the operation of Landcare in the catchment.³⁰

Thirty semi-structured interviews with landholders in the Valley were conducted by five two-person teams over a two day period, covering the social, economic and physical resources, issues, history and visions of the future within the catchment. The information gathered during the interviews was then analysed to determine common themes covering issues and areas of interest within the community, which in turn were discussed with around 70 landholders at a public meeting held in Ladysmith at the end of the second day. At this meeting, a visual representation of the themes, values and issues discussed, along with future opportunities for action regarding these (as identified and decided upon by the community members), was drawn up on butchers paper.³⁰ A copy of this was included in the formal report of the PRA process and findings produced by the CSU team and distributed amongst the Kyeamba Valley community later the same month.³⁰ A second Appraisal was conducted by CSU students in 1994 which gathered the views on Landcare in general, and the KVLG in particular, held by landholders in the Valley.²⁹



Above: Participatory Rural Appraisal, 1991.

Below: Collating the findings.



A Strong and Committed Organisation

The decade from 1995 to 2005 was an important period for the KVLG. An estimated 70-80% of landholders in the Valley were involved in Landcare during this time³¹ and a number of 'big' projects were undertaken by the group. These projects ranged from site-specific works done on individual properties, to developing a catchment-scale management plan for the entire Valley.

Dairy Waste Resource Management Project

In 1994 KVLG members Sid and Patricia Clarke, and Trevor and Jennifer Ray successfully applied for Environmental Trust funding to undertake an innovative redesign of the waste-water management systems employed in their dairies. With the milking machines, sheds and yards of both dairies needing to be thoroughly washed with clean water twice each day after milking sessions, to maintain hygiene standards, and further volumes of cold water being required to chill the milk during processing, hundreds of kilolitres of water and nutrient-rich effluent were being regularly flushed into Kyeamba Creek. This posed a threat to the creek and downstream aquatic communities, whilst simultaneously wasting valuable resources that could be better utilised on-farm.³²

Work was undertaken in 1995 to re-design both dairy yards and implement a new system to trap the effluent-rich waste-water, separate out and retain the nutrient-rich effluent for use as fertiliser, and microbially 'clean' the water for re-use.³² The efficiency and innovation of this new system eventually won the Clarkes Rivercare 2000 Silver and Bronze Awards for Primary Industry.

The project was publicly launched by Dick Smith on December 3rd 1995, an event that drew a crowd of over 200 people and received great media coverage.⁶ Sid Clarke remembers seeing cars lining the road to his dairy, whilst Dick and Pip Smith arrived by private helicopter and landed in a nearby paddock.⁶ On behalf of the group, Sid presented Dick Smith with an official KVLG bumper sticker, “and the first thing he did

was tear it out of its envelope and put it onto his helicopter”⁶, the Smiths then offered Sid a short ride in their helicopter as they headed to the nearby airport at Forest Hill to re-fuel, and later sent the group copies of the photographs they had taken from the air during this flight over local properties.⁶



Left: Sid Clarke and Dick Smith at the launch of the dairy project, 1995.

Right: Visual display showing the project's progress.





Left: Presentation of the Rivercare 2000 Bronze Award, 1998.

(From left: Pat Brassil, Patricia Clarke, Trevor Ray, and Sid Clarke.)

Right: Signs adorning the Clarke's dairy, 2010.



In their own words

“[BioAg tested effluent from] 11 dairy farms; we've got three times as much nitrogen, twice as much calcium, twice as much phosphorus and in the salt levels, which is the no-no, on a range of one to ten, we're two and all the others are six, sevens, eights and nines. So whatever's in the ponds, bug-wise, is pretty phenomenal.”

Sid Clarke⁶

Kyeamba Valley Land and Water Management Plan

Inspired by the findings of previous projects, including the Participatory Rural Appraisal and Salt Action management study conducted in 1991, the group decided to develop a Land and Water Management Plan (LWMP) for the Kyeamba Valley.^{7,33} A management plan for the entire catchment was considered the best approach for effectively combating land degradation on a catchment-wide scale, assuring that works done on individual properties would complement and build upon each other for maximum rehabilitative impact, an approach being adopted by many other Landcare groups.^{6,7} The Plan was developed over several years and presented at Soil and Water Conservation Association of Australia (SAWCAA) conferences in both 1995 and 1996. At the 1996 SAWCAA conference it was featured as a case study for Dryland Land and Water Management Plans.³⁴ A complete economic evaluation of the Plan, comparing the benefits and costs of 'With Plan' and 'No Plan' scenarios over 30 and 50 year periods was developed and published in 1999³⁵.

Unfortunately, despite the repeated attempts of the KVLG committee to secure funding for the implementation of their Plan, none was ever obtained.^{7,33,36} Group members became frustrated with the ever-shifting 'goal posts' and criteria needing to be met by Land and Water Management Plans, and despite funding being made available for LWMPs developed for irrigated farming regions, no funding body was established to deal with Plans developed for dryland areas.^{7,37} The frustration of this process and ultimate failure to achieve such an important goal after years of effort caused some members to become disillusioned with Landcare and the government-funding process, and the group lost some members.⁷ The completed LWMP was retained by the group as a guideline for developing projects on individual properties, in the hopes that despite being unable to implement the catchment-scale Plan as a whole, the suggestions within it could still inform 'best-practise' choices for works carried out on individual properties, to maximise the cumulative impacts of smaller projects.⁶

The Landholder Guide to Land and Water Management

The highly technical nature of the information included in the Kyeamba Valley Land and Water Management Plan (LWMP) unfortunately made the messages it contained inaccessible to many readers.^{6,33} To overcome this problem, group chair Sid Clarke suggested developing a Landholders' Guide to complement the LWMP.⁶ This document could address the community values and land degradation issues identified through the Kyeamba Valley Land and Water Management Study and 1991 Participatory Rural Appraisal, and deliver important land management information to landholders, but in a more accessible format than the formal LWMP.^{6,33} Through the combined efforts of the KVLG committee and Landcare Co-ordinators Hazel McInerney and Michelle Smith the *Kyeamba Valley Landcare Group Landholder Guide To Land And Water Management* was painstakingly developed over several years, and finally published in 1999. The Guide was launched by the Honourable Kay Hull (then Parliamentary Member for Riverina) at a public event held at Forest Hill.^{6,15,38} In the words of Sid Clarke: “We came up with a package of information which was easy to read ... if you want to find out about salt, you can see stuff that Jim and I have done; if you want to find out things about erosion you can look at what Bernie's done; Rick Martin about trees, Peter Cregan and so on and so on. So it's in layman's terms, not sort of airy-fairy stuff that people find hard to read.”⁶

Printed copies of the Landholder Guide still proudly grace the shelves of many Kyeamba Valley households, whilst digital copies are available on disk from the group committee. Although some of the information contained in the Guide has been further refined in the years since its publication, it remains a valuable document for informing landholders of management options to combat issues such as dryland salinity, soil acidity, erosion and paddock tree loss. It is perhaps even more valuable as an accomplishment of the Kyeamba Valley Landcare Group – a practical example of what can be and has been achieved by a group of dedicated Landcarers working together for a common goal.

