School of Design and the Built Environment

The contribution of community governance towards the sustainable planning and management of urban and regional green infrastructure

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This thesis is presented for the degree of Doctor of Philosophy

of

Curtin University

June 2018

Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Human Ethics The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number BE-82-2013.

Signature:

Date: 02/07/2018

Abstract

Green infrastructure, including public parks, gardens, bushland, green corridors and trails, is an essential part of our cities and our community life. The planning and management of urban green infrastructure in Australia has traditionally been the realm of government or governments acting in collaboration with and incorporating expert advice from the private sector. It is presumed that these government and business partnerships achieve the best outcomes for public open spaces and users. However, there are alternative governance arrangements that could contribute meaningfully towards green infrastructure planning and management.

Community governance involves the active contribution of the community, where the citizens or users play a direct role in the decision-making and realisation of a purpose or mission. This study explored the contribution of community governance to the planning and management of urban green infrastructure in Australia. The focus of the primary research was three case studies where the community was part of the visioning, planning and ongoing management of urban green infrastructure. The effectiveness and efficiency of these examples were examined and analysed to consider their contribution toward sustainable development driven by a sustainable governance model.

The three case study projects were green corridors in different states in Australia: Merri Creek in Melbourne, Victoria; Iron Cove to Cooks River GreenWay in Sydney, NSW; and the Bibbulmun Track in Western Australia. All three cases provided strong indications that community governance for green infrastructure can work well, offering efficient and effective outcomes when they have vision leadership, open trust, inclusive support and working systems. Organisational reputation, expertise and positive culture are also important for community governance organisations seeking to build credibility to address perceived risks about community governance from other sectors, especially the government. The case studies suggested that where both community and government partners have high capacity in community governance then sustainability outcomes are being achieved through active citizenship, community and civic contributions and environmental conservation initiatives. This study found that mature community governance arrangements in green infrastructure are realising mutual benefits even in complex environments such as cities including widespread volunteering, creative partnering with other not-for-profit, public and private organisations and engagement with diverse funding sources to collectively build flexible and innovative organisations. The research also considered the governance phases associated with each case study, and the social and institutional capacity associated with each project's evolution, starting with a community vision for green infrastructure and moving towards a mature effective community governance arrangement.

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List of Abbreviations and Acronyms

CALM   Department of Conservation and Land Management, Western Australia now known as Department of Biodiversity, Conservation and Attractions

DPAW   Department of Parks and Wildlife, Western Australia now known as Government of Western Australia Department of Biodiversity, Conservation and Attractions.

GreenWay   Iron Cove to Cooks River GreenWay, also known as the Inner West GreenWay

MCMC   Merri Creek Management Committee

NSW   New South Wales

SA   South Australia

UK   United Kingdom

USA   United State of America

WA   Western Australia

Chapter 1 Introduction

1.1.   Australian Context

Australia has a highly urbanised population with comparatively low urban densities. Our urban environment is a mix of the built and natural elements that provide the setting for the economic marketplace and social interactions. Our laws direct the development of cities and the governance system directs the stakeholder relationships and planning of spaces. The notion of the "common good" as the shared goal of multicultural, egalitarian Australia directs our values towards shared "civic" relationships to serve the common interest to provide relevant facilities and interests as distinct from one's "private life" (Hussain 2018). In the last three decades sustainability has been promoted as a complement to this ideal with consideration for a balance of social, environmental and economic and civic factors in decision-making (NSW Office of Local Government nd). Collaborative governance (Ansell and Gash 2008) and collaborative planning (Healey 1996) was considered key to this. For a long time, city growth in Australia occurred through a proactive nation-building government sector, a paradigm more recently challenged by the deregulated and global market promoting an increased role for the private sector and potentially the civil sector. The civil or third sector already has a significant track record in Australia for complementing the government in the provision of health and welfare services and there may be greater potential for it in open space and green infrastructure provision. The right governance approach is key to realising sustainability goals in the planning and management of our urban green infrastructure, and the role of community governance deserves consideration.

1.2.   Background

People generally recognise they are an integral part of the physical world and yet often struggle to balance this position within an economically driven urban-based culture. Humans by nature, and particularly our Western developed culture, demonstrate an over-riding self-interest (Glaser et al 2016) sometimes tempered by social solidarity borne out in communities of care. Such communities act together to provide for both human and environmental needs often supplementing those which governments seem unable to provide.

Low et al (2005) promote a planning approach that starts locally with the goal to get an everyday perspective on the way people live, work and use places. They suggest that only then can we build outward to develop a system of local places and environments and a strategy with meaning and

belonging. This starting point, by its stated aim, must essentially involve the local community and users of the place. The notion of local community engagement and involvement needs to integrate with formal and existing systems and governance arrangements in a way that allows for inclusive integration of all people involved in using, planning and managing places. One way this may be achieved is through community governance, as it applies to green infrastructure, the key area of exploration in this research.

The concept of green infrastructure, which includes the green web and is explained as green corridors linking open space and parkland though cities in Australia, has been promoted in the literature (Low et al 2005, Evans and Freestone 2010) and in recent plans like Sydney's Green Grid (Tyrrell Studio 2017, Greater Sydney Commission 2017). Internationally aligned ideas like the biophylic city (Wilson 1993, Beatley 2010) are also growing in popularity. While conceptually promising, the implementation of such links in our current economic-political environment and suitable governance processes, has proven to be critically challenging especially when retrofitting existing urban places.

1.3. Research context

The research of this study sits at the broadest level between philosophy, social science and science. It is more specifically embedded in the social sciences and covers a range of disciplines including political science, public administration, sociology, geography, environmental management and urban planning. There is also a contextual complementarity to this research to be found in the natural sciences especially biology, ecology and environmental science and in philosophy and psychology. As a multidisciplinary research area, this study uses various disciplinary fields to build understanding and crossover from various perspectives of similar concepts. However, the key discipline in which this research is situated is urban and environmental planning.

Planning literature associated with community governance includes collaborative planning, justice planning, regional planning and sustainable development. Related concepts to community governance are also emerging beyond planning theory and practice in aligned disciplines. These include new spatial governance, place management, social governance and associational governance. Other associated literature includes new regionalism, communities of place and networked governance. Environmental planning and related fields like natural resource management, green cities and landscape architecture give insights to green infrastructure. Sustainability offers a holistic overview of systems, places and communities.

Multidisciplinary approaches by their definition ought to encourage a broader political dimension as new and shared innovative ideas emerge through new thinking, partnerships, products, processes and systems across disciplinary boundaries. This research seeks new findings and innovative opportunities based on evidence for the betterment of urban planning and society.

1.3.1   International context and imperative of the research

Australia is one of 193 countries that is committed to implementing the United Nations Sustainable Development Goals for all people (United Nations 2015a). Goal 11 is to "make cities and human settlements inclusive, safe, resilient and sustainable" (United Nations 2015b, 1) and confronts the challenge to balance the need for cities to function as places for jobs and prosperity while maintaining healthy land and resources. Cities act as hubs for ideas, science, culture, commerce and social development, however rapid urbanisation can increase pressure on quality of life. Among the targets for this goal is the aim to "enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries" (United Nations 2015b, 5) and to "provide universal access to safe, inclusive and accessible, green and public spaces, and particularly for women and children, older persons and persons with disabilities" (United Nations 2015b, 21) by 2030. Recognising the role of social and environmental corridors, another target is to "support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning" (United Nations 2015b, 28)

The work of the United Nations and the Sustainable Development Goals challenge both Western and developing countries to reconsider their city governance for the goal of sustainable development. This is best covered by Sustainable Development Goal 17 Partnerships, described as "partnerships between governments, the private sector and civil society" (United Nations 2015c 1). These "inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level" (United Nations 2015c 1). The challenge to rethink the local and citizen role in governance in open space has not been readily considered by centralised capitalist democracies such as Australia despite their understanding of the worth of social capital in production. The United States and other countries provide recent lessons, both good and bad, for Australia in community governance arrangements. In Australia, with its own embedded approaches to tri-level governance and market based priorities, governance partnerships are mostly looking to the private sector as partners. For

the green and open spaces in Australia which are assets for public and community benefit, there is a need to better understand examples of community based approaches from the third sector (also known as the civil sector, a combination of non-government organisations and not-for-profit organisations) and understand lessons to inspire local and national practice.

1.3.2 Research gaps

Recent research has provided insight into the role and benefits (social, environmental and economic) of green cities, green webs and more specifically green open space and green corridors in urban areas. However, several studies have highlighted the absence of understanding in the broad area of sustainable governance and community governance (Aulich 2009, Buijs et al 2017, Young and McPherson 2013). Applying the Australian Centre of Excellence in Local Government definition to this study, "community governance" is defined as "a collaborative approach to determining a community's preferred futures and developing and implementing the means of realising them" (McKinlay et al 2011, 5). Further, it requires citizens to "play a direct role in delivering services and undertaking projects in order to achieve the kind of future they want" (McKinlay et al 2011, 4).

There is a growing recognition across Australian institutional leaders of the challenge in governance, especially cross-jurisdictional governance and stakeholder collaboration (The State of Queensland and the Council of Mayors 2007, 17), which may be explained in part by the complex multidisciplinary nature of the field. Given that governance is a topic that in part relates to government, the most useful research should consider a specific and common jurisdictional context. In this case, while international examples may be inspiring, the focus is on the role of community governance in open space green corridors in Australia, recognising that the individual states also have some governance and planning differences. The academic approach of this study acknowledges the neoliberal thread and the practice experience reinforces its market based emphasis influencing the current social-political context in Australia. This raises challenges for spatial decision-makers as they also consider issues such as access, equity, participation and rights raised by the social and environmental justice movement, ethical and moral relationships demanded by a caring society for the common good, 17 sustainable development goals (United Nations 2015) and the quadruple bottom line addressing social, environmental, economic and governance (civic leadership) values emphasised by the sustainable development movement and Australian local government (NSW Office of Local Government, nd).

This is an area of study highlighted in the literature as needing further understanding. It is widely acknowledged that community governance is complex and its practices can be difficult to substantiate and to sustain, particularly as it is becoming increasingly regulated. Factors contributing to its success and failures in practice are poorly understood, and require further scrutiny. It is also an area in practice that may highlight a level of frustration among those seeking to work or volunteer in Australian open space projects. The research is approached from a 'pracademic' perspective and is informed by a practice experience observing the frustrations of stakeholders, especially communities working in this field, and especially in urban green infrastructure. In addition, in Australia, there are misunderstandings and a lack of expertise (both in the literature and in practice) when dealing with complexity associated with community governance arrangements, with contested land use in green corridors and environmental issues, and barriers to community decision-making in urban areas. This research contributes to the literature and builds understanding and capacity in practice. This study recognises a need to extend analysis beyond existing disciplinary, geographical and socio-political boundaries, and the limits of old paradigms to search for further understanding and solutions.

1.4. Research question

The main research question for this study is: What contribution can community governance make towards the sustainable planning and management of urban and regional green infrastructure?

To answer the research question, there are four subquestions with associated research objectives.

1. **What role is community governance playing in the conceptualisation, planning and management of greenway projects around the world?**
   - Identify emerging initiatives in the conceptualisation and theorising of community governance.
   - Analyse international examples of greenways and their communities to consider the effectiveness of their governance systems.

2. **What are the factors associated with effective community governance in green infrastructure planning and management in urban and regional areas in Australia?**
   - Develop and apply selection criteria to identify the best practice examples of community governance projects in green infrastructure projects in Australia.
   - Identify the characteristics of community governance in green infrastructure projects in Australia.

- Investigate the enabling factors for effective community governance in green infrastructure projects in Australia.
- Assess the importance of social and institutional capacity for community governance in green infrastructure.

3. **What contribution can community governance make to the value of social capital and active citizenship in urban and regional green infrastructure in Australia?**
   - Assess the opportunities for active citizenship in community governance in the planning and management of green infrastructure in Australia.
   - Identify the benefits for the people and partner organisations involved in community governance in the planning and management of green infrastructure.
   - Analyse the roles of volunteers in effective green infrastructure community projects.

4. **What contribution can community governance make towards sustainability in green infrastructure planning and management in urban and regional areas in Australia?**
   - Assess the contribution of community governance towards sustainability in planning and management of green infrastructure.
   - Determine the value of community governance in complex green infrastructure projects in Australia.

1.5.   Research methods

A comparative case study approach is used to seek further understanding of the complex social phenomenon of "community governance", for the purposes of "sustainable planning and management", in the context of "urban and regional green infrastructure" in Australia. It supports Patton's (2002) approach to carry out a study in real-world settings where the researcher does not attempt to alter the situation of interest. By interviewing and surveying stakeholders the research seeks to reveal different perspectives of people deeply connected to each of the case studies. Then, through consideration of the data from various sources associated with each case study, the research questions on the social phenomenon of community governance are answered. As a research approach, it is suited to planning research, as well as aligned fields of public administration, organisational studies and community sociology.

As the international literature has established, there are many good reasons for open space corridors to play a key role in cities. There are also many good reasons for local communities to get involved in open space corridors in urban areas. Governments, usually multiple agencies across local

and state levels, have a key role in planning and managing urban open space corridors in Australia. The focus of this research steps beyond this idea to explore how Australian institutions and communities are using alternative governance frameworks to enable a broader range of benefits to occur. These enablers address factors associated with governance such as types of leadership, partnerships, structures and uses for effective planning and management of urban open space corridors. The nature of community involvement is explored and the various models of community governance from case study examples are considered especially community input into decision-making and sustainability processes and outcomes. The breadth of issues influencing the research are shown in Figure 1-1.

Theoretical and practice view of community governance in GI	•Theoretical Literature review •Case study Literature review •Practice review
External factors supporting community governance in GI	•Geographic context •Governance norms •Socio-political environment
Partners networking in community governance in GI	•Government •Community •Business
Internal factors enablingin community governance in GI	•Structures •Processes •Relationships

Figure 1-1 Issues influencing the research topic: community governance in green infrastructure

This research focuses on how communities are and can be involved in open space corridor decision-making and management for the common good and sustainability outcomes. The research is set in Australia and acknowledges that various states and even cities have some differences in governance within the broader shared national tri-level governance. Green infrastructure is a term that includes greenways, green open space corridors and green grids or webs. For this research, three case study projects in green infrastructure were selected for in-depth study: Sydney's GreenWay, Melbourne's Merri Creek corridor and Western Australia's Bibbulmun Track. The methodology for this research includes a literature and practice review, desktop research, online survey and in-depth interviews.

A pracademic approach in this research respects both academic rigour and practical realities. The strength of this approach is wider inquiry with relevance for both practitioners and academics. During the research, the researcher participated actively in community governance enabling a scholarly analysis informed by experience to provoke thinking, consistent with a pracademic approach.

1.6.   Thesis structure

Chapter 2 reviews the literature on the topics of sustainable governance, community governance and environmental governance. The literature was synthesised for a summary of good governance qualities for green infrastructure that informed data collection and analysis in the study.

Chapter 3 presents the methodology including a description of the data collection from multiple sources, and specific methods and analysis applied in this study. Chapter 4 summarises international green infrastructure projects and then develops criteria to assess Australian green infrastructure projects to select the three projects chosen for this study.

Chapter 5, 6 and 7 provide an overview of each of the three case study projects and a summary of the findings from each of the projects.

Chapter 8 presents the analysis and discussion of the findings, synthesising the three case studies through shared themes and consideration of other key elements such as their social and institutional capacities, their effectiveness and potential contribution, and an integrated summary of community governance phases from the case study data.

Chapter 9 concludes the research by presenting a summary of the findings and their implications. The achievements of the research objectives are addressed and the research questions reviewed.

1.7.   Summary

The planning and management of open spaces in Australia has been influenced by neoliberal values that have imposed market based priorities on governance and management practices, including a reduction in public sector and public resources. At the same time, public participation and collaborative planning, both usually resource intensive processes, have been incorporated into

strategic and statutory processes. This has resulted in increasing openness to exploring opportunities for using resources from non-government sources such as business and the community. The possibilities and potential for alternative governance and management arrangements in urban and regional green infrastructure are explored in this study. It considers the characteristics and effectiveness of projects that allow community involvement and community governance, particularly third sector or non-government not-for-profit organisations.

The chapter outlined the research strategy adopted to assess the effectiveness in working towards both dynamic governing and sustainable development ideals incorporating the common good principles of the past applied today in examples of green infrastructure. It highlighted the need to understand the input between key governance stakeholders of green infrastructure where not-for-profit, community governed organisations are involved and considered the potential for their expanded use. This included exploring innovative new governance alternatives for green infrastructure with an understanding of social and institutional capacity towards quadruple bottom line benefits. This study uses a pracademic multidisciplinary approach acknowledging the lifelong experiences of the researcher and directs them towards informed constructive challenge and reflection.

Chapter 2 Literature review

2.1. Introduction

This chapter outlines the literature associated with community governance for planning and management of urban and regional green infrastructure. The literature informs the empirical research exploring three case study practice examples of community decision-making and involvement in green infrastructure, in particular green corridors, in Australia. This research seeks to understand the opportunities for community governance, its models, concepts and practices in moving towards principles of sustainable development. Community governance is the term used in this thesis because it best describes the basis of the governance model, one that is primarily oriented around a community of place and purpose. The literature review also highlights significant contributions to the topic and recognises any significant gaps in the literature.

Bellah et al (1992) describe the common good as "the pursuit of the good in common" including social interests of individual citizens, the shared community interests, the protection and management of the physical environment and the maintenance of economic interests. Governance for sustainability takes into consideration these aspects of the common good both in the present and considering the needs of future generations. Good governance for sustainability, as a normative ideal, has been characterised in many ways including as community governance. Consequently, this review considers the literature across several disciplinary areas and concepts.

This chapter starts with an examination of the literature on governance. This includes the ideological shift affecting 'new' governance, its implications for planning and environmental governance and governance for sustainability. Governance for sustainability, especially the idea of 'dynamic governance', is explained as a normative theory of governance with particular reference to green infrastructure. Alternative normative ideals of 'good' governance such as collaborative governance, network governance and other governances are acknowledged, and community governance is discussed for its potential application in urban and regional green infrastructure in Australia. The chapter then considers practical guides and examples of environmental governance such as natural resource management. Lessons from international greenway examples are also used to inform the thinking and methodological approaches for the research. Finally, characteristics of good community governance of green infrastructure are summarised with common themes developed and conceptual approaches aligned as a set of normative principles to inform this study. These include

literature based indicators for case study choice, analytical categories for the methods of this study, and good governance principles to develop understanding of case study strengths and weaknesses.

2.2.   Context: An ideological shift in governing place

The notion of the common good is an ideal discussed in the literature by planning theorists (Fox-Rogers and Murphy 2015, Campbell and Marshall 2002) and practised in various ways in the planning and building of cities in Australia and internationally. Though a contentious ideal, 'the pursuit of the good in common' (Bellah et al 1991) remains an important aim in planning and has been extensively discussed in relation to the challenges of realising equality in the city and giving all people the right to have a voice in the processes and practices that lead to the creation and management of urban environments. Some key issues include the neoliberal ethic influencing urban planning policy and systems (Gleeson 2014); the need for shared frameworks for the process of place-making and ideas about citizen and stakeholder involvement in planning (Healey 1996, Arnstein 1969); and the ownership of the citizenry of their city through both their physical and social rights emerging from the thinking of Marcuse, developed by Lefebvre's "right to the city" (1970) and later by Purcell (2014).

For a long time in Australia, the common good was approached through a proactive nation-building government sector and noteworthy community collectives feeding into planning and welfare policy (Freestone 2009). Since the 1970s, this government-led approach has shifted towards stakeholder and partnership models with increased roles for the private and non-government sectors in policy making and delivery (Ansell and Gash 2008, Bevir 2012, Roy 2011), a shift often referred to as 'from government to governance' (Bevir 2012, Khan et al 2015).

Governance is different from government in that it is more focused on social activities and practices rather than the state and its institutions. That is, governance as a form of decision-making can include all the processes and many players associated with the decision, from the ruling power, the market, a network, a family or a tribe (Bevir 2012). More open to diverse organisational forms, the "new governance" (Howlett and Rayner 2006) does not include oversight and control through organised hierarchies but more flexible alternatives. Graham et al (2003) (cited in Lockwood et al 2009, ii) define governance as "the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens

or other stakeholders have their say". Ansell and Gash (2008, 545) cite Stoker (2004, 3) in their description of governance:

> As a baseline definition, it can be taken that governance refers to the rules and forms that guide collective decision making. That the focus is on decision making in the collective implies that governance is not about one individual making a decision but rather about groups of individuals or organisations or systems of organisations making decisions.

Bevir (2012) states that the three key characteristics that are apparent in governance include a hybrid combination of administrative arrangements with market mechanisms and non-profit organisations, multijurisdictionality and the involvement of a plurality of stakeholders. The major governance models in practice in Australia (and other Western countries) that are summarised in the literature include the traditional procedural model of public bureaucracy, and two further models described by Considine and Lewis (2003) as the network and the enterprise (a corporate-market hybrid) modes of governing.

Eggers (2008) reports on a shift from traditional, hierarchical government towards 'new' governance models with growing emphasis on "governing by network" (Eggers 2008, 23) and encouraging more flexible and entrepreneurial structures (Burns and Stalker 1961, Osborne and Gaebler 1992). With globalisation, Freestone (2004) and Searle and Bunker (2010) suggest that trends in governance and planning in Australia are moving closer to United States trends. In both countries, Public Private Partnerships are now widespread practice and have serious challenges and legitimacy dilemmas (Hodge and Greve 2008) including a need for new ways of thinking, developing the necessary skill base, and safeguarding the public interest (Eggers 2008, Johnston and Gudergan 2007).

In sum, the shift towards governance in organisations and institutions has brought many changes including more flexible organisational arrangements; a tendency to organise work as projects rather than procedures; a shift towards flatter structures; the creation of teams of interdisciplinary professionals; the addition of new departments to coordinate activities between sectors; the creation of integrated, cross-organisational roles such as place managers; management through targets and performance indicators (rather than traditional forms of supervision); and outsourcing of various tasks to the private and non-government sectors (Reddel and Woolcock 2003, Aulich 2009, Marshall 2007)

These trends are impacting urban places and spaces and their associated communities and are often

considered to be a 'double-edged sword', with costs and benefits. They are of benefit in enabling flexibility, creativity and coordination, and therefore crucial to success in an age of rapid change and chronic uncertainty (Kooiman 2000), as well as offering creative space for dealing with 'wicked' problems (Brown 2010). The costs include the lack of management and governance expertise, especially in negotiating contracts, and scepticism by citizens. (Hodge and Greve 2008)

It is these features that have helped to shape contemporary spatial planning (Healey 2007) and emerging approaches to environmental governance (Gleeson and Low 2000), including natural resource management (Lockwood et al 2010). This adaptability has allowed for some use of sustainability governance principles such as partnerships and collaborative networks (Reddel and Woolcock 2003), shared visioning (McPhearson et al 2016) and participatory processes (Edwards 2003, Stewart 2003). However, these changes in organisational structures have also introduced a tendency for public organisations to be top heavy (with a focus on the expert manager) and reliant on the measurement of narrowly defined outputs (known as the New Public Management), sometimes at the cost of broader ethical and moral considerations such as justice and institutional integrity (Evans 2012). Evans (2012, 97) highlights the gaps this creates, including "achievement in integrity in public administration, the options for integrity reform and the appropriate strategic framework". As such, normative concepts of 'soft' governance (Thomas and Littlewood 2010), 'good' governance (Bevir 2012) and 'new' governance (Lockwood et al 2009) seek to allow other stakeholders to complement reconfigured decision-making processes (Thomas and Littlewood 2010).

In this context, Cuthill and Fien (2005) remind us of the need to build a 'critical consciousness' of our collective responsibility for the common good. Communities acting for their collaborative rights and responsibilities build community consciousness, and such awareness is core to developing institutional capacity and social capacity. The sustainability discourse demands that institutions and policy (Dovers 2005) adopt notions of responsibility, stewardship, participation and duty of care with a focus on the community's rights in decision-making (Summerville et al 2008, Cuthill and Fien 2005). In contrast, Enroth (2013) describes the shift to governance as moving beyond policy for society to governing focused on solving problems without the presupposition of 'collectivities'. This raises a question on the role and impact of the citizen versus the community in the new governance of urban

place, the ideal of community (collective citizens)[1] including and extending beyond the individual's responsibility in the reach for the common good.

There is a strong link between the shift from government to governance and the neoliberal ideology (Khan et al 2015 that appears to have dominated globally since the 1980s (Gleeson and Low 2000, McGuirk 2005). This has had an impact on Australian urban social and physical environments and Australian governance and planning (Wright and Cleary 2012) and has been addressed by many academics and practitioners (Wiseman 2005, Mowbray 2009, Reddel 2006, Frost and MacDonald 2011, Smyth et al 2005, Aulich 2009, Sager 2011, Gleeson 2014). Neoliberalism is widely understood to be:

> the new political, economic and social arrangements within society that emphasize market relations, re-tasking the role of the state, and individual responsibility. Most scholars tend to agree that neoliberalism is broadly defined as the extension of competitive markets into all areas of life, including the economy, politics and society. (Springer et al 2016, 2)

The ideological elements of neoliberalism in Australia have split planners across the country as they consider its positive and negative impacts (Fox-Rogers and Murphy 2015. and may have changed the view of what the common good looks like. Sager (2011), for instance, questions whose interests are being advanced by neoliberal governance, and asks whether capital wields undue influence in agenda setting and policy making. He further argues that citizens' rights are more than as users of services, and include politicking roles, rights and agendas, therefore suggesting communicative planning as a necessary counter balance. Lawson and Gleeson (2005) highlight that market forces have influence over public agencies in the planning process, increasing social polarisation, while sustainability objectives are often framed to align with neoliberal views (Gunder 2006, Glover and Granberg 2011). Roy (2011) suggests that while neoliberalism is impacting management of public assets, including open space, civic organisations play an important role in reducing the socio-environmentally destructive effects of neoliberal processes.

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[1] The literature (e.g. Rose 1997, Burkett 2001, Shevellar et al 2015) highlights a distinction between geographical communities and relational communities, noting that the term 'community' carries different implications in different circumstances (McKinlay et al 2011). This thesis uses it broadly to cover a range of collectivities which form in a self-organising way around place-based and/or other (identity, political, ethical etc.) interests (Rose 1997).

2.3. Governance for sustainability

In seeking to realise our collective responsibilities towards the common good, a model of governance for sustainability may be a useful framework. Governance for sustainability aims to have decision-making that incorporates both scientific and local contributions to knowledge and seeks to balance environmental, social and economic interests. Urban and regional green infrastructure has a purpose to provide ecological and social services across cities including creating active transport linkages, recreational areas and protecting natural ecosystems to advance sustainability.

Sustainable urban and regional green infrastructure is based on an understanding of the importance of conservation planning in urban and regional areas for the benefit of human society (bushland, parklands and trails for accessibility, health and wellbeing), biodiversity and ecosystem functioning with an integrated network of natural areas for sustaining biodiversity, soil and water management (Benedict and McMahon 2002, Beatley 2011). Urban and regional green infrastructure is foremost a socio-ecological challenge, taking heterogeneous forms at various scales (site-based, local and regional) and providing for varied, often contested uses including conservation, recreation and utilitarian functions. This in turn demands governance arrangements that respond to complex and dynamic conditions and incorporate holistic approaches to socio-ecological management including concepts of ecosystem services (Barthel et al 2010) ecological/urban footprint, urban ecology (Grimm et al 2008), biophilia (Wilson 1983) and restorative environments (Kaplan and Kaplan 1989). Governance for sustainability is considered important to urban and regional green infrastructure in this research as it seeks to recognise the interplay of many factors, over space and time. The United Nations action plan for sustainable development recognises this interplay, and that our environment is integrally connected to human health: "Health ultimately depends on the ability to manage successfully the interaction between the physical, spiritual, biological and economic/social environment" (United Nations 1992, Chapter 6, Paragraph 6.3).

