

# Understanding the aspirations and perspectives of Rivercarers in the Mary River catchment, Qld

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## Key Points

- Private landholder engagement in river restoration is crucial for achieving long-term, meaningful outcomes for biodiversity and water quality
- Fostering and maintaining commitment of landholders to Rivercare is an important role for catchment groups, Landcare and natural resource management organisations
- Participatory studies in the Mary River catchment in Queensland found that the social aspects of Rivercare are just as, if not more important, for landholders than advice and technical know-how
- Community engagement programs are likely to achieve more widespread and sustained Rivercare outcomes if they are designed to build social capital and empower landholders.

## Abstract

The Mary River Catchment was one of the pilot catchments for integrated catchment management in the 1990s and has experienced growth in “Rivercare” practices since this time. Gaining a better understanding of the motivations, aspirations and perspectives of landholders and volunteers who undertake this work, in some cases over decades, is important for the effectiveness of a catchment management organisation such as the Mary River Catchment Coordinating Committee. A series of participatory forums have taken place in the Mary River catchment that have generated insights into what helps people get motivated and stay motivated to be “Rivercarers”. These activities were undertaken as part of the development of the Mary River Threatened Aquatic Species Recovery Plan and the “Mary River Restoration Stories: lessons from 20 years of Rivercare” project which brought people together to review the last 20 years of Rivercare. Whilst those involved in Rivercare are keen to keep learning and improving their knowledge and technical know-how, these two projects have revealed that gaining new information and skills is only one of many facets needed to keep people engaged and active in Rivercare projects. The social dimensions of being involved in restoration projects, such as the feeling of being part of achieved a shared goal, of being part of a support network, and of collaborating and sharing similar aspirations with others are crucial to many people’s ongoing involvement in Rivercare. Using the concepts of social capital and empowerment, a typology for engagement is proposed that could encourage more widespread engagement and corresponding stronger outcomes from Rivercare in the Mary catchment and elsewhere.

## Keywords

Community engagement, Mary River catchment, Rivercare, riparian restoration, empowerment, social capital.

## Introduction

A quick scan of the latest State of Environment report shows that many ecological processes and ecosystems are regarded as deteriorating in extent and/or condition (State of the Environment 2011 Committee 2011). In the Mary River catchment (a medium sized catchment of 9600km<sup>2</sup> that is the southernmost Great Barrier Reef catchment ) it has been estimated that rehabilitation of degraded riverbanks (including weed control, fencing and revegetation) would cost in the order of \$124 million (Mary River Catchment Coordinating Committee 2005). Allocation of \$124 million to Rivercare activities across the Mary River catchment, would use 12% of

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the National Landcare Programme budget of \$1billion and require more than double the \$56 million allocated in the recently announced funding round of Reef Trust III (McCormick 2016).

For comparison, \$124 million is approximately one quarter of that recently spent upgrading a 12km section of the M1 highway linking Cooroy to Curra, which transects the catchment (Department of Transport and Main Roads 2016). Given the spending priorities of Governments, it seems extremely unlikely that there will be sufficient funds made available to pay directly for the work that is needed to reverse the trends of deterioration across the nation.

Thus, achieving improvements will fall largely to volunteers including people who volunteer to undertake activities on their own land that have a public benefit (e.g. revegetation that improves downstream water quality, creation of terrestrial corridors, etc). Across Australia 25% of land is publicly managed (13% of this is protected in reserves (Jacobson et al 2014) and the remainder is in some form of private ownership and management (State of the Environment 2011 Committee 2011).

Private landholders, dominated by agricultural enterprises (52% of land) and indigenous groups (23% of land) are arguably the most important stakeholders to engage in efforts to reverse ecosystem decline. The shift, in recent decades, away from regulatory approaches and the devolving of responsibility for management of natural resources to regional-level organisations (Jacobson et al. 2014) provides further impetus for the need to effectively engage with landholders who voluntarily undertake Rivercare actions.

The importance of increasing participation in natural resource management is recognized in Australia’s most recent Biodiversity Strategy (Natural Resource Management Ministerial Council 2010) which set the goal of increasing participation by 25% between 2010 and 2015. The emphasis on participation has continued in the National Landcare Programme with strategic objectives 1, 3 and 4 of the Programme centering on community involvement (Department of Agriculture and Department of Environment 2015). Objective 3, “Communities are involved in caring for their environment “, specifically refers to increasing engagement and participation.