A Third Participatory Rural Appraisal

The group's fruitless struggle to secure funding for the Land and Water Management Plan, coupled with a general decline in enthusiasm and a perceived lack of direction, prompted the committee to approach Charles Sturt University for assistance. The Participatory Rural Appraisals conducted in 1991 and 1994 had been of benefit to the group, and the hope was that another (conducted in 1998) would help pinpoint the causes of declining interest amongst members and enable the group to develop a new way forward.³⁹ The process was a success and several themes were identified as contributing to the decline in Landcare involvement by Valley landholders. Major issues were disgruntlement with the bureaucratic system governing Landcare funding and the feeling that agricultural economics and 'Landcare' works could not coexist, particularly during the current drought conditions.³⁹ Some of these matters were beyond the group's ability to control, however the decision was made soon after the PRA to re-focus the monthly committee meetings and present them as general group meetings, in the hopes of improving engagement with non-committee members when discussing actions and directions for the group.⁴⁰



Above: Students from Charles Sturt University visit 'Mona Vale' in 1998.

Heartlands

In 2001-2003 local communities, Murray-Riverina Farm Forestry, the Department of Land and Water Conservation, the Murray-Darling Basin Commission and CSIRO joined forces to establish and assess the impact of catchment-scale works in remediating land degradation through the adoption of native farm forestry. The *Heartlands* initiative was rolled out in four catchments: Kyeamba Valley and Billabong Creek catchments in New South Wales, and Honeysuckle Creek and Mid-Ovens Basin in Victoria. The works conducted in each catchment varied according to local conditions and requirements, and included tree plantings for recharge control, stream protection and enhancement of biodiversity.⁴¹



Above: Year 1 'Heartlands' planting at 'Woomahrigong', 2001.

In Kyeamba Valley, over the three years of the project, a total of 117 hectares of farm forestry was planted on eight properties, the majority of which established successfully. Sites were developed on a range of soil types in areas easily accessible for future harvesting, and were designed by CSIRO to trial different aspects of developing successful farm forestry plots in low rainfall areas (550-700mm per annum).⁴¹

During the first year, sites were established on George and Pat Wilson's property 'Big Springs Station', Ian and Rayma Kemmis' property 'Woomahrigong', and Lyn and Francois Retief's property 'Winbirra', totalling around 25 hectares and almost 25,000 trees.^{41,44} Piezometers were placed at two of the sites to measure the impacts of the plantings on groundwater levels.^{21,41,44} Several workshops, field days and working bees were held throughout the year to prepare and plant up the sites, install the piezometers, and educate KVLG members about farm forestry.¹⁵

Year Two (2002) saw sites established on five more properties: Don Welsh's 'Yaruga', Frank Palmer's 'Alabama', Bob Reynolds' 'Brooklyn West', Tom and Jo Heany's 'Woodridge Park' and Ian and Catherine Kennedy's 'St Omer'; and another on 'Big Springs Station' - approximately 80,000 trees in total.⁴¹ In October, the group members involved in the project attended a *Heartlands* Open Day in Violet Town, Victoria, and presented a static display of works conducted to date on their project sites. Twenty landholders from the Valley also undertook a Master Tree Growers course throughout the year, learning how to prune and manage farm forestry sites, and several members visited the Weyerhaeuser sawmill and Visy paper mill at Tumut, NSW, to view some of the potential products of their farm forestry enterprise.^{15,41}

A second site on 'Woomahrigong', was planted in the third and final year of the *Heartlands* project, and funding was sought to replace some trees in earlier plots that had died. A final report on the project was compiled by project manager Cherie White and presented to the group at a field day at 'Big Springs Station' on March 14th 2003, along with a booklet entitled *Opportunities for Farm Forestry on the South West Slopes*, which was developed as part of the project⁴¹.



Above: Cherie White and Bob Reynolds measuring one-year-old 'Heartlands' saplings in 2002.

Over all, the *Heartlands* project was considered successful within the Kyeamba Valley at the close of the project, with all but one of the sites having successfully established, despite the loss of some plants over the dry summers. Unfortunately, the Heany's site at 'Woodridge Park' fell victim to intense drying and insect attack and was unable to be re-established.^{15,41} Some concern over the long-term viability of the project was also expressed by members of the steering committee, as long-term management of farm forestry plantations is vital for overall success, and it was felt that the training in this area supplied through the project may have been insufficient.⁴²

In March 2012 a field day was held at 'Woomahrigong', to inspect and compare the growth and overall status of the sites planted in 2001 and 2003.⁴³ The 2001 site had been thinned in 2004 and again in 2011, whilst the 2003 site had not been thinned to date. Survival and growth rates for a number of species were judged by attendees to be excellent at both sites, with indications of "good potential" for timber production over the next ten to fifteen years. The group considers this evidence that farm forestry is indeed a viable land-use option within the Kyeamba Valley.⁴³

Other positive outcomes have been noticed by landholders with *Heartlands* sites; Lyn and Francois Retief find walking in the shade of their trees to be very restful and uplifting, “It’s incredible to walk through there; there’s a huge amount of spiders and birds, and all sorts of things. And it’s ideal too, in terms of the shelter for the stock, either in heat or freezing cold.”²¹ The Retiefs have noted that even trees that were lagging behind their neighbours in growth have caught up and are now growing vigorously, despite having faced a decade of drought since their initial establishment. They have likewise noted that some of the understorey plants that were included in their forestry plot to provide additional biodiversity outcomes have begun to regenerate from fallen seed, and they are keen to have seed collected from the plot to be used in further plantings within the region.²¹ The Retiefs have also been carefully monitoring their *Heartlands* block piezometer readings since 2001 and have noticed an encouraging trend suggesting that, as hoped, the growing trees are positively impacting the water-table on their property.²¹



*Above: 'Heartlands' field day at 'Woomahrigong', March 2012.
(From 2nd left: Bob Reynolds, Nicole Maher, Ed Maher, Jan Gray, Terry Bourne, Mardi Pillow, and Rob Kuiper)*