The theoretical premise of sustainability considers time as well as space; that is, it relates to conditions both today and the future. Voinov and Smith (1994, 10) outline three conditions for sustainability:

> 1. the system does not cause harm to other systems, both in space and time
>
> 2. the system maintains living standards at a level that does not cause physical discomfort or social discontent to the human component
>
> 3. within the system life-support ecological components are maintained at levels of current conditions, or better.

Snep and Opdam (2010) recognise the need for a holistic view whereby natural systems are recognised as an intrinsic part of a broader socio-ecological system therefore removing conflict with the human socio-economic system. Using a governance framework associated with sustainability presents an opportunity for holistic, open minded governance with a reflexive critical approach to urban transformation, while building societal capacity and socio-ecological resilience (Lebel et al 2006). The remainder of this section examines how governance for sustainability has been framed by some key proponents.

The United Nations Secretary General's High-level Panel on Global Sustainability (2012) highlights strengthened institutional governance as a major area to address, stating that "sustainable development depends on an effective framework of institutions and decision making processes" (para 203) at all levels. The Panel points to the diverse array of players involved in governance today, and a "pragmatic recognition that effective solutions often depend on a far more collaborative and flexible approach" in adapting to new challenges and opportunities (para 205). The Panel acknowledges the eight characteristics for good governance as: participatory, consensus oriented, effective and efficient, transparent, responsive, accountable, following the Rule of Law and equitable and inclusive. According to the Panel, setting up the governance framework for constructive collaboration and with the ability to realise social and environmental priorities next to economic is essential.

The International Union for Conservation of Nature (IUCN) has had an active program for engaging people in sustainability extending over several decades promoting the following core components to inform practice including governance (Tilbury and Wortman 2004, 11):

- imagining a better future
- critical thinking and reflection
- participation in decision-making
- systemic thinking
- partnerships.

The 2002 World Summit on Sustainable Development endorsed participation and good governance enabling all people in society to participate in decision-making for sustainable development:

> Rather than relying on outside specialists or managers, participation can engage more stakeholders in becoming part of the process of self-governance and decision-making…

Participation provides opportunities to build a shared vision, a greater sense of purpose and community identity. (Tilbury and Wortman 2004, 54)

Partnerships are considered key for the governance initiatives towards sustainability requiring "commitment to structural change involving society's stakeholders to work collaboratively, including industry, government, community organisations and the public" (Tilbury and Wortman 2004, 64). Ideally a broad range of partners, from local to national, organic community to institutional to corporate organisations, seek to align to create synergy and to build a collective knowledge through dialogue and increasing impact by combining resources, expertise and support, and bringing cross-sectorial benefits with local relevance. Barriers can include old world views, hierarchies, established power structures and lack of trust. Breakthroughs rely on persistence and time in dialoguing, transparency and sustained resources to build trust (Tilbury and Wortman 2004, 73.)

A helpful framework by Evans et al (2006) brings these broad principles together, positing social and institutional capacity as the means to analyse and guide sustainability governance in practice: "The higher the levels of both social and institutional capital, the greater the likelihood of sustainable development policy success" (Evans et al 2006, 855).

Evans et al (2006) propose dynamic governance as the key to governing for sustainability. Dynamic governance can incorporate the United Nations good governance goals and newer emerging reflexive demands put on stakeholders better than other forms of governing such as active government, passive government and voluntary governing (Figure 2-1). Dynamic governing demands broad stakeholder and organisational competence and capacity to adapt reflexively to external changes therefore building a shared governance to deal with the known and unknown challenges, particularly emerging needs such as reflexive governance in recent literature.

		INSTITUTIONAL CAPACITY	
		High	Low
SOCIAL CAPACITY	High	Dynamic Governing	Voluntary Governing
	Low	Active Government	Passive Government

Figure 2-1 Dynamic governing for sustainable development
Source: Adapted from Evans et al (2006, 857).

Evans et al (2006 853) describe institutional capital as "the internal patterns of behaviour and ways of working, as well as the collective values, knowledge and relationships that exist within any organised group in society" and social capital as "the collective capacity that has been built or exists within a 'community' and within a local capacity". Citing Evans et al (2006 14), it is "those networks and assets that facilitate the education, coordination and cooperation of citizens for mutual benefit". Social capital is linked to the consolidation of democracy through a strong and active civil society (Putnam 2000). Several authors have written expansively on social capital and highlight its structure, cognitive and relational dimensions (Ackerman and Halverson 2003, Huysman 2003). They refer to the ability of actors to reach out to others (within an organisation or even to other partner organisations) to seek resources not available or accessible for their use using a shared narrative based on trust, agreed norms and belonging (Ackerman and Halverson 2003, Lesser and Prusak 2000).

Essential to achieving dynamic governance is building cooperative links between organisations and groups, known as bridging social capital. There are certain ways for government institutions to act and structure through good institutional design which in turn helps the creation and mobilisation of social capital. These include creating supports for the voluntary sector, promotion of citizen participation, and the ability to listen to, and channel citizen demands (George et al 2012). Evans et al (2006) reported that positive sustainable development policy achievements were linked with a greater level of civil society activity and knowledge in sustainability issues. Several sectors including the local media, the tertiary education sector, industry and business, and environmental NGOs were found to have strong influences in bridging social capital.

In response, it is necessary to develop institutional learning to build institutional capacity for sustainable development within local and state government to broaden their perspective and understanding of the new governance landscape. This requires strong influential leadership with a vision for sustainable development (Erickson 2004, Evans et al 2006), cross-departmental working through horizontal structures (Evans et al 2006, Marshall 2007), reduced administrative and financial constraints (Lockwood et al 2009); public support and trust building (Erickson 2004); and an ongoing culture of learning which may only occur when institutions engage fully in a collaborative exercise (Poncelet 2001). By integrating a 'double-loop' process of institutional learning, "the first loop involves learning within existing frameworks, whereas the second 'loop' of learning actually changes those frameworks" (Evans et al 2006, 860). This suggests an adaptive management approach, which

would support this dynamic governing proposition and seek to incorporate the good governance objectives of the United Nations.

Increasingly, the literature argues that inequalities and political volatility characterise urban and regional developments under neoliberal agendas. At the same time, there are indications that innovations in sustainability governance, which include community governance arrangements, are thriving in Australian contemporary planning in new hybrid organisations and structures. These arrangements operate in the third and fourth sectors (a sector combining market based and purpose driven aims using the logics of the three sectors), where the structural and organisational features of the profit and non-profit distinction are decoupled from the motivation and values underlying it. Evolving from this is a growing awareness of the concept of integrated governance with an emphasis on collaborations between governments, agencies and non-government agents (Lawson and Gleeson 2005) opening the door for exciting new partnerships with a growing awareness of the need for the common good consciousness and community representation in green infrastructure.

2.4. Good governance

A key message emerging from the sustainability literature is the importance of good governance, incorporating engagement between the state and society, involving multiple stakeholders, and reaching across jurisdictions with formal and informal links (Bevir 2010, 5, Baker 2016). As a normative ideal, good governance is highly contentious, and there is a proliferation of ideas about what good governance looks like, including among others:

- integrated governance
- collaborative governance
- empowered participatory governance
- adaptive governance
- resilience governance
- networked governance
- mosaic governance
- sustainability governance (transformative sustainability governance)
- nested governance
- polycentric governance
- reflexive governance
- community governance.

However, across these types of good governance there is overlap of concepts and definitions. Table 2-1 provides an overview of the literature, definitions and similar terms associated with good governance.

Table 2-1 'Good' governance terms – normative ideals

Environmental governance	
Literature	Armitage (2008), Ali-Khan and Mulvihill (2008), Armitage et al (2009), Duit and Galaz (2008), Folke et al (2005), Plummer and Armitage (2007), Wallington and Lawrence (2008) Australia: de Loe et al (2009), Lebel et al (2006), Everingham (2009)
Definition	The processes and institutions through which societies make decisions that affect the environment (de Loe et al 2009).
Models	Models include regulatory instruments; civil society; cooperative management; market regulation and self-regulation and contextual control (de Loe et al 2009, 15)
Related concepts	Hybridisation of environmental governance, PPPs, co-management and private social partnerships and many hybrid models
Emerging ideas	Group decision-making, networks, hybrid partnerships among state and non-state, social learning and adaptation
Concerns	Seeking to match the governance arrangements to between and among appropriate scales and levels, realising legitimacy, accountability, adaptiveness, evaluation, knowledge and flexibility and learning.
Network governance	
Literature	Stoker (2006), Setchfield and Abbott (2015), Considine and Lewis (2003), Eggers (2008), Fenwick et al (2014), Borgatti et al (1997), Everingham (2009)
Definition	Considers solutions to the coordination challenges with multi-actor systems. Government continues to rely on outside agencies, as strong partners in initiatives of joint action (rather than contracts) and linking together clients, suppliers and procedures as co-producers (Considine and Lewis 2003)
Models	Network governance seeks to build and shape networks rather than being a precise form of governance. Provan and Kenis (2007) analyse how different types of network structures are more effective depending on contextual factors like trust and number of participants
Related concepts	'Multilayered' networked governance sees a shift from hierarchical legal forms to the more flexible, responsive, multilayered structures of 'networked governance' (Fenwick et al 2014)
Emerging ideas	Term networked society used often eg Setchfield and Abbott (2015) Strategic government (Geoff Gallop Speech 2006) and transnational regulatory networks
Concerns	More needs to be done in theorising networks and in elaborating our understanding of actual networks (Fenwick et al 2014) Transaction costs of attaining agreement between state actors at the international level are significant.
Collaborative governance	
Literature	Innes and Booher (2010), Rottle (2006), Agger and Lofgren (2008), Ryan et al (2006), Schroeder and James (2001), Abbott (2012), Ansell and Gash (2008), Brand and Gaffikin (2007). Healey (1996, 1997) and Innes and Booher (1999) provide foundational accounts of collaborative planning, a process used in collaborative governance.
Definition	A 'complex adaptive system' in which a "multiplicity of institutions, practices, and motivations jointly interact to shape metropolitan development" (Innes and Booher 1999, 142). A "governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets" (Ansell and Gash 2008, 544). Emerson et al (2012) provide another definition and a worthwhile table.
Models	"new forms of networked and negotiated governance and planning have been evolving in practice and theory to replace narrow hierarchical, adversarial and managerial modes" (Abbott 2012, 16)
Related concepts	'democratic governance' or 'community governance' (Pillora and McKinlay 2011, 10–11) Characteristics include needing a starting condition (power and resources), incentives to collaborate, history of conflict or co-op, facilitative leadership. Inclusive governance and transparent rules achieve a virtuous cycle through face to face dialogue, trust building, shared understanding, and commitment. (Ansell and Gash 2008)
Emerging ideas	Drivers of collaboration, collaborative dynamics South East Queensland regarded as a best practice collaborative governance initiative highlighting

	community groups and Regional Organisations of Councils and "their groups". "Leadership and ideas from community groups provided a new driver to change the collaborative dynamics" (Abbott 2012, 61). Susskind and Cruikshank (1987), Gray (1989), and Fung and Wright (2001, 2003) give general theoretical accounts. The work on green infrastructure includes Wondolleck and Yaffee (2000)
Concerns	South East Queensland (Abbott 2012) was written up for its successes however there is not very much evidence for the successes of community governance as a working model. Still governance driven, subsidiarity not embraced.

Participatory governance

Literature	Hoover and Shannon (1995), Freiwirth and Letona (2006), Opdam et al (2006), Aulich (2009), Fischer (2012), Gustafson and Hertting (2016), Johnson (2013) (includes a literature review and models)
Definition	A participatory approach that encourages learning processes and trust building (Hoover and Shannon 1995). A form of governance theory placing emphasis on democratic engagement using deliberative practices and seeks to deepen citizen participation in the government process. Addresses issues of citizen competence, capacity building and empowerment(Fischer 2012). Establishing system-wide knowledge transfers and information exchanges; developing transformative partnerships; decentralising decision making and inter-institutional dialogue; and building relationships based on trust and reciprocity (Reddel and Woolcock 2003, 93).
Models	Johnson emphasises institutional solutions, characterised by the development of formal rule structures incorporating the public decisions into the policy process (2 models of Assembly and Community) (Johnson 2013, 17). Arnstein (1969)'s Ladder of Citizen Participation ranging from the lowest levels of citizen power involving manipulation and therapy to the highest level emphasizing delegated power and citizen control. This has been a highly influential contribution, with the idea of a ladder or spectrum underlying many models for community engagement practice e.g. IAP2 (Davies and Wright, 2010).
Related concepts	Deliberative approaches, civic governance, citizen engagement, deliberative democracy, development governance
Emerging ideas	Pracademics include International Association for Public Participation, Involve, Kettering Foundation, and the Ash Center for Democratic Innovation at Harvard and seminal texts (Abers 2000, Fung and Wright 2003, Baiocchi 2005, Smith 2009). (Johnson 2013)
Concerns	Broadening public participation in governance can work when based on with genuine cooperation and buy-in by political and government actors, reinvigorating democracy and positively impacting the quality of government. (Johnson 2013) Evaluation is a challenge (fit for purpose)

Devolved multilevel governance

Literature	Natural resource management, regional organisations of councils and Landcare, Lockwood et al (2009), Empowered devolution and governance for indigenous Australians
Definition	Follows the principle of subsidiarity ie that authority to decide and act is the responsibility of the people or organization at the closest level to the decision or action it is seeking to serve. It needs government to hand over power and control and act as enablers (Marshall 2007). Literature may refer to devolved multilevel governance as relevant to the tiers in government (Gleeson 2008) only or can extend to local communities to take ownership and mange project, visions and places (Lawson 2015).
Models	Particularly relevant to indigenous communities, it relies on notions of self-determination and mutual responsibility
Related concepts	Empowered devolution, participatory devolution, localism, community localism, citizen participation, , citizen committees, citizen empowerment, active citizenship. (Fung and Wright 2001, Australian Government 2015, Empowered Communities Report, Hendrick 2013). Community governance is closely related to this approach, though with its own unique elements.
Emerging ideas	Growing area filling a gap in current market and government governance failures
Concerns	Challenges include the time and resource intensive character of this approach

Resilience based governance, and adaptive governance

Literature	Arnold and Gunderson (2013), Folke et al (2005), Panarchy (Allen et al 2014) (Karkkainen 2006), Polycentric governance (Ostrom 2010), Environmental social and institutional resilience of cities (Garmestani and Benson 2013)(Lebel et al 2006)(Campbell et al 2016)
Definition	The governance of complexity, the 'resilience as transformation' acknowledges the limits of top-down governance to deal with social-ecological complexity and the rise of self-reflexive and self-governing individual. Two understandings of resilience: 1. a problem-solving tool to deal with complexity, 2. issues of resistance (Chandler 2014, Garmestani and Benson 2013)
Models	Academic literature in natural resource management agencies (e.g., Williams et al 2009) acknowledges many systems of governance are lacking the flexibility needed to accommodate dynamic systems (Liu et al 2007, Ostrom 2009). Polycentric systems are complex adaptive systems with multiple governance units at multiple scales, all

	with some capacity to govern at its scale (Ostrom 2010, Andersson and Ostrom 2008).
Related concepts	Resilience literature supports the notion of "polycentrism in government with "multiple decision making centres retaining considerable autonomy" (Marshall, 2008, 25). Beyond it is mosaic governance (Buijs et al 2016) a context based approach depending on diversity of actors and scales, and going beyond landscape governance by acknowledging the spatial dimension of environmental government for resilience.
Emerging ideas	Reflexive law is needed to accompany adaptive governance Mosaic governance (Garmestani and Benson 2013)
Concerns	Resilience-based governance needs alongside it, "organizational learning, cross-scale linkages, and adaptive capacity to govern in a more flexible, iterative, and adaptive manner". Partnered with the integration of resilience science includes adaptive management, adaptive governance, and panarchy, with reflexive law. (Garmestani and Benson 2013)
Reflexive governance for sustainable development	
Literature	Nilsson and Eckerberg (2007), Meadowcroft (2007), Vo$ and Kemp (2006), Baker (2016)
Definition	Using self-reflection and self-confrontation of societal and governance problems to develop new strategies, processes and institutions. Reflexive governance has dual components: "acting now in technical and often sub-optimal ways while at the same time steering towards more transformative approaches, which must themselves remain open ended" (Baker 2016, 87).
Models	Embraces a new steering logic including coordination of multilevel and multi-sector arrangements requiring horizontal and vertical consideration and working in uncertainty. Replaces linear planning and places emphasis on interconnectedness; considering process more than outcome; learning, innovation and adaptation; anticipation and ambiguity; all these operating across social, environmental and economic dimensions of decision-making.
Related concepts	Adaptive management, transition management, systems approach, transition management (Loorbach 2007)
Emerging ideas	Some connection to resilience governance, social learning, slow urbanism (Knox 2015, Turkseven et al 2011) and ecological democracy (Dryzek 2005)
Concerns	This approach overreaches the ability of cooperation, underplaying the political elements (Vo$ and Bornemann 2011, Walker and Shove 2007)

With so many options for good governance, the challenge is to assess the literature for examples that may be better suited to urban and regional green infrastructure. Lockwood et al (2009, 1) suggest that the new governance has preference for "collaborative approaches among government and non-government actors from the private sector and civil society". Agger and Lofgren (2008) refer to this as the networked age and outline the implications of networked governance for government including Australia.

> Governments in the future will not simply be bureaucratic providers of a narrow range of public goods. They will no longer merely occupy the space traditionally promulgated and occupied by governments to act as monopolist service owner and direct service provider. Instead, governments will act as aggregators of networks, managers or partnered arrangements and buyers of diverse services and new forms of value. In this transformation, they will need to refashion their systems, practices, structures and skill sets in a way that reflects the government's new roles in service delivery and working through network governance models. (Agger and Lofgren 2008, 27)

Ansell and Gash (2008) review the international collaborative governance literature and highlight that while there is definitional disagreement, the value of collaborative approaches in natural resource management and local resource disputes is clear. The definition Ansell and Gash (2008, 544) give is "a governing arrangement where one or more public agencies directly engage non-state

stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets." The 137 case studies of collaborative governance were reviewed to realise the context for collaborative governance success including the starting conditions (trust, conflict and social capital), institutional design (basic ground rules), leadership (facilitation and mediation for collaboration), and collaborative process (iterative, trust building, commitment) (Ansell and Gash 2008). They highlight the relationship between time, trust and interdependence and the value of good faith negotiations in the process. Stakeholder representation includes citizens and groups representing non-state actors and public agencies, and is deliberative, multilateral and collective, however they emphasise that "public agencies have a distinct leadership role in collaborative processes" (Ansell and Gash 2008, 546). Emerson, Nabatchi and Balogh (2012), building on Ansell and Gash (2008), developed an integrative framework for collaborative governance from a wide review of literature and practice and define it more broadly as:

> The processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished. (Emerson et al 2012, 1–2)

Practices of new governance highlighting 'locally based efforts' based on networks, deliberation and cooperation are not simply local or simple (Plummer and Armitage 2007). Co-management approaches to environmental governance continue to value the role of state in policy alongside other actors and social networks including polycentric approaches to deal with decision-making complexity (Marshall 2007, Chandler 2014). Several studies suggest that 'multilevel' governance systems are linked both horizontally across geographic space, and vertically across levels of organisation (Armitage 2008, Carlsson and Sandstrom 2008). In summary, the good governance of urban and regional green infrastructure will include many of the characteristics of collaborative governance, networked governance models and co-management approaches.

2.5. Community governance

The principles of community governance date back centuries, with elements observed in various early practices of tribal decision-making, village life and parish governance across time, space and culture. While the concept has a long practice history, the term community governance emerged in the literature in the 1990s, when Clarke and Stewart (1992, 1994, 1997) used it to describe a "specific form of political governance (including meta-governance) that allows for the highest degree

of democratisation: empowering the public as 'community' (Clarke and Stewart 1992, cited in Somerville 2005, 120) or embodying the local democratisation of governance" (Clarke and Stewart, 1997 cited in Somerville 2005, 120). Clarke and Stewart (1992) note that in many decision-making processes the community functions as the largest stakeholder with the right to participate in and determine issues that affect them through direct control and community based institutions, with due account to other stakeholders such as local authorities and national governments.

Bowles and Gintis (2002) give a compelling summary of the history of thought on the values associated with community governance, and why it is considered to still have a place when viewed from either the left or the right of politics and within a market context (Bowles and Gintis 2002). Realising that the common market had failures, as did the state (Putnam 1995, Bowles and Gintis 2002), a small body of literature argues that community governance has a legitimate place as a solution to societal problems and gaps. Giving attention to a history of the concept of governance and its links to democracy, Somerville (2005) outlines the core characteristic of community governance as democratised shared decision-making for a local community of place.

More recently, its use in the literature and in practice represents a "new" community governance (Clarke and Stewart 1994), born again as a response to the economic rationalist based free market society that is rooted in a neoliberal agenda. Bowles and Gintis (2002) suggest that community governance may well provide some of society's unmet needs in the realm of local public goods and, with evidence of loss in social trust, community governance represents the values of civic virtue like "trust, generosity and collective action" (Bowles and Gintis 2002, 419). Kayhan (2015) highlights the shared problem solving ability of the community, harnessed effectively when autonomous and voluntary, supporting Bowles and Gintis's (2002, 419) list of community governance "superior governance capabilities" including better practices for problem solving, multilateral monitoring and risk sharing (Bowles and Gintis 2002, 433). Several authors emphasise that the role of communities will increase in importance in the future (Yates 1999, Bowles and Gintis 2002). Somerville (2005, 122) reinforces the role of community governance in maintaining democratic legitimacy and as regulator of "common activity: trust, solidarity, reciprocity, reputation, personal pride, respect, vengeance, retribution". Further, Somerville (2005) warns of its risks, challenges and conditions for success, not least as a social and political movement.

While the use of the term community governance has been occasional in the global literature over the last two decades, aligned concepts have developed, with some interest emerging in the 'new'

localism in the United Kingdom (Stoker 2004), and associated terms around civil society roles, citizen participation and social democracy continue to grow in use. In recent years, literature on urban sustainability transitions and environmental governance has been focused on bringing together social and ecological systems and grassroots community initiatives towards resilience-based outcomes (Chandler 2014, Garmestani and Benson 2013, Frantzeskaki et al 2016).

Some recent case studies of community governance include peacebuilding in Nepal (Acharya 2015), anti-democratisation due to contestation of community governance in South Africa (Katsaura 2012, exclusionary practices of the middle class emerging from community governance of open spaces in Bogota (Galvas 2014), roles for community governance in climate change adaptation in Pacific Island countries (Nunn et al 2014), lessons for resourcing transformative community organisations in England and Canada (Fischer 2012), developing a platform for trusted data using network organisation and community governance in Ireland (Costello et al 2016) and maintaining successful village collectives for business and administration to preserve local interests in China's urban villages (Tang 2015). Other perspectives in the literature have explored perceptions of community governance and knowledge transfer using wikis (Kayhan 2014), beneficial impacts of funding grassroots organising in civil society (Ostrander 2013), and complexity around issues of legitimacy in new governance community based network arrangements in the United Kingdom (Connelly 2010). Work in China promotes the function of community governance at a base level (grassroots) providing the basis of civil society (Li 2008) and several examples of community governance give rise to innovative and enterprising communities working towards sustainability (Davies 2012).

While models of new governance like network governance, collaborative governance and deliberative governance have provided a necessary shift towards a platform for the development of community governance, they may stop short. Models of community governance have been developed by Sullivan (2001) describing three frameworks of community government, local governance and citizen governance. Sullivan discusses the limitations of local authorities to adopt community government with tendencies towards the control of structures and processes (Sullivan 2001). Stoker (1996) also raises concern about many differing perspectives on how local authorities should relate to other key stakeholders, highlighting the role of extensive deliberation alongside network governance to improve local governance. Somerville (2005, 136) outlines the barriers to deepening democracy (power based and practical) and provides a list of requirements for success in community governance:

- It needs a single source of a democratic territorial decision-making authority on a suitably local scale fully accountable to communities, neighbourhoods and citizens within the territory.
- It needs community control over functions operating on a community scale but involving politicisation rather than depoliticisation of public and community service (ie with greater rather than lesser involvement of elected representatives of the people).
- It needs an emphasis on functional integration rather than fragmentation (ie addressing issues in a holistic manner rather than in separate compartments).
- It needs democratic decision-making at neighbourhood and community level to drive the process of political and policy change by using appropriate strategic vertical and horizontal embedding.

This is usually based on a lack of understanding (or acceptance) by key stakeholders of a key community governance principle known as subsidiarity, which holds that the people closest to a decision or action should be responsible for making the decision (Wilkinson 2005). The principle of subsidiarity, consistent with governance for sustainability, is part of the European Union Treaties and their spatial planning system (Glasson 2004), the United Nations Development Program (1999) and the United Kingdom Government's Localism Act (2011) aimed to ensure that decisions are taken as close to the citizen as possible. This principle may also apply to similar concepts to community governance such as new localism (Fung and Wright 2001, Stoker 2004) which is broadly based on principles of empowered devolution and citizen empowerment within multilevel governance and deliberative democracy (Aulich 2005). Australian literature also refers to subsidiarity in planning and governance including Gleeson and Low (2000) who discuss its role alongside public deliberation. However, falling well short of community governance, Gleeson and Low's (2000) definition of subsidiarity only includes the three levels of government (local, state and federal) in Australia omitting the community organisation and the private organisation. This highlights the variability in definition of subsidiarity and can affect the application of the concept.

2.6. Community governance in Australia

In Australian practice the use of the term community governance has some general level of understanding. The book *Community and Local Governance in Australia* by Smyth et al (2005) adds importantly to the Australian discourse on the topic with many contributors. In 2015, the South Australian Government supported an event led by the Institute of Public Administration titled "Making community governance work". The event included a public discussion, a presentation on

research in Portland, Oregon by Paul Leister (Lawson 2015) and the launch of a report by the Local Excellence Expert Panel recommending the establishment of Regional Councils and community governance. This meeting aimed to reconceptualise the meaning and application of community governance in Australia towards it "reflecting the increasing predisposition within communities to play a greater role in how decisions are made which affect 'their place' and the options open to them for how they live, work and play" (Lawson 2015, 47).

Another significant report on the Evolution of Community Governance (2012) for the Australian Centre of Excellence for Local Government (McKinlay et al 2011) included a literature review of governance, particularly local government and community governance, and noted that the term governance in Australia "commonly refers to accountability for organisational decision-making and behaviour" (McKinlay et al 2011, 9).

The McKinlay et al (2011) definition of community governance highlights collective processes and describes a "collaborative approach to determining a community's preferred futures and developing and implementing the means of realising them" (McKinlay et al 2011, 5). The key to defining community governance "is not whether clear and specific boundaries can be set around it, but whether it has utility in the sense of improving understanding of how decisions which affect a community's future are best taken and implemented" (McKinlay et al 2011, 5).