Engagement and participation have many different forms which differ in their capacity to empower and generate action by participants. Gooch (2004) combined the famous Arnstein’s (1969) ladder of citizenship participation and Jules Pretty’s (1995) work on rural development practice to provide a framework for describing levels of catchment volunteer empowerment (Table 1). Higher rungs of the ladder signify greater empowerment of individuals and the community.

**Table 1. Gooch’s typology of participation in catchment management**

<b>Rung on the ladder</b>	<b>Level of participation</b>
<b>7. Self mobilisation</b>	Citizens and groups take initiatives independent of influential agencies, and retain control over how resources are used
<b>6. Delegated power</b>	Citizens are in the majority, and can make decisions. Public accountability is assured
<b>5. Interactive Partnership</b>	People participate in joint development of action plans, using multiple perspectives and learning processes
<b>4. Functional participation</b>	Participation tends to arise only after major decisions have already been made
<b>3. Informing</b>	No channels for feedback— one-way flow of information to inform the public
<b>2. Pretence</b>	Participation is simply a pretence, with ‘people’s’ representatives on official boards but who are unelected and have no power
<b>1. Manipulation</b>	Non-participative withholding information, changing information

Arnstein (1969) conceptualized participation as a form of power and Pretty (1995) proposed interactive forms of participation as the basis of a new form of agricultural professionalism. The typology makes clear that

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community participation is not always empowering, for instance, participation that involves “pretense” and/or “manipulation” is actually disempowering. Interestingly, Gooch’s (2004) research found that these disempowering forms of participation were rife within the catchment management space.

Providing information to participants, has a role to play in encouraging participation, but it is quite low in the ladder, suggesting that it does not contribute greatly to empowerment. It is at this level that conventional awareness-raising programs sit as they generally involve a one-way flow of information to the community. Offering participants information and opportunities for functional participation corresponds to levels of participation which Arnstein (1969) referred to as tokenism, whereas interactive partnership, delegated power and self-mobilization involve not only a sharing of power but also greater levels of individual and community ownership and control.

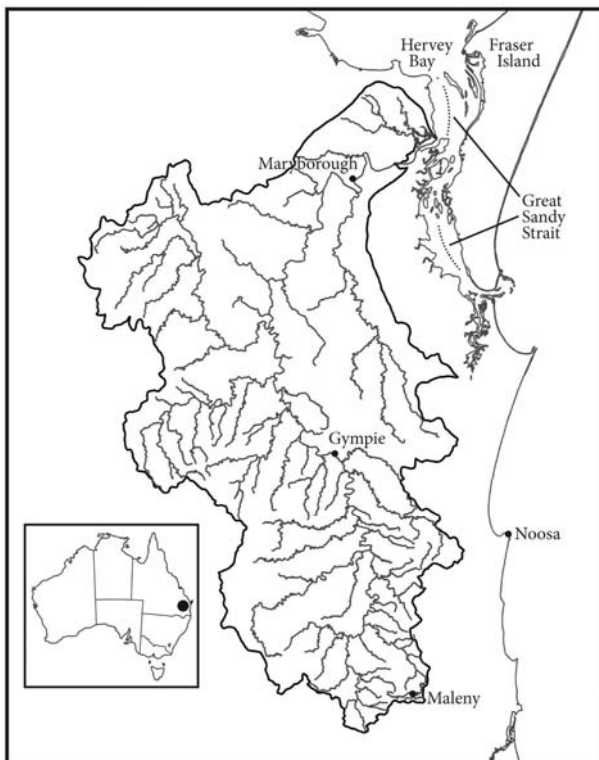
This paper concentrates on the role of private landholders in Rivercare activities in the Mary River catchment and what has been learned about the perspectives and aspirations of these landholders from two recent Mary River Catchment Coordinating Committee’s projects

The first of these projects occurred in 2012 during the community consultation phase of the development of the Mary River Threatened Aquatic Species Recovery Plan and included two engagement activities referred to as the “Caring for Mary” forums and the “Indigenous Working Group” meetings. The second project was funded through a Community Action Grant from the Australian Government and took place in 2013. Called “Mary River Restoration Stories: lessons from 20 years of Rivercare”, this project held a series of participatory forums to evaluate the last 20 years of Rivercare in the catchment. These projects were designed to reveal a broad range of perspectives and to generate understanding about what motivates people and keeps them motivated to undertake Rivercare activities on their own land or to volunteer on private or public land.

## **Approach and Results**

### *Context*

The Mary River catchment is located on the northern edge of South East Queensland (see Figure 1).



