Community Discussion Paper for North Central Regional Catchment Strategy 2021-2027

Preamble

The North Central Regional Catchment Strategy (RCS) is the principle framework for land, water and biodiversity management in north central Victoria. It sets regional priorities for the management of natural assets, overall direction for investment and a framework for coordination of effort by landholders, partner organisations and the wider community. This discussion paper has been written to assist in the development of the North Central RCS for 2021-2027. It provides an overview of the; values, condition, trends, threats, policy context and priorities for the community theme. The information herein will be used; to frame discussions with stakeholders, guide the development of priorities and outcomes and provide content for the RCS.

The North Central CMA region includes the Traditional land of the Barapa Barapa, Dja Dja Wurrung, Taungurung, Wadi Wadi, Wamba Wamba, Wotjobaluk and Yorta Yorta peoples. North Central CMA are engaging the seven Traditional Owners groups within the region, to inform RCS renewal, as detailed in a separate Draft Traditional Owner Discussion Paper.

Overview

Dedicated community members are fundamental to natural resource management in the north central region. The health of our catchments relies on the active involvement of people in the region. People who farm and manage land or live in towns, work, volunteer or go to school all have a role to play in contributing to developing and achieving the 2021-2027 North Central Regional Catchment Strategy (RCS) vision. Effective engagement with the regional community will enable us to incorporate local knowledge and priorities in the RCS for 2021-27.

Eighty-seven per cent of land in the region is privately owned and most of it utilised for agriculture. As such, rural landholders continue to be the foundation for landscape scale NRM in the region. There is a need to understand the demographic trends in land ownership and the issues facing farming communities across the region, to maintain effective engagement with landholders around NRM.

Our region is fortunate to have more than 160 Landcare, regenerative agriculture and/or environmental volunteer groups actively working across the region, generating significant social, environmental and economic benefits through effective catchment management. During the 2018-19 year, more than 3,300 members volunteered over 80,000 hours to Landcare driven natural resource management (NRM) action, valued at \$2.4M. (*Source: 2018-19 North Central Landcare Report Card*).

Trends in environmental volunteering show that people are continuing to sign-up for volunteering programs, but for less time than in the past and they want to make a meaningful contribution. Citizen science programs are a popular choice. Interest groups such as angling clubs with mutual interests represent opportunities for engagement around NRM.

Generally speaking the ageing population and trend toward larger/corporate farms in the north and west is leading to population decline and associated socio-economic impacts including a reduced volunteer base. Whilst in the south and east of the region there is strong growth in rural residential development which is increasing pressure on natural resources and introducing new landholders.

Partner organisations and community based NRM groups will need to adapt and tailor their approaches in response to these demographic shifts.

Current condition and trends

Social benchmarking survey of rural landholders

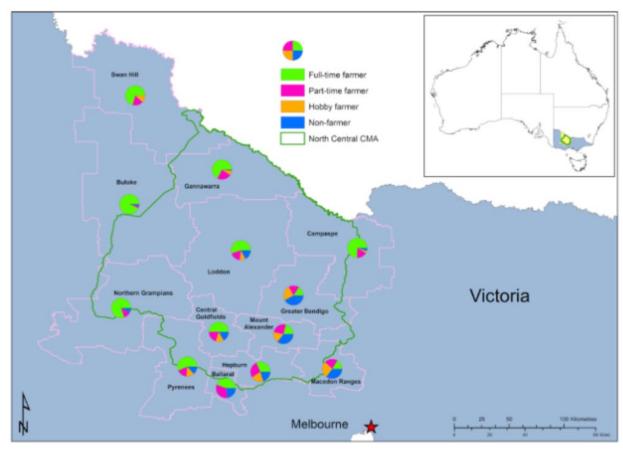
Source: Curtis, A., & Luke, H. (2019). – see also summary of results in Appendix 1.

Since the 2013, when the previous RCS was developed, the region has seen significant shifts in farm sizes, ownership arrangements and diversification. Agriculture remains the dominant land use, but primary production is not the principal focus of many landowners. The CMA's recent Social Benchmarking survey asked rural property owners (with properties 10 ha and above) of their farmer identity and of the respondents;

- 49% identified as full-time farmers,
- 19% as part-time farmers,
- 13% as hobby farmers, and
- 19% as non-farmers.

Full-time farmers are down from 52% in 2014 but remain the largest farmer identity group and manage about 80% of the land owned by survey respondents. As in 2014, there were significant differences across the famer identity groups, for almost all survey items. The capacity of both full-time and part-time farmers to engage with CMA programs is shifting in the north of our region, where farm sizes are increasing, and precision agriculture is creating production efficiencies which require less people on farm than in the past. Demographic data by shire region, shows north central Victoria continues to have an aging population. Paired with social benchmarking data which indicates those living on farm, are likely to move off once over the age of 65, we can anticipate a significant shift in the composition of our regional communities and agricultural industries in the next decade. In contrast there is a lower proportion of full-time farmers and generally less reliance on agricultural production for income, in the south-east of the region within proximity to Bendigo, Ballarat and Melbourne.

With most rural land in the north central region under private ownership, these landholders directly influence the condition of soil, waterways, wetlands and native vegetation. In turn, the condition of those environmental assets influences their livelihoods, well-being and wealth (including property values). The social benchmarking survey results have demonstrated a diverse range of long-term plans, however most respondents indicated they were wanting to continue living on their property as long as possible. The stability across survey years (2014-2019) in relation to landholders' long-term intentions to stay on their property, presents an opportunity to work with private landholders over the long-term, building capacity, knowledge and skills to better the chances of ongoing best practice NRM and achieving intended outcomes.