Kyeamba Action Plan

Toward the end of 2002 the KVLG received \$511,900 of Government funding to implement the *Kyeamba Valley Targeted Salinity and Water Quality Program*, which the group re-named the *Kyeamba Action Plan* for ease of reference.^{45,46} The aims of the project were to: reduce salt loads entering the Murrumbidgee river from the Kyeamba creek by 2628 tonnes per year; and reduce sediment and nutrient loads entering the Murrumbidgee river from the Kyeamba creek.^{45,46} The project was notable in that it targeted on-ground works in specific sub-catchments, with sites selected based on specific land capability classes, surface features, geology and position in the landscape, in order to achieve the greatest environmental impact – a very different approach to previous government-funded projects.⁴⁶

Project activities included revegetation of salinity recharge sites, gully stabilisation, perennial pasture establishment and a series of field days which were attended by more than 100 local landholders.⁴⁶ Originally planned as a two-year project spanning 2003 and 2004, the project was extended until 2007, with planting works undertaken in 2004, 2005 and 2007.⁴⁶ An additional \$870,000 of cash and in-kind contributions were made to the project over this period by participating landholders, the Murrumbidgee Catchment Management Authority, Department of Primary Industries and other supporting organisations, including Greenfleet and Scouts NSW who assisted with some of the planting efforts.⁴⁶ In total, 72 sites (1138.7 ha), were established on 28 properties, achieving all funded targets under budget, although ongoing monitoring of the actual environmental impacts of the works was not possible.⁴⁶

Small Projects

Throughout this period many smaller projects were likewise rolled out across the Valley. One such project was the establishment of a series of piezometers on properties in the Coreinbob sub-catchment, which have been monitored on-and-off by the landholders and CMA staff over the years since, to collect data on the movements of the water-table.⁴⁷ These piezometers have proven useful in showing the direct impacts of some of the salinity-mitigation actions taken on these properties over the years. According to David Strong: “it is interesting that, for example, where we've put [a piezometer] in and then we've come and sown lucerne into a rather flat creek paddock where the water-table's quite high, it is obvious that the water-table drops away, even in kind of wet years; the lucerne is quite powerfully pumping water out of the system.”⁴⁷

Another project the Strongs were involved with during this period was the *Environmental Services Scheme*, a NSW Government initiative examining the benefits to the community of environmental services arising from implementing certain on-farm practices. The project aimed to identify the types of environmental services that could be incorporated into regular farm management, along with the best ways to manage and value these services, and to identify the costs involved in incorporating such practices with on-farm production. The Strongs - along with several other landholders across New South Wales - planted several stands of trees and established perennial pastures on their property 'Coolbaroo', and government staff monitored these for salinity control, carbon sequestration, biodiversity enhancement and water quality improvement.^{47,48} David is unsure if the project yielded the results the department sought, but he is pleased with the benefits he received from his involvement, in terms of establishing trees and perennial pastures across the property and revegetating the landscape, and he believes that establishing tree-lots on saline recharge areas has helped reduce the occurrence of saline scalds in recent wet years.⁴⁷

During this period great effort was also taken by the committee to ensure a succession of informative speakers at group meetings; an initiative which served both to keep members engaged and to increase natural resource management knowledge within the community.⁴⁷



Above: Environmental Services Scheme tree lot on 'Coolbaroo', 2011.

In their own words

“It wasn't simply that we were implementing quote/unquote 'on-ground works' that everyone talks about, that wasn't all it was. When I was the president, I think the thing that I enjoyed the most was actually organising the meetings where someone would come and speak, and so in some ways we've got nothing to show for that – I mean, I could show you the trees on hills, and that's great, and I want to show you those and I'm happy with them – but there's things that you can't show, such as someone coming and talking to us about dung beetles, or about biological control of Patterson's Curse, or about soil bio-fumigation, or about the biology of the soil or whatever, which often attracted a lot of interest from the community and brought all of it together - it felt as though it was a good community exercise.”

David Strong⁴⁷

Community Action and the Ripple Effect

In 1989, not long after the formation of the KVLG, Jim Dumaresq was quoted in the *Daily Advertiser* stating that “Dryland salinity... is a neighbourhood problem. What one person does affects another, so a community-based approach is needed”.¹² The group went on to fully embrace the community nature of Landcare in the decades following, with meetings and field days open to families and non-members, and several group visits to and from other Landcare groups. Many KVLG events have included barbeques, formal dinners, and other social aspects, allowing neighbours to get to know each other and share their experiences of working and caring for their land. Field days and farm walks have been held for not only Landcare group projects but also non-group-related works on members’ properties. Dennis Lawson remembers that when the Landcare group formed “all of a sudden everyone was going to each others’ properties and they were talking to each other about what they were doing, and what may or may not work” and Kyeamba Valley residents were suddenly getting to know distant neighbours they might otherwise never have met.⁷



Above: Direct tree-seeder demonstration field day, 1994.

Many members of the group attribute much of the success of Landcare in the region to this social aspect. Helen Dumaresq describes the Landcare approach as “very much an exchange of ideas... 'This worked for us, it might work for you'. People were coming up with all sorts of ideas, [asking] 'how can this possibly be fixed?'”.⁸ This exchange of ideas and knowledge, along with the voluntary assistance of fellow Landcarers in performing works, has allowed KVLG members to address problems on their properties that they might never have been able to tackle themselves.

Major problems that have affected many properties throughout the catchment - particularly dryland salinity, gully erosion and creek siltation - have by their very nature necessitated a community approach. As Margaret Conway has pointed out “You've got to start at the top and work your way down, because sometimes what you do is undone by your neighbour”. For some, like Lyn and Francois Retief, this flow-on effect has been of particular importance: “The important thing for us was [that what we did] wasn't just going to benefit our land, it was clearly going to benefit the neighbour... on down through Kyeamba Creek to the river, to South Australia... And that's the point; most Landcare works locally, wherever you are, are going to have a major ripple effect, which is so exciting”.²¹