A key factor that community governance and environmental planning have in common is complexity and a diversity of approaches (McKinlay et al 2011, 35):

> All actors in community governance are confronted with a mix of natural complexity which is inherent to the issue involved, and imposed complexity which is the result of a history of often uncoordinated regulatory intervention.

McKinlay et al (2011) identify the key theories underpinning community governance from a range of literature and projects of local councils. Concepts of subsidiarity, new localism, governance of place, community engagement, civic leadership and metropolitan governance are discussed. The outcomes of a review of various successful community governance examples across Australia include a broad range of community governance models. McKinlay et al (2011) name the "community bank" concept as the most significant in its impact and sustainability, and also conclude that some issues remain unresolved. They highlight the importance of the community plan and the level of effort to produce one, questioning the cost versus the benefit. They note the lack of legitimisation of the concept of the community plan at all, and the lack of acknowledgement by the various state governments in the

role of local governments in local community planning. However, despite these challenges, McKinlay et al (2011, 11) find important potential for community governance in Australia and outline eleven findings for local government for community governance to continue to develop:

1. Local governments' communities have a growing expectation that they will be involved in decisions which affect them.
2. Size and geography both matter.
3. A community governance approach changes the roles of elected members.
4. It is critical that all parties are well informed about the community governance approach.
5. A community governance approach highlights the importance of ensuring that the council can hear all the voices within the community and not just the traditional 'squeaky wheels' or other loud voices.
6. In all councils, it is the councillors who have ultimate responsibility for the council's policy on community engagement but there is a need to tailor actual delivery to the circumstances of the individual council, other pressures on elected members, and the council's culture and structure.
7. Most councils involved in the study have recognised in different ways the need for community capability building initiatives as part of developing community governance.
8. Place shaping and place-based management requires a genuinely effective and comprehensive approach to community governance, and there is likely to be a growing trend for councils to look at reorganising their structures to reflect this.
9. There is likely to be tension between state government planning and a community governance approach. The former is a top-down approach to imposing decisions on individual communities and the latter a bottom-up approach expressing the community's preferences.
10. Councils adopting a community governance approach recognise the need for three separate roles: around decision-making and implementation, facilitation, and advocacy.
11. The development of community governance should remain free from statutory direction.

Finally, McKinlay et al (2011) acknowledged a light literature on community governance in Australia and a need for further understanding in certain areas, especially multijurisdictional green infrastructure. They identified areas for further research and understanding of the use of community governance such as "alliances that have been set up to deal with cross-cutting issues such as the management of river catchments or the economic challenges facing a locality." They suggest that the features of community governance include effective community engagement, partnerships and

networks, councils offering strategic leadership and a "sense of place as a unifying and motivating concept for all stakeholders who are involved" (McKinlay et al 2011, 12).

2.7. Governance of green infrastructure

Governance for green infrastructure is embedded in environmental governance and includes the institutions and processes by which society makes decisions on the environment and does not preclude the approaches mentioned before. The tools of environmental governance include civil society; cooperative management; market regulation, regulatory instruments; and contextual control and self-regulation (de Loe et al 2009, 15). There are also various approaches in the broad environmental governance literature including:

- perspectives from various scales including localism and new localism, regionalism and new regionalism (Kubler 2005)
- a systems based approach to governance that may assume a city, urban studies and metropolitan focus or an economic, ecological and social systems approach (Voinov and Smith 1994)
- an issue based approach to governance including climate change, energy management, stormwater management and sustainability (Bellantuono 2014, Krellenberg et al 2016)
- a land use function approach including green and grey infrastructure, urban forests and public open space (Green et al 2016, Connop et al 2016).

Given many environmental issues are "wicked" problems that need complex and creative multistakeholder decision-making and management (Lockwood et al 2010), governance of urban and regional green infrastructure in Australia generally incorporates some type of collaborative approach. Further, governance of complex environmental problems has a complexity, continuity and an ambiguity that demands a holistic consideration of both social and ecological systems through a site based approach. The following section includes a brief discussion of the definitional challenges around the use of the term green infrastructure and a summary of approaches to environmental management and governance.

The use of urban green infrastructure as a term is expanding (Lennon 2014) and it has absorbed a variety of similar concepts including urban forests (Konijnendijk et al 2006, Young 2011), greenways (Fabos 2004, Erickson 2004), green corridors, green belts (Thomas and Littlewood 2010, Amati and Taylor 2010), urban green space (Mattijssen et al 2017), informal urban green space (Rupprecht et al

2015, Rupprecht and Byrne 2014), urban gardens (van der Jagt 2017, Fox-Kamper et al 2018), trails (Stender 2017) and open space networks (Koc et al 2017, Mell 2013, Lennon 2015, Amati and Taylor 2010). Mell (2013, 152) highlights the fundamental principle of green infrastructure planning as focusing on developing, maintaining and enhancing green resources. Green infrastructure, both the term and concept, has enjoyed some policy traction (for example in the United Kingdom), through a broadening of concept to include all green space variations in cities (and their stakeholders), moving from a focus on ecological goals towards decision-making that includes consideration of economic and social goals in an increasingly soft governance environment (Thomas and Littlewood 2010). With the growing understanding of the importance of urban green infrastructure there has been some reconsideration of these concepts and their values (including uses and benefits) for sustainable development. This has seen a growing contestation of environmental, economic and social interest at play in deliberation of values for green infrastructure in urban areas (Roe and Mell 2013, Lennon 2015). For example, the environment urban containment tool that greenbelts offer (Amati and Taylor 2010) is at odds with the economic pressures to develop them in land restricted cities and is at odds with the social equity pressures placed on those living beyond greenbelts (Thomas and Littlewood 2010, Amati and Taylor 2010).

Several authors have produced recent reviews of the use of the concept urban green infrastructure in the literature and in practice, providing summaries of the definitions, uses and benefits of urban green infrastructure (Kabisch 2015, Lennon 2014) and developing typologies. Several authors comment on the ambiguity of the use of the term resulting in a loss of clarity (Koc et al 2017) and not just in its use but also in the breadth of relevant stakeholders and disciplines associated with green infrastructure resulting in disciplinary tensions and increasing the need for synergistic integration (Lennon 2014). While a universal set of typologies of green infrastructure is not likely (Koc et al 2017, Lennon 2014), there is a need for ongoing discursive engagement and deliberation (Lennon 2015) even on what constitutes green infrastructure (Koc et al 2017).

This challenge in scope and breadth of the use of the term varies across continents, scales, functions and discipline emphasis and has impacts for governance, planning and management and policy making. This suggests a localised, context based understanding of green infrastructure, perhaps guided by Koc et al (2017, 15) with their "ternary approach in terms of the functional (purpose, use, services), structural (morphology) and configurational (spatial arrangements) attributes of green infrastructure". While Koc et al (2017) present four main categories from the literature analysis of tree canopy, green open spaces, vertical greenery systems and green roofs. Mell (2013) poses a

challenge to consider the green to grey spectrum of green infrastructure. Urban stormwater site based technical solutions such as rain gardens, bioswales and street treatments are also included in some definitions of green infrastructure (Trust for Public Land 2016, Dhakal and Chevalier 2016) with recommendations by Dhakal and Chevalier (2016) to decentralise and distribute governance locally. Mell (2008, 69) helpfully describes the green infrastructure concept more holistically as "connected matrices of greenspaces that provide numbers of complementary benefits for ecological, economic and social spheres". From a European perspective, Artmann et al (2017) provide a helpful summary of green infrastructure related terms, green infrastructure definitions and scales, and a summary of ecosystem functions.

Much of the recent literature on urban green infrastructure puts the emphasis on considering cities as socio-ecological systems and examines a range of topics including the multiple benefits from social, environmental including stormwater management (Dhakal and Chevalier 2016, Artmann et al 2017), and economic perspectives (Hansen et al 2015).

> The main categories of ecosystem service analysed in planning discourses dealing with the green infrastructure planning and multi-functionality of European and American cities include provisioning (material outputs provided by the ecosystem), regulation (ecosystem processes that serve to regulate the ecosystem), habitats (functioning as living spaces and maintaining genetic diversity in support of biodiversity) and cultural ecosystem services (non-material benefits for local people who engage with the ecosystem. (Hansen et al 2015, 9)

Vierikko et al (2017) describe the biocultural diversity approach as a reflexive concept able to support cities' adaptive potential (although with the risk of greater conflict) to strengthen planning and management for ecologically sound and socially inclusive urban green infrastructure.

The 'greenway' specific literature has further studies of interest. Jongman et al (2004) and von Haaren and Reich (2006) recognise that complex interactions between cultural and natural features affect decision-making and result in quite different ways for the elaboration of ecological networks and greenways across Europe. Greenway planning in the United States is summarised by Fabos (2004) including a literature review and consideration of large scale initiatives. Conclusions confirm the use of multipurpose greenway corridors, often located in river corridors, as a planning tool with application at every scale, ranging from site-based through municipal and regional to national levels. Erickson (2004) emphasises the need for an innovative integrated approach to greenways to overlay the historic parkways of cities (like Milwaukee and Ottawa) and emphasises the growing importance of greenways in urban connectivity and community health. A study of five greenway cases in

Portugal (Ribeiro and Barao 2006) reinforces their value and confirms that political objectives and urban development can be balanced with greenway planning protecting landscape quality and opportunities for public recreation and education.

A small literature focuses on governance models and approaches for urban green infrastructure. Broadly, green infrastructure policy has a focus on regional and subregional 'soft governance' bodies, with a shift away from more concrete greenbelt policies that were characteristic of planning in the last century (Thomas and Littlewood 2010, Amati and Taylor 2010). Kabisch (2015) highlighted three main challenges in Berlin's urban green governance as added pressure from development on the municipal budget, expertise loss, and lack of awareness and communication of the benefits of green space. The recommendation in this example was for further green space promotion based on green infrastructure's role in ecosystem services. Frantzeskaki et al (2016) highlight a role for civil society as an innovator for sustainability, while Green et al (2016) recognise the uncertainty and complexities of managing ecosystem services in urban green spaces and suggest a governance approach that is adaptive and iterative.

Further governance, planning and management literature for green infrastructure addresses questions on the balance between urban densification and public open space (Artmann et al 2017), developmental stages of governance for open space (Fox-Kamper et al 2018), soft governance spatial strategies (Thomas and Littlewood 2010) and cross-sector partnerships (Dempsey et al 2016). There is a growing body of knowledge about cross-sector partnerships on improving environmental stewardship and quality of green space (e.g., Dempsey et al 2016, Fisher et al 2012). The various structures of cross-sector partnerships, the demands on resource capacity, and the decision-making networks and processes are discussed by Fisher et al (2012) and Connolly et al (2012) and Holt et al (2012). Mathers et al (2015) highlight a gap in examination of cross-sector partnerships created as an alternative to replace existing governance structures in green space management.

Governance that considers the role of community involvement directly in green infrastructure includes a focus on place making and place-keeping as concepts to take the local social element further (Mattijssen et al 2017), communal governance especially related to community gardens (van der Jagt 2017) and use of a participatory governance framework (with simple and complex forms of deliberation) to build greenway policies in New York (Hoover and Shannon 1995). While local public sector authorities seek to involve communities and organisations from other sectors more in delivery of green space management on the ground (Burton and Mathers 2014) it seems difficult to

embed. Perkins reports on the democratic potential of shared governance of open space emerging in United States and Europe. While it has positives and negatives, the impacts of citizen entrepreneurialism for open space (Perkins 2010) where communities of self-interest (including corporations, non-profits groups and residents) step up in response to disinvestment to assist in park upkeep has potential. Despite this, Perkins warns that it risks remaining a top-down greening strategy. Young and McPherson (2013) also note that the public sector is dominant in the visioning, planning and management of green infrastructure initiatives in the United States and the role of the private sector is minimal. Despite this dominance, the sustainability initiatives had limited success in becoming institutionalised.

Roy (2011) reignites confidence in the counter-liberalism potential and capacity offered by non-profit civic greening agencies, including both grassroots community based organisations and some state initiated, for their role and advocacy in urban social-ecological processes, like the "Greening Milwaukee" citizen tree planting group. Other researchers have sought to measure the ecological or biophysical performance of community-led interventions (e.g., Anderson et al 2014, Ernstson 2013). Ball and Pack (2013) emphasises the role of individual and organisational level social capital during a rail-trail and greenway development as community non-profit and local government relationships evolve. Jerome et al (2017) create a typology of environmental volunteers in community scale green infrastructure to understand how multiple actors remain engaged in the decision-making processes of green infrastructure management and maintenance. The seminal work by French and Raven (1959) give further understanding of the issues affecting and motivating the actors in community governance and multi-collaborative partnerships. In French and Raven's (1959) basis of power theory, several powers operate in group dynamics including: legitimacy (the formal right to make demands and expect compliance); rewards (compensation for compliance); expert (skills and knowledge); referent (developing the right to respect); and coercive (punishment for non-compliance). Hustinx et al (2008) identifies a shift from traditional volunteering, with its lifelong, value based commitments, to passion volunteering, more associated with sporadic personal interests and needs. Understanding this change in volunteering toward interest and capacity has led to a newer phenomenon in brokerage of a broader, more flexible range of volunteering (Rochester et al 2016). As a warning, the empathy and enthusiasm associated with civil volunteering activities even in community governance organisations can be replaced by bureaucratic governance involving formal and inflexible solutions if they come to resemble public authorities too closely (Lorentzen and Henriksen 2008).

Buijs et al (2016) recommend mosaic governance as a way of urban green infrastructure planning that is context-sensitive, seeking to enhance relationships between the diversity of landscapes and communities across cities. Focusing on environmental, institutional and social resilience they suggest a lead role for active citizenship and inclusive governance. Their diagram in Figure 2-2 is a visual image of the context sensitive combination style of green infrastructure governance instruments and people.

> Mosaic governance delivers resilience through various arrangements that differ by greenspace type, by the character of the citizens that take part and through time. This plays a role in helping bridge spatial and temporal boundaries of a site in response to changing social and ecological circumstances. Local authorities can provide some of the coordination of bottom-up initiatives that are needed to achieve well-connected, multifunctional urban green infrastructure, which is key to urban resilience (Buijs et al 2017, 5)
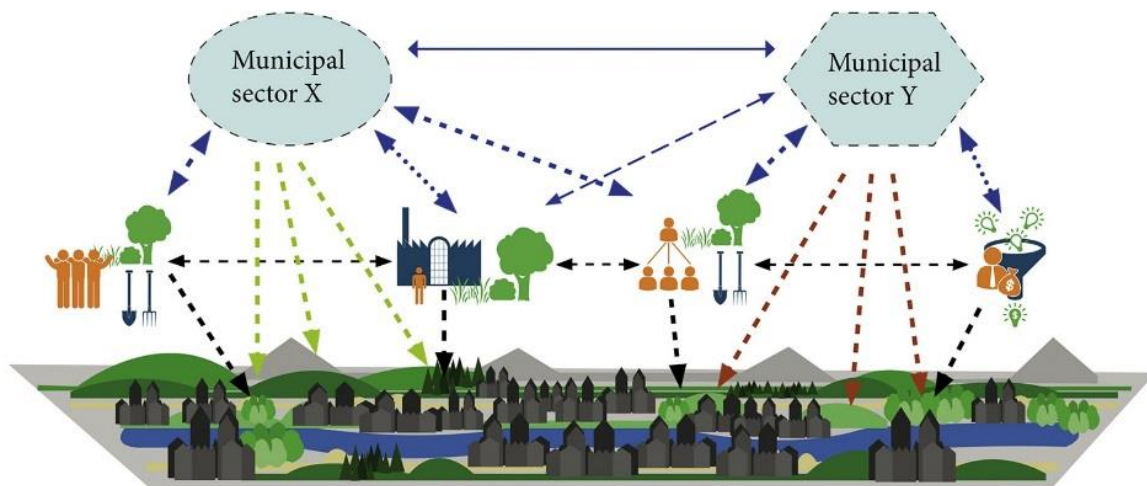
Figure 2-2 Mosaic governance for multifunctional urban green infrastructure
Source: Buijs et al (2016, 4). Reproduced with permission of Elsevier

Finally, Buijs et al (2016, 5) highlight the research gap in international literature on governance for urban green infrastructure:

> A number of recent literature reviews on the topic of urban greening and urban forestry have highlighted the sparse and unsystematic nature of research detailing the diversity of governance arrangements and their associated impacts.

Young and McPherson (2013, 74) also raise the need to improve understanding of citizen-based mobilisation and "institutionalisation" in governing metropolitan green infrastructure:

Studying the relationship between public sector initiatives and popular mobilizations (either corporate or citizen-based) in ensuring their institutionalization would be of considerable interest in this regard.

In Australia, there is an even greater gap in this field of research, as the focus of research on community governance and environmental governance has generally been natural resource management in regional areas, rather than urban green infrastructure. Several comprehensive studies have been conducted on the effectiveness of engagement processes and conservation programs, with an understanding of good governance in these contexts developed for broader application (Lockwood et al 2008, 2010, Mitchell et al 2014). Brunckhorst et al (2006) suggest eco-civic based resource management regions as improvements for integrated natural resource management. Another key research study by Abbott (2012) has findings that can be applied to new governance and spatial strategies towards sustainable regions. This report, commissioned by the Australian Centre for Excellence in Local Government, gives an account of collaborative governance in metropolitan planning and the lessons learnt in South East Queensland from 1990 to 2010 (Abbott 2012). It emphasises that the positive local government role in collaborative governance is supported by the South East Queensland case study, and while time and resource challenges may raise issues at the metropolitan level, a metropolitan forum (with a state minister) for collaboration is recommended as a solution toward joint policy making that endures. Abbott (2012) also highlighted a commonly repeated concern that a state government's unilateral decision-making can undermine outcomes for collaborative governance (including genuine efforts of local government and community groups) and that this needs challenging as it undermines trust. The need for state government to realise their interdependence on local government is highlighted. Further consideration of these studies for urban green infrastructure governance in Australia is noted.

Other literature on urban green infrastructure governance is limited to historical and academic commentary, with very few empirical studies reviewing real case examples. Evans and Freestone (2010) report on the role of open space in structuring metropolitan form in Sydney through a green web with an open space system aimed towards sharing recreational opportunities. This was also impacted by a green belt aimed in part to secure a more compact city that resulted in a patchwork of subregional communities (Evans and Freestone 2010). Hedgcock (2015) and Hutton and Connors (1999) highlight the dominant role of public state-based management authorities for significant green infrastructure. George et al (2015) examine a grey/green corridor reuse case study of the GreenWay in Sydney's Inner West and highlight its governance and significant changing political

challenges and the key role of the community in its history, including visioning, decision-making and management.

Several government strategies have focused specifically on green infrastructure policy and practice including the Moreton Bay Regional Council Draft Green Infrastructure Strategy 2012-2031 (Moreton Bay Regional Council 2015) which aligns with outcomes and targets in the council's Community Plan 2011. In South Australia, the Botanic Gardens of Adelaide (Sustainable Focus Pty Ltd 2014) published a report "Adding value through Green Infrastructure: Working effectively with Local Government" as part of a broader vision although it is noted that governments, rather than citizens and communities, are clearly acknowledged as the drivers of future green infrastructure plans on public land in South Australia. While local government must play an important role, the empowerment of citizens towards community governance ideals is better represented by Lawson's (2015) summary of a conference focused on the key role and leadership of community in community governance of green infrastructure also held in South Australia with local government.

In summary, the connection between the planning, development and management of urban and regional green infrastructure and its governance is seen primarily as a role for government in Australia. Exceptions exist in regional natural resource management and urban single site-based community gardens, where some positive results are developing a growing legitimacy for the role of the community in decision-making processes and by Lawson's (2015) promotion of community governance ideals to local government in South Australia. Regarding the growing role of the community Lockwood et al (2010 citing Bernstein 2005) highlights legitimacy as

> ''the acceptance and justification of shared rule by a community . . . the question of legitimacy concerns who is entitled to make rules and how authority itself is generated'' (Bernstein 2005, 142–143) and is therefore a key factor in the effectiveness of governance arrangements.

However, there is much opportunity for research to fill the gap in the literature in this area and answer key questions: What is the evidence of innovative and alternative new governance models for planning and management in urban and regional green infrastructure? How are communities involved in the decision-making of green corridors, trails and green spaces across Australian cities? What is the practice and opportunity for community based governance models especially in complex situations? Are there cases where it is working? This study addresses this gap by focusing on

Australian case studies and future potential of community governance and its opportunities as a niche of good governance of urban and regional green infrastructure.

2.8. Operationalising good governance in green infrastructure

As this chapter has shown, since the publication of Arnstein's Ladder of Citizen Participation (1968), a large and diverse literature has contributed to and expanded on our understanding of ideals such as 'empowerment' and 'partnership', and how they play out in practice. Even for those authors who highlight community participation (see Table 2.1), this is not necessarily a matter of achieving broad representation but of ensuring opportunities for self-organising communities of stakeholders to participate at the level that suits their particular interest and skills in the place and/or issues at hand.

This literature provides some normative principles of governance for sustainability and natural resource management, including specific characteristics of stakeholder relationships, operational management and decision-making practices that may apply to green infrastructure case studies. These include the role of strong influential leadership with a vision for sound environmental outcomes (Erickson 2004), seeking public support and trust building (Erickson 2004) with reduced administrative and financial constraints (Lockwood et al 2009). Barriers and problems are also mentioned including poor leadership, mistrust, lack of community involvement (for many reasons), split communities, and lack of communication and transparency between stakeholders.

2.8.1 Leadership

Strong leadership is a theme reiterated throughout the literature. It is leadership that provides vertical and horizontal connectivity throughout organisational structures, whether public or private. Gottlieb (nd part 1) lists leadership as the most important function for a community driven governance board:

> Leadership is about creating end results on behalf of the communities our organisations serve. Only leadership comes close to the truest definition of governance – leading, guiding and making decisions on behalf of others.

The characteristics of successful leaders include skill, charisma and visionary thinking. Depending on the project, they may have roles in varying positions in governance structures.

Ansell and Gash (2008) analysed the collaborative process of governance and found that leaders could steer projects through rough patches, using a process they call 'facilitative leadership'. That is,

the leader could build trust, set and maintain clear ground rules, facilitate dialogue and explore mutual gains empowering and mobilising stakeholders to move collaboration forward (George et al 2012). Rottle (2006) focused on the key stakeholders of the Mountains to Sound Greenway in Washington State in the United States and found that "participation by an effective leader, coordinator or facilitator was one of the two most frequently cited conditions for success" (Rottle 2006, 219). The Mountains to Sound Greenway had two powerful individuals, with one representing the public interest and one the private interest (Rottle 2006). While the president of the Mountains to Sound Greenway board was most influential and charismatic, pulling together the broad group of stakeholders, the executive directors and project leaders helped provide organisational 'glue'. Highlighting the importance of collaborative leaders, Rottle (2006) describes the leaders' ability to motivate rather than direct as important, being skilled in seeing the connections across boundaries, and demonstrating characteristics of determination and humility. These types of leaders are aware of the need to develop sustainable relationships across the varied dimensions of multiple stakeholder governance structures.

In the St Louis (Missouri, United States of America) greenway plan, Krummenacher et al (1997) demonstrated how the vision grew from a community effort, with non-profit organisations that had strong community leaders that managed to gain support of political leaders. Ryan et al (2006, 175) supported the view that strong leadership was required in regional greenway projects "which must co-ordinate many local-level greenway projects". Without strong leadership, evidence suggests that projects are vulnerable. Ryan et al (2006) found that a lack of leadership results in a lack of coordination between government agencies and organisations. Erickson (2004, 219) notes that projects lacking provincial leaders and well developed community groups, such as non-profit organisations, suffer "from a paucity of influential leaders". Abbott's (2012, 61) review of South East Queensland metropolitan planning reports on the positive role of leaders and their peak community groups (Regional Organisation of Councils) in collaborative processes in strategic planning: "Leadership and ideas from community groups provided a new driver to change the collaborative dynamics".

Ansell and Gash (2008) also highlight that there is a role for strong 'organic' leaders emerging from the community of stakeholders and commanding respect and trust especially in collaborative governance processes. In a trust compromised situation, there may be a need for an honest broker that stakeholders accept to act as a mediator (Ansell and Gash 2008). The collaborative process should be as much about trust building as negotiation, and leaders need to avoid manipulation, by

building trust (Ansell and Gash 2008, 555) and earning respect to influence. This type of influence (or power) in group dynamics is earned over time, built on trust, and referred to by French and Raven (1959) as referent power.

2.8.2 Administration and finance

Administrative efficiency and financial certainty are noted as factors impacting the success of community governance in case studies. Administrative and financial constraints reduce an organisation's ability to achieve their goals in a timely manner, as reported in projects across the world and in Australia, like the Ottawa Greenway plan in Canada that was stalled due to financial and administrative constraints during the city's reorganisation (Erickson 2004) and the numerous barriers facing Christie Walk, a housing co-operative in Adelaide (Crabtree nd). The Adelaide project lacked support by banks, local government and the real estate market which slowed its early development and resulted in an inability to meet its affordable housing targets. Eventually a lender created a tailored 'green loan' which helped remediate some of the financial uncertainty (Crabtree (nd). Poor funding allocation and over administration has also hampered Australian natural resource management projects where Lockwood et al (2009) found there was a "lack of strategic planning to ensure that funds were systematically directed to achieving priority outcomes" (170) and "unnecessarily complex and demanding reporting requirements" (176). This upward accountability "tied up a significant proportion of some regional NRM groups capacity" through the reporting of quarterly financial expenditure and half yearly milestones, which wore down the willingness of the community volunteers and led to a loss of their goodwill and motivation (Lockwood et al 2009, 176).

> While upward accountability is essential to good governance, micro-management by governments is to be avoided, with administrative and reporting processes designed to be as lean as possible… Government agencies need to earn legitimacy from subsidiary environmental bodies, while the subsidiary bodies need to recognise and respect the legitimacy of governments' roles in a multi-level governance system. Thus, relations of trust, mutual respect and responsibility between the parties are crucial. (Lockwood et al 2009, 182)

2.8.3 Public support and trust building

High levels of trust are essential when designing a governance structure for public assets such as greenways and environmental management projects and without it, projects are at risk of stalling or collapse (Ansell and Gash 2008, Lockwood et al 2009). Erickson (2004) suggests that trust building is integral to successful governance, and especially community focused governance. Cross-stakeholder trust assists in timely decision-making and helps to avoid disappointment (Lockwood et al 2009). Agger and Lofgren (2008) reiterate previous literature that the collaborative process develops trust,

new relations and interpersonal networks, and in time it produces higher levels of social, intellectual and political capital among involved actors. According to Ansell and Gash (2008), a history of cooperation can create and build social capital and high levels of trust, which in turn feeds a virtuous cycle of collaboration.

In contrast, O'Rourke (2005) provides an example of a public asset project in Ireland that became plagued with mistrust and disagreements, resulting in a split community. Similarly, Ansell and Gash (2008) report on problems relating to low levels of trust within collaborative governance frameworks where significant imbalances impacted desired outcomes. Imbalances of actors or groups in their capacity, organisation, status or resources affected relationships between stakeholders. This allows stronger actors to jeopardise collaborative governance progression through power and resource imbalance and creates distrust or weak commitment in participants. Ansell and Gash (2008) warn that a history of conflict between stakeholders, resulting in low levels of trust, will produce a vicious cycle of suspicion, distrust and stereotyping leading to low levels of commitment, manipulation and dishonest communication.