**Figure 1. Map of the Mary River Catchment**

The Mary River Catchment Coordinating Committee was incorporated in 1995. The organisation has a small number of paid staff and is guided by a volunteer committee that represents over twenty different sectors from across the catchment and across industry, local and state government and the community. The Mary River Catchment Strategy (Mary River Catchment Coordinating Committee 1996) recognized the importance of engaging the community and numerous activities have occurred over the last decades to encourage involvement in catchment management. This paper focuses on three recent engagement activities.

### *1. Caring for Mary workshops*

Caring for Mary workshops were held in four locations in 2011 – Maryborough, Gympie, Kenilworth, and Maleny (120 participants in total). Participants were self-selected and people engaged in agricultural production were a minority within the groups. At each workshop participants were divided into groups of five or less and each group recorded their opinions regarding two questions: “Why do you care about the Mary?” and “What do you need more of to help you to care?”. A synthesis of the feedback from the groups regarding each of these questions and subsequent collective discussion lead to the creation of action lists from each meeting. These lists were incorporated in the actions included in the Mary River Threatened Aquatic Species Recovery Plan.

Responses to each question were coded to identify related themes. Figure 2 shows the results of the response to the question “Why do you care about the Mary?” collated across all four meetings. It shows that “It’s all connected” was the most frequently occurring theme. This theme includes connections among people, cultures, the landscape and plants and animals. A sense of responsibility and leadership were also prominent influences upon people’s caring attitudes toward the river. For some people this was because “nature can’t speak for itself”, for others it was about a desire to “give back”, or because they have “seen changes and need to do something”.

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Love of biodiversity was a strong driver among this group of participants. Respondents also referred to the need to ensure that future generations could also enjoy and experience the river. The lifestyle and recreational benefits of the river were also a motivation to care for the river, as were passion and spiritual nourishment from caring for the river because “It’s in our blood”. For some they cared for the river because it is “where they live”. The role the river plays in sustaining people by providing water and food was cited as another reason to care.