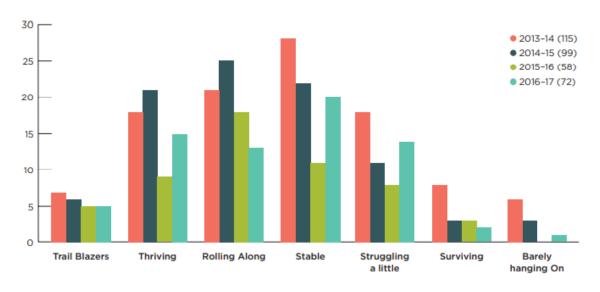
Farmer identity of rural landholders surveyed, by Local Government Area

Landcare group health

An aging demographic trend is compounded when looking at current NRM volunteer group data, for example Landcare. Landcare Groups are typically made up of older people, who have time and interest in group-based membership and traditional styles of volunteering. It is this demographic that has kept Landcare stable in our catchment for the past 35 years. However, as tree-changers flock to our region, namely the southern shires (Mount Alexander, Macedon Ranges, Hepburn) the working parent and family group type of volunteers are joining Landcare or reigniting groups that had been in recess. There is opportunity for Landcare and other environmental volunteering groups to embrace demographic shifts and take advantage of the volunteering opportunities on offer.

Notwithstanding the ageing population, Landcare remains strong and active with our region. The existing partnerships between the CMA, Landcare Networks and their supported groups is effective and enduring. The North Central Regional Landcare Support Plan (2018-2023) describes the current condition of Landcare and group health in our region. Data trends show that in our region, 41% of groups regard the overall success of Landcare as 'mostly' or 'completely' successful, however a significant portion of responses (37%) were indifferent to the movement's success. On a scale of 1 (poor) to 5 (very good), 53% of survey respondents rated the overall health of Landcare as '4' (good). In 2017, more than 80% of the groups that took part in the annual group health survey, rated themselves as stable or above. This is consistent with previous results indicating most groups in the region are in good health and are active. The remaining groups rated themselves as struggling, surviving or barely hanging on and it is these groups that require more support and assistance if they are to continue to function.

FIGURE 3. TRENDS IN GROUP HEALTH RATINGS SINCE 2013 (NUMBER OF GROUPS SUBMITTING SURVEY)



Regional Landcare Support Plan 2018-2023

Trends in Landcare group health ratings since 2013

The ongoing strength of community groups and environmental volunteers to engage in planning and delivery in line with RCS goals, relies heavily on the current support structures remaining in place, namely the Local Landcare Facilitator, Regional Landcare coordinators and Regional Agriculture Landcare Facilitator. (Source: Victorian Landcare Program Review Action Plan, 2015)

Public land stewardship

Various arrangement currently exist in the region by which community members and landholders play a vital role in the protection and enhancement of public lands, including crown land frontage licences, Committees of Management (COM) overseeing areas of public reserve and Conservation Management Networks (CMN) (or similar) whom are an enduring network of interested parties focused on protection of high value remnant vegetation patches, usually public land.

The North Central CMA region proudly supports three of Victoria's 13 CMNs. These networks are land-based networks for conservation of threatened ecological communities (flora and fauna) and remnant vegetation. They are supported through a network of landowners / land managers and the community. (Source: 2020 SWIFFT - State Wide Integrated Flora and Fauna Team).

The role of a Committees of Management (CoM) differs from a CMN, in that under the Crown Land Reserves Act (1978), their role is to 'manage, improve, maintain and control' Crown land reserves that have been set aside for the benefit of the people of Victoria. CoM play an integral role in approving guiding and providing support for catchment works within their area of interest, as well as leverage investment and attract their own funding and resourcing to compliment government agency programs.

(Source: Department of Land, Water and Planning, 2020).

Waterway frontages can be privately or publicly owned. Landholders wishing to manage a parcel of Crown frontage are required to possess a Crown Frontage Licence. At mid-2018, there were over 1,100 riparian management licences (and 128 conservation licences) covering almost 9,300 hectares of Crown frontage in Victoria, of which over 7,100 hectares is fenced and protected. Landholders

play a major role in the management of private riparian land and licensed Crown frontages. In partnership with waterway managers, landholders typically contribute resources to the initial riparian management activities and undertake long-term management of the fenced riparian land. Even on frontages where there is no input from waterway managers, many landholders expend considerable resources on pest animal and weed management as required by their legislative obligations and licence conditions.

(Source: <u>Department of Land, Water and Planning, 2020).</u>

Recreation groups

Our region boasts an engaged and vibrant recreational angling and boating community, with 17 active Angling Clubs and Associations described as within the North-West region. (*Source:* Victorian Fisheries Authority). Recreation fishers, angling clubs and local 'Men's Sheds' have been a collaborative cornerstone for projects in recent years looking to reinstate native fish habitat, waterway connectivity, improve riparian areas health and extend the reach of engagement activities, such as being involved in the CMA's annual 'Catch a Carp' day event series.

Recreational users of waterways, in particular anglers, have a strong and supported network through membership with VR fish as the peak body for anglers, the Victorian Fisheries Authority and CMAs. This partnership approach enables funding to be leveraged into the region through grants programs which fund community projects along waterways and wetlands to improve accessibility, education and habitat. In recent years, this partnership has seen the creation of the first fishing and kayak launching platform along the Campaspe River; supported fish habitat installation in the Lower Loddon and engaged local fishing clubs in 'Catch a Carp' events and fish stocking in local waterways in partnership with Waterwatch.

Environmental volunteering

Trends in environmental volunteering show that people are continuing to sign-up for volunteering programs, but for less time than in the past. A recent survey conducted by the Environmental Volunteering team at DELWP show that volunteers want more event-based volunteering that enables them to make short-term commitments to a cause. And they want easier access to these volunteer opportunities, which are currently not always accessible or readily available. Survey respondents want meaningful volunteer roles and to be recognised and valued by the organisations they work with. Some want to volunteer through their workplace or are looking for pathways to employment and skills development.