> If there is a prehistory of antagonism among stakeholders, then collaborative governance is unlikely to succeed unless (a) there is a high degree of interdependence among the stakeholders or (b) positive steps are taken to remediate the low levels of trust and social capital among the stakeholders. (Putnam 2000 as cited in Ansell and Gash 2008, 553)

To build trust, an investment of time, energy, skill levels and communication are needed to build capacity. This includes leadership towards establishing clear ground rules, facilitating dialogue, exploring mutual gains, and mobilising and empowering stakeholders. Also, stakeholders need sufficient skills and expertise to engage in meaningful discussions about a range of issues including highly technical problems. Lockwood et al (2009) reiterate this point: trust building is crucial to gain multilevelled devolution of power and accountability. Downward accountability to the community as well as upward accountability to governments assists in transparency in management decisions and improves trust levels (Lockwood et al 2009). Lessons from Lockwood et al (2009) reinforce the importance of communication, cooperation and coordination as central features of good governance structures.

In summary, the literature from case studies in green infrastructure and natural resources management shows that strong leadership, collaborative processes that reinforce trust, and reduce financial and administrative constraints all contribute towards good governance. This allows the

building of social and institutional capital, which in turn helps build trust in the process, creating a recursive process. Evans et al (2006) build on this in their development of dynamic governance as the benchmark towards governance for sustainability.

2.8.4 Detailed principles for achieving leadership, trust and efficiency

To achieve these aims of leadership, efficiency and support and trust, certain principles are raised and reiterated in much of the literature on the issues around governance for green infrastructure including:

- strong influential leadership with a plan for environmental outcomes (Erickson 2004) especially in government (Evans et al 2006), crucial role for strong organic leaders from the community (Ryan 2006)
- reduced administrative constraints (Lockwood et al 2009)
- reduced financial constraints (Lockwood et al 2009)
- public support and community input (Erickson 2004)
- cross-sectorial partnerships and decision-making networks (Dempsey et al 2016, Fisher et al 2012, Connolly et al 2012)
- support by government of community initiatives (Abbott 2012, Burton and Mathers 2014)
- trust (Erickson 2004, Lockwood et al 2009, Ansell and Gash 2008)
- participatory methods including deliberation (Abbott 2014, Hoover and Shannon 1995)
- need to be iterative and adaptive (Green et al 2016).

This list of key themes guides the interview questions, surveys, analysis of data and evaluation of the results in the empirical research with three case studies.

Table 2-2 summarises how other normative frameworks for good sustainability governance connect with these themes and principles, then reordered and synthesised in Table 2-3 they are called practices for the purposes of pracademic consideration and application.

Table 2-2 Overview of the principles under consideration in this study

Key themes from Green Infrastructure governance literature and case studies	UN 'good' governance principles for sustainable development	Lockwood et al (2009) 'good' governance principles from Australian NRM case studies	IUCN (Tilbury and Wortman 2004) components for governance in engaging people for sustainability	Community governance recommendation (McKinlay et al 2011)
Cross-sectorial partnerships and decision-making networks	Equitable and inclusive	Inclusiveness	Participation in decision-making	Seeks a wide range of community voices
Reduced administrative constraints	Consensus oriented	Fairness	Imagining a better future	Size and geography are relevant
Reduced financial constraints	Effective and efficient	Capability	Critical thinking and reflection	Shifts the roles of elected members
Public support and community input	Transparent	Transparency		Upskilling needed for community governance approach
Need to be iterative and adaptive	Responsive	Adaptability	Systemic thinking	Place shaping and place-based management are aligned and council structures and roles reflect this
Support by government of community initiatives	Accountable	Accountability		Need for community capability building initiatives
Trust	Following the Rule of Law	Legitimacy		Statutory direction not needed
Participatory methods including deliberation	Participatory	Integration	Partnerships	Expectation by communities to be involved in decisions which affect them
Needs strong influential leadership with a vision from community and government				Recognition of different roles on decision-making, implementation, facilitation and advocacy
				Community governance arrangement to be designed for purpose

Table 2-3. Summary of good governance principles synthesised into "best practices" for community governance of sustainable planning and management of green infrastructure

Authors summary for analysis Best Practices	Good governance principles for Sustainability	References
Vision Leadership	Forward-looking leadership	Forward-looking leadership (Dryzek and Stevenson 2011) and strong influential leadership with a plan for sound environmental outcomes (Erickson 2004).
	Shared joint goal	Sharing resources and expertise towards an agreed joint goal (UN World Summit on Sustainable Development 2012). Facilitated leadership (Ansell and Gash 2004) (George et al 2011)
	Facilitated leadership	Deliberative framework to realise stakeholder participation, deliberation and decision-making with transparency and accountability (Dryzek and Stevenson 2011, Abbott 2012).
Open trust	Deliberative, transparent decision-making	The importance of building trust building and public support (Erickson 2004) through factors outlined by Ansell and Gash (2008) including development of commitment and shared understanding through face-to face dialogue.
	Trust	
	Public participation	Participation in decision making as a core activity for achieving sustainability (UN Agenda 21, Arhus Convention). Participation in dialogue also seen as a means of social learning (Wals 2007).
	Collaborative planning	Healey (2007) recommends collective action seeking public purpose by developing public and partnering processes for improved collaborative governance (Ansell and Gash 2008).
Inclusive support	Government support	Public participation and partnership (Dernbach 1998, Abbott 2012,) is emphasised developing a collaborative voice (Doppelt 2003). Partnerships are improved through an adaptive environment of networked governance (Innes et al 2010, Considine & Lewis 2003)
	Partnerships	
	Networking	Legitimacy needs to be earnt in both direction, upwards and downwards (Lockwood 2009). Bernstein says it is the acceptance and justification of "shared rule by a community"
	Legitimacy	
	Subsidiarity	Subsidiarity is a necessary principle (Wanna et al 2009. Gleeson 2008, Dernbach 1998, Abbott 2012,) that supports decisions taken as closely as possible to the citizen and activities that are decentralized to the lowest level (communities) able to carry them out adequately (Marshall 2008). Communities bring innovative solutions (Abbott 2012).
	Innovation	
	Systemic thinking	The IUCN promote critical thinking and systemic thinking in their components for informing governance practice in engaging people for sustainability (Tilbury and Wortman 2004)
Working systems	Critical thinking	
	Reducing barriers in admin	The need to remove administrative and financial constraints (Rottle 2006, Ryan et al 2006, Ansell and Gash 2008). Adaptive and reflexive processes are promoted (Lockwood et al 2009, Marshall 2008, O'Rourke 2005) incorporating co-management principles of flexibility operating within a systematic framework.
	Adaptive and reflexive	

2.9.   Conclusion

This literature review has revealed a need for more research to fill a gap in the scholarship, specifically in understanding community governance of urban green infrastructure (Buijs et al 2016, Young and McPherson 2013) and particularly in Australia. Bringing the two concepts of community governance and urban green infrastructure together has revealed a paucity of literature based on empirical studies internationally and even less in Australia, with the exception of George et al (2012). This study aims to address this gap and, by applying findings from studies in related fields (Lockwood et al 2009, Evans et al 2006, Erickson 2004, Ansell and Gash 2008) inform this study and guide practice. Like Lawson (2015) in South Australia, the research approach engages in discussion with practitioners from government and other organisations around community practice through grassroots based governance of place and community driven preferred futures. Lawson (2015, 48) summarises the importance:

> There is an increasing realisation that effective responses to the changes now confronting our communities are going to be far from a 'one size fits all' handed down from a higher tier, or tiers, of government. Instead, although higher tiers of government will continue to play an extremely significant role – partly by informed choice, partly by inertia – more and more communities will need to find their own solutions and have the freedom to do so.

Chapter 3 Method

3.1.   Introduction

The research question for this study is what contribution can community governance make to the sustainable planning and management of green infrastructure in Australia?

This chapter explains the approach of a case study methodology to answer the research question. Section 3.2 briefly reviews other similar comparative case study examples from the literature. It outlines and justifies the case study research method, including the theoretical propositions and subquestions. Sections 3.3, 3.4 and 3.5 describes the process and criteria for case study selection, while the application of the criteria to the projects and case study selection is presented in Chapter 4. Section 3.6 describes the specific methods of data generation and Section 3.7 describes the approach to the analysis. Section 3.8 considers the validity of the data, and the rigour and reliability of the study.

This research has been undertaken from a 'pracademic' perspective which has informed the study question and framed the choices. For example, the context and boundaries of this work are partly informed by a practice experience that has demonstrated frustrations of stakeholders, especially communities working in this field, and with complex green infrastructure corridors especially in urban areas. This is related to challenges in understanding and dealing with complexity associated with multiple governance arrangements, contested land use and environmental issues and barriers to community decision-making in urban and regional areas. This complexity in itself acts as a barrier to innovative alternative governance opportunities as risk averse attitudes often dominate in situations of uncertainty. Thus the study question and subquestions embraced the complexity across the Australian governance context to seek understanding for academics and practitioners. The study questions were:

1. What role is community governance playing in the conceptualisation, planning and management of greenway projects around the world?

2. What are the factors associated with effective community governance in green infrastructure planning and management in urban and regional areas in Australia?

3. What can community governance contribute to the value of social capital and active citizenship in urban and regional green infrastructure in Australia?

4. What contribution can community governance make towards sustainability in green infrastructure planning and management in urban and regional areas in Australia?

3.2. Review of comparable studies

The literature review in Chapter 2 explored various key concepts relevant to the study including community governance, sustainable governance, environmental management, decision-making, and planning, open space, green space and green infrastructure and key themes in common including vision leadership, open trust, inclusiveness and working systems. It also identified some important commonalities in terms of the methodological approaches to researching these themes, most importantly case studies. This informed the choice of methodology of case studies, and was a guide to other similar studies. Various studies were also highlighted for their commonalities or differences in their approaches. The themes under search for this work included:

- greenway governance and management

- natural resource management governance and management

- environmental governance and management

- open space governance and management

- community governance and management

- green infrastructure governance and management

- community decision-making in planning and management

- green infrastructure governance.

The idea of the community as a legitimate inclusion and leader in multilevel governance in environmental planning was key to this study. Lockwood et al (2009) proposed a devolved multilevel environmental governance for Australia's natural resource management. This form of governance was promoted by an analytical comparison with current natural resource management governance programs in Australian state and territory governments; "a community-based regional NRM governance model" (Lockwood et al 2009, 169). Lockwood et al (2009) drew information from a wide range of sources including extensive literature reviews and interviews with representatives from national, state and regional levels of government in a closely related field. The methodological approach taken by Lockwood et al (2009) especially the literature analysis and natural resource management program analysis combined with the data from key stakeholder interviews provided a guide to this research, including the interviews with stakeholders across the levels of government. The findings included a list of normative principles for good governance, focusing more on the theoretical concepts than practices (refer to Table 2-2).

In greenway governance, a key piece of comparative case study research informing this study was Erickson (2004). One United States city, Milwaulkee, and one Canadian city, Ottawa, were chosen to explore transnational differences in open space planning and implementation. She used qualitative research techniques to develop in-depth cases, including the use of planning reports and historic documentation and took site visits to each city to tour greenway corridors and conduct key four to six informant interviews of project managers working on greenway planning within public agencies or non-profit organisations. Erickson (2004) informed the method of this study, especially the broad range of information used including historic evidence, planning reports and site visits. Certain themes emerged from Erickson (2004): strong leadership, reduced administrative and financial constraints, public support and trust building. These were reiterated through other literature on governance for green infrastructure (Fox-Kamper et al 2018, Thomas and Littlewood 2017, Buijs et al 2016) and particularly greenways (Hoover and Shannon 1995, Ryan et al 2006, Rottle 2006); and were summarised at the end of Chapter 2.

Two areas of assessment, informed by the literature, became apparent for use in this study:

- development of the criteria to decide which case studies should be examined in detail for the purposes of understanding good community governance

- assessing and making a comparison of the case study data against the themes presented in the literature to discern any emergent or differing themes, with several studies providing guidance.

Leach et al (2002) provided guidance on criteria. They developed six evaluation criteria and applied these to 44 catchment (watershed) partnerships in California and Washington to make comparisons and determine the success of the partnerships. Descriptive criteria were coupled with quantitative indexes or scores on these criteria. Catchment users and stakeholders were surveyed using a seven-point scale, and asked to assess whether the partnership had created new relationships and/or increased their understanding of key issues. The survey was sent to informed participants plus several knowledgeable non-participant observers. In addition, interviews were conducted with selected key participants representing different catchments, and relevant documents including meeting minutes were reviewed (Leach et al 2002). The idea of multiple data sources and criteria was useful although the number of cases studies was very high.

Reliance on fewer case studies has been a preferred research approach in similar studies. Paulson's (1998) study of collaborative management in Wyoming public rangelands examined four in-depth case studies. This involved 23 long interviews and meeting reviews. Four intermediate-depth case studies involving shorter interviews provided complementary data. A telephone survey of stakeholders was also conducted. The choice of which case studies to study in-depth was based on purposive sampling (Holloway and Jeffeson 2008) "in which the researcher selects cases that are most likely to produce information to help answer the question" (Paulson 1998, 304). This approach relied mostly on qualitative data, with the phone survey information adding some quantitative data as a point of cross-reference. This led to the decision in this study to vet the many case study options against criteria and then to choose a smaller number to examine in detail through various data sources for qualitative analysis. This detailed multi-case study approach has the advantage of gaining a deeper understanding of the dynamics operating within single settings (Eisenhardt 1989) and then being able to compare them.

3.3.   Methodology and case study principles

The methodology of this study is to focus on case studies, using multiple "instrumental case studies" to "inquire into a social issue or to refine a theory" (Sarantakos 2005, 221). This study tests a highly practical and situated social proposition on the application of a social phenomenon for a purpose in a context. The case study approach is used to seek further understanding of a complex social phenomenon that is "community governance", for the purpose of "sustainable planning and management", in the context of "urban and regional green infrastructure" in Australia. It supports Patton's (2002, 39) approach to carry out a study in real-world settings where the researcher does not attempt to "manipulate the phenomenon of interest". By interviewing and surveying stakeholders it seeks to reveal different perspectives of people deeply connected to each of the case studies. The consideration of the data from various sources associated with each case study helps answer questions about the social phenomenon of community governance for this purpose. As a research strategy, it is suited to research in planning, as well as aligned fields of public administration, organisational studies and community sociology. Yin (2002) outlines three types of case study approaches as exploratory, descriptive and explanatory. The "what" question in this study lends itself to an exploratory approach and is suited towards developing propositions for further study. There is also a "how" component to the research question in this study as the "contribution" part of the question explores how effective community governance and decision-making could be in this context and under what conditions. This latter part is a more explanatory line of questioning. Yin's (2009) opinion is that case studies are well suited to answering both types of questions. Case

studies can use various strategies for data collection and for the purpose of addressing the research questions included an historic overview, a desktop survey, an online survey and in-depth interviews (Glaser and Strauss 1967, Patton 2002, Shipley and Wood 1996, Yin 2002). The online survey and desktop survey assisted more with the "what" questions and the history, and in-depth interviews with the "why" and "how" question (Yin 2009, 8).

In this study a multi-case study approach was considered preferable over a single case study that only reveals the dynamics operating within single settings (Eisenhardt 1989). This study explored three in-depth cases to allow analytical generalisations to theoretical propositions (Maxwell 1992) . When using multiple-case studies, every case should serve a specific inquiry purpose and follow a ''replication'' logic, similar to multiple experiments allowing an understanding of the differences and the similarities between the cases (Baxter and Jack, 2008) and an ability to analyse the data within each situation and across situations (Yin, 2003).The aim is to gain understanding, "expand and generalise theories (analytical generalisation) and not to enumerate frequencies (statistical generalisation)" (Yin 2002, 10). Comparative analysis and triangulation of various sources of qualitative data was undertaken to look for cross-case patterns for study findings that have validity and rigour. In this study, both contrasting and similar results in the studies (Yin, 2003) have shed light on the study topic of community governance highlighting whether the findings are valuable or not (Eisenhardt, 1989). This is particularly helpful in a situation where very little literature about similar examples exists.

3.3.1.   Theoretical propositions in this study

In case study research, it is helpful to consider what questions assist in the development of a research design that deals with a logical problem. Yin (2002) describes the methodological process as "a study's questions, its propositions, its units of analysis, the logic linking the data to the propositions, and the criteria for interpreting the findings" (Yin 2002, 20). Figure 3-1 highlights Yin's approach taken in this research.

Conduct an overview of the literature related to community governance and green infrastructure and case study examples to establish propositions.

Theoretical Propositions

- Internationally community governance is playing an important role in green infrastructure.

- Community governance relies on certain identifiable factors to be effective in green infrastructure planning and management in urban areas in the Australian context.

- Community governance can contribute significant value for social capital and active citizenship and in urban areas in the Australian context.

- Community governance can make an important contribution towards sustainability in the planning and management of green infrastructure in urban and regional Australia.

Units of analysis

THREE COMPARATIVE QUALITATIVE CASE STUDIES

Qualitative evidence through replication. Understanding through descriptive explanation

Case study data sources

Desktop research (Qualitative)	Interviews (Qualitative)	Questionnaire (Qualitative)

Analysis – qualitative comparative analysis, triangulation of data and personal reflection.

Apply the criteria from the literature review to interpret the findings

Figure 3-1 Methodology for the study

Four research subquestions with associated research objectives support each of the theoretical research propositions, with one subquestion for each proposition. The main and secondary data sources for each of these research subquestions are listed in Tables 3-1, 3-2, 3-3 and 3-4.

Table 3-1 Proposition 1. Subquestion, research objectives and data sources

Subquestions	Research Objectives	Method/data approach and data source (main source in bold)
What role is community governance playing in the conceptualisation, planning and management of greenway projects around the world?	• Identify emerging initiatives in the conceptualisation and theorising of community governance.	Conduct an international **literature review** of the theoretical literature associated with community governance and green infrastructure and synthesise findings.
	• Analyse international examples of greenways and their communities to consider the effectiveness of their governance systems.	Conduct a **literature** and **web review** of green infrastructure case studies. Search and analyse community involvement in green infrastructure projects (especially greenways) around the world including their governance to develop an understanding of good practice.

Table 3-2 Proposition 2. Subquestion, research objectives and data sources

Subquestions	Research Objectives	Method/data approach and data source (main source in bold)
What are the factors associated with effective community governance in green infrastructure planning and management in urban and regional areas in Australia?	• Develop and apply selection criteria to identify the best practice examples of community governance projects in green infrastructure projects in Australia.	**Literature** and **web review** to search and analyse community involvement and community governance in planning and management in green infrastructure projects (especially greenways) around Australia including their community involvement to develop relevant criteria for best practice.
	• Identify the characteristics of community governance in green infrastructure projects in Australia.	This objective seeks to define community governance for this study from the **Australian literature** and context.
	• Investigate the enabling factors for effective community governance in green infrastructure projects in Australia.	What are the important internal and external factors for a community governance project from the perspective of the stakeholders? The **interviews** and the **online survey** provide an overall perspective of the important things to a range of key stakeholders. The 3 cases studies explore the effective and non-effective structures, processes, partnerships, relationships, leadership and expertise in effective community governance. Do they align with the literature?
	• Assess the importance of social and institutional capacity for community governance in green infrastructure.	The literature and web review and the **interviews** provide the main source of data to assess capacity.

Table 3-3 Proposition 3. Subquestion, research objectives and data sources

Subquestions	Research Objectives	Method/data approach and data source (main source in bold)
What contribution can community governance make to the value of social capital and active citizenship in urban and regional green infrastructure in Australia?	• Assess the opportunities for and motivation for active citizenship in community governance in the planning and management of green infrastructure in the Australian context.	The interviews and **online survey** both provide profile data of the participants and the membership data in reports. Analysis focused on what people get out of their involvement. Is it about the personal, social or the environmental rewards?
	• Identify the benefits for the people and partner organisations involved in community governance in the planning and management of green infrastructure.	The interviews and **online survey** both provide understanding of a positive and negative volunteer experience.
	• Analyse the roles of the volunteer in effective green infrastructure community projects.	The **interviews** and **online survey** both provide profile data of the participants and ask how citizens can get involved in decision-making and activities for their green infrastructure.

Table 3-4 Proposition 4. Subquestion, research objectives and data sources

Subquestions	Research Objectives	Method/data approach and data source (main source in bold)
What contribution can community governance make towards sustainability in green infrastructure planning and management in urban and regional areas in Australia?	• Assess the contribution of community governance towards sustainability in planning and management of green infrastructure.	**Analyse** and **synthesise** all the available data and information to get an understanding of good community governance for sustainability toward planning and management of green infrastructure and give commentary on the three case studies considering their contribution.
	• Determine the value of community governance in complex green infrastructure corridors and projects in Australia.	**Analyse** the complexity of the case studies especially in their external environment and determine the value of community governance in those extreme circumstances.

3.4.   Setting the boundaries for the study

There are complexities in the definitions and interdisciplinary perceptions in the study field. Through a review of the literature, and an examination of examples of community governance in practice in green infrastructure, three main challenges were identified.

The first challenge is differences in definitions and uses of various terms and concepts such as green infrastructure and community governance. They may vary across the globe, across disciplines and across fields of practice such as academic, local government, and community governance. From the literature review in Chapter 2, examples of these differences were provided, and definitions applied in this study were outlined.

The second challenge is the broad research question crosses interdisciplinary boundaries from urban planning to environmental science to political studies. As a result, this study has sought to cover this complexity and breadth in the literature search and gives some consideration to multiple applications in the analysis and conclusions.

The third challenge is the need to set clear boundaries in the study. Clarity in this study's focus helps to articulate similarities and differences from other research and other case studies and emphasise where this study fits in the broader literature and practical application. Both community governance and green infrastructure can be applied at a federal scale right through to the site based plot, and so while the study topic may be similar, the scale (and therefore many of the issues) may be different. For example, Hudson (2012) summarises the approach of national governments to the issue of governance of natural commons, while Bartolomei et al (2003) explores the relationship between communities and the governance of community garden plots. Other studies focus on a type of use such as urban agriculture (Petts 2001), or the riparian zone (Ives et al 2005). In this study, urban and regional green infrastructure is chosen to include a multi-use multijurisdictional green corridor, at a catchment to regional scale in an urban or regional area. This scale is supported in the literature as strategic in environmental management issues in Australia, however not usually crossing state jurisdictions. This can include a range of green space networks such as greenways, walking trails, green corridors and urban forests. This study also focused predominantly on urban areas which usually adds complexity in social political issues, governance issues, political issues, land use and land ownership issues.

Some international and national projects were included in background material for this study based on the following criteria:

- a greenway or green infrastructure corridor

- an actively involved community

- complex governance across local government boundaries thus fitting the subregional criteria, rather than state or national.

- urban catchment usually included.

A further issue was the context and breadth of the study. The benefits of generalisability of a shared national government system, a common socio-political system and its common stability, societal norms, shared governance, shared policies and similar socioeconomic conditions were apparent. This allowed the focus to be on the complexity around the multijurisdictional subregional governance issues and the socio-environmental challenges. For contextual consistency, the case studies chosen were all in Australia, albeit from several states. In addition, some international case studies were included to highlight key themes and understand broader issues in other parts of the world considered relevant to the Australian context.

A national context and a set of boundaries have been established for the case studies in this study and these have been legitimised from the literature review.

3.5. Selection of case studies

The case study criteria for ideal projects for use as case studies in this study are listed and justified in Table 3-5. In this research the decision was made to compare cases that met pre-determined normative criteria with the focus on why and how community governance can work, and not why it, or other models, fail. Thus positive case studies were chosen rather than negative ones. In keeping within the broad ideal of successful community governance projects the criteria required them to have been both community led and sustained over time. The actual process of case study selection, and the final choices are detailed in Chapter 4 with the analysis of individual projects from international and Australian contexts for background understanding and projects from Australia for use as detailed case studies.

Table 3-5 Criteria for choosing case studies for this study

Case Study Criteria	Justification
Their catchment incorporates complexity such as urban environments	There is a need for improved understanding of urban governance alternatives. Community governance is underrepresented in cities due to complexity and well represented in the regions (McKinlay et al 2011). The literature (Bai et al 2010, Sellers 2002) highlights metropolitan areas as important for exploring environmental governance (Young and McPherson 2013).
They cross council/Local Government Authority boundaries thus fitting the subregional criteria	While much work has been done in natural resource management across the states and across regional and local boundaries in non urban areas (catchment authorities eg regional organisations of councils Lockwood et al 2009) much less has been done in urban areas. Site based community governance in urban Australia has had some attention such as community gardens (Middle et al 2014) and social housing (Bijen and Piracha 2017), however the multijuridictional nature of subregional green infrastructure in cities needs further understanding.
They are characterised as a greenway or green infrastructure corridor indicating an environmental management priority	Multi-use environmental corridors are essential to the wellbeing of urban citizens, and city sustainability (Ives et al 2017, Mekala et al 2015).
They are owned and governed by a collaboration of government organisation and/or by a not-for-profit organisation.	Complex and innovative governance models are poorly understood and research is lacking internationally and in Australia (Buijs et al 2016).
They have an active community involved in the governance and management of the green infrastructure	Community governance definitions include community in the decision-making and governance (McKinlay et al 2011, 39).
They are situated across different socio-economic areas and land use types	The green infrastructure corridors in urban areas have a variety of local contexts (socio-political) and land use types adjoining them (George et al 2012).
They are situated in different cities across Australia	Australia is the common context, with a federal constitution, and dominance of the state in planning and environmental management. Subtle governance variations in practices in different states and various Australian cities can give insight into potential workable alternatives.
The project demonstrates longevity (sustainability) in its life cycle.	A project lasting over ten years or more is an indication that something is working.

3.6.   Specific methods

3.6.1.   Methodological steps

To address the research question the following methodological steps, shown in Figure 3-2, were carried out.

- Develop an understanding of the academic literature and government and online literature (grey literature) related to governance in Australian planning, and especially relating to community governance in sustainable planning and management of green infrastructure.

- Consider the use of terms and their meanings within the research question to establish the research study question and boundaries set around the question.

- Undertake a international literature review of relevant publications under relevant search topics and databases.

- Develop an insight into green infrastructure projects in the world, and especially those applying community governance arrangements in their planning and management using a web search.

- Undertake a desktop research process of green infrastructure projects in Australia to collect available relevant information. This also included some early inquiry phone calls and site observation to produce an Australian based list and a set of core information. This provided a basic understanding of the green infrastructure governance 'landscape' and the broader issues around their success and failings.

- Develop evaluation criteria for case study selection and apply to potential Australian case studies to identify the three that are best suited to meet the study criteria, that is to provide insight into the research question and provide methodological integrity.

- Carry out comprehensive desktop research on the three selected case study projects to collect informations from policies, strategies, histories, websites and masterplans. Carry out preliminary discussions with the project leader on their support for the research. Undertake in-depth interviews with key stakeholders from the organisation and the partnering groups. Undertake an online survey with questions about similar topics relating to community governance to reach a broader group of affiliate perspectives.

- Analyse qualitative data to understand each of the chosen case study projects, their history, context, governance arrangements, decision-making, partnerships, participants, leadership, financial arrangements, main issues, current progress and likely futures.

- Analyse the data across the case studies by exploring consistencies, comparisons and differences. Present findings and conclusions and any new presuppositions developed through this study.

Literature review
A review of the literature associated with the research question, including definition and consideration of the main themes especially as they relate to each other including community involvement and green open space and governance.