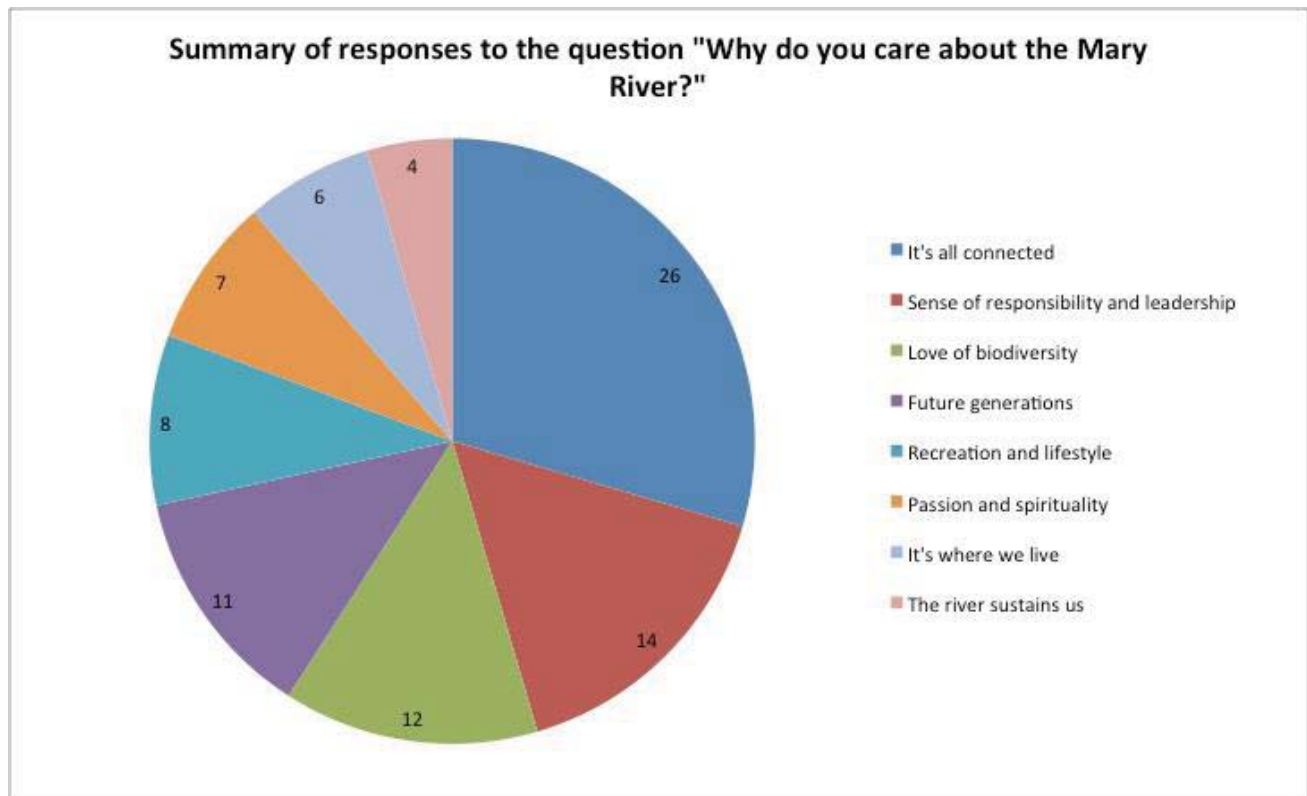
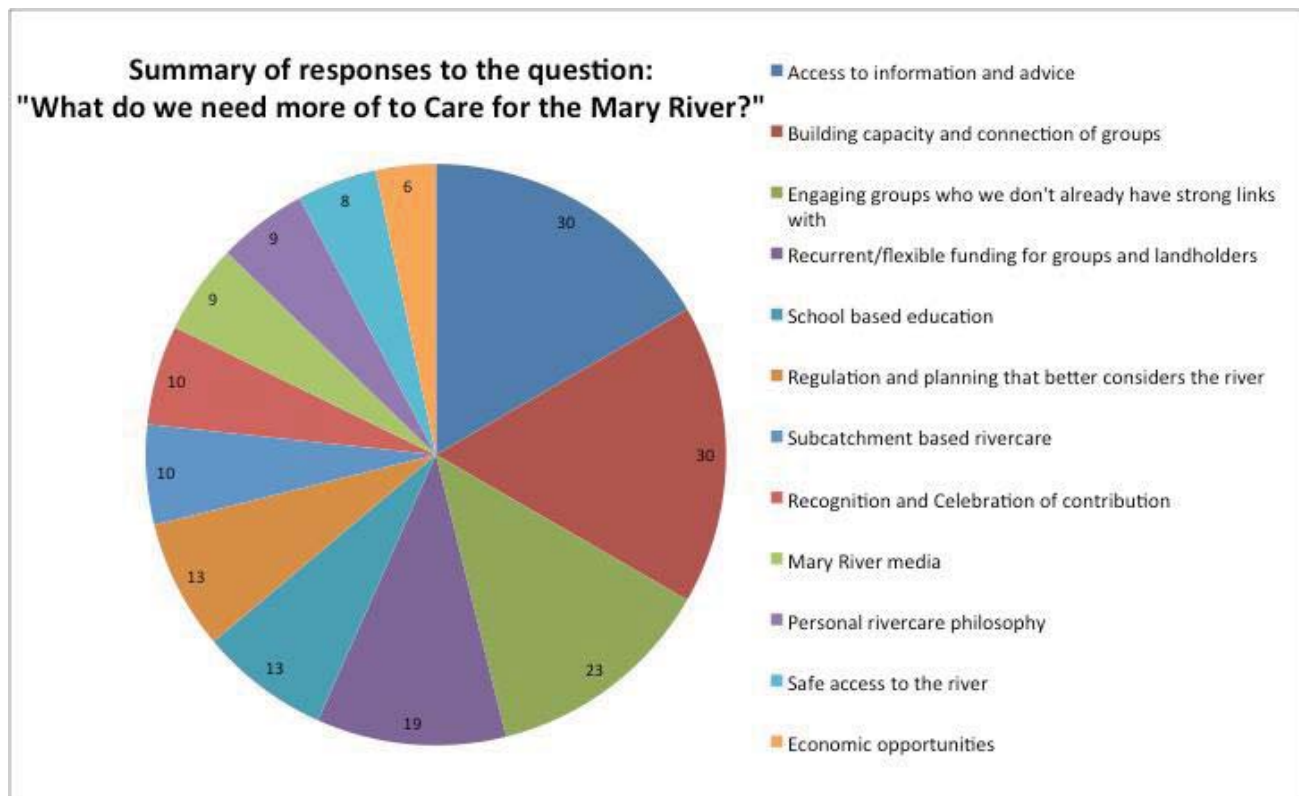


Figure 2. Grouping of responses to the question “Why do you care about the Mary River?”