Source: Victorian Environmental Volunteering Plan 2018

Citizen science

These trends in volunteering are making citizen science programs increasingly popular. Citizen science typically involves volunteers collaborating with scientists to enhance knowledge and support management of biodiversity. The North Central CMA's Waterwatch program is leading our region providing opportunities for people to participate in citizen science activities that report on the ecological health of the region's land, water and biodiversity. The program coordinates and delivers a range of activities to including training, field days, workshops and celebratory events to support community members to become valued partners in helping to monitor key on ground works programs and priority waterways. At a minimum, volunteers test salinity, pH, turbidity and reactive phosphorus on a monthly basis. Annual water bug monitoring is also undertaken as an indication of ecosystem health.

For most citizen science programs, an annual River Health Snapshot report is produced. Written and presented in a simple format, these are used to interpret data and communicate changes in ecosystem health to a diverse audience. The reports can be used to detect issues where there has

been significant impact on a waterway and over time can help to identify and prioritise areas for future works.

Our River Detectives program is a flourishing education initiative aimed at safeguarding the future of Victoria's precious waterways. Today's young people are tomorrow's future; this thinking is at the heart of the River Detectives program. The primary objective is to inspire teachers and students to understand, appreciate and care for their local waterways. Through engaging, cross-curricular, citizen science-based activities, it's a flexible and fun way to connect young people to nature. Students learn how water, land, plants, animals, people and communities are all integrally linked.

Looking ahead, we plan to better engage with Traditional Owners across the catchment, to share knowledge, to create opportunities for First Nations people and to contribute towards Reconciliation.

Philanthropic and charitable organisations

Partner organisations focused on landscape scale NRM play a critical linkage role working alongside community, governments and business, attracting investment into our region and contributing to RCS aspirations. Philanthropic and charitable organisations such as Bush Heritage, Trust for Nature, Wettenhall Environment Trust and Birdlife Australia have worked with RCS partners and communities to undertake landscape restoration, climate change adaptation projects, threatened species reintroductions and importantly, have contributed to the governance, capacity and education of community based organisations such as Conservation Management Networks and Landcare Networks.

A strength of many philanthropic partners is the purchase and covenanting of land, making their staff and property managers part of the local community and allowing for a very pragmatic understanding of local landscape condition trends, issues and management actions. This in turn helps inform the land management actions of Landcare and RCS partners. Significant benefits and catchment outcomes have been achieved through sharing technical knowledge and understanding, leveraging investment and involving landholder and community in the programs that government, Traditional Owner, philanthropic and community led organisations deliver across the region.

The role of engagement

The final review of the current RCS 2013-19 asked; To what extent has community and partner engagement assisted in RCS delivery and improvements to priority asset condition? The evidence collated for the review indicated that community and partner engagement had certainly assisted in RCS delivery noting that engagement was not only essential for landholder uptake of CMA initiatives, but research also supports the assumption that engagement contributes to better outcomes in the long-term and thus, improved asset condition. Community engagement outcomes included landholder uptake of CMA initiatives, improvements to knowledge, awareness, skills and attitudes (KASA) and intention to make practical changes that contribute to the protection and enhancement of RCS priority assets (as indicated in event evaluations). Community-based programs/networks developed and/or supported by the CMA included, soil protection groups, Landcare and Waterwatch, both having environmental and social benefits. Community engagement by partner organisations was not been considered in the review, but it was noted that stronger collaboration between the CMA and partner organisations had yielded; access to broader networks and funding sources and improved coordination of effort. Challenges identified include attracting a younger demographic to participate in engagement activities and the effective engagement and empowerment of Traditional Owner groups.

RCS partner organisations including the CMA, evaluate event participants to understand effectiveness of their activities and associated demographics. The CMA event evaluation data report

(2015-2020) describes the audience reached and the proportion of those who intend to change practices as a result of participating in the event/training. Over a five year period;

- 3,665 event participants took part in our evaluated events
- 73% of event participants reported a 'reasonably or greater' improvement in skill or knowledge as a result of attending our events,
- 61% of event participants said they were Likely/definitely intending on changing a management practice or implementing a new skill as a result of attending a CMA event.
- The median age bracket of CMA event attendees is 50-65 years.

Other ways that the CMA collect data around community is through the social benchmarking survey the annual NRM audit and current Protecting Investment Improving Capacity program. Continuing to improve our understanding of the regional community and evaluating our impact, will enable RCS partners to tailor their activities and respond to the changing demographics of the region. For example; an opportunity exists to use demographic and social benchmarking data strategically to increase uptake of best practice NRM, through adaptive engagement approaches, to improve catchment condition going forward. North Central CMA could take the opportunity to correlate the areas of likely landholder succession, with the highest priority RCS assets in order to deliver targeted incentive programs as generational changes take place. To achieve catchment outcomes and RCS goals, it is vital to protect our investment equitably through both on ground works and community (including landholders) extension and support.

How well do we understand our regional landholders and the NRM active community? Where the gaps and how can we address them?

Major threats and drivers of change

Challenges for rural landholders

The social benchmarking survey of rural landholders indicated that the top issues at district and property scales (refer figures below) included soil management, changes in weather patterns and dam water quality during drought. At the property scale there has been substantial change in both the level of concern about issues and the relative importance of issues including a substantial increase in the level of concern for soil management issues. For example, soil erosion (e.g. by wind or water) is the highest rated issue and has moved from last of the soil management issues to first.