Case study review
A review of case studies, both Australian and International case studies, to develop an understanding of the broad landscape of the topic. From the Australian examples, three projects selected to explore in depth.

The research question
What is the contribution of community governance in the sustainable planning and management of green infrastructure?

Detailed case study data and analysis
Desktop research, history, in-depth interviews and online questionaires of each of the three case studies. Qualitative analysis of each of the three case studies.

Analysis across case studies
Analyse the data across the case studies by exploring comparisons and differences, strengths and barriers, issues and opportunities and lessons from the findings.

Figure 3-2 Methodological steps

3.6.2.   Case study data sources

The approach to the three case studies aimed to be holistic and sensitive of the context, with data collected from a range of sources to represent the complexity and develop a full understanding of the subject matter being studied (Patton 2002, 447). A comprehensive history of the case studies was considered to develop an understanding of each case study including the project visioning and development, the interactions of key actors and groups and the issues of significance along the way. This information was reinforced by desktop survey of key strategies, policies and newsletters from various perspectives. This information was further enhanced by data collected from multiple key stakeholder views obtained through in-depth interviews of 18 people and from an online survey conpleted by 33 people.

The data collection processes sought to be broad, inclusive and accessible, and also consider past and future stakeholders, through consideration of historic accounts and interview questioning. However, the desire for a democratic context to explore sustainable governance and innovative community governance had to be combined with practical considerations such as available researcher resources especially in the longer-term, and stakeholder capacities and constraints. A key

issue in developing a methodology for this topic of study is that everyday use of the terms community and governance is highly ambiguous.

3.6.3.   Background study – history and desktop

The three Australian case studies were explored in depth to describe their historical background and their political, socio-economic and environmental context. A broad spatial and geo-demographic description was carried out for each case study, considering their scale, location and character to develop an understanding of the social, physical and political context in which the case studies have been operating. On site observation of each project site and the broader regional area allowed further ground checking of the place, its landscape, its peoples and its context.

A historical outline highlights the key phases in each green infrastructure project. This analysis of case study assets allows consideration of any possible links between spatial character of the assets (corridor length, width, type, environmental features, urban density), the socio-political character of the surrounds (socio-economic trends, population growth, level of volunteerism and political character), the key historic phases, and the key issues emerging from the data.

3.6.4.   In-depth interviews

The interviews included a highly involved, knowledgeable group from various case study partnering organisations. This approach is aimed "to arrive at conclusions that are specific to the sample, but which give reflective, or explanatory depth to the subject being explored" (Davies 2007, 152). Given the real life project context, social circumstances are naturally explained best by the people working in and associated closely with the project. Even more compelling is the argument that unless those giving input have been connected with the project in some way over a reasonable period of time it is unlikely that they will know very much at all about the specific case study project and how and why it functions as it does. While acknowledging this situation, it is important that a case study researcher seeks to avoid bias and report all evidence fairly. While participants were anonymous, their sector and case study were identified. In each case study, six in-depth semi-structured interviews of key stakeholders were carried out totalling 18 interviews. Participants were from several sectors including staff and councillors from state and local government, leaders and volunteers from communty groups and leaders and staff from not-for-profit organisations. Appendix 7 has a summary of participant stakeholder groups. Interview participants were selected with consideration of the following:

- All stakeholders chosen had active regular involvement in the case study project.

- Stakeholders selected for each case study came from a range of stakeholder sectors (various local and state government agencies and various community groups).

- Stakeholders selected have been involved in the project for a various time periods but all for a minimum of 1 year.

- Stakeholders were informed and willing.

This research had minimal impact on participants involved and the process was approved through ethics clearance (Form C) at the university. Participants gave their written permission for the semi-structured interviews and copies of the permissions stored in case of future reference. (Refer to Appendix 1.)

The interviewees were selected based on what Bryman (2004) calls purposive sampling, that is on their understanding, knowledge and level of involvement with the project and their differing project perspectives. By interviewing six people involved in each project an attempt was made to mitigate any bias inherent in interviewing the project facilitator, politicians, leader, or any narrow or possibly self-motivated perspective. In the information collecting phase of this study the focus was on open interview and this included mostly face to face interviews and several skype or phone based interviews for interstate case studies. While face to face open interviews are preferred for qualitative research (Kleinman et al 1994, Lofland et al 2006), this was not always logistically possible and skype and telephone calls were adequate alternatives.

The semi structured interviewing process aimed to approximate an ordinary conversation but be directed by guidelines of open-ended questions that were developed to give direction but not enforced. (For interview questions refer to Appendix 2.) The goal was to elicit rich detailed information relevant to the topic from the interviewee for qualitative analysis. In this study, with participant permission, all the interviews lasted a minimum of one hour ,with some extending to two hours with the participant's agreement. To improve the level of confidence in the information from the interviews, interview transcripts were prepared and sent to the interviewees for checking. After a small number of changes were accomodated, the researcher manually conducted detailed analysis of the transcripts, seeking to follow four concepts: all analysis relies on all relevant evidence; all rival interpretations in the analysis should be included; the most significant aspect of the case study (in this case views on community involvement) should be the focus; and the researcher's expert knowledge should further the analysis (Yin 2002).

3.6.5. Online survey

The online survey was sent to a broader, less involved group than the interview candidates with more prescriptive and quantifiable questions relating to the study question and informed by the interview process and literature. Questions were designed to have theoretical underpinnings and explored the key issues that emerged from the literature review on good governance principles for sustainable green infrastructure and synthesis of four practices including vision leadership; open trust; inclusiveness and working systems (see Table 3-6). The questions also focused on the perceived effectiveness of community governance practices in each case study. (For online survey questions refer to Appendix 2). The stakeholders who were invited to complete the online survey (approximately 50 per case study) were identified by each of the project managers with guidance from the researcher. They were sent an explanatory email linking to a survey via an explanatory online survey tool, Survey Monkey. Respondents were self-selecting and responses were anonymous with a predominantly closed responses with opportunity for open comment. Open responses regarding views on volunteering and reasons for getting involved in their projects, totalled approximately 600 words. Of the 150 invited, a total of 40 surveys were received, 35 completed, and 23 were volunteers. While the response rate may be viewed as a limitation of this research, it may also reflect the fact that community governance projects often rely on a relatively small group of highly involved active people. In the event, the survey yielded useful qualititave data to supplement the interviews. Open responses regarding views on volunteering and reasons for getting involved in their projects totalled approximately 600 words.

Table 3-6 Summary of good governance principles for sustainable green infrastructure

1. Vision leadership; (Leadership)	2. Openness and trust (Structures and relationships)	3. Inclusive partnerships (networks and power)	4. Working systems (Processes and resources)
Forward-looking leadership	Deliberative, transparent decision-making	Partnerships	Systemic thinking
Shared joint goal	Trust	Networking	Critical thinking
Facilitated Leadership	Public participation	Legitimacy	Reducing barriers in administration and financial
	Collaborative planning	Subsidiarity	Adaptive and reflexive
		Power	Resources

The categories emerging from the interview responses (and initially informed by the literature review) were leadership, expertise, partnerships, structures, processes and personal relationships, and these were used in various questions in the online survey to further consider their relevance. The online survey provided a structured and consistent questioning process that sought ratings and preferences established through choices in a pre-designed set of optional responses (usually offering a range of five) to the pre-piloted questions. Online survey data was captured exactly by Survey Monkey and aimed to seek understanding of the frequency of similar ideas and the generalisability of the findings (Lofland et al 2006) alongside the other data, but there were an inadequate number of responses for quantitative assessment. However, the survey did add general confirmation to the interview responses with a possible indication of stakeholder preferences. There were also several open questions to allow for optional written answers to collect further information, opinions and descriptive views of respondents. These responses were useful, especially on each project's effectiveness and the profiles, motivations and concerns of a broader range of stakeholders, particularly volunteers.

An online pilot study was run with several participants to review the survey tool and this highlighted concerns on jargon, confusion and inaccessibility of the language and terms used. Several of the early pilot participants did not understand or relate to the use of the term 'governance' and some of the other terms (arguably jargon) such as 'greenway'. The feedback was that they did not see the survey as relevant to them, so they just stopped mid survey due to their disinterest. This resulted in a review of the accessibility of the survey content and language. To address the issues of understanding and relevance, some words such as community were defined and others were replaced. For example 'governance' was replaced with 'decision-making' and 'greenway' and 'green infrastructure' were replaced with trails and parkland corridors'. These new terms were more broadly understood and the rate of response increased significantly. This change in terms was not needed in the in-depth interviews, as the interviewees' demonstrated understanding of governance showed they were familiar with the terms and the content being discussed.

The responses from the interviews and online survey were analysed alongside those presented in the relevant literature. The responses from the open-ended questions in the interviews were also analysed against the list developed from the literature review regarding good governance in Table 2-3. and summarised further in Table 3-6.

3.7. Analysis

The interviews were analysed thematically based on the guidelines provided by Davies (2007), which included four steps: development of a detailed commentary; identification of the principal emergent idea in each piece of transcribed data; development of typologies and taxonomies; and identification and reduction of material into manageable themes. The analysis started with an initial overview of the interview by the researcher in written commentary, seeking the emergence of a main idea from each interview and the subsequent ideas. The issues that emerged from each interview were then compared and reflected on. A typology of issues was developed from identifying similarities and differences between the various perspectives within each case study project and then across three studies as a collective and from stakeholder groups. Participant responses were then sorted according to the themes that emerged from the literature to compare against previous academic conclusions.

The data was analysed both within case studies and then across the case studies by exploring comparisons and differences, strengths, weaknesses and barriers, issues and opportunities and lessons, reflections and theories from the findings. The cyclical analysis process involved the key steps outlined by Henninck et al (2011, 237) as "developing codes, description, comparison, categorization, conceptualization and theory development". The methodology sought a deliberate practice to link the data to the research propositions. This was achieved by using a pattern matching technique applied to the individual cases to explore similarities and differences and between cases to establish potential patterns and possibly rival patterns (Campbell 1975). The pattern-matching approach allows the researcher to compare emerging patterns with predicted patterns, in this case, the themes outlined in Table 3-6. Internal validity is enhanced when the patterns coincide and this is particularly relevant between comparable case studies. Arshad et al (2012) argue that this method of data collection and analysis yields robust, vibrant, rigorous, valid and generalisable findings. External validity or generalising relates to the transferability of the case studies to other contexts and this is enhanced when:

> Thick, detailed case study description can give readers a vicarious experience of 'being there' with the researcher, so that they can use their human judgement to assess the likelihood of the same processes applying to their settings which they know. (Seale 1999, 118)

This method involving data collection and analysis seeks to realise robust, valid and generalisable findings. In the field of environmental planning there is evidence that generalising from case studies may be valid for policy studies. Generalising from analysis involves determining the transferability of

the findings, by applying a theoretical understanding of the factors that result in outcomes and the impact of the context (on those causes and outcomes). Context always matters in case study analysis, so the idea of generalising only has minor relevance in these case studies. This is because transferability is enhanced where the case studies have been "studying the typical" (Schofield 2002, 181), where a study of policies as applied to either a single geographic area or an environmental theme may have something important to say about environmental policy making in other jurisdictions or areas, both nationally and internationally. This transference can result in the process of diffusion (Tews 2005) and there is growing evidence that globalisation has caused policy and legislative convergence: i.e. Western governments have been prone to copy the success stories of other Western governments (Busch and Jorgens 2005).

In management studies, qualitative research is useful for offering insights into exploring real organisational goals, processes, failures and links (Skinner, Tagg and Holloway 2000). By exploring beyond generalisations, it enables depth of understanding, in this study the practice of community governance in green infrastructure projects. It is hoped this process has the "ability to uncover and interpret mechanisms behind behaviours and meaning-making" (Gerhardt 2004, 10). In the conclusions of this study, the theoretical propositions are considered according to the conclusions emerging from the analysis of all the findings and discussed with any emerging new challenges and possibly theories.

3.8.   Ensuring rigour and validity

The data collection method and analysis best suited to form understanding of the three case studies issues and across the three cases was considered to be primarily qualitative. Analysing a range of qualitative data from various sources can help develop further understanding of the key issues, important themes and build on the understanding developed and synthesised in the literature review and case study overview. Complementary data sources were sought where possible.

The three main data sources, desktop study, interviews and an online survey for each of the cases, were designed to offer perspectives from a range of stakeholders and a triangulation of the results to identify any obvious alignments of findings or inconsistencies. Denzin's (1978) triangulation technique is often used as a tool to enhance validity which, as Silverman (2006) explains, seeks to compare various kinds of data and different methods to consider whether they corroborate one another. This study collects information and insights from the case study history and desktop survey, key stakeholder interviews and surveys of broader stakeholders. While critics argue that this assumes a positivist position holding that some inherent truth exists, the better argument is that it increases the trustworthiness of the results and conclusions (Denzin and Lincoln 2000. 5) through

the use of multiple sources of data that add "rigor, breadth, complexity, richness and depth to any inquiry".

The data collection processes sought to be broad, inclusive, accessible and ethical. The process sought to consider past and future stakeholders, through consideration of historic accounts and through the interview questioning process and online survey. However, the desire to develop a democratic platform to explore sustainable governance and innovative community governance had to be combined with practical considerations such as available resources, and stakeholder capacities (such as knowledge of jargon) and constraints (especially limits to busy people's time). The online pilot survey helped to address the concerns about language and jargon, including some confusion about the terms community and governance both of which can be highly ambiguous in everyday use. The other issue on constraints was managed by dealing directly with key case study personnel, usually the project manager or CEO, who guided the process to establish respectful boundaries around participants' time constraints and any concerns. Formal institutional ethics processes were undertaken to follow institutional norms on research practice and participants' choices, privacy and control on their participation.

The contribution value of each case study was assessed in relation to the criteria of effectiveness (ability to achieve outcomes), efficiency (the ability to achieve those outcomes and optimise resources) (Mouzas 2006) and sustainability (respecting the quadruple bottom line and maintaining future oriented needs) (Mohrman and Shani 2011) as applied to each case study in its application of community governance in the context of urban and regional green infrastructure. Mouzas (2006, 1127) helpfully makes the links between the three concepts in Figure 3-3.
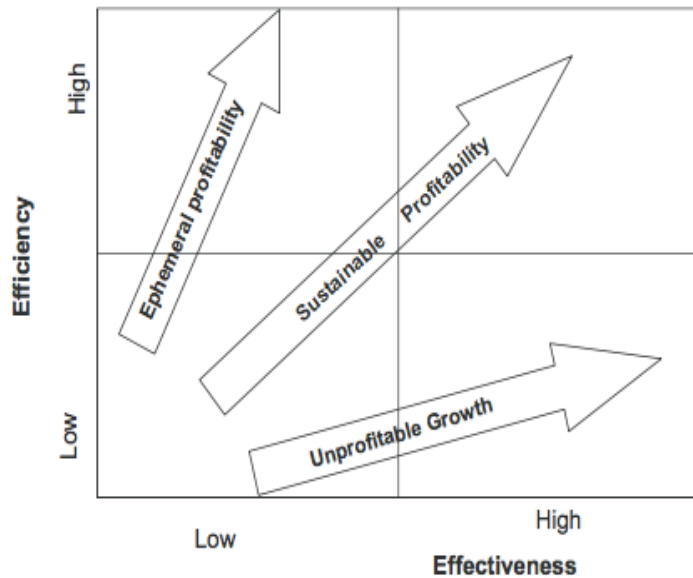
Figure 3-3 Efficiency and effectiveness and sustainable profitability

Source: Mouzas (2006, 1127). Reproduced with permission of Elsevier

While these three measures of effectiveness, efficiency and sustainability may be simplistic, they attempt to allow a move between the broadly accepted working practices in management in Australia and the ideal practice towards "sustainable effectiveness" as outlined by Mohrman and Shani (2011). Table 3-7 shows the criteria and the measures that will be applied. This process used qualitative indications to make an overall judgement on the contribution of the case studies. For this, some analysis used criteria based on the findings from the literature and measured against the data collected. Responses from various stakeholders reporting on case study success were considered, as were other practical indications from the desktop information that fit within the four categories such as ongoing grants, partnerships, development of strategic plans, and development of governance procedures. Project KPIs such as project longevity, growth in personnel (staff and volunteer), and progress in the development of the infrastructure were also considered. While positive variables have been the focus, the negative variables may offer key learning and reveal opportunities for further study, such as the unintended consequences, negative elements or costs of community governance in this context (such as costs associated with growth of volunteer numbers) that have been highlighted through this process.

Table 3-7 Assessment of "contribution" to be applied to each case study

List of criteria from literature	Is it effective?	Is it efficient?	Is it sustainable?
1. Vision Leadership			
2. Open Trust			
3. Inclusive Support			
4. Working Systems			
Project KPIs • Longevity • Personnel growth • Development of infrastructure			
Dynamic governing assessment			
Quadruple bottom line			
Risks and challenges			

3.9.   Researcher bias

There are three types of biases in research identified by Sadler (2002): ethical compromises, value inertia, and cognitive limitations. In the area of ethical compromise, there may be inherent subjectivity due to a conflict of interest between the researcher and the agency, a personal relationship between the researcher and information provider and a lack of care where an argument lacks rigour influenced more by personal views than evidence. Having worked as a research consultant with one of the case studies in this research before the start of this particular research project there may be potential for predetermined bias. The researcher had prior involvement in one of the selected projects, the GreenWay. It is possible that this prior relationship may have affected the results, either positively by interviewees being more open due to the trust already developed, or negatively, their being less open and not as critical. In time, positive trusting relationships developed between the project managers of all three case studies and the researcher, such that they felt able give access to personal details of key stakeholders to request interviews them. In the GreenWay case, a two-year break between previous work on the project and this research allowed fresh perspectives on its history. Also a change of staff in key roles in the case study meant that the effects of prior personal relationships on the conduct or interpretation of the interviews was lessened.

While Sadler (2002, 125) calls a researcher's "background knowledge, prior experience, emotional makeup or world view" as potential for "value inertia", this is well refuted in the discussion of

Lofland et al (2006). Usually, this unavoidable as even the choice of what to study in the first place is inseparable from all these factors. The "key is avoiding inertia, or ensuring that personal social learning occurs": what Keen et al (2005, 5) describe as "a process of iterative reflection that occurs when we share our experiences, ideas and environments with others". In the context of research, this is largely a one-way process where the information is reflected upon and the researcher observes and takes the experiences and ideas of others from a distance. To avoid inertia in this study the researcher sought to look for surprises in the information that would then trigger further iterative reflection.

Finally, cognitive limitations may occur and they relate to biases that emerge due to limitations when dealing with information. This may be due to what Sadler (2002) refers to as "our inherent incapacity to deal effectively with large masses of information at once, our intuitive ignorance of notions of natural variability (randomness and probability), and our tendency to seek meaning in or impose meaning upon the world around us" (Sadler 2002, 127). Sadler (2002, 127) identifies elements of "cognitive limitations including: data overload, positive and negative instances, internal consistency, missing information, sampling considerations and confidence in judgements". The role of supervisors and mentors is paramount in assisting in managing issues associated with significant and ongoing research.

Lofland et al (2006) recognise that it is often personal experience that has been the springboard for meaningful naturalist inquiry. They highlight many examples where biographic experiences produced opportunistic research. Understanding the researcher's motivation for the study and the long-term commitment to and experiences of the topic can assist both the researcher's approach and analysis. The desire and trend to include and acknowledge this link between self and study is acknowledged discussed further by Lofland et al (2006).

3.10. Summary

This chapter outlined the methodological approach to address the research question. It reported on the gradual development of the research strategy based on a qualitative multiple case study approach with a critical realist approach informed by theoretical and case study underpinnings from the literature. The approach is justified according to the literature and modified through consideration of the strengths and weaknesses of the approach. For example, establishing clear boundaries for this study has made the steps clearer and informed case study suitability. Also, the study question puts the emphasis on understanding the role of community governance over all

other variables in the study. Finally, the process of analysis against theoretical propositions was discussed, with the possibility that alternative propositions may emerge in the research findings. The link between researcher experience and interest in the topic of study was also acknowledged.

Chapter 4 Green infrastructure case studies

4.1. Overview

This chapter gives an overview of green infrastructure projects including International examples as background information for this study and highlights the international relevance of the study area. Examples include greenways or green infrastructure corridors with an active community involvement and a complex governance context. Lessons and transference issues for Australia are noted. For the purposes of this study, eleven Australian green infrastructure projects are selected and then broadly described and ranked according to detailed criteria to reduce them to three relevant projects suitable for use as detailed case studies.

4.2. International examples

A range of green infrastructure projects from across the globe were identified through a desktop survey and described to provide background information including project type and context and to demonstrate the relevance of this study to the international domain. The international green infrastructure projects were: from the United States, The High Line – New York, Bloomingdale Trail and Park – Chicago, Reading Viaduct – Philadelphia, Hudson River Greenways Program – New York, The Great Rivers Greenway District River Ring and Michigan Trails and Greenways Alliance; from Europe, East London Green Grid Project, Prague-Vienna Greenways System, and European Green Belt Initiative; and from South Korea, Seoul Urban Greenway Project.

4.2.1 High Line, New York USA

The High Line became a disused elevated rail line in 1980, and since 1999 a project has been focused towards its conversion to become an elevated public park. It has been managed through a partnership of a community-based not-for-profit group, Friends of the High Line (a non-profit conservancy) and the City of New York (owner) under a license agreement. Donated by the former owner to the City after realising extensive community support, the 1.45 mile public landscape was designed by a team of designers guided by a group of visionary community leaders in 2002. In 2005, the line was rail-banked and then the City took ownership and signed a trails agreement. The High Line opened in three stages: 2009, 2011 and the northern section Rail Yards in 2014.

In 2016, it was governed by a Board of 38 directors, plus 3 ex-officio members from the City of New York staff and elected officials and 9 Emeritus members and is managed by a well-paid CEO (US$240,000 pa) and a team of ten executives with approximately 50 staff and over 200 volunteers.

Volunteer roles include docents, photographers, horticulture partners, greeters, on-call supporters, play partners and spring cutback gardeners. Annual visitors and activities continue to grow, and in 2015 there were 7.6 million visitors and 450 public programs. Horticulture includes over 350 species planted, and over 120 artists are shown. Between 2009 and 2014, over 20 million people have visited the High Line.

This extensive organisation is supported by the "Friends" including community volunteers and members who raise funds from both public and private sources to support more than 98% of the annual operating budget. The Friends offer memberships that range from US$40 to US$50,000 pa and include a range of key benefits including promotional products, High Line tours and networking opportunities with Highline key people. Several food outlets support the High Line and locally sourced food is used wherever possible. A wide range of tours run, and an innovative public art program and a schools' program also thrive. In the summer a busy program of events also runs. The High Line has opening and closing hours and a set of rules to maintain user-friendly behaviour. Summarising the vision and its realisation, Michael Mobbs (2012), says

> One of New York's growing national and international attractions is the High Line garden. It was created by accidents of commerce and nature and community pressure, not by council planning or a vision the council had for a new park. Now, planted out by volunteers and council, and celebrated by all as a garden, the line has become so successful it's generating new hotels and other developments nearby. Developers pay to put in access ramps and lifts to the High Line to make their site more business-worthy. The increasing array of plants and birds and insects and the beauty of the park winding up high through the heart of the city is amazing for those who walk and sit there or drive their cars below or work with a view of it.

4.2.2   Bloomingdale Trail and Park, Chicago USA (existing)

This project began in 2004 following ten years of contemplation. It was a vision for a 2.7 kilometre multi-use recreational linear trail involving the conversion of a disused aerial rail line through the north-west side of Chicago as part of a larger green web called "The 606". It provides 13 acres of open space to relax, play and commute and educational programming around the trail for many local schools. The project was advocated by the Friends of the Bloomingdale Trail, a non-profit organisation, and funded over time by public and private sources, costing US$95 million. The project was overseen by a group of partnering organisations that strategically acquired land for access, developed design guidelines and began construction in 2013. The trail opened in 2015 and is stewarded by the Friends of the Bloomingdale Trail Park Advisory Council and the Chicago Park District. It is successful with runners, cyclists, strollers and families, particularly those living within a

10 minute walk. Its future may include extensions, and its consequence is increased development interest and increased property prices.

Source: http://www.cityofchicago.org and https://www.the606.org, https://www.bloomingdaletrail.org

4.2.3   Reading Viaduct, Philadelphia USA (in progress)

The vision is for the conversion of a 3 mile rail viaduct (rail cut and elevated viaduct), currently in a poor state, to a park with green space and multimodal transport connecting neighbourhoods and cultural institutions. The project began 11 years ago in 2003 and by 2014 the construction documents were completed and costed in current city and state budgets. The project had many partners, public, private and non-profit, and a very active community involvement. Phase 1 is under construction due to finish in 2018. Partners including the Centre City District and its Foundation have raised US$10.3 million for the development. The community based Friends of the Rail Park have advocated for the vision and plan to continue in its care. They have a board of ten people and several staff are now employed to support the Friends.

Source: Rail Park website http://therailpark.org

4.2.4   Seoul Urban Greenway Project, South Korea (existing)

Between 2003 and 2005, an elevated freeway in Seoul was removed to redevelop and regenerate the underlying (previously sealed) Cheonggyecheon stream with a linear park. This freeway to greenway conversion, costing US$900 million has been lauded as a success story in effective and efficient greenway design, construction and governance. In addition to its successful urban renewal, and growth in green zones, and tourism gains the development has seen local revitalisation and net gains in residential and non-residential properties and land use change. The project is also described as a reimagining rather than a restoration that impacted gentrification-displaced local people and history.

Today, the greenway follows the stream that flows from the west to east in central Seoul. It goes for 10.9 km, through 13 districts across four wards of the city. Broadly regarded as a positive outcome for the city, the project had strong leadership, with governance described from different perspectives. Kang (2009) described strong levels of trust between stakeholders with partners working together towards the project outcomes including a citizen's committee. Lee and Anderson (2013) suggested that the project had more of a top-down approach.

4.2.5 East London Green Grid Project, London (in progress)

The London Government website states "the aim of the Green Grid is to create a network of interlinked, multi-functional and high quality open spaces that connect with town centres, public transport nodes, the countryside in the urban fringe, the Thames and major employment and residential areas" (Greater London Authority 2008, 15). Pedestrian and cycle paths are an integral part of the green infrastructure that will make up these open spaces. Improved public access, connectivity, health, biodiversity, sustainability, water management, and environmental awareness are recognised as integral benefits of this project.

The Grid will be controlled by the London boroughs and other government partners including Greater London Authority, London Development Agency, Department for Communities and Local Government, the Forestry Commission, Natural England, Environment Agency, London Thames Gateway Development Corporation, Bexley Regeneration and Woolwich Regeneration Partnerships and environmental organisations such as Trees for Cities, London Wildlife Trust and Thames 21. Effective governance of this project is a "complex and challenging task" and one that will be best "achieved through the adoption of appropriate policies by boroughs in their Local Development Frameworks" (Greater London Authority 2008, 11).

The East London Green Grid Framework report does not illustrate a governance model, however does recognise and propose many ideas for achieving this ambitious goal. Relevant to this study are the community food growing spaces including grants for social enterprise to set up horticultural enterprises and projects that contribute to high quality green spaces, sustainable jobs and community cohesion. Various community based Friends and Forum groups support this work at a local (borough) scale and at a more strategic level the Open Space Society focuses on protecting village greens and the London Friends of Greenspaces Network provide support for Friends groups.