Peter Cregan remembers the struggle that was undertaken to convince the government that this 'ripple effect' needed to be acknowledged and shouldered by the wider Australian community, rather than dismissed as the responsibility solely of regional landholders: “It took quite a long time for the Federal Government in particular to accept that there had to be a shared cost for the externalities that were occurring due to land degradation. The fact that you have developing salinity here means that there's a negative externality to the Murray-Darling Basin, because Kyeamba Creek was spewing out thirty to forty thousand tons of salt a year, and that was increasing, and it was a major source of turbidity and phosphorus as well. So what was happening here was having an external effect elsewhere, but if something was to be done about that it had to be individual landholders who had to bear the cost of it. So the argument was put, over a long period of time, that there needed to be some cost-sharing, because what individual landholders did, or groups of landholders did, had an external benefit. And yes, they

may have gotten some productivity gains on their own property, but there was this substantial benefit to other people in the catchment – other people in the *bigger* catchment, the Murray-Darling Basin. People in the Murray were benefiting from activities that occurred at Book Book.”⁴⁹ Eventually this argument was accepted by both State and Federal Governments, and funding was made available, often on a dollar-for-dollar matching arrangement, for on-ground works to be carried out on private properties, which would have impacts far beyond those properties' boundaries.⁴⁹

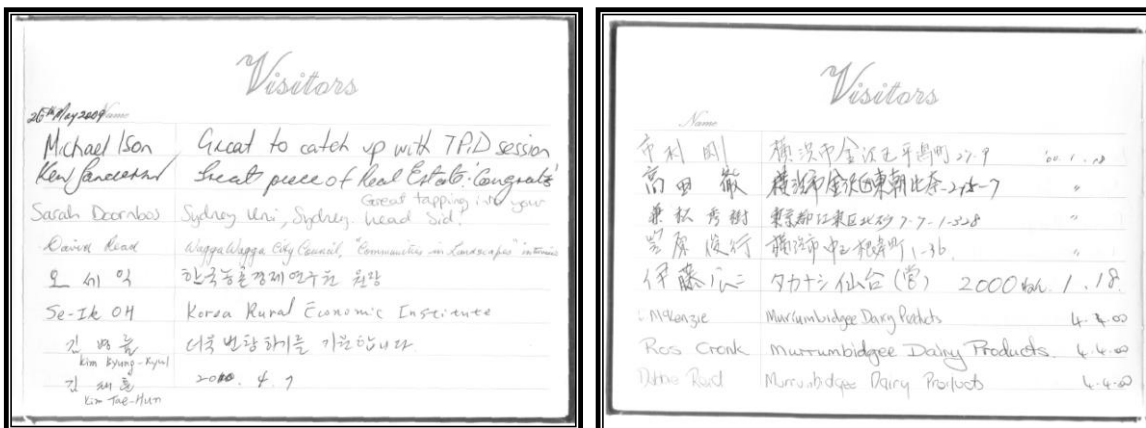
The social nature of Landcare has had impacts on the Kyeamba Valley community above and beyond the sharing of knowledge and ideas. Dennis Lawson was a newcomer to the Valley when the Landcare group formed, and credits the group with allowing him to get to know more of his neighbours than he would otherwise have met.⁷ Terry and Trish Bourne semi-retired onto a small property at Coreinbob in 2001 and immediately joined the Landcare group, because they'd always had an interest in sustainable land management and “It's nice to interact with other people who are interested in the same things”,⁵⁰ whilst Lyn Retief considers one of the greatest aspects of Landcare to be “that one realises one isn't alone; it's really good to be able to work with a diversity of people, and learn from each other and share findings – the good and the bad”.²¹



Above: Landcare BBQ and spotlighting evening, 2011

Some Landcare group-initiated events have even been purely social in nature, focussing on building community cohesion and introducing fun into the often hectic and stressful lives of the group's members. For several years in the late 1990s, Helen and Allan Reynolds hosted an annual barbeque and dance in the woolshed on their property 'Ascot Valley', to which all members of the Landcare group and many uninvolved neighbours were invited.⁵¹ Helen says "I just thought: we've got to get together somehow as a social group instead of just a working group, and invite all those people that don't ever come to Landcare ... Some of the other farmers picked up on it and we had massive picnics out in paddocks ... We had some fun times out there, it was really great". This continued for three or four years and Helen still remembers the very first dance she and Allan hosted, "Everyone in the Valley turned up at our woolshed, we had three barbeques in a row all going like crazy."⁵²

The group has also hosted many visitors from within and beyond the Wagga Wagga region over the years, including several hundred international visitors and many local, state and federal politicians, including Simon Crean, Kay Hull, and Tony Abbott.^{6,15} Sid Clarke has kept a record of the group's international visitors over the decades, and maintains that 'the whole globe has been here' – with representatives from countries across Asia, Europe, North America and even Africa on the list, this claim seems well-founded!⁶



Above: Pages from Sid Clarke's Landcare Visitors Book

In their own words

“Once a person hears of something, or even better goes and has a look, and kicks the dirt and has a yarn, then the thought process is 'oh that could actually work in [our] paddock or this place or that place'. Or indeed 'what a pity it didn't work and maybe it's not worth persisting, or maybe it didn't work there but it could work here'.”

Lynn Retief.²¹

~ ~ ~

“We had the odd faction within the group that didn't agree or wasn't happy with what we were doing, but in general, the entire membership of the Landcare group were together on whatever we were trying to do, which was great, because there's power in numbers. One farmer working alone usually has huge amounts of problems, but when you join together like that down a water catchment area you can do amazing things, and we did, and they're still doing amazing things out there, they never stop.”

Helen Reynolds⁵²

~ ~ ~

“I guess the idea of Landcare was that it was groups of people, combining together to do something as a community, and because they were community-focussed they'd be able to tackle environmental problems in a more holistic manner. And when you're dealing with catchments you need to consider all of the properties in the catchment, because of the relationship between the properties. And it's better if people have ownership of what they're doing. So they're the sorts of things that initially Landcare was based on.”

Peter Cregan⁴⁹

~ ~ ~

Facing Hard Times

The first decade of the 21st Century saw prolonged, severe drought conditions throughout Australia, which imposed many additional hardships on families on the land, including Kyeamba Valley's Landcarers. In the words of Peter Cregan: “During the drought period there was still substantial [Landcare] work done. It probably slowed what *was* done down quite a bit, because people just didn't have the cash - their income was reduced and their costs were increased, so it was pretty difficult for them to do anything” or as Peter Lawson puts it: “People were just cash-strapped and time poor and tired”.^{7,49}

The added pressures of the drought, changes in the structure, age and cohesion of the Kyeamba Valley community, and alterations to the Landcare delivery model, have all been identified by group members as contributors to a decline in Landcare activity and membership during this period.^{7,31,49,53} Many of the original members became less actively involved in the group, particularly in committee roles, in part to allow others to step forward and assume leadership roles.^{8,54} Others have simply found they have less energy as the years pass and prefer to keep closer to home, applying the management strategies they've developed over the past decades and enjoying the positive changes they have wrought on their properties.^{22,47,50,54}