Changes in weather patterns

Quality of water in farm dama during drought

Movement of irrigation water away from this region

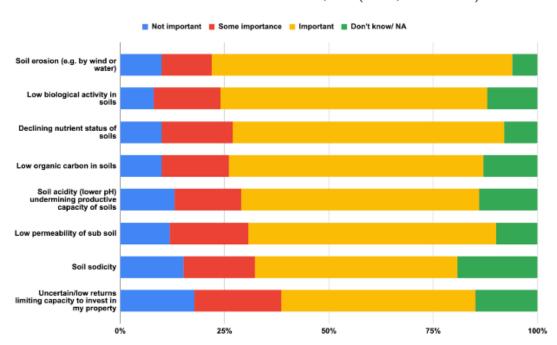
The impact of pest plants and animals

Risk to life and property from wildfires

FIGURE 1: TOP 10 ISSUES AT DISTRICT SCALE, 2019 (N=663, n=640 TO 593)



25%



50%

75%

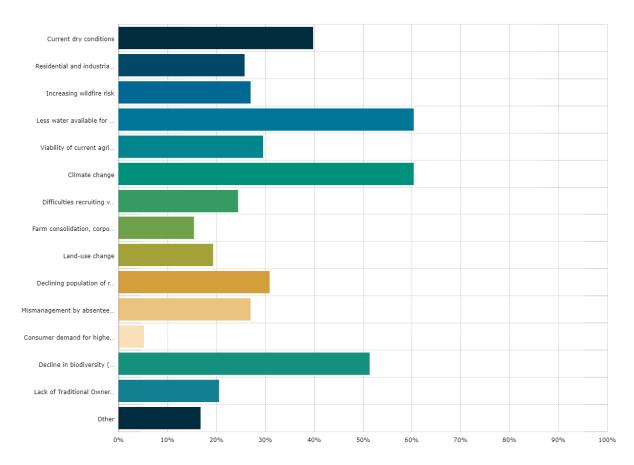
In the context of our regional NRM community groups, the top 5 priorities as reported through the annual Landcare Group Health survey are:

- 1. Vegetation protection and enhancement
- 2. Pest plants and animal control
- 3. Sourcing project funding
- 4. Threatened species protection
- 5. Waterway protection

The online survey for RCS renewal (March-May 2020) asked respondents to pick the top five challenges for rural landholders and community-based NRM groups.

1. Climate change

- 2. Less water available for agriculture, recreation, environment
- 3. Decline in biodiversity (including Threatened species), and
- 4. Current dry conditions
- 5. Declining population of rural community



Challenges for Landcare

Strong and collaborative partnerships between private landholders and Landcare are integral to the community capacity to adapt to undertake NRM action, given the private land ownership ratio in the north central region. Currently 89% of the region is covered by active Landcare (or similar) groups and maintaining these groups is a priority. (*Source: North Central CMA GIS analysis 2018*). Landcare Network Chairs and Facilitators engaged for RCS renewal to date, reported the following trends and challenges:

- Ageing population and volunteer base, younger farmers and landholders not engaging with Landcare
- Difficulty attracting new members, particularly to committee positions.
- Administrative load (e.g. grants, mapping etc) is a challenge and funding is limited.
- More corporate farms, some of whom are exploiting Landcare as cheap labour and a way to demonstrate social responsibility.
- Some newcomers buying smaller lifestyle properties don't have the skills/knowledge in NRM resulting in poor management and increasing demand on Landcare as educator.
- The work that is funded is almost always weed control, too much of the same, it would be great to get some more support to tackle weeds so groups can do some other on-ground work.
- Landcare members fatigued, need to get the fun and enjoyment back into Landcare, important to celebrate achievements, demonstrate the value of our work (e.g. work on public land then opened up as a walking track).

It is important that Landcare is supported to adapt to these challenges if we want them to continue in their role.

Climate change

Climate change is a key driver of change for communities across our region. Climate adaptation is already happening on many levels – land managers and communities have been responding to increased incidence of drought, flood and fire through a range of actions that minimise future risk, improve water security and conserve high value agricultural soils. The work of many Landcare and community groups to buffer remnant vegetation and improve landscape connectivity is supporting adaptation of natural assets. (Source: North Central Region Climate Change Adaptation and Mitigation Plan, 2015)

The recent RCS climate change paper identified the following region-wide priorities for community: and capacity building:

- Improved resilience of communities
- Embedding the latest climate data and science in decision-making
- Education and information provision to local communities to help understand economic and social impacts

The paper also acknowledges the implications of climate change, the vulnerability of natural assets and capacity of communities to adapt, vary across the catchment. Rural landholders reliant on agriculture for their livelihoods, particularly those in the north and west of the region, will be more likely exposed to climate change impacts.

What other trends and challenges facing regional landholders and the NRM active community should be considered?

Opportunities

Social benefits of community-based NRM

It is widely acknowledged that community based NRM activities have social benefits, for example:

"Brian Walton is a Waterwatch volunteer for the RiverScan project who has just turned 80....Brian was able to participate in building fish hotels that would be installed into the Pyramid/Box Creek program area where we are monitoring water quality and macroinvertebrates. After a while, due to aging, Brian's eye sight had deteriorated, and he became unable to drive and with a bad knee, Brian was finding it even more difficult to get out and about. A friend of Brian's (a retired water quality analyst from Goulburn Murray Water) decided to drive Brian to the project area so he could participate in the program...By linking to projects like the Native Fish Recovery Program to the community, we are not just gathering data, we are changing people's lives by building social networks in communities and improving physical/mental wellbeing. "

The final review of current 2013-19 RCS suggested the current Monitoring, Evaluation, Reporting and Improvement (MERI) approach could be expanded to include cultural and social objectives. The social benefit of investment into community delivered NRM works for example, could be measured through a Social Return on Investment (SROI) evaluation process or similar, which may also serve to facilitate different investment streams into the sector.

Enlisting volunteers

Volunteering Naturally (DELWP 2019) explains that emerging issues can be the spark for environmental volunteering, citing that the increase in awareness of climate change, rising energy costs and communities wanting to play their part in living sustainably are all contributors to greater interest in renewable and community-owned energy and environmental volunteering generally.