The All London Green Grid gives planning guidance and builds on the success of the East London Grid with the Green Infrastructure Strategy for London. It aims to link 50,000 hectares of public open space through a network that assists active transport, environmental management, sustainable food production and tourism through implementation at a regional and local level. A research review of its implementation shows that approximately half the boroughs (and other organisations) have taken up the strategy in their policies and understand its value through better guidance on the multiple benefits of green infrastructure and a trend towards greater political support (Campaign to Protect Rural England, 2014, 2).

4.2.6 Prague-Vienna Greenways System, Europe (existing)

This system of greenways is a "250-350 mile long web of trails and country roads" which crosses two European country borders (Czech Republic and Austria) initiated in the 1990s. It is part of the Green Belt Initiative which has the vision "to create the backbone of an ecological network, running from the Barents to the Black Sea that is a global symbol for trans-boundary cooperation in nature conservation and sustainable development" (Friends of Czech Greenways website). According to the US-based Friends of Czech Greenways website, this comprehensive system of greenways had grassroots beginnings, started by environmental enthusiasts. "Following the model of the Hudson River Valley Greenway, they created a partnership of twelve mayors and their towns" (European Greenbelt Initiative website) and partnered with several community based not-for-profit organisations and philanthropic organisations.

4.2.7 European Green Belt Initiative, Europe (in progress)

Following the European greenway vision, this initiative started as a way to convert the former Soviet 'Iron Curtain' into an ecological corridor. This enormous green belt runs for 8,500 kilometres spanning 23 countries in central Europe (European Green Belt – The Route). To achieve objectives that have local and global implications, the Green Belt is divided into three sections, each with their own regional coordinator. The entire initiative is overseen by the IUCN Green Belt coordinator who "links stakeholders with each other and the secretariat" and acts "as an information hub within the Green Belt community and towards the media". Hosted in Brussels, the secretariat supports active stakeholders with information exchange, studies and pilot projects. Many countries, NGOs and government organisations cooperate in this project and the European Greenbelt Association e.V (formed in 2014) has sought to formalise the governance, previously operating as a loose network. The initiative recognises that the Green Belt means different things to the different stakeholders along the line such as ecological conservation, cultural conservation, recreation and tourism (European Green Belt – The Structure).

4.2.8 Canal and River Trust Towpaths, UK (existing)

The Canal and River Trust is a civil society focused charitable organisation focused on encouraging and maintaining the care and use of canals and rivers and tow paths and cycleways alongside canals across rural England and Wales and including Quietways in London. There are approximately 1,956 miles of canal towpaths in England that are quiet places of nature, wildlife and history that link towns and villages. They are overseen by the London Waterways Partnership and the Canal and

River Trust that work with a large staff of approximately 1,600 and many volunteers and community partners such as schools and businesses that have joined the adopt a canal program.

4.2.9 Hudson River Greenways Program, New York USA (existing)

According to GreenWay.org.au, this greenway is "one of the highest profile and most comprehensive greenway projects in the US" (Sydney GreenWay website). This Greenway traverses 264 communities within 13 counties bordering the Hudson River. It has public and private partners and works with staff and volunteers to achieve the goal of "thinking regionally as communities plan locally".

The Hudson River Greenway Act (1991) "created a process for voluntary regional cooperation" (Hudson River Greenway Organisation). This Act is used as a regional governance strategy, while "maintaining the tradition of home rule for land use decision-making" (Hudson River Greenway Organisation nd). Two organisations were created under this act. The Greenway Communities Council coordinates with local and county governments to advise on land use planning techniques. The Greenway Conservancy works with multiple stakeholders, including local and county governments, regional, local, private and public organisation and individuals to promote tourism, preservation of agriculture and "strengthen state agency cooperation with local governments" (Hudson River Greenway Organisation nd).

4.2.10 The Great Rivers Greenway District River Ring, USA (in progress)

The River Ring was visioned to provide "an interconnected system of greenways, parks and trails that will encircle the St Louis region" (Great Rivers Greenway website). The 965 kilometre system will comprise over 45 greenways that will be developed by the Metro East Park and Recreation District in Madison and St Clair counties, Illinois. Since 2000, when this project had a 'grassroots' style beginning it has evolved to be institutionally driven by a county collaboration, governed by a board of directors that is made up of ten representatives from three local counties and partners with government organisations, NGOs and private industry. "All board members are appointed by the executive of the city or county that they represent" and board meetings take place monthly in the districts' offices to govern the funds for developing the interconnected system of Greenways. Approximately 190km of Greenway are built. Community Advisory Groups are recommended for each Greenway and in 2016 a Foundation was launched to support fundraising. The Annual Report (Great Rivers Greenway 2016) describes community and environmental stewardship as a driving force of the success of this Greenways system, providing social and economic benefits including

recreation, volunteering, weeding, planting, social gathering, events and clean-ups for 2 million users (Great Rivers Greenway 2016).

4.2.11 Michigan Trails and Greenways Alliance, USA (existing)

The Alliance is a non-profit organisation begun in 1986 that advocates for and facilitates coordination between stakeholders of nine greenways with the purpose of "developing an interconnected greenway system within the city of Detroit" and a vision for "an active lifestyle in Michigan". The Alliance "works at both the state and local levels by assisting public and private interest in trail and greenway planning, funding, development and maintenance" and engages with numerous partners from state to local governmental agencies (Michigan Trails and Greenways Alliance website).

4.3.   Lessons for Australia

While Europe has some very large greenways with well-developed governance models, the United States has most recently developed innovative community governance on urban retrofitted greenways and South Korea has demonstrated leadership in greenway governance in a slightly new way. When reflecting on the international examples of greenway governance, and application particularly of the United States governance model to Australia, George et al (2015, 9) notes some differences regarding Australian urban infrastructure renewal, planning, and governance arrangements. These include Australia's lower urban density, "lack of philanthropic culture and the political nature of Australian city planning where politics overrides good governance". Other issues mentioned "include contested uses (high rise, new rail, green space), and complex tenure and land acquisition rights" (George et al 2015, 9). Table 4-1 addresses five case studies with particularly interesting community governance arrangements highlighting similarities and differences to Australia.

Table 4-1 Key examples and lessons for Australia from community governance of international urban green infrastructure retrofitting projects

Community governance on international urban greenway retrofitting projects	
Case Study	Similarities and differences to Australia
New York High Line, USA	High density characteristics of New York are less common in Australian cities. Philanthropic giving to open space not as easily accessed in Australia. The High Line project did not cross multiple jurisdictional boundaries.

East London Green Grid Project, London (underway)	The London Green Grid was a top down planning strategy is consistent with the approach of Australian state governments in planning. Whether the community would ever take ownership of the initiative remains the question given the mistrust of government and public in Australia. Similar in nature and governance, Sydney's Green Grid, promoted as part of the Metropolitan Greenspace Program, is a Greater Sydney Commission initiative.
Bloomingdale Trail and Park, Chicago USA	A multi-partner collaboration apparent in the US that shows agency and community cooperation that is less common in Australia due to political barriers and agency silos.
Reading Viaduct, Philadelphia USA	Bipartisan visions are more possible in the US than Australia, particularly in Sydney, where political parties still interfere with good planning and decision-making.
Seoul Urban Greenway Project, Seoul South Korea	Strongly top down governance approach in Seoul. Three years from vision to completion is a short time frame unlikely in Australia due to regulation and democratic voice.

Source: Adapted from George et al (2015, 5).

The American project examples in cities demonstrate government and community partnerships from the early stages of the project vision for an inspired urban green infrastructure corridor and present their projects as an equal ownership of the project (community and government) for citizen benefit. This includes government investing time and effort to support the development of a sustainable not-for-profit community based organisation to play the key role in interfacing with the community and private philanthropists towards the realisation of the green infrastructure. European countries generally have large cross-national border green infrastructure initiatives. They also show enthusiasm to partner with community networks and groups although funding is mostly reliant on government and European Union support. The UK Canals and River Trust also shows a government decision to hand over all responsibility (over the coming years) to the trust to manage and finance the green and blue network. This differs from the approach taken in the London Green Grid, a planned government strategy, that once conceptualised, encouraged local boroughs to get on board in their policy development and community engagement. The exception to this is social enterprise projects which were offered grants for horticulture work by communities along the grids on a site basis. Community "friends" groups have also sought to get involved.

These examples show that the United States city governments are open to recognising the role of community based trusts, associations and foundations in attracting private and social good funding towards green infrastructure and civic renewal. They share the "ownership" and work with the local community, realising its benefit. The UK Canal and River Trust is planned to run its own green infrastructure by partnering with many private and public organisations and philanthropists. It is yet

to realise its full financial independence as a not-for-profit green infrastructure manager, however its symbolic and historic value may be key to its success. The key question in the Australian context is around the issue of transference. Would this model be as effective in Australia given private philanthropy is less common and not usually directed towards green infrastructure as it is considered the domain of government funding? Are Australia's green infrastructure projects of a symbolic importance to our culture and history to attract enough community support including financial support? Would or could Australia's love of the outdoors as a key component of our lifestyle attract the support needed?

4.4. Criteria for selection of Australian green infrastructure projects

Three broad criteria were used to identify a preliminary list of eleven green infrastructure projects across Australia:

- a greenway or green infrastructure corridor in Australia
- active community involvement
- complex subregional level governance arrangements such as cross-council or local government area boundaries.

The projects were the Inner West GreenWay; the Great Kai'mia Way; Powells Creek Corridor; and Alexandra Canal Path, all from NSW; Brisbane Valley Rail Trail from Queensland; River Torrens Linear Park, SA; Merri Creek, Victoria; Murray to Mountains Rail Trail, Victoria; and the Bayswater Main Drain, Cape to Cape Track and Bibbulmun Track all from WA. The eleven projects are briefly summarised to provide background knowledge of Australian green infrastructure projects using professional knowledge, recommendations from planners, annual reports, media and journal articles, a web search and conversations with key people involved with the case such as project managers and local councils.

4.5. Potential case study projects

4.5.1. Inner West GreenWay, Sydney, New South Wales (in progress)

The proposed GreenWay is for a "5 kilometre road-free corridor linking two of Sydney's water assets – the Cooks River flowing into Botany Bay in the south of Sydney, and Iron Cove (a tributary of the Parramatta River) which provides access to the waters of Sydney Harbour in the north" (George et al 2015, 1). The community vision was "for a sustainable active transport and biodiversity corridor called the Cooks River to Iron Cove GreenWay (GreenWay)" (George et al 2015, 1). This involved the retrofitting of a disused rail corridor and the Hawthorne canal through a medium density urban area.

There have been 40 years of interest, and 20 years of effort to retrofit a multi-use greenway into Sydney's medium density inner west, driven by a community passion and commitment and with increasing support from local councils and mixed support from state government. Strengths of this project include the community drive and its adaptable governance, however state politics in Sydney's inner west impacted its progress significantly at several points. A shift in governance in 2012 has seen a GreenWay Place Manager oversee the project and the amalgamation of the four councils to two along its length. In 2016, the NSW Government announced significant funding for the remaining 45% of the project.

4.5.2. Great Kai'mia Way, Sydney, New South Wales (stalled)

The Great Kai'mia Way is "over 200 kilometres of sustainable walking tracks and cycle ways that link Botany Bay, the Woronora valley, large parts of southern and western Sydney, and the Illawarra Escarpment" (Great Kai'mia Way website: http://kaimiaway.org.au/). The vision incorporates many issues and objectives such as: sustainability; cross-community awareness, and cooperation; engagement of environmental issues; providing safe, motorised traffic-free linkages between communities; promoting Aboriginal and non-Aboriginal heritage; and promoting health.

This is an extremely large project with a complicated governance structure. It traverses twelve councils, crown land, national parks, Aboriginal Land Council land, private properties and land belonging to other government authorities and agencies such as Sydney Water. Those involved recognise the need for a coordinated approach to implementation of the Way where all stakeholders agree on management measures and adopt the suggested measures of the study through a signed memorandum.

An advisory board was meeting quarterly with major stakeholders, during 2002-2004, in different council areas to address the importance of cross-community involvement and ownership. During this period some projects were completed however progress on this vision stalled due to a lack of funding.

4.5.3. Powells Creek Corridor, Sydney, New South Wales (proposed)

Powells Creeks is an urban stream west of Sydney Harbour that flows through Sydney Olympic Park and joins Parramatta River at Homebush Bay. This is a government driven initiative known as 'Harbour to Hinterland' created under the Powells Creek Landscape Design Framework, compiled in 2003. The corridor is a 4.5km degraded green corridor from Strathfield Town Centre (the hinterland) to Parramatta River at Homebush Bay (the harbour) (Planning NSW 2003). Pedestrian and cycle paths have been proposed to link these areas. Defining attributes of this project include ecological restoration and biodiversity, access and local connections, improving community awareness of physical and cultural values, and recreation.

The project has been developed with multiple government stakeholder partnerships including Strathfield and Canada Bay City Councils, Sydney Olympic Park Authority, and two Planning NSW Urban Improvement Programs (Parramatta Road, and Centres Travelling Together). The project recognises that there are a number of stakeholders that will need to be collaborated with to realize outcomes in the corridor (Planning NSW 2003). The Strategy identifies the related stakeholders and the political and funding context and a proposed management structure to integrate the stakeholders (Powells Creek Landscape Design Framework, 'Harbour to Hinterland', Volume (Planning NSW 2003). The governance includes a steering committee, formed in 2004 to guide the longer-term planning, management and implementation of works and programs.

4.5.4. Alexandra Canal Path, Sydney, New South Wales (stalled and now in progress again)

This is a proposed 4 kilometre cycle and pedestrian green corridor that will follow a section of the Alexandra Canal in South Sydney, a disused heritage-listed inner urban waterway, transforming the abandoned area into a "major recreational and ecological asset". The vision is "part of a green, regional spine linking the Cooks River with Sydney and Moore Parks" (GreenWay nd). The Alexandra Canal Path project had significant momentum from 1997 to 2001 until in 2008 it was declared highly contaminated and best left untouched. It remained dormant until 2015 when the project came to

life again with the planning for the first section of the path. In 2018, a 2 kilometre cycleway along Airport Drive connects the city to the Cooks River cycleway with more paths planned.

This was primarily a government driven project until contamination warnings, however there is still grassroots support for the idea with groups such as Marrickville South Sydney Bicycle Group (MASSBUG) still advocating for an adjacent path. The governance, like many similar projects in urban areas, includes many major stakeholders, such as councils (Sydney, Marrickville, Bayside) and other major institutions (Sydney Water, Department of Planning and Environment, RTA, Waste Service NSW, Environment Protection Authority and the Department of Land and Water Conservation and community groups like Massbug

4.5.5. Brisbane Active Transport Strategy: Walking and Cycling Plan, Queensland (in progress)

The Brisbane Active Transport Strategy: Walking and Cycling Plan 2005–2010, plans towards 2026 to develop an interconnected network of cycleways and greenways throughout the city of Brisbane (Brisbane City Council 2012). The main goals were to reduce motorised transport and encourage exercise. The Transport and Traffic Branch of Brisbane Council is the lead agency for the delivery of the Walking and Cycling Plan. Government agencies, private sector and peak groups were recognised as important stakeholders that the council should continue to build partnerships with. These include bodies such as Queensland Transport, Main Roads, Queensland Police, Translink, Bicycle Queensland, Cycling Queensland, Bicycle Federation of Australia and Pedestrian Council of Australia. This plan details numerous and existing greenway and cycleway projects for Brisbane, and addresses governance directly (Brisbane Active Transport Strategy: Implementation), however does not provide any governance role for the community.

4.5.6.   River Torrens Linear Park, Adelaide, South Australia (existing)

The River Torrens Linear Park is a 50 kilometre long greenway that follows the River Torrens, linking the Mt Lofty Ranges with Gulf of St.Vincent in Adelaide, both rural and urban areas. The park is a story of implementation to rehabilitate an important waterway of South Australia. A shared use pedestrian and cycling path runs along both sides of the river for 30 kilometres from the river mouth through the city and alongside many notable Adelaide landmarks and quality urban public open space. A guided O-Bahn busway also runs along one side of the corridor.

The Linear Park was the result of a dedicated plan by the government to improve the environmental degradation of the Torrens River resulting from decades of misuse from private and public bodies. Growing public interest towards environmental issues from the 1970s onwards developed an understanding that the health of the river was an important part of improving these issues. The government was influenced by this growth in the interest of the public in environmental issues, demonstrating the importance of bottom-up initiatives to get a top-down result.

A stage by stage approach is recognised as a successful implementation plan, especially where limited funds were available. This approach also allowed recurrent public consultation and feedback which was important in alleviating concerns that were brought up in preceding stages. Healthy relationships between NGOs and state and local governments helped facilitate sound multilayered goals and implementation plan that included land acquisition, rehabilitation, flood control and trail construction. It was finished in 1997 (Mugavin 2004).

4.5.7. Merri Creek Trail, Melbourne, Victoria (existing)

This is a cycle and walking trail and riparian corridor that follows Merri Creek in the northern suburbs of Melbourne. The creek itself is about 40 kilometres long, or more and the Merri Creek Shared Trail extends for about 10 kilometres of the lowest, urbanised part of the creek. It joins the main Yarra Trail at its southern end and then leads to the city of Melbourne. Forty years ago, this project begun with a focus on river rehabilitation and then on a shared pathway for pedestrians and cyclists. The project has proved to be successful in connecting people to the natural environment through bringing people to the Merri Creek Parklands. The Merri Creek and Environs Strategy 2008-2013 (Merri Creek Management Committee, 2009) recognises the importance of environmental and social equity issues such as protecting Aboriginal and European heritage, flora and fauna and the creek's riparian zone.

Much of the ownership and management rests with councils, including Darebin, Moreland and Yarra. It is recognised that development of new sections of trail would involve consultation with many other active stakeholders such as: Parks Victoria, VicRoads, Department of Infrastructure, Melbourne Water and other landowners. Other active stakeholders include Bicycle Victoria, CERES, Parks Victoria Metropolitan Trail Network body and Friends of Merri Creek. A review of the trail was prepared in 2007 by the three councils. It states that the project had many problems in its infancy due to funding constraints and lack of uniformity with the then eight municipalities (TBLD P/L 2007). Since then, annual reports (MCMC 2016) show that the Merri Creek Management Committee has

demonstrated community based collaborative leadership and a sustainable model of environmental management for the catchment and the Merri Creek catchment quality and facilities continue to improve.

4.5.8. Murray to Mountains Rail Trail, Victoria (existing)

This trail follows 94 kilometres of historical, disused railway lines linking the townships of Wangaratta, Bright, Beechworth, Myrtleford and Porepunkah. The core reason for its development was a vision by three councils, the Shires of Alpine, Indigo and the rural city of Wangaratta, to create a significant tourist attraction (Beeton 2006). Grassroots community involvement and sustainability were not defining attributes in the formation of this project. Although the initial development was primarily funded by state and federal government initiatives, the ongoing governance and maintenance is "generally supported by the three LGAs that the trail passes through" (Beeton 2006). Other active stakeholders include local businesses (tourism based), Bicycle Victoria, Cycling Promotion Fund and Rail Trails Australia (Murray to Mountains website).

4.5.9. Bayswater Main Drain, Western Australia (stalled)

Located in Perth metropolitan area's largest urbanised catchment area, the once natural watercourses have been modified for use as drainage to allow development. Now referred to as the Bayswater Main Drain (covering 6 kilometres) and associated drains (44 kilometres) the area includes open and covered sections of a permanently flowing drainage network that discharges into the middle Swan River in Bayswater. Much of the water is poor quality impacted by adjoining land uses, first market gardens and now high density residential, commercial and light to medium industrial areas. Local community groups over the years (North Metro Conservation Group formerly the North Metro Catchment Group) have generated projects such as revegetation, water quality monitoring and education programs and worked alongside the Healthy Rivers program as part of the Coastal Catchment Initiative along the catchment. The project was very active around 2007 and 2008 but work now seems to have stalled.

4.5.10. The Cape to Cape Track, Western Australia (existing)

The Cape to Cape Walking Track is a 135 kilometre walking track in the south-western region of Western Australia. It has a very active community organisation that started in 1998 called the Friends of the Cape to Cape Track with many volunteers involved in the development of the Track, promotion of bushwalking, group walks and membership benefits. There is an active website, maps, promotional materials and guide books. There are memberships available, and many sponsors and

partners to the Track, especially close associations with government departments including with Department of Biodiversity, Conservation and Attractions and the Department of Sport and Recreation and the two councils along the Track. Grants to support the development of the Track have come from Lottery West and AusIndustry among others. The Track runs through wilderness areas with valued biodiversity and valued heritage sites such as Cape Naturalist Lighthouse and all the partners seek to promote tourism and environmental awareness for this precious part of the Australian coast. (http://www.capetocapetrack.com.au)

4.5.11.Bibbulmun Track, Perth to Albany, Western Australia (existing)

The Bibbulmun Track is "one of the world's great long distance walk trails, stretching 1,000 kilometres from Kalamunda, a suburb in the hills on the outskirts of Perth, to the historic town of Albany on the south coast. It passes through the heart of the scenic south west of Western Australia" (Bibbulmun Track Foundation nd). It offers wilderness walking and camping. The Track was visioned and brought to fruition over 40 years through passionate community members who worked with government to realise the vision. Current governance arrangements have the state government Department of Biodiversity, Conservation and Attractions, with the Parks and Wildlife Service acting as manager (as land owner) and the track's management, marketing and maintenance all supported by the Bibbulmun Track Foundation, a not-for-profit association with several permanent staff, many members and partners. This model has been sustained over nearly 20 years and offers innovative insights into community governance.

4.6.   Application of case study criteria

More detailed criteria for the case study selection were developed and applied to ten of the projects described above. The Cape to Cape walk was deemed too similar to the Bibbulmun Track because it was partly modelled on the Bibbulmun Track and so it was removed from consideration. The criteria applied, which were derived from the research question to fill a gap in the research, were:

- The projects cross council boundaries thus fitting the subregional criteria.
- The projects are characterised as a greenway or green infrastructure corridor indicating an environmental management priority.
- The projects are urban examples, due to the gap in the research and the different and complex issues they raise.
- The projects have a shared governance arrangement – they are governed by several government bodies or by a not-for-profit governance arrangement in partnership.

- The projects have an active community associated, involved in decision-making and other activities.
- The projects are situated across different socio-economic areas and land use types.
- The projects are situated in different cities or states across Australia
- The projects demonstrate longevity (sustainability) in their lifecycle.

The Australian green infrastructure projects were assessed for their suitability for this study according to the criteria listed above using research of projects from information on the internet such as annual reports and active websites, published papers and news articles, and conversations with key people involved with the case such as project managers and local councils. Each of the eight categories was ranked out of 5, with the highest score being 5 and 1 being the lowest. A total ranking out of 40 indicates a project's suitability as a case study for this study. The top three ranking case studies were used in this study.

Some categories required a more subjective assessment than others. For example, a project that has been existing and sustained for 20 years or more scored a five, however a shorter or inconsistent project rated lower. An urban context was ranked a five when the whole corridor was located within an urban area, with medium and high density areas ranked higher than projects partially in urban areas or with low density urban areas. All projects were ranked according to their subregional nature, extending across council boundaries thus fitting the sub-regional criteria and green corridor character. A project crossing four or more council boundaries scored the highest ranking. The green infrastructure category scored a green corridor with an environmental planning and management emphasis as the highest. Other complementary uses for the corridor were viewed favourably. Projects that were jointly governed by several government bodies or by a not-for-profit subregional association incorporating multiple, diverse stakeholders or a community led not-for-profit organisation ranked the highest. Projects were scored on how they incorporated the community in an integral way over the long term. Community-centred governance arrangements, with community included in the decision-making ranked the highest. Government dominated governance arrangements that consulted the community ranked in the mid-range. Projects that cover a variety of socio-economic areas and a variety of land use types adjacent to the corridor ranked the highest.

The top three projects were chosen as case studies in this study because they scored highly on nearly every criterion as shown in Table 4.2. They are:
- Cooks River to Iron Cove GreenWay, Sydney NSW, score of 39/40
- Merri Creek Catchment, Melbourne Victoria, score of 39/40

- Bibbulmun Track, Perth and regions, WA, score of 36/40 (losing points for being predominantly in regional areas).

Table 4-2 Green infrastructure project assessment for case study selection

Criteria	*Cooks River to Iron Cove Greenway, NSW*	Rank	*Merri Creek, Vic*	Rank	*Bibbulmum Track, WA*	Rank
The case demonstrates longevity with phases	25 years with life cycle phases	5	Yes 30 years	5	Yes More than 40 yrs	5
The catchment incorporates urban environments	Yes	5	Yes, 8 LGA's and other stakeholders	4	Yes, low density only but mostly rural wilderness and regional towns	2
The case crosses council boundaries thus fitting the sub-regional criteria	Yes 4 LGA's and other stakeholders	5	Creek Rehabilitaion, bushcare, active transport trails and education	5	Many LGA's and state agencies and other stakeholders	5
They are characterized as corridors indicating an environmental management priority	Yes, bushcare and active transport and other priorities eg education	5	A not for profit Association co-operating with councils and other stakeholders	5	Bush regeneration, wilderness walking and education	4
There is an active community associated with the case study involved in decision-making and other activities	Yes, shared governance and a community based steering committee	5	The community is part of the vision, the decision-making and the management.	5	A not for profit Association co-operating with state government and councils support and other stakeholders	5
There is an active community associated with the case study involved in decision-making and other activities.	Yes It was a community vision and they are active	5	Community is part of the vision, the decision-making and the management.	5	Community is part of the vision, the decision-making and the management.	5
The case covers a variety of socio-economic areas and a variety of land-use types adjacent	Yes to both, 5 km in middle density inner Sydney	4	Yes to both, 60 km with variety 8 LGA's and other stakeholders	5	Yes to both, the trail covers 1000km	5
Variation in origin of Australia city	Ranked the most suited example in NSW	5	Ranked the most suited example in Victoria	5	Ranked the most suited example in WA	5
Total Ranking out of 40		39		39		36
Ranking out of Case studies		1		1		3

The next most suitable project was the Torrens River Linear Park, scoring 33/40 and losing points on categories 5 and 6. The other projects and their ranking are shown in Appendix 3. Lessons can also be learnt from those projects that did not rank well in the criteria as to their limiting factors.

4.7. Summary

This chapter highlighted practical examples of green infrastructure from international and Australian contexts that offer insights into this study. Based on the study question, criteria were developed to choose case studies for this research that would allow understanding of the various issues being explored including an active community group or community members involved in planning and decision-making for green infrastructure. With this understanding, the context was narrowed to Australian based examples due to a shared governance and socio-political context at a national level. Criteria were then developed to select three green infrastructure projects for use as detailed case studies in this study. Some of the opportunities and challenges and complexity associated with community governance for green infrastructure became apparent especially in urban areas, with the realisation that many green infrastructure projects were unsustainable. While understanding the challenges associated with such projects was not the focus of this study, the need for further understanding is noted.

The following three chapters summarise and analyse each of the three selected case study projects: Sydney's GreenWay, Melbourne's Merri Creek corridor and Western Australia's Bibbulmun Track.