Unfortunately, as the members of the Kyeamba Valley community and Landcare group have aged, they have faced difficulties in handing the metaphorical reins on to a younger generation. Many KVLG members have seen their children grow up and move away from the Valley, to pursue careers elsewhere.⁶ Those that have remained on properties in the Valley may be applying the Landcaring principles their parents imparted to them as they grew, but few have joined the Landcare group itself.^{8,22} Some newcomers to the Valley during this period helped swell the KVLG's numbers, but a shift in community identity has been noted, with many Valley residents increasingly choosing to socialise within nearby Wagga Wagga, rather than in Ladysmith or Book Book.^{7,21,49,55}

Many group members have similarly identified the shift to 'the CMA model' as a major factor contributing to Landcare's decline, both within the Valley and elsewhere.^{8,31,49,53} When the group first formed, it was common for Landcare groups to directly apply for funding under state and nationally-delivered funding schemes, and manage their projects themselves or by employing a coordinator or project manager for the task. The early 2000s saw a shift away from this model to a new model in which funding was delivered via a state government body in the form of small and medium devolved grants awarded mostly to individuals, thus removing the need to be part of a group to secure funding and increasing a sense of competition between neighbours.^{31,49} In 2004 the Catchment Management Authorities (CMAs) were formed to assume the role of project funding body, and for several years effectively controlled the funding, project types and support that were available to land managers and Landcare groups in NSW.^{31,49,56} Many KVLG members feel that this change in model has resulted in dis-empowerment of the group, and was a backward step on the part of the government by moving away from the drivers of social change and community involvement in environmental management.^{7,49} Group members feel these changes have contributed to the loss of community value of the Landcare group as well as a decline in the general sense of community in the Valley and in other districts, as group ownership of projects has decreased and people spend less time viewing and assisting with works on each others' properties.⁷

Despite all these pressures, Kyeamba Valley Landcare Group is still in existence and still meets once a month at the Ladysmith hall. Rick Martin and others have expressed great admiration for those that have kept the group going, attend the meetings each month, and hold positions on the committee, recognising the commitment of these individuals whilst faced with multiple difficulties.⁵⁴ Peter Lawson, the group Chair during this period, says the committee faced the possibility that they may have to follow the example of many other groups across NSW and fold, but chose to keep going because "It was the sort of group that, in my point of view, should have a role in the community, but exactly what it is I didn't know... But if Landcare folded then, it was going to take a very special group of people to get it going, and it would have been much harder to get it going again... From a community point of view, if it dissolves it

will be just one more group that disappears from the community, and regardless of its role in the community I think that would be a sad thing”.⁷

This determined spirit on the part of the existing group members has paid off. Far from having folded and become merely part of Kyeamba Valley's history, in 2009 the group celebrated its 21st birthday, complete with a cake and a visit to the Martin's and Conway's properties to look at the influences of 21 years of Landcare.^{21,57} At time of writing, planning has already begun for the KVLG's 25th anniversary in May 2014.



Above: Combined field day with Tarcutta Landcare, September 2012

A Drop of Rain and a Breath of Fresh Air

2010 saw a break in the drought and a resurgence of problems not faced in many years, including flooding creeks, bogging of farm vehicles in long-forgotten wet-prone areas, and the re-emergence of salinity in some paddocks. Many residents of the Valley expressed an interest in discovering if their salinity-amelioration works would indeed perform as intended, should the wet weather continue^{8,54}. In late 2010 the Dumaresqs found that, unlike some others, they could still drive all over their property without getting bogged, even in areas they remembered as having been impassable in wet years in the past, although they couldn't say for certain if this drier surface was due to their Landcare works or simply a result of the previous years of drought.⁸

Communities in Landscapes: Cross Property Conservation Planning

2010 and 2011 also saw several members of the group become involved with *Communities in Landscapes: Cross Property Conservation Planning* – a project funded under the Federal Government's *Caring for Our Country* initiative. *Communities in Landscapes* (hereafter *CiL*) focussed on working with neighbouring landholders to integrate agricultural production with conservation of threatened Box Gum Grassy Woodland remnants on a landscape scale. Nine partner agencies, including both government and non-government organisations, with agricultural, environmental, research and education interests, joined forces to deliver a package of farm-planning sessions, field days, workshops and on-ground works, tailored to the needs of the landholders involved.⁵⁸ The KVLG members involved with *CiL* enjoyed returning to the 'roots' of Landcare; once again visiting neighbours' properties, discussing management techniques and swapping ideas.^{7,21} The project, coupled with the easing of drought conditions, was considered by many to be the 'boost' the group needed to reinvigorate themselves, and attract new members.^{7,21,55}

The *CiL* project (and subsequent unrelated funding) also provided the group with the opportunity to resurrect the KVLG newsletter, a development which was eagerly embraced by the many members unable to attend regular meetings but keen to be kept

updated on Landcare matters.⁶⁰ A community wildlife spotlighting evening, and hosting the Annual Murrumbidgee Landcare Forum in 2011, helped raise the group's profile in the local area once more, and with assistance from Murrumbidgee Landcare Inc the KVLG were successful in obtaining funding for several projects, including a continuation of the cross-property planning approach begun with the *CiL* project, now expanded to include properties without Box Gum Grassy Woodland remnants.⁶¹



Above: Cross-property planning, 2010.

(From left: Peter Lawson, Tobi Edmonds, David Middleton, Lach Harris and Susie Jackson.)

In their own words

“From a community and Landcare group point of view I think it’s been terrific. Having this cross-property group has really brought the community back together.. people learning off other people more so than just being told ‘this is what the project is, you make it suit your farm or you’re not eligible’. There’s been a very inclusive feel to the whole project, and twenty-two years ago, when Landcare first formed, that’s what drove it.”

Peter Lawson about the Communities in Landscapes project.⁵⁹

Getting it right: flood mitigation that balances environmental, production and infrastructure needs

Stream-bank erosion has been a challenge faced by the KVLG since before the group formed, and flooding events in 2010 and early 2012 caused significant environmental and infrastructure damage on many properties. Kyeamba and Tarcutta Valley Landcare groups joined forces in 2012 on a Qantas-funded project to learn new skills and techniques for tackling this issue, taking into account both production and environmental concerns. The project's key elements included: natural disaster planning to minimise potential damage and enhance recovery efforts; making properties more resilient to natural disaster; and management and enhancement of vulnerable riparian habitat. Demonstration sites were established on Jill and Dave Middleton's property and on a Tarcutta Landcarer's property, with a particular emphasis on utilising vegetation to control erosion.^{61,62}



Above: Lining a gully-head with plastic to reduce dispersion of sodic soil, 2012.