Emerging issues, in particular waste and climate change, were the catalyst for the creation of the regions Intrepid Landcare movement in 2018-19. There are currently two *'Intrepid tribes'* doing stuff that matters across the Macedon Ranges and Mount Alexander regions. The members are typically under 35 and operate online. Whilst still in its infancy, the goal for this nation-wide movement, is to facilitate more regular check-ins with tribes and establish a tribe-to-tribe get together for more communications across and between groups, so we can all grow together. Intrepid Landcare is a blend of personal, professional and leadership development that is one of many platforms engaging younger people in community based NRM, environmental issues and climate change action.

Connecting with nature

Green spaces, open spaces, natural spaces and shade are integral to the health and wellbeing of everyone in our region. An increasing amount of research is finding many positive impacts of urban green spaces on the health and wellbeing of the community. Access to green space has been found to improve mental wellbeing with studies showing relationships between greenery and reduced rates of depression, anxiety and faster hospital recovery times.

These places will be increasingly important as temperatures rise with climate change. Current initiatives such as 'Greening Greater Bendigo' and 'Cooling Inglewood' are multi-stakeholder led initiatives, driven to reduce the impact of heat stress, carbon pollution, tree loss and provide increased amenity in the form of shade and green spaces.

"Over the next fifty years, Bendigo's population is set to double. As we grow, our climate will become increasingly hotter and drier, putting greater importance and strain on the urban forest. The trees we plant today will become the shade trees over the coming decades for future generations, and they must withstand the many climatic, environmental, economic and social challenges" (Source: Greening Greater Bendigo Strategy 2020-2070.

https://www.bendigo.vic.gov.au/sites/default/files/2020-06/Greening-Greater-Bendigo-Strategy-2020-2070.pdf)

By enabling, improving and promoting opportunities for people to connect with nature, through recreational use and around natural assets in urban areas (e.g. Bendigo Creek and other IWM projects) there will be benefits for community wellbeing but that connection may also inspire action and it offers RCS partners an opportunity to engage with, educate and link those people with projects, groups and volunteering opportunities.

Leadership

Leadership within our communities is essential for achieving the aspirational goals of the RCS. North Central CMA will continue to actively promote and where possible, provide support, to ensure the delivery of regional leadership programs which have produced innovative and effective leaders from right across the North Central region e.g. LEAD Loddon Murray Community Leadership Program, Jumpleads NFP, Australian Indigenous Leadership Centre and Victorian Rural Women's Leadership and Mentoring Program.

Supporting community to play their part

Community respondents to the online survey for RCS renewal were mostly non-farmers from the south-east of the region, many who are managing their land for conservation. This is a gap that will need addressing in the next phase of community engagement. Regardless there 79 responses received which is a good result. When asked what is needed to support landholders and community to play their part in the future; there was not a lot to distinguish the responses, indicating that all were needed, however the most common by a small margin were; financial incentives, peer support and information/advice.

Other suggestions included; some who want more government involvement,

"Stronger policing of landholders responsibility in regard to weeds and pest animals. Non-compliance needs to have consequences",

and those who want less;

"Landholders recognized as the relevant local authority, and not advised by removed, nonstake holder urban agencies."

Some felt that:

"Acknowledgement of agricultural stewardship" and locally relevant, community led solutions were important;

"...programs/opportunities that connect the opportunities and risks with the values of individuals,"

"Activities that enable dissemination of local knowledge build community capacity and encourage new ways of doing things."

And there was also a suggestion to; "Return First Peoples' care of country to develop new/old methods and frameworks beyond monetary reductionism."

Whilst financial incentives and provision of information/advice are fairly standard NRM interventions, peer support through the establishment of local community-based and led farming groups is a growing area. For example, through the Farming for Sustainable Soils (FSS) project, local communities were empowered to improve the health of their soil assets. The project demonstrated the effectiveness of community-based approaches to programs in the natural resource management sector. Funded field trials and demonstrations were a core component of the FSS model that were found to both provide value through their outcomes and results, but also provided value to farmers as a learning activity and engagement tool.

"[One of the best things about the FSS Project was] talking to other people and realising that it's good to take a risk and try different things [...] don't be scared to do that, no-one is going to bag you if it doesn't work [...] and if it goes wrong, then other people can learn from that, and if it goes right equally people want to learn from that." (participating farmer)

The RCS Land discussion paper includes a discussion around this and proposes priority directions to further community-based approaches.

When asked what support Landcare needed, Network Chairs and Facilitators of the region suggested that

- Bring back Landcare Network grants, allowing Networks to focus on strategic landscape scale projects and introduce some discretionary funds for Landcare networks so we can be responsive
- Enable Landcare to work on public land
- More training for Landcare groups
- Devolve funds into issues, cut across government silos (e.g. sustainable agriculture and biodiversity)

- Sustainable/regenerative agriculture is not a priority for all groups, but there are opportunities to introduce this and broaden activity/membership
- One tactic is to open Landcare projects up to the broader community
- Celebrate success at local level, promote using videos
- Have had some success tapping into networks of a younger demographic, they are invigorating our Landcare group membership

A broader audience

As described in the event evaluation section, the CMA event evaluation data report (2015-2020) shows the audience reached since standardised event evaluation data collection began. The demographics of our participants highlights a lack of diversity across age, gender, cultural background and occupation. Since 2015, excluding the school based events, a CMA event attendee is typically a Caucasian male, over the age of 55 with a part or full time farming occupation.

School based events run through River Detectives, Waterwatch and Junior Landcare events engage younger audiences and some Landcare events bring in a stronger female audience with targeted events like 'Women in Agriculture' courses and 'Chicks in the Sticks', which was specifically designed to create inclusive, female friendly field day style event.

The data presents a clear opportunity to plan engagement and extension events that are considerate and inclusive of a more diverse demographic. Barriers to participation and specific requirements need to be considered, when planning and design engagement and extension activities to include, for example:

- Traditional Owners and Aboriginal Victorians
- Culturally diverse communities.
- Hobby, boutique and corporate farmers.
- Cooperative farming enterprises.
- Environmentally oriented businesses (e.g. carbon offset brokers).
- Episodic volunteers and citizen scientists.
- Youth and corporate volunteers.