Figure 3 provides a collation of the coded responses to the question “What do you need more of to help you care?”. Across the four workshops responses categorized as “access to information and advice” and “building the capacity and connection of groups” were equal in number. Engaging with groups where strong links do not already exist was also seen as a strong need. Young people, indigenous groups and finding new sources of volunteers were specifically mentioned in this theme.

The next most frequent responses fell in the theme of recurrent and flexible funding. School-based education and improvements to regulation and planning had 13 responses each, followed by subcatchment-based Rivercare and recognition and celebration of contribution to Rivercare. Increasing Mary River media, encouraging a personal Rivercare philosophy, providing safe access to the river and identifying economic opportunities to foster and strengthen Rivercare were also identified.



**Figure 3. Responses to “What do you need more of to care for the Mary River?”**

### 2. Indigenous perspectives on the Mary River Threatened Aquatic Species Recovery Plan

Three Traditional Owner groups were consulted in the development of the Mary River Threatened Aquatic Species Recovery Plan. These were the Butchulla people whose country is in the north-eastern part of the catchment and the Kabi Kabi and Gubbi Gubbi who have connection to country in the southern part of the catchment. Two separate meetings were held for the Kabi Kabi and Butchulla, an interview with an eminent Gubbi Gubbi elder occurred and a two-day workshop and bus trip through country was held which primarily involved Kabi Kabi people. The discussions focused on the issues the river faced and the actions that should be in the Recovery Plan. The concerns and actions fell within the following broad categories:

- Protection of habitat and natural flow patterns to ensure both clean water and clean and abundant aquatic and estuarine food sources (e.g. diamond scale mullet)
- Passing on culture and knowledge to future generations and involving kids at a young age
- Engaging in reciprocal science projects in which traditional owners and scientists share knowledge on country
- Employing young indigenous people in natural resource management.
- Improving cultural awareness of non-indigenous people.

Only the first of these categories is a strictly biophysical activity. All other activities involve collaboration, sharing culture and connecting across generations and cultures.

### 3. Mary River Restoration Stories: lessons from 20 years of Rivercare

The Mary River Restoration Stories project involved two workshops about Rivercare and one bus trip focused on river processes and geomorphology. The data presented here arose from the first workshop which was

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held in the small town of Widgee to the west of Gympie. It was attended by 40 people from throughout the catchment and representing a mixture of landholders engaged in agriculture and/or conservation as well as local government, Landcare and catchment management staff.

Being the first workshop, one of the goals of this day was to identify how the subsequent activities in the project could best benefit riparian restoration activities and build on what had been learned over the last twenty years. The questions of “what helps” and “what hinders” riparian restoration were explored using an affinity process in which all participants in the workshop wrote their answers to the questions on individual post-it notes and then placed the post-it notes on the wall. The whole group then reviewed all of the post-it notes and grouped them into related themes.

Figure 4 below presents the results of this process as a force-field diagram representing the things that help on the positive side of the axis and the things that hinder on the negative side. Bar graphs show the number of comments for each theme.