Changing Landscapes and Changing Minds

Twenty-five years of Landcare in the Kyeamba Valley has made a notable difference in the landscape. Long-term residents remember treeless hills where there are now swathes of leafy timber, salt scalds have disappeared in many places, and the spread of certain weeds has decreased.^{6,22,47,49,50,52} Helen Reynolds remembers arriving in the Valley as a new bride with a city upbringing: “There were two huge paddocks, one was beautifully bright purple and one was beautifully bright yellow, and I was going 'WOW! This is pretty cool' and my husband said 'Not really'”. Through the efforts of landholders and the release of biological control agents in the region, the Patterson's Curse and St John's Wort that so impressed Helen upon first viewing have slowly decreased in the decades since, although they have yet to be eradicated. Helen is amongst those who feel that real progress has been made in the battle against these weeds; “Now when you drive down that road, you haven't got those massive amounts of purple everywhere, and that's just one thing”.⁵² Helen has likewise noticed a marked improvement in the volume and quality of water-flows exiting the Valley in wet years, which she attributes to the dedicated effort Valley landholders have put into erosion-mitigation and innovative farm dam construction.⁵²

Others recall a largely tree-less landscape that has changed dramatically in appearance, and credit this change to the Landcare approach of demonstrating by doing. When Terry and Trish Bourne first began planting trees along the fence-lines on their property, 'Milverton', passing neighbours would stop and comment on this unusual activity; now every property visible from 'Milverton' sports healthy planted tree lots.⁵⁰ Similarly, Sid Clarke tells of a neighbour who scoffed at the Clarkes' early tree-planting efforts, seeing only a profitless loss of productive land, yet “after six years of [us] growing trees, [he] came in one day and said 'oh, I like the look of your trees, I think I'll sow a few' and he got started”.⁶

Many members consider this style of learning by example to be one of the strengths of the Landcare model, particularly in rural communities.^{6,21,31} As Sid puts it: “Our idea was to get on with those that wanted to go with it, and not so much *forget* the rest, but

peer pressure would apply. And it did. ... We didn't go up to people and say 'you've gotta do this, you've gotta do that', because we know that us people that live on the land are difficult creatures, and if you stick a gun under their nose, they're just going to retaliate and close down. So you're better off to keep it rolling; show what can be done.”⁶ Lisa Glastonbury, who worked with the group as Landcare Coordinator for many years, feels that the KVLG's success is due in large part to those members who took up innovative land-management practices and ran with them, providing a practical example for their neighbours to be inspired by and follow: “there is a big social benefit from those early innovators being open, ready and willing to host field days, farm tours, walks, all that sort of stuff, and invite people to look at what they've done. And that was fairly critical to the success of the Landcare group.”³¹



Left: Kyeamba Valley paddock dominated by Patterson's Curse, 1995

Right: A view of the Valley from 'Jandera', 2010



In their own words

“I think from a historical point of view, Landcare has served a very good purpose in that it helped create change, even just in the way that people thought, they became more open to change.”

Peter Lawson⁷

~ ~ ~

“There's been a lot of change in the Valley as a consequence of Landcare. One obvious measure of the success of something like that is just to look at what the change has been in the management of the land, in the practices. I guess it's difficult to separate what changes in practices are due to Landcare and what changes in practices are just due to changes in society at the same time. But nonetheless you just take a look across the landscape, and ask around, and you can see the obvious things like tree-plantings and use of perennial pastures and better grazing techniques. A much greater awareness of soils and soil fertility, a much greater awareness of better conservation practices, less exploitation and less tillage. And you look across the countryside and you see there's lots of trees. When Landcare first started, initially there was about 5% tree cover; now - I don't know what number it is, but you just look out the window and see there's a lot of trees. We've got eight neighbours on this property, and every one of them has undertaken substantial tree-planting.”

Peter Cregan⁴⁹

~ ~ ~

“I think a lot of the other residents in the valley could see the benefits of what we were doing. There was less wind erosion, less water erosion, because of the stuff that was happening, so they could actually see the benefits for stock and crops.”

Helen Reynolds⁵²

~ ~ ~

A Research Resource

The Kyeamba Valley and its residents have contributed a great deal to many fields of scientific research over the decades. Researchers from Charles Sturt University (CSU), CSIRO, the Fenner School of Environment and Society, the University of Sydney, and numerous other organisations have worked with Kyeamba Valley landholders to increase agricultural, ecological, and social scientific knowledge within Australia and across the globe.

The previously mentioned Participatory Rural Appraisals conducted by Tony Dunn's CSU research team in the 1990s were some of the earliest conducted in Australia, and helped prove the value of this research methodology as a tool for engaging rural communities.⁶³ Similarly, many of the trial sites established on the properties of KVLG members have contributed valuable data to the fields of salinity, erosion, farm-forestry and pasture management, to name only a few.^{6,24,41} Important information on the effects of different plant species on ground-water levels has been gathered from many Kyeamba Valley properties, including 'Winbirra'²¹ and 'Mona Vale',^{8,64} which in turn has guided scientific thinking regarding management of salinity and water-logging at both the local- and landscape-scale. Even trials that have not worked out as planned – such as the establishment of dense tree-cover beside gullies resulting in the loss of soil-binding ground-cover species rather than the hoped-for increase in bank stability – have increased the local and broader communities' understanding of how best to manage issues like erosion control.

Much biodiversity and conservation research has likewise been conducted in the Valley. Ecologists from the Australian National University's Fenner School of Environment and Society, including Mason Crane and Rebecca Montague-Drake, have conducted many studies within the Valley over the life of the Landcare group²¹. Biodiversity surveys, habitat restoration, and connectivity trials have yielded interesting results, including the discovery in 2011 of scats indicating the presence of phascogales in the Valley, where they had been thought to be extinct for many years. At time of writing, the degree of

habitat-connectivity that has been restored across the Valley is visible in satellite imagery of the region. On-farm tree-plantings, established for many reasons, are clearly recognisable in these images, and can be easily distinguished from remnant vegetation, thus providing at a glance evidence of the positive impacts the Landcare group have had on their landscape. Google Maps™ satellite images of the Ladysmith and Coreinbob areas have been included in Appendix 3.