These audiences are all underrepresented in the CMA's current engagement data and have been identified as priorities for NRM extension and engagement in Victorian Government policy and plans, such as the Pupangarli Marnmarnepu 'Owning Our Future' *Aboriginal Self-Determination Reform Strategy 2020-2025*, Victorian Landcare Program Strategy (2020-2023) and Biodiversity 2037.

Policy context

Regional polices, strategies, plans and legislation	Each of the Landcare Networks in the Newth Countries
Landcare Network and/or Conservation Management Network Strategic Plans	Each of the Landcare Networks in the North Central region has a community developed strategic or
Landcare Group Action Plans	activity plan which outlines the strategic direction and priority landscapes of focus for the Network/ Group, which assist in achieving the goals and purposes of
	the organisation.
North Central Waterwatch Support Plan	The North Central CMA's Regional Waterway Strategy underpins the actions of the North Central Waterwatch. The program is supported to use the data collected by our region's citizen scientists to help strengthen trust, credibility and participation in forming a collective awareness of the current condition of our natural resources. North Central Waterwatch will work with citizen scientists to address Water for Victoria's action 3.4 Strengthening
	community engagement and participation; support
North Central Regional Landcare Support Plan	community partnerships and citizen science. The North Central Regional Landcare Support Plan
	explains how the North Central CMA does and will support Landcare and community based NRM groups in the region – working together to protect and enhance our natural assets. A Landcare community that is active and engaged is critical for the successful implementation of the North Central CMA's Regional Catchment Strategy.
Victorian Government policies, strategies, plans and leg	rislation
Water for Victoria	Water for Victoria is a plan for a future with less water as Victoria responds to the impact of climate change and a growing population.
	The approach focuses on strengthening local relationships and putting community at the centre of decision making and the delivery of priority water projects for Victoria's cities, towns and regions.
Our Catchments Our Communities	The first state-wide strategy for integrated catchment management in Victoria. State and regional partners and community networks are involved in its implementation, along with DELWP and CMAs. Through this partner approach, the strategy will strengthen partnerships through co-ordinated planning, investment, and on-ground activities. Over the course of the strategy, CMAs and their regional partners and communities will deliver integrated catchment management projects across Victoria.

Regional polices, strategies, plans and legislation	
Victorians Volunteering for Nature - Environmental Volunteering Plan Protecting Victoria's Environment - Biodiversity 2037	Victorians Volunteering for Nature – Environmental Volunteering Plan is a coordinated and revitalised approach to environmental volunteering that looks at how we can support and sustain the existing environmental volunteering sector, while encouraging more active involvement from Victorians by making the sector more relevant and accessible. Protecting Victoria's Environment - Biodiversity 2037 (the Biodiversity Plan) was launched in 2017 and is a high-level strategy that recognises stopping the decline of Victoria's biodiversity will require a concerted effort over many years by government and its partners across Victoria to put biodiversity back on a path to recovery. One of the Biodiversity Plans goals is that "Victorian value nature" – Victorians understand that their personal wellbeing and the economic wellbeing of the state are dependent on the health of the natural environment. The Biodiversity Plan outlines a number of priorities and associated initiatives to reach this goal that are relevant to our regional Community including: • Priority 3: Raise the awareness of all Victorians about the importance of the state's natural environment. • Priority 4: Increase opportunities for all Victorians to have daily connections with nature • Priority 5: Increase opportunities for all Victorians to act to protect biodiversity • Priority 7: Help to create more liveable and climate-adapted communities.
	·
Australian Government policies, strategies, plans and le	
Australian Government's National Landcare Program	The National Landcare Program is a key part of the Australian Government's commitment to protect and conserve Australia's water, soil, plants, animals and ecosystems, as well as support the productive and sustainable use of these valuable resources

Draft Priority Directions

The RCS will include high-level priority directions for each theme and local area. Draft directions for the community theme, developed in response to the issues outlined herein, are presented below for discussion:

- Expand our approach to MERI, to better understand and value the; social/cultural outcomes
 of investment in community based NRM works and consider how to integrate social/cultural
 objectives in decision making
- Continue to improve our understanding of rural landholders and their communities, across the region and over time, to enable tailored approaches and improved engagement in NRM across a broader demographic
- Community development and capacity building for climate change adaptation considering the
 varying; impacts across the region, diversity of views, capacity to adapt and the need for
 locally relevant information to enable informed discussions and how to deal with uncertainty.
- Provide the support that community based NRM groups (including Landcare) need to; maintain group health and membership, adapt to demographic shifts and continue their important role into the future.
- Continue to improve the NRM literacy of the community with a focus on regionally important NRM issues
- Enable, improve and promote opportunities for communities to connect with nature (including recreational use across the region and around natural assets in urban environments, acknowledging the benefits for community wellbeing, as well as opportunities to; deliver community education link with community-based NRM groups, onground works and citizen science.

Draft Outcomes

The RCS guidelines require all RCSs to adopt a standard outcomes framework to enable consistent monitoring and reporting on condition and management across the state, using agreed outcome indicators. The outcomes framework allows CMAs to articulate what success looks like at the regional scale. Outcomes are to be SMART (specific, measurable, achievable, relevant and time-bound). There will be long-term (20+ years) and medium-term (6 years) outcomes identified for each theme and local area. Regionally specific indicators can also be developed. The following outcomes and indicators for community have been drafted for comment.

Draft vision for Community:

An informed, engaged community active in protecting and enhancing the region's natural assets.

Long-term (20+ years) SMART regional outcome for Community:

 An informed, engaged community active in protecting and enhancing the region's natural assets.