Chapter 5 Case study 1: GreenWay Project

5.1. Overview

The GreenWay, as it is locally known, is a community driven project emerging from a local vision spanning several decades. It is a 5 kilometre open space corridor stretching from Cooks River to Iron Cove in Sydney, Australia. It is a multijurisdictional, multi-use, green infrastructure corridor with a unique local identity in Sydney's Inner West. It has cultural, educational and environmental value to the local community who have worked collaboratively for over 20 years with councils (originally four councils) to realise the GreenWay in a very complex political and institutional context. Through stakeholder perseverance this project developed a positive reputation in Sydney, and this was enabled by well-considered and responsive governance arrangements over time, most recently a shared place management model. It demonstrates sustained perseverance of a local community through changeable and difficult times. The current governance structure for the GreenWay is situated between two councils and attempts to cross the institutional and community barrier with a community advisory board and partnering community groups. In the early years, from the late 1990s, this project was characterised by determined visionary leadership, perseverance, expertise and passion, and was challenged by issues of control, frustration and conflict, in a constantly changing context. More recently the GreenWay's success has been through place-based leadership, stakeholder collaboration (especially the NSW Government), and shifts in societal views towards projects like this one. Some challenges include the loss of community capacity over time.

This chapter outlines the broad context, history and vision of the GreenWay and discusses the findings from the GreenWay case study, through desktop information, interviews with six key people very involved in the project, and an online survey of a broader group of stakeholders. The findings are presented under major themes and minor themes, with key observations to shed light on the conditions and reasons for success and failings of the various hybrid institutional community governance arrangements in this urban green infrastructure project. Finally, lessons from the primary GreenWay case study are summarised for comparison with the other case studies.

5.2. Vision

The GreenWay Program embraces a grassroots vision developed by the community in the late 1990s to:
- foster community connections in Sydney's Inner West
- facilitate sustainable transport

- enhance the urban environment

- implement sustainability education

- encourage greater awareness and enjoyment of local history and culture. (Chapman 2016b, 2)

The GreenWay is the result of a community vision for a pedestrian and cycle path (active transport) through regenerated bushland and parks along a disused rail corridor and drainage canal (Hawthorne Canal) which aims to link the community and nature to Sydney's water and city assets (George et al 2015). It is located approximately 10 kilometres from the Sydney CBD ranging across several medium density suburbs, and the former inner city councils of Leichhardt, Marrickville, Ashfield and Canterbury (Figure 5-1), now the Inner West Council and City of Canterbury Bankstown. While the GreenWay vision included the possibility of a light rail line extension along the corridor, it was to be "a recognisable environmental, cultural and non-motorised transport corridor linking the subcatchments of two of Sydney's most important waterways", the Cooks River (which leads to Botany Bay to the south of Sydney) and Iron Cove, a bay in Sydney Harbour (GreenWay Coordination Strategy Working Group 2009, i) (see Figure 5-2).

The GreenWay project adds value to the natural environment and to the community through a biodiversity corridor, improved amenity and accessibility pathways and is also a significant asset for the recent large residential developments along the corridor (see Figure 5-3 and 5-4) The green urban corridor is consistent with state and local government goals to create more sustainable and liveable urban environments and has been linked with several strategic regional corridor, trail and cycle plans (add recent funding project link). The GreenWay vision is now also reflected in planning strategies, instruments and conditions, through incorporation in various development control plans, local environment plans and supporting strategies and plans.

Figure 5-1 Location of the GreenWay corridor, Sydney

Source: Google Maps and J. George.
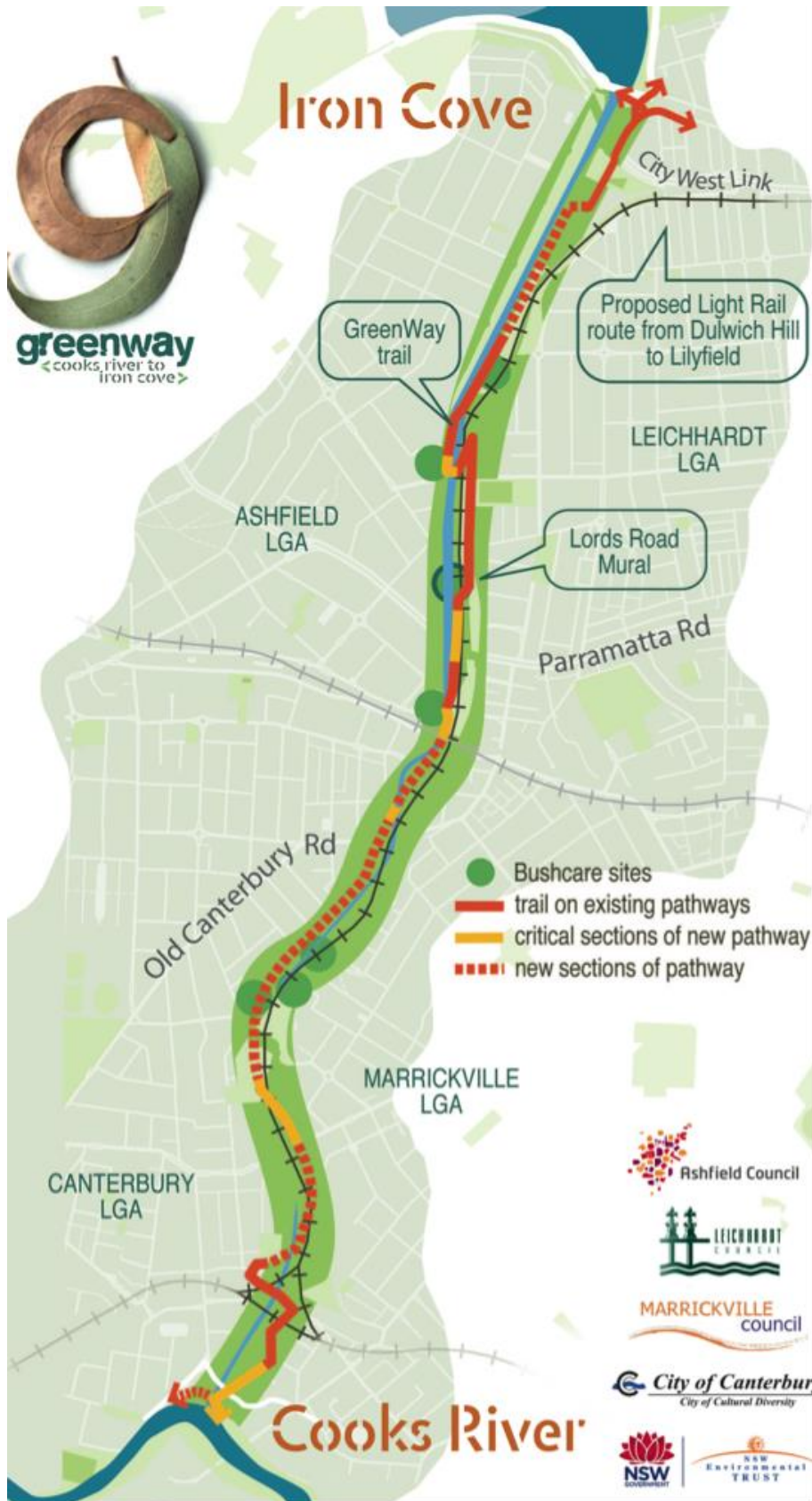
Figure 5-2 The GreenWay proposed trail and catchment

Source: GreenWay Sustainability Project, GreenWay Newsletter 2010.
Permission received with thanks from the GreenWay Place Manager, N. Chapman 2018

Figure 5-3 GreenWay in 2008 showing the disused railway (southern end)

Source: J. George.

Figure 5-4 GreenWay in 2008 showing Hawthorne Canal and path (northern end)

Source: J. George.

5.3. Context and history

The concept of retrofitting a greenway across an already established medium density inner urban area in Sydney, a city of approximately 5 million people, has its challenges. These include the constraints of the landscape, contestation of uses, land tenure and policy coordination across multiple political jurisdictions and raising financial and political support. The GreenWay provides a green corridor in a dense urban catchment in Sydney's inner west. The GreenWay catchment (see Figure 5-2) has a population of 48,000 people located within approximately 1km of the corridor and proposed precinct developments are forecast to increase the population by a further 16,000 over the next 10-20 years. (Simpson 2015). The catchment has 22 primary schools and 8 high schools and colleges. The GreenWay crosses several busy arterial roads such as the City West Link and Parramatta Road which are due for an extensive upgrade over coming years. It also passes under Sydney's main western rail line at Summer Hill (Simpson 2015).

While the next paragraphs give a summary of the GreenWay history, a more complete story is provided in Appendix 4. The GreenWay project started with early conversations and actions around native bush regeneration (see Figure 5-5) and an opportunity for the pathway emerged in the early 1990s with several local community groups joining together to drive the momentum for the GreenWay idea. With support developing from local councils, their work resulted in a funding grant in 2001 from the state government to develop plans, link the vision into council strategies and for public advocacy. The next stage of development, also realised through a government grant in 2004, was to staff the vision, start to formalise processes and governance and develop stakeholder collaboration for the vision. This included a Greenway Steering Committee overseeing governance and a GreenWay coordinator working on the masterplan approval and the next stage of growth. In 2007, a significant grant called the GreenWay Sustainability Project, (formerly Urban Sustainability Project) led to several staff joining the project over a three year period and they focused on formalisation of processes and enhanced communication of the GreenWay through a logo and website, community workshops and festivals; the development of a biodiversity strategy and an active transport strategy; piloting a sustainability education program for primary schools; a social profile consultancy; the hosting of a GreenWay Festival and Arts Exhibition; the establishment of new bushcare sites and free bushcare training and resources; and development of a governance model for the future of the GreenWay (Chapman 2014).

Figure 5-5 Bush regeneration site located alongside the disused railway in 2008

Source: J. George.

During this period the significance of the context of the "GreenWay" catchment, especially its political importance, influenced the project. The GreenWay was situated in a "swinging" political area affected by four councils (originally), an unpredictable state government and a politically interested federal government. While the state government was supportive with several Environmental Trust Grants it had shown some resistance to shared collaboration for the early stages of the vision, with a mostly reactive rather than visionary approach characterising planning at the state level at that time. This was aggravated by short-term political terms of 3 years for federal government and 4 years for state government and changeable party conditions and led to a highly volatile political context in the GreenWay catchment in 2010 and 2011. During this time, the state government promised to build the GreenWay alongside a recently advocated light rail, with mixed feelings from the locals about the two uses sharing the corridor. The state government then pulled out of their GreenWay commitment. The local councils, including some long-term committed local political and institutional leaders and project staff, collaborated with the dynamic community leadership and local community and tried hard to persevere with the vision through this setback that threatened to undermine the project. While broader partnerships continued to develop including art, university, school and business partners, and various programs, events and research initiatives thrived, funding, community and partner morale, project governance and institutional governance

were all challenged in this period. From 2012, the GreenWay has been governed by a stakeholder committee and funded and managed by an internally staffed Place Manager using a shared place management approach. Gradually the project regained momentum and in 2014, a five-year MOU was signed between the four councils to support the project and the Place Manager role. In 2015, a report highlighting the GreenWay missing links including 55% of the path assisting with advocacy to the state government. In 2016, along with shifts in societal values towards the environmental vision, there was renewed state government support including significant financial and policy support. The journey of the GreenWay has been full of promise and disappointment and the vision continues to make progress in expected and unexpected ways. The GreenWay governance arrangements reflect collaborative consideration and are designed to be resistant and adaptive to the challenges that emerge. The goal has been to continue to support the expanding vision for a sustainable multi-use corridor, incorporating the original vision for bush regeneration to reinstate an environmental corridor alongside the shared use cycle and pedestrian path. This expansion now also includes significant cultural, art and education objectives and the greater challenge of sharing the corridor with light rail as well.

For the local residents who live in the area, which has a mid-range socio-economic ranking (Australian Bureau of Statistics 2011), the GreenWay "offers the potential for a pleasant low stress trail for walkers and cyclists from the neighbouring suburbs" (GreenWay Coordination Strategy Working Group 2009, ii). Experts now acknowledge the need for "co-locating an active transport corridor with the natural environment" through urban green corridors and their contribution in "wellbeing, facilitating social interaction and improving health" (AECOM 2012, 5) of residents and users.

The future of the GreenWay trail will see it shift from a temporary hybrid off-road/on-road alternative active transport route to a $15 million green infrastructure build with the costs shared between the state government and councils. The Place Manager also promoted that the GreenWay "should incorporate place making and activation elements to achieve multiple community benefits" (Simpson 2015, 10).
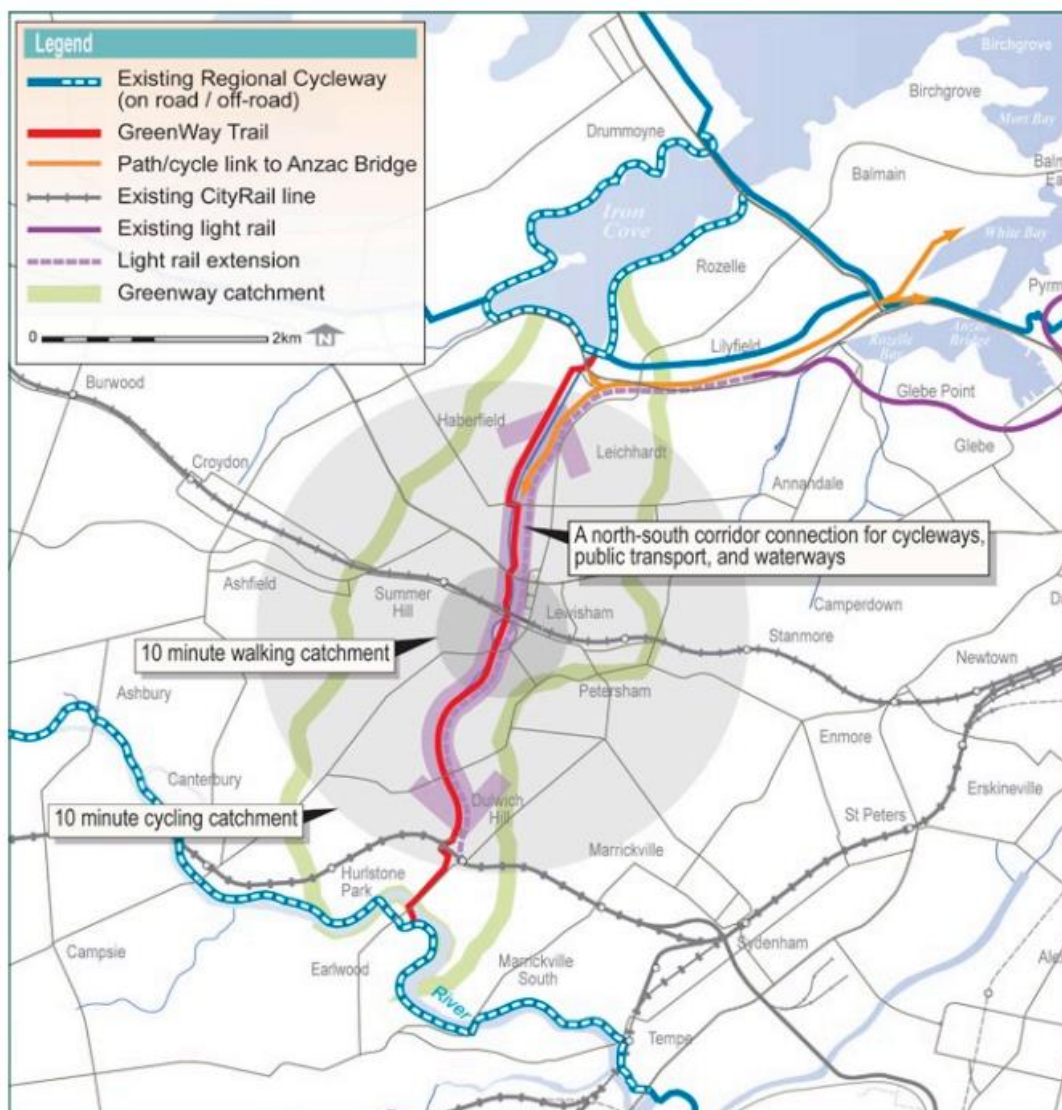
Figure 5-6 Active transport links integrated with the GreenWay

Source: Cooks River to Iron Cove GreenWay Master Plan and Coordination Strategy, October (GreenWay Coordination Strategy Working Group, 2009, 8).
Permission received with thanks from the GreenWay Place Manager, N. Chapman 2018

5.4.   Governance of the GreenWay

5.4.1.   Stakeholders

As characterised by other case studies (Ryan et al 2006, Hoover and Shannon 1995), the GreenWay has complex governance arrangements (see Figure 5-7) including multiple landowners along the corridor and the diverse stakeholder interests. The GreenWay passes through four local government areas: Leichhardt Council, Ashfield Council, Marrickville Council and the City of Canterbury. Since 2016, council amalgamations have reduced the councils to the Inner West Council and City of Canterbury Bankstown.

NSW government agencies also have jurisdiction over areas, such as the old freight line land. Over the years, there have been over ten active community based groups with a stake in the GreenWay vision, most significantly Inner West Environment Group (IWEG), Marrickville And South Sydney Bicycle (Users) Group (MASSBUG) and the Friends of the GreenWay. The more influential "partners" in recent years have been EcoTransit in their controversial lobbying for light rail, and the Greater Sydney Commission which developed the Central District Plan that provides an endorsement for the GreenWay as it aligns with Sustainability Priority 5 and the GreenGrid. The GreenWay community and stakeholders are:

- Friends of the GreenWay members (over 300 over 10 years)
- Mayors and councillors
- Council employees
- Residents
- State government agencies
- State government ministers
- Light rail operator, Transdev
- Landowners in and adjacent to the GreenWay boundary
- GreenWay catchment residents and neighbours
- Community groups eg IWEG, MASSBUG, EcoTransit.

5.4.2. Approach

There have been several governance phases associated with the GreenWay. In the early years, the governance was more informal and organic in nature allowing an open approach for volunteers to advocate unrestrained by bureaucracy and political sensitivities. In more recent years, governance has involved a proactive approach to suit the political, institutional, financial and social context and with some formalisation to accommodate the growing complexity. Most significantly the governance change process has been sustained due to the dynamic and adaptive process adopted to accommodate the changes even when resources and commitment appeared to be diminishing. The Friends of the GreenWay group remains active, although leaner than in previous years. This group still represents the visionary GreenWay community of the present and past as recipients of a "Great Community Led Project" award at the NSW State Government, inaugural Greater Sydney Planning Awards in 2017 (http://www.greater.sydney/greater-sydney-planning-awards). Two of the key collaborative governance groups for the GreenWay are described below, however these two groups may continue to evolve after council amalgamations as the GreenWay governance adjusts yet again.

GreenWay Steering Committee

One of the more consistent features of the GreenWay governance, albeit refined over time, has been the GreenWay Steering Committee. Following adoption of the GreenWay Master Plan and Coordination Strategy in 2009, the four GreenWay councils formed an alliance to implement the GreenWay vision. This included convening the GreenWay Steering Committee in 2010. The GreenWay Steering Committee, which was preceded by several ad hoc community advisory groups, provides guidance to the councils about the strategic direction for the GreenWay program and its other functions. The role of the GreenWay Steering Committee, defined on the GreenWay website, is to:

- provide strategic direction for the GreenWay
- be a united forum for the GreenWay
- guide and implement the Cooks River to Iron Cove MasterPlan and Coordination Strategy
- act as an advisory panel for GreenWay projects
- provide advocacy on GreenWay issues, especially in relation to biodiversity, bushcare, and active transport
- communicate the GreenWay to the wider community, including, state and local government and agencies
- be a centralised source of information for the GreenWay (Chapman 2016b, 2).

The GreenWay coordinator led a process to develop the terms of reference and membership. The committee is chaired by a councillor and consists of councillors from each of the GreenWay councils, council staff, four community representatives from along the corridor and delegates from established community groups such as Friends of the GreenWay, Ashfield Bike Users Group (AshBUG) and the Inner West Environment Group (Chapman 2016b, 2).

GreenWay Program Steering Group

Within councils, a group of dedicated officers and the GreenWay staff (GreenWay Sustainability Project and then the Place Manager) are part of the GreenWay Program Steering Group (an evolving (smaller) version of the group from the GreenWay Sustainability Project days) responsible for championing and operationalising the GreenWay vision in the various councils and keeping open communication between councils. Between them this group of four champions have invested over 30 years supporting the GreenWay.

5.4.3. Funding

Much of the early GreenWay work was funded in the most part by the GreenWay community volunteers who shared their initiative and expertise to win funds through three major grants (listed below) over the last 12 years. The GreenWay staff and projects have also continued to be sustained through the years by the shared support from the four (now two) councils (on a pro-rata basis) as in the recent MOU and in-kind support of professional and operational staff. A key funding win was the 2017 announcement for $7.5 million from the NSW Government towards the GreenWay missing links project.

- A NSW Environmental Trust grant (2001) supported MASSBUG to carry out a three-year Hawthorne Canal Active Transport Study, connecting community bicycle groups and the four councils of the proposed GreenWay corridor.
- A NSW Environmental Trust grant for $37,000 (2004) enabled IWEG to lead action on a project 'Creating a Green-link Project' which had a goal to restore native vegetated corridor linking the Cooks River and Iron Cove within a highly-urbanised area. (GreenWay 2010).
- The NSW Environmental Trust gave a $1.86 million grant in 2008 for the GreenWay Sustainability Project from 2009-2012.
- In 2016, the NSW Minister of Planning offered to provide up to 50% of the estimated $15 million required to complete the missing links, on condition the councils fund the other 50%, with an agreement to be developed by the councils and state government to design, fund and construct the missing links over the 4 years to 2020.

5.4.4. Governance phases

The next section describes the various governance approaches and summarises them into phases.

Early organic community governance model 1999–2009

The Marrickville and South Sydney Bicycle User Group (MASSBUG) in 1991 and the Inner West Environment Group (IWEG) in 1999 and 2000 created the momentum to formalise a greenway vision. Together these community groups promoted the shared vision: an active transport (cycling, walking) pathway and an integrated restored native bushland. During the early 2000s, several local people enthusiastically applied their professional expertise, local knowledge, and political acumen to develop the concept plan for the GreenWay vision. In time, the vision gained support with the broader community, including local and state government staff (George et al 2015, 4). A GreenWay website was developed and regular meetings were both fundamental for communication and mobilisation. Governance issues began to be addressed through the development of a GreenWay Steering Committee with a combination of community and government members set up to oversee

the GreenWay vision and projects. A GreenWay coordinator was employed in 2007 by Ashfield Council to coincide with the GreenWay Master Plan Consultation period (2007–2008). Also in 2007, the Friends of the GreenWay community group brought the various community advocates together.

Para organisational governance model – GreenWay Sustainability Project 2009–2012

The GreenWay Sustainability Project started in 2009 after securing Environmental Trust funding for the next three years. This enabled the GreenWay to be staffed with a Project Manager, part-time Biodiversity Officer and a part-time Education Officer and to provide funds for remunerating the Community Coordinator's role for Friends of Greenway. This team worked from Ashfield Council and worked in a para-organisational capacity, funded separately yet working collaboratively with the GreenWay Steering Committee and the GreenWay Project Group (see Figure 5-7). During this period, the GreenWay Steering Committee was revised, led by the GreenWay coordinator addressing issues of broader community representation and developing terms of reference. The extra resources allowed for enhanced communication of the GreenWay through a logo and website, video, community workshops and festivals; the development of a biodiversity strategy and an active transport strategy; the establishment of new bushcare sites and free bushcare training and resources; a social profile consultancy; the hosting of a GreenWay Festival and Arts Exhibition; and piloting a sustainability education program for primary schools (GreenWay 2012). Funding was allocated to developing a GreenWay governance model, partnering in an action research project with Macquarie University enhancing governance practices, and allowing for a positive transition when the GreenWay Sustainability Project finished.
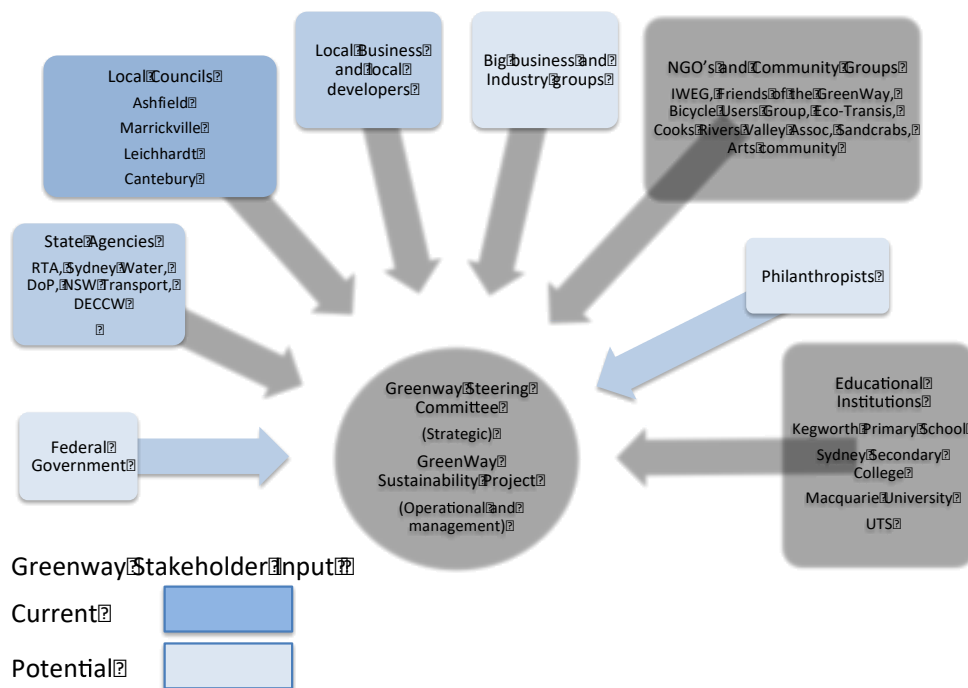
Figure 5-7 Greenway Sustainability Project governance structure in 2011: Current and potential stakeholders
Source: George et al (2012, 26).

The GreenWay Governance Research Project 2010-2012

A paper by the researchers of the project (George and Goldstein 2012, 181) outlines its purpose and approach:

> The GreenWay Governance Research Project was undertaken by researchers at Macquarie University as a component of the GreenWay Sustainability Project. The governance research aimed to develop multi-stakeholder engagement in designing a model to govern the shared assets of the GreenWay's environment, transport and community activities, while honouring the community's ownership of the concept. The governance research project was conducted over a three-year period using a participatory action research approach.

This paper describes and reflects on the research journey and the efforts made in the research to involve stakeholders in the process to develop a shared understanding of a governance model for the GreenWay. Key to the process was collaboration and the co-creation of a process to choose a future the stakeholders preferred. Action research proved a means for this generative process and one that enabled adaptability to deal with a changing political and social context (George and Goldstein 2012, 181). This work was designed to complement the broader goals of the GreenWay

and the GreenWay Sustainability Project's effectiveness, through dealing with the neglected issue of governance.