Above: John Lucas from Charles Sturt University conducting an EM survey at Borambola, 1995

Looking to the Future

Twenty-five years after formation, Kyeamba Valley Landcare Group is still active, bringing members of the community together to share ideas, learn new things and tackle new and ongoing challenges. Changes in climate, community structure, and funding availability have all impacted the way Landcare functions, both within the Valley and elsewhere in Australia, and active membership has declined in recent years, but the land caring spirit is still strong within Kyeamba Valley. Members continue to seek innovative methods to address new and ongoing issues in land management and are constantly learning and sharing new information about the landscape they live and work within.

The low rate of generational succession within the group has some individuals concerned that the KVLG may pass out of existence as a formal body in future years, but all are certain that no matter what happens, the Landcaring spirit will continue to thrive in the Kyeamba Valley.



Above: Mardi Pillow with Landcare seedlings, June 2012.



Above: A KVLG field day in 2012. (From left: Jeanette Coventry, Brad Collins, Susan Duffy, Dick Green, Tracey Everett, Mardi Pillow, Carmen Coates and Katie Collins.)

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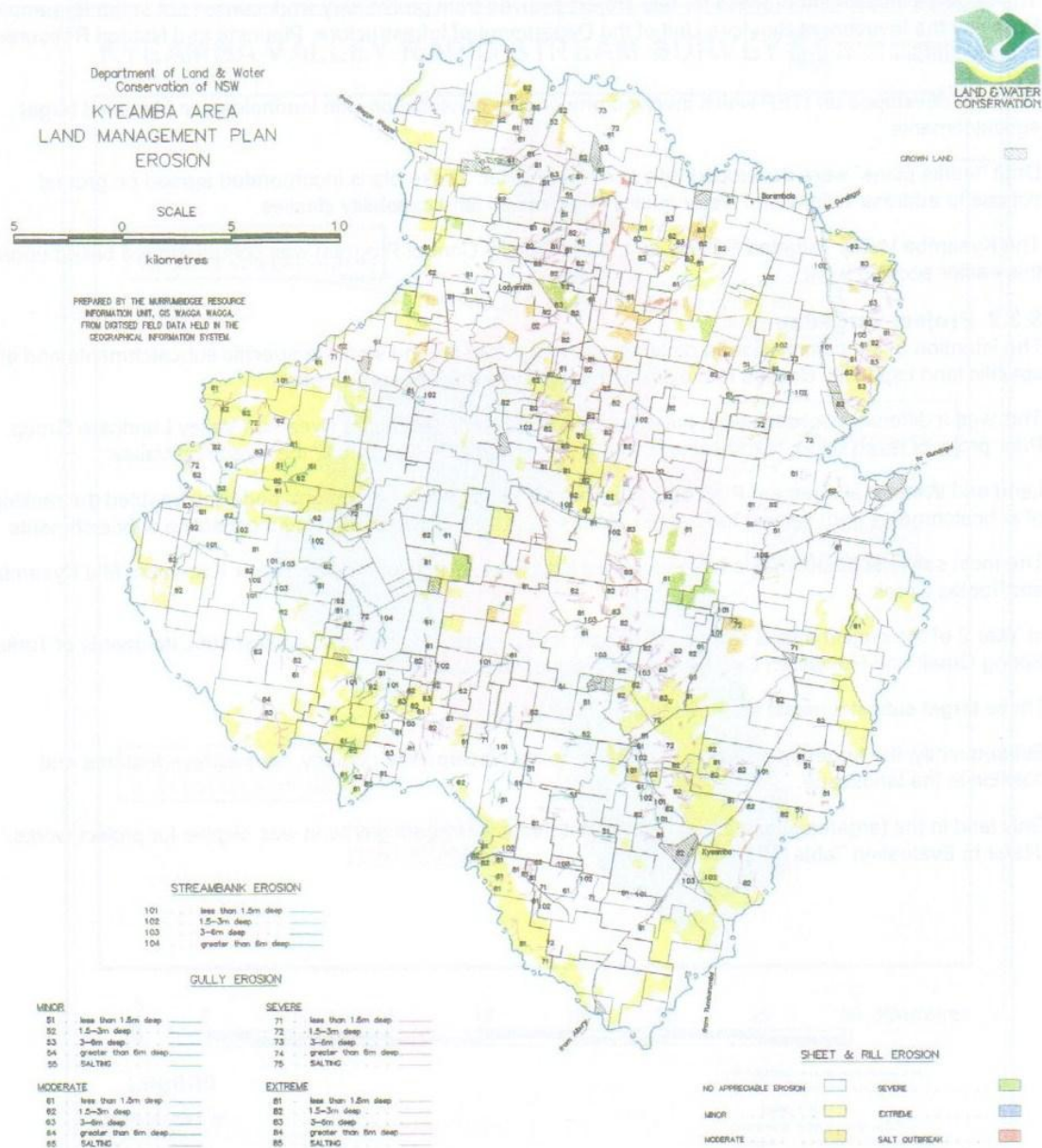
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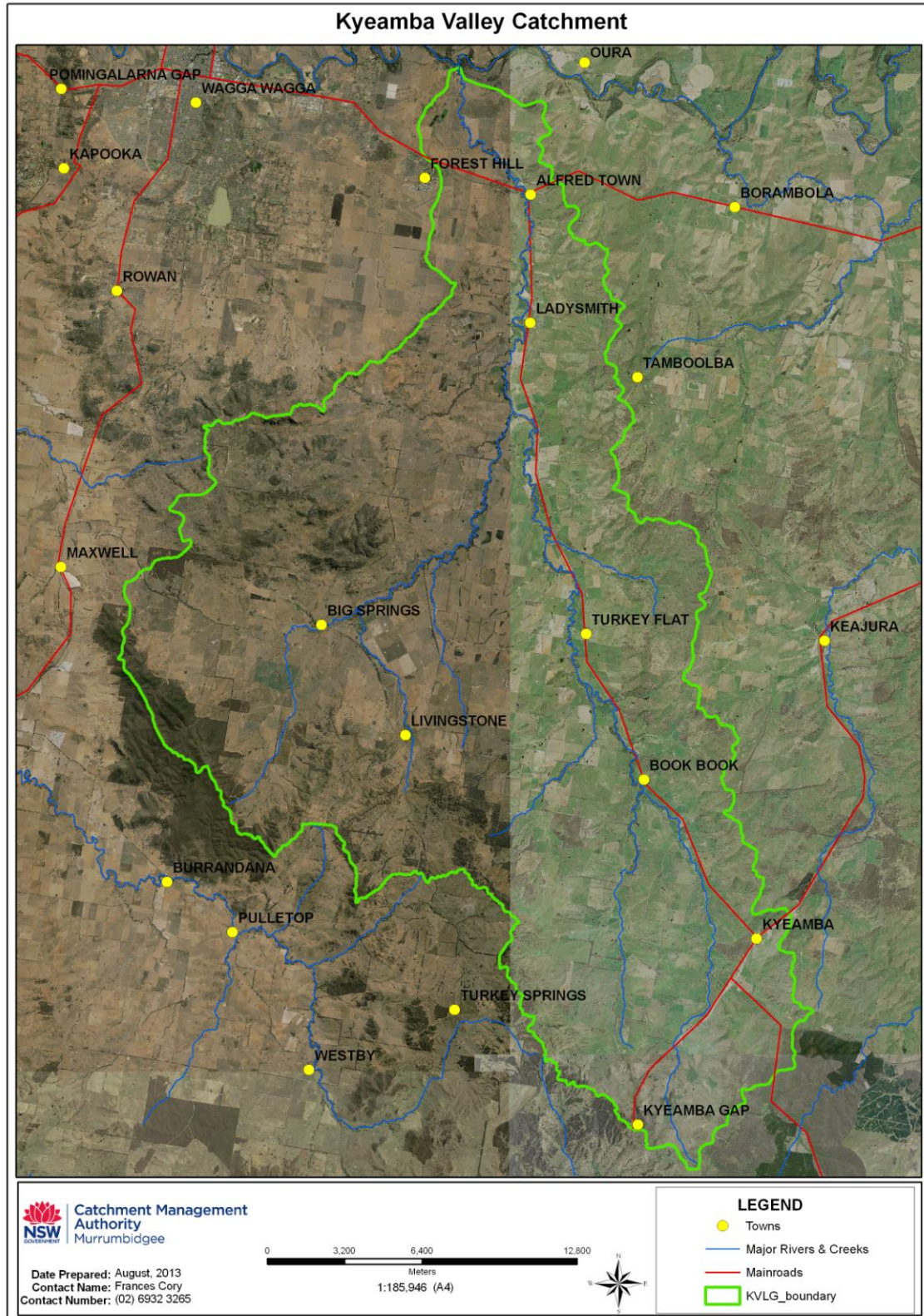
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Appendix 1 - Map of Kyeamba Valley erosion and salinity 'hot-spots' 1990