Medium-term (6 year) SMART regional outcomes for Community:

- Improve skills and knowledge to enable practice change through 4000 community members participating in events and programs, by 2027.
- Waterwatch supporting 60 of volunteer citizen scientists to monitor land, water and biodiversity outcomes, by 2027
- Engage a younger and more culturally diverse demographic of event and program participants by 2027.
- Increase the average Landcare / Community NRM Groups Health Score, by 2027

We welcome your comments on the draft priority directions and outcomes. What would you change, add/remove and why?

References

City of Greater Bendigo (2020). Greening Greater Bendigo Strategy 2020-2070. https://www.bendigo.vic.gov.au/About/Document-Library/Greening-Greater-Bendigo

Curtis, A., & Luke, H. (2019). Social benchmarking for natural resource management: 2019 North Central Victoria. Southern Cross University, NSW, 2480.

Department of Environment, Land, Water and Planning (DELWP). Victoria's Climate Change Framework. https://www.climatechange.vic.gov.au/ data/assets/pdf file/0021/55254/DELWPClimateChange Framework.pdf) Department of Environment, Land, Water and Planning (DELWP). Victorian Landcare Program Review Action Plan (2015).

https://www.landcarevic.org.au/resources/victorian-landcare-program-review-action-plan/

Department of Environment, Land, Water and Planning (DELWP). Victorian Environmental Volunteering Plan (2018)

https://www.environment.vic.gov.au/ data/assets/pdf file/0035/394883/VVfN-Environmental-Volunteering-Plan WEB.pdf

Dhelkunya Dja Land Management Board Joint Management Plan for the Dja Dja Wurrung Parks: Strategy (2018). http://www.dhelkunyadja.org.au/files/Oct-18-Strategy.pdf)Natural Decisions (2019) Regional Catchment Strategy 2020, Foundational Paper 4: Climate Change

North Central CMA Engagement Strategy DRAFT (2017-2021).

https://nccma.sharepoint.com/:w:/r/sites/Communications/_layouts/15/Doc.aspx?sourcedoc=%7BABA7166F-A0A0-40C3-9EF2-C65A3E7FB678%7D&file=2017-

North Central Region Climate Change Adaptation and Mitigation Plan (2015).

http://www.nccma.vic.gov.au/sites/default/files/publications/nccma_final_climate_change_mitigation_plan_2015.pdf

North Central Regional Catchment Strategy (2013-2019).

http://www.nccma.vic.gov.au/sites/default/files/publications/nccma-

78628 north central cma rcs - may 2013 web 0.pdf

North Central Regional Landcare Support Plan (2018-2023).

http://www.nccma.vic.gov.au/sites/default/files/publications/landcare 2018 support plan.final .p df

North Central Waterway Strategy (2014-2022).

http://www.nccma.vic.gov.au/sites/default/files/publications/north_central_waterway_strategy_20_14-2022.pdf

North Central Waterwatch Support Plan DRAFT (2019-2024).

https://nccma.sharepoint.com/sites/nrm/_layouts/15/Doc.aspx?sourcedoc=%7BC0186393-42AA-47EF-86E3-

<u>4FE4B4F4A1CE%7D&file=North%20Central%20Waterwatch%20Support%20Plan%202019%202024%</u> 20V2.docx&action=default&mobileredirect=true&DefaultItemOpen=1

Victorian Government Department of Health and Human Services. (July 2019). Climate change and health. https://www.betterhealth.vic.gov.au/health/healthyliving/climate-change-and-health

Appendix 1 – Summary of Social Benchmarking Study 2019 by Local Government Area

Notes:

- Compared to 2014, a larger proportion of respondents identify as non-farmers and a smaller proportion as part-time farmers.
- Full-time and part-time farmers are more likely to give a higher rating to items focused on farming as a business
- Hobby farmers and non-farmers gave a higher rating to items focused on environmental condition and amenity.
- Across cohorts there are shared values or common ground.

		Loddon	Macedon Ranges	Gannawarra	Greater Bendigo	Hepburn	Mount Alexander	Northern Grampians	Buloke	Campaspe	Central Goldfields	Pyrenees	Swan Hill
Number of respondents		111	38	56	91	54	64	52	32	60	33	33	18
Family members interes	ted in taking on property	42%	37%	46%	31%	43%	31%	56%	37%	52%	23%	35%	28%
Level of knowledge of NRM	How to identify main constraints to s oil productivity on property		27%	68%	34%	24%	36%	70%	73%	63%	52%	48%	56%
	Role of understorey plants for birds	28%	38%	36%	36%	39%	52%	32%	20%	34%	34%	28%	33%
Prioritise private propert	Prioritise private property rights (harvesting rainfall)			34%	47%	49%	50%	34%	29%	32%	45%	44%	39%
Confidence that best- practices are effective	Fencing to manage stock access to waterways & wetlands	70%	81%	66%	78%	64%	80%	62%	72%	78%	60%	69%	50%
	Benefits of stubble retention	65%	35%	71%	43%	36%	40%	74%	87%	71%	58%	52%	72%
	Watering stock off-stream improves bank stability & plants	57%	68%	61%	63%	55%	69%	44%	66%	66%	57%	63%	44%
Belief in climate change		53%	79%	46%	72%	75%	86%	51%	35%	42%	59%	67%	39%
Predisposition to trust		50%	37%	52%	45%	42%	40%	45%	42%	40%	66%	30%	28%
Predisposition to accept	risk	45%	58%	63%	51%	48%	51%	43%	42%	45%	43%	38%	44%
Enterprise mix	Crop	74%	5%	57%	26%	28%	19%	87%	94%	73%	47%	58%	28%