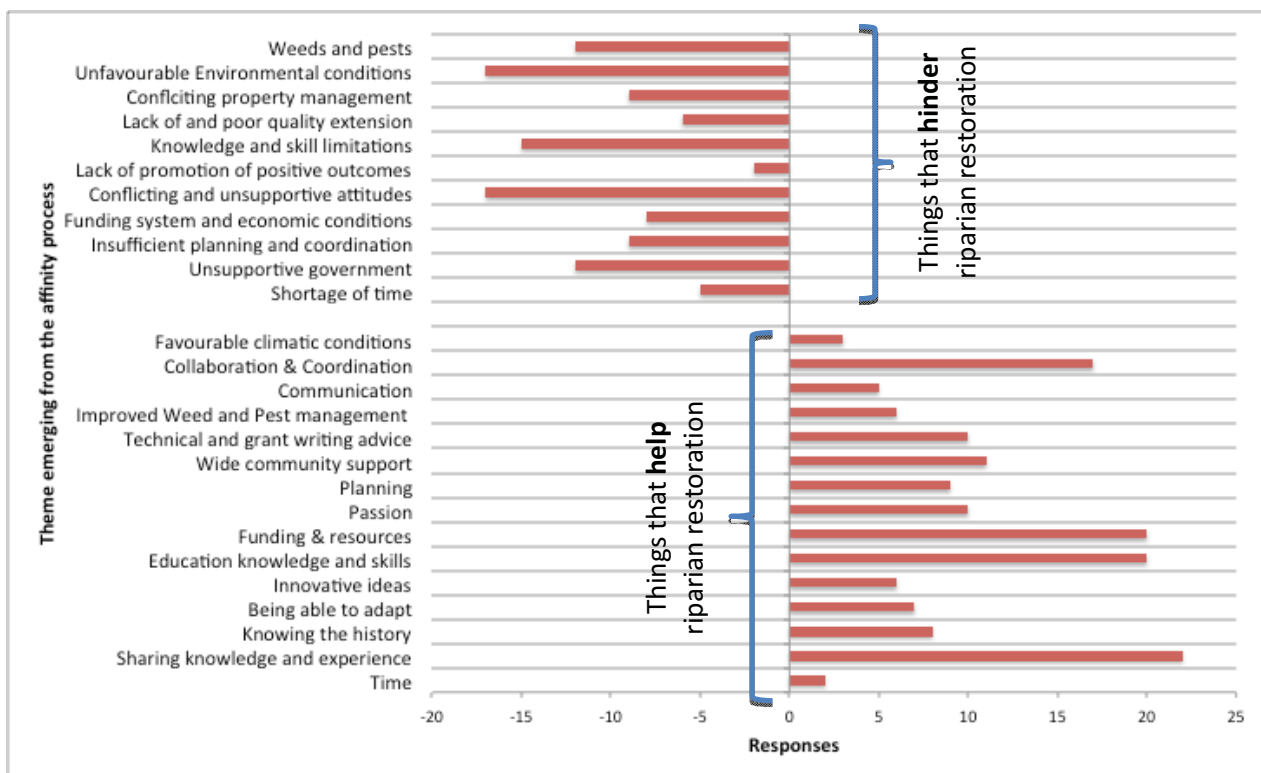


Figure 4: Summary of responses to the questions “What helps riparian restoration?” and “What hinders riparian restoration?”

Figure 4 shows that, according to these participants, things that help riparian restoration are dominated by sharing knowledge and experience, education, knowledge and skills, funding and resources and collaboration and coordination. The strongest factors that hinder riparian restoration are conflicting and unsupportive attitudes in the community, among neighbours and among decision makers, unfavourable environmental conditions, knowledge and skill limitations and unsupportive government.

## **Discussion**

The community engagement activities outlined in this paper aimed to gain insights into what drives people's participation in Rivercare activities and how their ongoing participation could be fostered and participation in general broadened. As discussed above, the magnitude of the natural resource management and Rivercare challenges we face far exceed the current funding opportunities. Even if funding to support these activities were to increase significantly, reversing the trends of deterioration in our natural resources will still require empowering private landholders to not only be more aware of these issues but to also be active participants and drivers of improvement. According to Gooch's (2004) typology of participation this challenge situates the future needs of engagement firmly in the higher levels of the ladder, including interactive partnership and delegated power and self-mobilization.

Engagement programs in natural resource management tend to focus on awareness-raising, as evidenced by the current National Landcare Programme objectives. The results of the participatory processes outlined in this paper have shown that, although people want increased knowledge and value technical support, this is only one comparatively small part of what engages and motivates them. In addition the participants listed a range of other influences associated with connecting with other people and groups, feeling supported, encouraged and celebrated. A mixture of processes and experiences at the individual, community and societal levels therefore drive Rivercare.

Consequently, engagement programs dedicated to the informing level of Gooch's (2004) participation typology will have limited outcomes in terms of empowerment as they do not necessarily address the diversity of activities that encourage Rivercare. This observation is consistent with theories of empowerment that have emerged from international development work and anthropology and have identified a range of precursors to empowerment, of which increasing knowledge and awareness are only a small part. Empowerment arises from being able to imagine a better future, from competence and from having both the energy and the desire to act (Narayan 2005, Diener and Biswas-Diener 2005). Programs that increase participants' technical know-how while also helping to build these other precursors of empowerment represent levels of engagement higher up the participation typology.

The participants in the workshops already had aspirations in terms of their contribution to riparian restoration and a strong sense of why they care about the river that link with love of nature, intergenerational equity, sense of responsibility, a sense of interconnectedness, retaining and passing on cultural knowledge and practical concerns regarding resource use. Appadurai (2004, 67) identified that "[a]spirations are never simply individual (as the language of wants and choices inclines us to think). They are always formed in interaction and in the thick of social life." Engagement programs that value these aspirations and encourage sharing among individuals and groups regarding the future aspirations will help support positive visions of the future.