MAP 2: Streambank and Gully Erosion in the Kyeamba Valley (1990)



*Appendix 2 - Map showing Kyeamba Valley
Landcare Group official boundary*

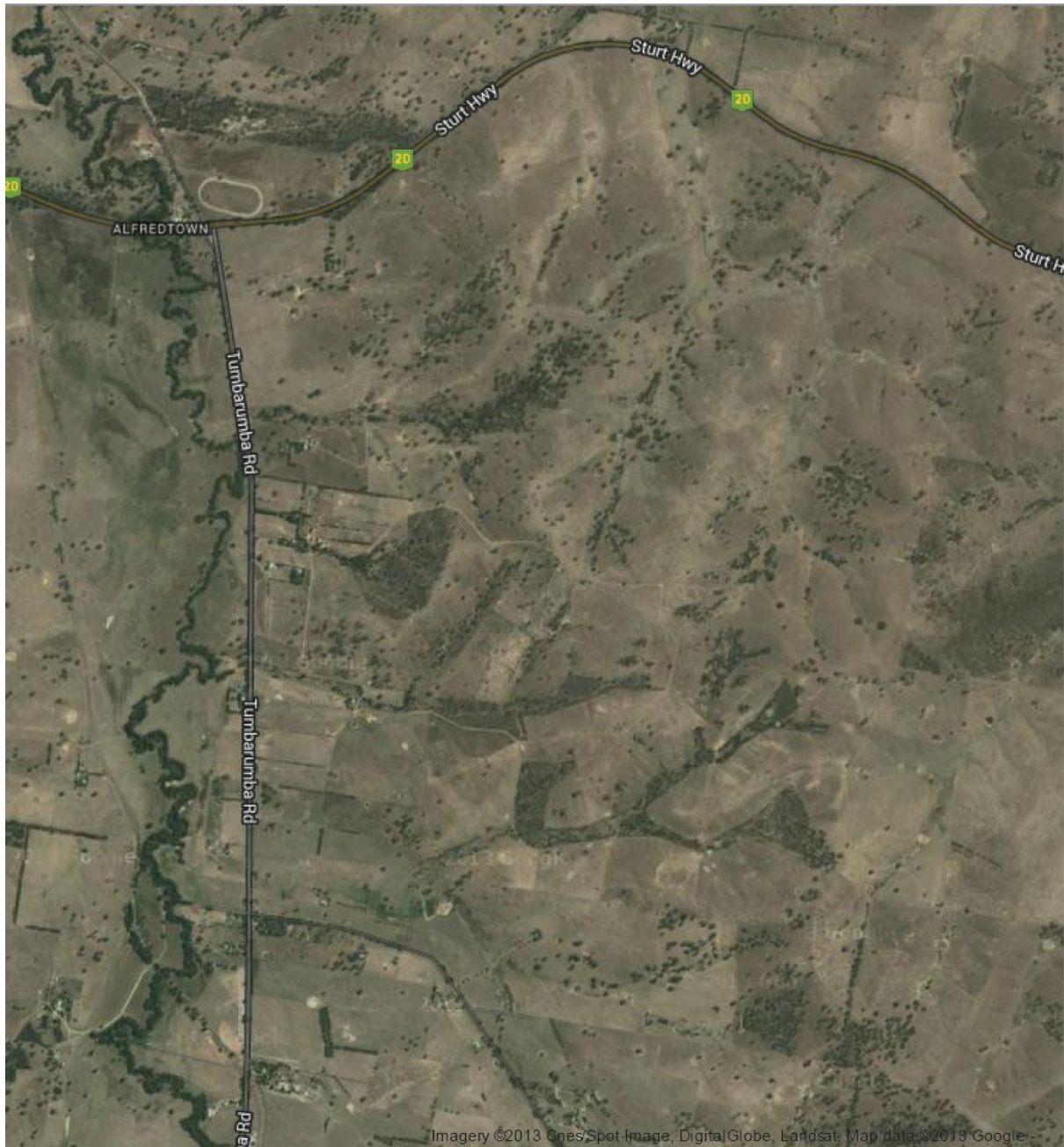


Appendix 3 - Satellite images of Kyeamba Valley 2013 showing evidence of on-farm plantings

Map 1. Ladysmith, north of the Gregadoo-Ladysmith road.



Map 2. Coreinbob, south of the Hume Highway.



Satellite images ©2013 Google Inc.