		Loddon	Macedon Ranges	Gannawarra	Greater Bendigo	Hepburn	Mount Alexander	Northern Grampians	Buloke	Campaspe	Central Goldfields	Pyrenees	Swan Hill
	Dairy	4%	nil	14%	nil	2%	nil	nil	nil	23%	3%	nil	6%
	Beef	19%	37%	39%	19%	37%	27%	14%	16%	28%	18%	24%	22%
	Sheep	64%	37%	41%	53%	37%	39%	83%	72%	48%	67%	85%	39%
	Living/recreation space	29%	53%	41%	37%	46%	41%	25%	38%	18%	27%	39%	56%
*Farmer identity	Full-time farmer	55%	16%	67%	16%	32%	21%	80%	94%	74%	50%	57%	71%
	Part-time farmer	18%	22%	24%	17%	28%	26%	12%	3%	17%	20%	17%	18%
	Hobby farmer	10%	27%	7%	25%	20%	18%	nil	nil	3%	13%	13%	12%
		Loddon	Macedon Ranges	Gannawarr a	Greater Bendigo	Hepburn	Mount Alexander	Northern Grampian s	Buloke	Campasp e	Central Goldfields	Pyrenees	Swan Hill
	Non-farmer	17%	35%	2%	42%	20%	36%	8%	3%	5%	17%	13%	nil
Have implemented	Fenced waterways & wetlands	29%	53%	38%	25%	37%	31%	52%	34%	32%	30%	42%	22%
best- practice over the full-period of management	Tested soils for nutrient status	47%	34%	63%	26%	43%	39%	75%	75%	72%	39%	64%	56%
-	Used minimum or no tillage	60%	29%	55%	32%	33%	38%	73%	88%	75%	49%	64%	44%
	Fenced native bush/grasslands	49%	55%	38%	31%	44%	45%	52%	63%	45%	36%	52%	39%
Median property size		460 ha	26 ha	290 ha	40 ha	50 ha	51 ha	1000 ha	1525 ha	400 ha	400 ha	403 ha	50 ha
Median time property in family		50 years	20 years	60 years	26 years	30 years	35 years	100 years	100 years	60 years	70 years	63 years	40 years
Property principal place of residence		76%	67%	83%	61%	71%	71%	73%	67%	86%	58%	70%	94%
Landcare participant		29%	32%	31%	14%	28%	44%	48%	40%	18%	21%	44%	11%

	Loddon	Macedon Ranges	Gannawarra	Greater Bendigo	Hepburn	Mount Alexander	Northern Grampians	Buloke	Campaspe	Central Goldfields	Pyrenees	Swan Hill
Have property management plan	25%	30%	32%	16%	30%	28%	31%	28%	18%	32%	26%	50%
Male respondent	80%	71%	83%	73%	59%	57%	90%	94%	93%	79%	87%	83%
Any income from agriculture	76%	31%	84%	39%	65%	48%	92%	93%	92%	74%	77%	83%
% all respondents with net profit from agriculture >\$50k	40%	12%	44%	14%	25%	11%	64%	70%	21%	21%	55%	47%
% all respondents with net off-property income > \$50k	25%	45%	27%	38%	35%	41%	23%	16%	22%	30%	27%	39%
Days paid off-property work	51 days	116 days	44 days	106 days	96 days	86 days	51 days	1 day	45 days	30 days	42 days	76 days

TOP THREE ATTACHED VALUES AND ISSUES BY LGA

		Loddon	Macedon Ranges	Gannawarra	Greater Bendigo	Hepburn	Mount Alexander	Northern Grampians	Buloke	Campaspe	Central Goldfields	Pyrend
Top 3 attached values	1	Pass on healthier environment 88%	Attractive place to live 92%	Pass on healthier environment 96%	Attractive place to live 92%	Attractive place to live 85%	Attractive place to live 90%	Sense of accomplishment building business 96%	Sense of accomplishment building business 97%	Sense of accomplishment building business	Opportunity to learn new things 86%	An im source house incom
	2	Productive soil 87%	Ability to pass on 86%	accomplishment building	Pass on healthier environment 88%	Pass on healthier environment 83%	A great place to raise a family 90%	An important source of household income 92%	An important source of household income 97%	Productive soil 93%	Productive soil 86%	Produ 84%
	3	Sense of accomplishment building business 87%	Place to raise family 81%	Sense of accomplish ment producing food 91%	Native vegetation for an attractive place to live 77%	Opportunity to learn new thin gs 8 0%	Pass on healthier environment 85%	Pass on healthier environment 90%	Productive soil 97%	Pass on healthier environment 90%	Sense of accomplishment building business 85%	Sense accon buildir busine
Top 3 issues	1	Soil erosion 83%	Risk to life and property from wildfires 76%	Movement of irrigation water away from this region 94%	Changes in seasonal weather patterns 83%	Risk to life and property from wildfires 83%	Soil erosion 84%	Crop weed resistance to herbicide 90%	Crop weed resistance to herbicide 97%	Movement of irrigation water away from this region 91%	Soil erosion 80%	Soil e 93%
	2	Movement of irrigation water away from this region 81%	Crop weed resistance to herbicide 73%	Absence or poor quality of important services and infrastructure 79%	Quality of water in farm dams during drought 79%	Low biological activity in soils 77%	Declining nutri ent status of soils 79%	Soil erosion 88%	The impact of pest plants and animals on native plants and animals 90%	Low biological activity in soils 77%	Risk to life and property from wildfires 76%	Low b activit 92%

	Loddon		Macedon Ranges	Gannawarra	Greater Bendigo	Hepburn	Mount Alexander	Northern Grampians	Buloke	Campaspe	Central Goldfields	Pyrene
	3 in farm	of water dams drought	Changes in seasonal weather patterns 70%	Modernisation of the irrigation system as part of water reform 79%	Risk to life and property from wildfires 77%	Low organic carbon in soils 76%	Quality of water in farm dams during drought 79%	Absence or poor quality of important services and infrastructure 83%	Changes in seasonal weather patterns 83%	Crop weed resistance to herbicide 74%	Low biological activity in soils 73%	Qualit in farn during 90%