The concept of social capital stresses the importance of social networks for creating a sense of well-being, providing hope and generating enthusiasm, reciprocity and commitment (Putnam 2001). For decades, social capital has been linked with the sustainable and equitable resolution of development problems (Pretty and Ward 2001). There are various interpretations of social capital. Pretty and Ward (2001) propose that social capital arises from: 1) relations of trust, 2) reciprocity and exchange, 3) common rules norms and sanctions, and 4) connectedness, networks and groups. Activities that encourage collaboration, coordination, sharing of knowledge, celebration of achievement and appreciation of the effort private landholders undertake to achieve Rivercare outcomes have been identified by the participants as things that would help them in their riparian restoration goals. The participants were in effect identifying that building social capital helps them to achieve their riparian restoration goals.

Landcare, catchment management and general natural resource management have been identified as having a very wide range of benefits beyond biophysical improvements including social, economic, cultural and health benefits (GHD 2013). These benefits align with the building of social capital. Breakdowns in social capital have occurred in the past in the Mary River catchment as a result of fear that control of riverbanks would be taken from landholders (Thomson and Pepperdine 2003) demonstrating that a lack of consideration of, or a lack of capacity to address the social issues can have major consequences. It is crucial that natural resource management programs recognize the value of, and have skills in building social capital to sustain participation, create empowerment and thereby achieve better outcomes. Building on Gooch’s typology, Table 2 offers a typology of levels of engagement that generate sustained action and build social capital and empowerment. The premises underlying this typology are as follows:

- 1) the extent to which activities facilitate the ability of the participants to imagine a better future, feel competence, and have both the energy and the desire to act will determine the level of action that follows.
- 2) building social capital, specifically trust, connectedness, shared norms and reciprocity will contribute to participants’ capacity to imagine a better future, to feelings of competence and to possession of the energy and desire to act.

Using the ladder as a metaphor, the typology starts with providing information at the lowest rung of the ladder and builds from this level to include listening to feedback, responding to this feedback, creating connections, celebrating achievements, building appreciation of Rivercare and facilitating self-mobilised groups that not only achieve on-ground outcomes but also continue to build social capital. Whilst this typology does not apply to every single landholder, it is substantiated by the results of the participatory processes undertaken in the Mary River and by other evidence as outlined in the literature cited. This typology is also not intended to condone placing all responsibility for natural resource management or Rivercare with private landholders and volunteers. The public benefit of the improved land management and conservation practices many landholders are engaged in requires recognition and also reward and ongoing and recurrent funding.

**Table 2: Typology of engagement for generating Rivercare action**

<b>Rung on the ladder</b>	<b>Examples of engagement activities and anticipated outcomes</b>
<b>7. Facilitating active self-mobilised groups</b>	Collating achievements, facilitating regular interactions, providing targeted technical support and financial incentives to assist with actions; supporting group governance; Achieving on-ground outcomes and facilitating the building of social capital.
<b>6. Fostering a culture of appreciation of Rivercare</b>	Build a media and community profile that tells story Rivercare stories, provide financial support to Rivercare activities; Recognise the public benefit of Rivercare and increase awareness of the interconnectedness of the river ecosystem with the local economy, agricultural production, local culture and social wellbeing.
<b>5. Celebrating achievements</b>	Public and private celebrations of individuals, groups and projects: Document progress and create a sense of accomplishment by sharing and celebrating the achievements of individuals and groups.
<b>4. Creating connections and partnerships within and across sectors</b>	Use field days, workshops, demonstration days and forums to share experience; Build trust, connectedness and competence across groups and identify areas of common ground and shared understanding
<b>3. Responding to feedback</b>	When feedback is requested from groups or individuals, provide a summary of responses to the feedback and, in particular, what will be done differently; build trust.
<b>2. Active Listening</b>	Use feedback surveys, semi-structured interviews and other forums to learn about aspirations and needs of participants as well as to evaluate program success
<b>1. Informing</b>	Awareness-raising programs, technical advice, including land management, group governance and collaboration; address knowledge gaps that impact on feelings of competence and may be impacting on natural resource management outcomes.

## Conclusions

Notwithstanding uncertainty about future funding levels, private landholders and their future commitment and action in relation to Rivercare and catchment management more broadly will have a profound effect on whether or not trends of deterioration in our natural resources can be reversed. In this paper the perspectives and aspirations of private landholders regarding riparian restoration activities were gathered to understand what drives them to continue to participate, over, what is decades in many cases. Through analysis of data collected in two different projects over a period of two years, the importance of building social capital and, in doing so, empowering people to act was identified. Conventional awareness-raising programs and programs that provide technical advice are also important because they help build competence among landholders and awareness of the issues. However, these programs alone are unlikely to generate the scale of sustained response that is needed. A typology of engagement that generates Rivercare action was developed in response to these findings and related research. This typology is proposed as a framework to encourage community engagement programs that build social capital, empower landholders and achieve Rivercare and catchment management outcomes in the Mary River catchment and potentially elsewhere.

## Acknowledgments

The projects which are the focus of this paper were funded by a Community Action Grant from the Australian Government, by the Mary River Catchment Coordinating Committee and by a direct contract with the Australian Government's Department of Environment (Recovery Planning). The contribution and dedication of the participants and Rivercarers everywhere is also greatly appreciated.

## References

- Appadurai, A. (2004) "The Capacity to Aspire: Culture and the Terms of Recognition" in Rao, V & Walton, M eds, *Culture and Public Action* Stanford University Press, Stanford, CA
- Arnstein, S. R. (1969) *A Ladder of Citizen Participation* [Online]. Available: <http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.html> [Accessed 8 May 2007].
- Department of Agriculture & Department of Environment. (2015) *National Landcare Programme* [Online]. Commonwealth of Australia. Available: <http://www.nrm.gov.au/national-landcare-programme> [Accessed 20 May 2015].
- Department of Transport and Main Roads. (2016) *Bruce Highway (Cooroy to Curra)* [Online]. Brisbane: Department of Transport Main Roads. Available: <http://www.tmr.qld.gov.au/Projects/Name/B/Bruce-Highway-Cooroy-to-Curra> [Accessed 24 May 2016].
- Diener, E. & Biswas-Diener, R. (2005) "Psychological Empowerment and Subjective Well-being" in Narayan, D ed *Measuring empowerment: Cross-disciplinary perspectives* The World Bank, Washington DC
- Ghd (2013). Multiple Benefits of Landcare and Natural Resource Management. *Report for the Australian Landcare Council 21/21673*.
- Goch, M. (2004) "Volunteering in catchment management groups: Empowering the volunteer" *Australian Geographer*, 35 193-208
- Jacobson, C. L., Hughey, K. F. D., Lynch, A. J. J., Nursey-Bray, M., O'Connell, M., Munro, P. G., Vella, K., Whiley, D., Dovers, S. & Carter, R. W. (2014) "Twenty years of pacifying responses to environmental management" *Australasian Journal of Environmental Management*, 21 143-174
- Mary River Catchment Coordinating Committee (1996). *Mary River Catchment Strategy*. Mary River Catchment Coordinating Committee, Gympie
- Mary River Catchment Coordinating Committee (2005). *Mary River Catchment Rivercare Initiative Recommendations Report*. Burnett Mary Regional Group and the Mary River Catchment Coordinating Committee (MRCCC), Gympie
- Mccormick, B. (2016) *Budget Review Index 2016-17 - Environment* [Online]. Commonwealth of Australia. Available:

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[http://www.aph.gov.au/About Parliament/Parliamentary Departments/Parliamentary Library/pubs/rp/BudgetReview201617/Environment](http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/BudgetReview201617/Environment) [Accessed 24 May 2016].

Narayan, D. (2005) "Conceptual Framework and Methodological Challenges" in Narayan, D ed *Measuring empowerment: Cross-disciplinary perspectives* The World Bank, Washington DC

Natural Resource Management Ministerial Council (2010). Australia's Biodiversity Conservation Strategy 2010-2030. Canberra

Pretty, J. & Ward, H. (2001) "Social Capital and the Environment" *World Development*, 29 209-227

Pretty, J. N. (1995) "Participatory learning for sustainable agriculture" *World Development*, 23 1247-1263

Putnam, R. (2001) "Social capital: Measurement and consequences" *Canadian Journal of Policy Research*, 2 41-51

State of the Environment 2011 Committee (2011). Australia state of the Environment 2011. Independent report to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities. DSEWPaC, Canberra

Thomson, D. & Pepperdine, S. (2003). Assessing community capacity for riparian restoration. *National Riparian Lands R&D program*. Land and Water Australia,