The GreenWay Urban Sustainability Project Final Report (GreenWay Sustainability Project, 2012) and the final evaluation report by T-Issues, an independent NGO consultancy firm contracted by the GreenWay Sustainability Project, declared the GreenWay concept and project a success, especially given the challenging environmental, social and political context. The legacy of the project is increased social and institutional capital (Evans et al 2006, T-Issues 2012, GreenWay Sustainability Project 2012), which has not only empowered community members to take part in sustainable development planning, but also brought local governments closer together to work towards shared goals of sustainable development. The governance work to develop an understanding of the project's significant events and broad phases assisted in planning for change and for alternative futures in this dynamic context (see Figure 5-8). These are all key factors in good governance practice, or what Evans et al (2006) call 'active governing' (George et al 2015).
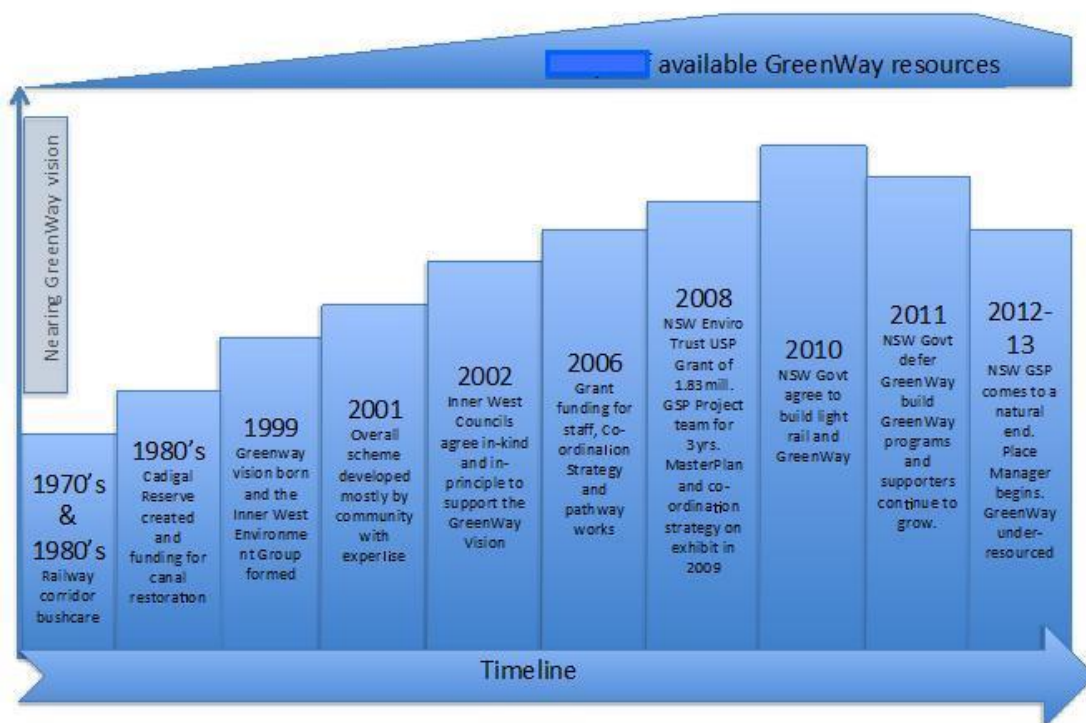
Figure 5-8 Summary of the lifecycle of GreenWay support

Source: George et al (2015).

Place management approach 2012–2017

Following the GreenWay Sustainability Project (2010–2012), the four councils resolved to continue implementing the GreenWay Vision and the 2009 Master Plan (with its 50 actions) by implementing the place management governance approach that had emerged from the governance project. The place management role has provided an important means to consolidate the work of the Greenway Sustainability Project, when the conditions were difficult. All the stakeholders were managing their disappointment following the deferral of the GreenWay by the state government and the end of the Greenway Sustainability Project resources. Having a Place Manager step in, as already agreed, allowed the continuation of work to market the vision and the activities along the corridor, develop the website, develop events and promote the continued development of the GreenWay trail. The place management approach was responsive to these circumstances.

The role of the GreenWay Place Manager is to "facilitate a coordinated approach to the sustainable development and management of the corridor and adjacent areas" working "with the GreenWay councils, state agencies, major landholders, stakeholders and community groups to achieve integrated, holistic and place-based outcomes" (GreenWay Missing Links Working Group 2015, 14), as summarised in Figure 5-9. As a workshop of key stakeholders recommended in 2014, "partnering with stakeholders and working across boundaries is essential to achieve outcomes identified in the 10 year council community strategies, the various GreenWay strategies and plans and other key statements of community intent. Working across agency and landowner boundaries through a place management approach is an important aspect of this process" (Simpson 2015, 10).

The GreenWay Place Manager roles

Communication of Vision and Actions
Reports to committees, Council, website, community
State government
Cost benefit analysis on stations

Coordinate stakeholders
Agreements on station operations & management, lighting, bushcare licences

Cultural Events
Art exhibition & prospectus
Art installations

GreenWay Place Manager

Place Making - Missing Links infrastructure for active walk cycle trail, Funding
Opportunities for integration with other development projects
Place making and maintenance and operation agreements for stations and access to GreenWay

Bushcare Regeneration
Licensing of new sites as offsets for light rail loss
Citizen Science Bandicoot & Bird monitoring
Stormwater and water sensitive design

Education
Engagement of schools
University projects to contribute to design, active transport study

☐ Community engagement based actions
■ Place Manager focused actions

Figure 5-9 Summary of Place Manager roles

Note: Roles coordinated by the Place Manager for more community oriented and driven actions (light shading) and roles depending on more coordination, negotiation, strategic and opportunistic actions by the place manager (dark shading).
Permission received with thanks from the GreenWay Place Manager, N. Chapman 2018

A stakeholder review and critical reflection on the place management approach by key stakeholders in 2016 (George and Goldstein 2016) revealed the importance of the Place Manager position being positioned at a senior level within the institutional structure and with institutional awareness and support (in this case needed among multiple councils). The role essentially involves maintaining the vision, the continuity of the initiative and enabling ways to leverage change and break through barriers to achieve the vision in a complex political context. The GreenWay Place Manager has contributed to building the reputation of the GreenWay and its integration of the strategic vision into NSW government planning initiatives for Sydney, thereby achieving the GreenWay infrastructure funding. As the context changes, it is also important to reflect on the governance model, particularly if a place "is not just the physical fabric" as Mant (2000, 59) says, but also "a focus for community interaction". This is further discussed in the next chapter.

5.5. Purpose – Environmental management

The Australian World Environment Day Awards recognised the sustainability outcomes achieved by the Greenway Sustainability Project with the partner councils and the community. "The achievements included a new website which provided a centralised hub of resources, an accredited Primary Schools Sustainability Program, community commitment to bushcare sites including planting 15,000 new plants, two years of GreenWay festivals, three years of art events, signage along the GreenWay, a growing volunteer network, and several council adopted strategies for biodiversity conservation, bushcare and active transport" (George et al 2015, 7).

The Master Plan identified 50 actions for implementation by the community, the GreenWay councils, state agencies and other stakeholders. An analysis of progress made against the 50 actions in the Master Plan shows that one quarter of the Master Plan's actions have been completed and nearly two thirds are substantially underway. Over half of these relate specifically to environmental management actions beyond the trail itself including actions around bushcare, feral and weed issues, parkland issues, indigenous issues, environmental education and water management issues. Of the 11 key priorities focused on for upcoming years, the environmental management priorities were:

- better integration of GreenWay biodiversity strategy, vegetation and landscape management plans
- broaden biodiversity monitoring
- renewed focus on stormwater quality issues (Chapman 2016b, 10).

In 2017, with the NSW Government funding toward the GreenWay new development will focus on 3kms of cycling and walking links from from the Cooks River Cycleway to Iron Cove, confirming its status as a major sustainable transport asset and urban environmental resource in Sydney's Inner West and a flagship for the NSW Government of collaborative efforts in planning towards more environmentally sustainable cities.

The "on ground" operations around ten bushcares sites, are undertaken by council workers from the various councils and community groups, like the Inner West Environment Group. The GreenWay has an impressive and long-term track record in urban bushcare. In recent years, there have been ongoing negotiations with the state government about GreenWay work given they own the site and these will continue as further work continues to be carried out (Chapman 2016a, 8).

5.6. Key findings from the primary data

The data sources for the GreenWay case study included eleven online surveys, six in-depth interviews, and desktop research from a range of GreenWay stakeholders.

5.6.1. Survey results

In the GreenWay case study data collection, there were 11 completed survey responses to the online survey including short and open-ended questions. The value of this survey lies predominantly in the qualitative data with the broader group of views accessed and the indications of case study effectiveness. Of the respondents, most work 1–3 hours per week, on the GreenWay project with a few working 3–20 hours, and half were volunteers. Most have a medium to long-term involvement with the project (5 years or more) and are involved in a range of activities including decision-making and leadership. Interestingly, all respondents were women over 45 years in paid employment and all reported having a passion for the GreenWay project. The survey results generally confirmed the results from the interview data findings. Both are presented in this section and then analysed and discussed toward the end of the chapter.

5.6.1.1. Leadership and expertise are important in the GreenWay

On the GreenWay project, all aspects of decision-making were rated highly for effective decision-making with two areas of expertise and leadership getting the most support (see Figure 5-10). This result is interesting because while leadership is mentioned as a key factor for success in similar cases in the literature, expertise is rarely mentioned. The dominance of these two themes emerges further in the interview data where they are discussed in detail.
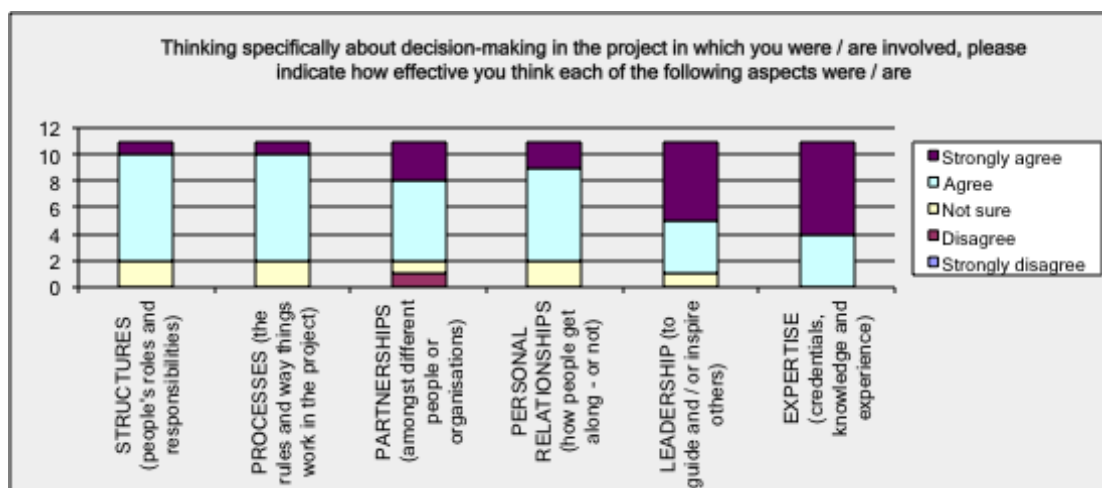
Figure 5-10 Effective organisational influences on decision-making in the GreenWay project
Source: Online survey of 11 participants in GreenWay.

5.6.1.2.   Community involvement

The survey showed that most respondents strongly agreed or agreed that the community had satisfactory involvement in the GreenWay project and that their expertise was well used although there were suggestions by two respondents that some barriers still existed. The governance and decision-making was agreed to be satisfactory and most agreed that it was open and transparent. Many agreed that the stakeholders were working towards the same goal, however some other data challenged this finding.

5.6.1.3.   Motivation for the GreenWay

Respondents' motivation to be part of the GreenWay project was most clearly related to them believing in the vision and work of the project for the good of the community, and the local environment. A respondent said:

> Great community project that will bring excellent opportunity to the local area and community. A great sustainability project that showcases best practice community/council collaboration.

> My belief is that there is a need to provide safe paths for people to do active transport. Also there is a significant and increasing demand for green open space and bush regeneration.

Another respondent said:

> See huge value for the community, both in the physical infrastructure and the potential for community and social capital building.

> I want to see more active transport, and bush corridors.

Several stakeholders were motivated to get involved as it tapped into their interests, skills and passions of education, and sustainability in local schools. Their responses were:

> I am interested in involving my students and school community in local environmental issues and learning for sustainability.

> I believe in the importance of using the local environment as a classroom, getting children involved with the GreenWay.

Another respondent saw the links of the project to local community and local business and realised the strength of partnerships to get things done.

> My business is located within the precinct, so I wanted to assist the project to come to fruition and to keep informed as to how it was going. At one point, they needed assistance in an area I could help out with, as they did not have enough funding to cover

all bases, so we put together a team of locals with professional expertise in that area and we all undertook a small volunteer project together. Our project was significant in that it led to an aspect that was later funded and supported professionally by all of the four councils.

5.6.1.4.   Passion and positive volunteering

Passion from all the respondents rated highly, with most being quite or very "passionate about the project" and they feel good or very good about working on it, "appreciate its importance" and enjoy the "sense of community spirit". This also included making friends, meeting a variety of people with "shared passions", and highlighted the social side of volunteering.

Making progress towards a shared goal and being part of something meaningful is an important part of volunteering according to the respondents. Others mentioned the opportunity to have a voice in decision-making.

> Connection to people, community and environment. A feeling of empowerment as you play a part in shaping your neighbourhood or city.

Several also shared that clear guidance was valued and that "appreciation and recognition" was also important to them, which again highlights the enabling, care and thanks that need to be programmed into community focused volunteer based projects. This was done well in the GreenWay example according to the survey responses.

The difficulties that can make volunteering a challenge include over expectation and over working. Being under supported, under-represented and operating with unclear roles can leave volunteers feeling overwhelmed. All responses on the positive and negative aspects of volunteering are listed in Appendix 5.

5.6.2.   Interview results

Six in-depth interviews were conducted for this case study, each taking at least one hour and several two hours. The participants were all involved in a significant way with the GreenWay, with three paid employees and three volunteers representing various stakeholder groups and organisations. Follow up data was sought several times to get updates on the case study situation due to changes over time. The major themes that emerged from the in-depth interview data are summarised below.

5.6.2.1. Leadership

Leadership has been a major theme in the literature, specifically strong influential leadership with a vision for sound environmental outcomes (Erickson 2004). The interviews with GreenWay stakeholders conveyed that leadership was a leading theme on the Greenway project. Stakeholders reported that across the life of the project, leadership has been important throughout, although the stakeholders interviewed indicated the notion of what is considered 'ideal' leadership has changed in its characteristics as time and the project progressed. Originally the project was visioned and led by leaders in the community. Leadership is characterised slightly differently across the life of the GreenWay and aligns closely with the governance phases outlined earlier. The various leadership styles mentioned by stakeholders have been both good and bad. One period in the project history when a void appeared in leadership was a transition period following the Greenway Sustainability Project and before the Place Manager. Stakeholders conveyed that was a frustrating period for many, a period that not only lacked leadership but had low stakeholder energy, low trust and lacked security.

5.6.2.2. Community leadership

The early days of the GreenWay were led by a community group characterised by strong visionary leadership with some generous contributions of expertise and long-term perseverance towards the vision. One council manager reported that there had been "significant community ownership and leadership" (council manager 1), while another described the community led project as a grassroots initiative that evolved into something bigger.

> You've probably heard this term a lot, but this project has very much been a 'grassroots' up project. So it's been – the evolution has been one where the interest has begun with local residents – particularly… but also others, and it's then gone into councils, and then up into the state level. And even some connection at the federal level I guess through council writing letters and what have you. So it has been a long, gradual, slow evolution from the bottom up. (Council manager 2)

A local community member reported on the key role of Friends of the GreenWay (FOG) in leadership.

> I think FOG have been absolutely critical. I think that we have provided a lot of leadership. You know…… we've been the key movers and shakers. We've done basically the vast majority of the political lobbying. (Community leader 1)

And another community member spoke about multiple people showing leadership from the community, alluding to the problem of "less Indians, and too many chiefs".

So I think the GreenWay has this whole gang of leaders, which is why we have a lot of conflict and falling out and squabbles. Because everybody has an opinion and everybody has a role and we've all grown up with the project. And when people are working on their separate things like …. on environmental education or arts, and …. on bushcare things are fine. But when people start crossing over then we start getting little areas of conflict between the different, sort of leaders within the GreenWay community. (Community leader 4)

A perspective from a council staff member suggests that although a key visionary leader from the community has been mentioned as significant, the project was always aimed towards being flat in its structure and the committee mentioned here included the council staff in the relatively early years of the vision.

We were never meant to be a committee where there's somebody at the top so to speak. It was meant to be coordinating everybody round the table. So it is really got more to do with knowledge and personalities than any formal leadership role. (Council manager 2)

Respondents referred to the expertise and confidence in advocacy in the GreenWay leaders, especially the community members. "Community activism is vital" according one community member, who labelled themselves "Inner west types" and suggested that was characteristic of the left-wing professionals living in the area. Community expertise included master planning, environmental, place managing, legal and education skills.

That is symptomatic of the sort of community that you have in a place like the Inner West. But I think had there not been a number of individuals that not only had professional knowledge in experience and credentials in some of the areas that the GreenWay is focusing on, but also the ability to advocate that effectively – there is absolutely no way that we would have achieved what we have achieved today. (Community leader 2)

While the work of the early community visionary leaders was impressive, some of the achievements and practices had consequences. Several responses from different people suggested that the leadership efforts of some could also be intimidating and cause others to retreat.

The demands from the community leaders are so great. And one of the ways that they get things done is being complete pests and harassing for more and more and more all the time. And unless you've got quite a strong character, and resilient – they chew people up. And so there has been a lot of council staff along the way who have just been fed up. (Community leader 4)

Another response highlights the role of the governance model to maintain broad community input.

The single voice can dominate. Some people might give **so** much time and expertise, then others can't match it and it loses broader community input. We need a solution to this built into the governance model. (Community leader 2)

With the growth of the GreenWay vision and the funding for the Greenway Sustainability Project, more resources brought changes. While this allowed consolidation of a range of people, processes and governance structures, responses suggested that some early visionaries struggled with this change. As new staff came on in leadership roles and efforts were made to incorporate staff, a team approach to leadership was taken. The handing over the vision and trust was not easy for some heavily invested community leaders reflecting concerns about standards of work but also acknowledging limits to the direction of focus.

I'm not sure if that is a failure, but the more time you put into a project over the years, the less you want to see something not work. (Community leader 3)

And from another:

The difficulty when something is driven completely by volunteers is that it inevitably reflects the interests and the passions of the people who are the most dynamic and most involved. And other elements seem to fall by the wayside. (Community leader 2)

At times this was challenging for these local individuals, occasionally feeling under supported, under recognised, and under paid.

And then I think that caused a lot of conflicts in terms of who's being paid from what. And that was always a frustration, that councils are quite happy to have the underpaid professional work on the GreenWay and … then I don't regard it as volunteer work. Essentially it has been unpaid professional work. It is work that I think should have been done by councils and state governments. (Community leader 3)

The need to manage community expertise and passion more positively was a key challenge.

But I think that it is very important to find out what I think are the common themes; not just one person's very particular point of view; and figuring out what to do with all that community knowledge and expertise. (Para-organisation 1)

5.6.2.3.   New leadership emerging

There was a broadening of the leadership on the GreenWay, as exposure of the project grew, extending well beyond the community with politicians, mayors, managers, council officers and dedicated GreenWay staff promoting the vision. As the leadership broadened it became increasingly important to incorporate, communicate and share messages and decision-making. Comments from

stakeholders suggest that the leadership of the vision became more distributed, and more about coordination. Evidence suggests that leadership styles of the key staff moved towards facilitated leadership to involve the growing number of supporters. Several stakeholders describe the leadership and management during the Greenway Sustainability Project period. A council officer described a paid staff member as:

> … a good leader and good coordinator in terms of finding the middle path, and taking action on things. (Council manager 2)

And a community representative described the staff as:

> two or three professional officers that know their stuff. Which is fantastic, because in one sense I think it has helped us to overcome conflict. (Community leader 2)

Like the Greenway Sustainability Project, the place management approach needed to incorporate multiple leaders and long-term passions and expert views into the project processes. The responses by a range of stakeholders across the sectors regarding the Place Manager role in 2016 (Chapman 2016c) suggested that the ideal skill set was to have 'a vision of what might be achieved', 'collaborative and co-operative way of working', and an ability to 'build trust and relationships', 'leadership' and 'political awareness' and an ability to 'act on their own initiative'.

5.6.2.4.   Partnerships

While most of the stakeholders talked about the partnerships between local government and the community, there were some differing opinions about the government support on the project. While the community and the council staff described what was going on similarly, their views on it differ. Regarding the collaboration between the community and the councils, comments suggested that while they agree that the support for the GreenWay vision from the councils was indicated through encouragement and intent, it seems to have been limited by available resources. One long term council officer and keen GreenWay supporter said:

> But I suppose it has always been individual staff in the councils who are just given the project as part of their ongoing programs of work. And not necessarily extra time, or taken off other projects to dedicate to that. So that has particularly been the case here. And in any case each of the different councils have different levels of staff, so for instance like Ashfield and Leichhardt Councils – we're environmental people. And at Marrickville Council it is a transport person. (Council manager 3)

From the perspective of a community member:

So, all along I suspected that council and others were supportive of the project, primarily because they didn't have to do anything. (Community leader 3)

And from the part-time GreenWay staff:

The lack of commitment to give money is... I think very sad, and very frustrating, if they are not prepared to support the organisation in any way. There is no money given for any administrative support. My salary... I work as a consultant from home... the phone bill, printing and everything else comes out of my pocket, which is not exactly the way to run an organisation. (Community leader 4)

The weaknesses in the GreenWay journey have been the slowness of the government to genuinely support a great vision, at both levels of government, as other several hard-working community members highlighted.

The other weakness you would say is – this is a – this has been an extraordinarily long time to get to the point where we are now. It started in about 1996–1997. And so there has been a real failure by local government and local state politicians to embrace what the GreenWay offered and presented through a decade – more than a decade really. Being realistic – from about 2000 is when they could have started to see the value of it of an asset. So it has taken far too long. I think it has been a real failure by local and state government to recognise what an asset the GreenWay is for the inner west. And they didn't devote any resources to realising that vision. So too much has been left to the community groups to drive it. (Community leader 1)

Stakeholder feedback suggested that the management of community expectations as support grew was a challenge. The community volunteers showed a deep dedication towards a vision, so while the community were keen for government buy-in to the project, especially with financial support, there are indications that they struggled enormously with handing it over to a staff team and engaging positively. Some stakeholders suggested that the change that the Greenway Sustainability Project brought could have been handled better.

It has relied too much on the free unpaid time of volunteers to make it happen…. There wasn't enough awareness and community support building by the council prior to the Greenway Sustainability Project staff coming on board. (Community leader 1)

And from the councils' perspective:

First of all, in terms of change, we tried to prepare the community for change, and prepare them for that transition from them being a real driver and decision maker, to now council taking on that next step. And we did hold an event last October to kind of recognise everything that had gone on before and try and prepare everyone for the next step, with council.

I think that has been handled by community, that change, with varying levels of success. I think there has been a real struggle with letting go of the 'reins' – so to speak – and letting the project get on with what it was charged to do – which is delivering the business plan. (Para-organisation 1)

The state government planner entrusted to oversee the project build also commented on the dynamic.

I think one of the issues with the whole thing was that the GreenWay was a vision of someone's or a group of people. And those visions evolve and become, you know, translated into plans and strategies. And, a lot of those visions never happen. But what happened, this project came along, and was announced and was incorporated into the project, and that vision then started to become a reality. And I think the issue was ... sometimes the people who come up with the vision and the ideas, I think some of them felt, somewhat disenfranchised, because they were losing control of their project. But it was going into a different phase. It was going to actually... now we need to go and get a design and deliver this. And this requires a different set of skills, and a different type of people to actually focus on that, and I think that was the... that caused quite a bit of angst amongst some people.

Given green infrastructure initiatives are still embedded in a state planning system in NSW there is a constant challenge for communities seeking to collaborate with state government silos, processes and the additional challenge of state politics. Understanding the importance of and the challenges associated with collaborating, both within communities and between state agencies and local governments, one frustrated long-term community representative said:

That is one of the problems with the whole thing. It's the experience that I've got in the last 10 years is collaboration is not something that is done very well in NSW or Sydney. Or maybe it is everywhere. But what I have found is that everyone has had their own agenda or briefs or constituents and I think people seem to be afraid of other people taking the limelight or taking over control. So I guess that is something that has never been properly addressed. That if you've got a whole lot of state government resources and federal government taxes and council responsibilities and communities... there isn't really an open collaborative … it's often like an adversarial approach. And I guess that is promoted by political opportunism.

Like the state government has shown absolutely no interest at all in the coordination strategy process. And until the light rail and GreenWay announcement recently, I don't think that there was one state government agency responded to the coordination strategy. I just didn't see it as theirs that they were interested in. That for me is one the most surprising things about the GreenWay project – is the lack of interest at a state level – at subregional planning. Even though they talk about catchment planning and all

the different agencies, there seems to be very little mechanism to end up with
collaborative improvements in a geographical sense.

To me that has been the most amazing thing. Even with the light rail project – was still
no – and the Premier behind the whole thing, there's still no integrated collaboration
between agencies. And hence this current battle between biodiversity and light rail.
And unless something is done, I can just see that continuing in the future. [long pause]
So in some ways you need that sort of place management approach, but at a state level
as well as a local level. (Community leader 3)

In this way, the GreenWay seemed to offer a demonstration of the best and the worst of multi-stakeholder collaboration, when all the local and community stakeholders join together but the state government will not enable constructive conversations and collaborations. In 2011, when the state government stakeholders opened the conversation they still seemed to dictate the terms, compromising the vision and splitting the community especially over the bush regeneration sites and biodiversity issues. It appeared that at the time, NSW Government and local community collaborations are not generally viewed with optimism because it is the job of the state to take it over.

I suppose this can't happen without the state government. Which is a shame, because if
local government had the resources, and the dedication to doing it, it might have
happened more quickly. But because we were totally dependent on the state
government to provide the funds and the commitment of the rail corridor….   often
when you see these sort of things come out of state government they fail. Because they
fail to build up a… they don't connect well enough with the community and what the
community needs. (Community leader 1)

There was some indication that this may have changed more recently, when in 2016, the GreenWay Place Manager and council representatives engaged again with the state government with indications that their attitude towards funding and collaborations for strategy development may have started to shift (FitzGerald 2016). The GreenWay was incorporated into a green transport strategy for NSW's "Sydney's Cycling Future" in December 2013. The strategy states that the NSW Government "will work with Councils on other sections, such as the southern section of the GreenWay, to improve local neighbourhood links to light rail stations on the Inner West Light Rail Extension" (NSW Government 2013a, 17). In 2016, an Urban Transformation Strategy for Parramatta Road Corridor (UrbanGrowth NSW 2016) also supported green links including the GreenWay. This was also helped by the work of the Greater Sydney Commission that was set up to:

coordinate and align the planning that will shape the future of Greater Sydney. We're
taking a collaborative 'one government' approach to this, so we can lead and guide the

planning for development, transport and housing so that Greater Sydney will be a productive, liveable and sustainable city for all. (Greater Sydney Commission 2016a)

A part of the Greater Sydney Commission's thinking is the 'Green Grid' which is "an interconnected network of open space... from national, regional and local parks, through the harbour, wetlands, rivers, beaches and creeks to playgrounds, playing fields, golf courses and cemeteries" (Greater Sydney Commission 2016a) and the GreenWay is priority 1 described as a 'Poster child of the inner west' (Chapman 2016b). It is worth noting that the community, the visionaries, were not part of this process, however their vision is finally looking achievable.

5.6.2.5.   Governance challenges

Formality versus informality

Stakeholder feedback also focused on the GreenWay governance and its related issues conveying a range of views around the need to develop a proactive governance agenda. Possibly, it was ignorance about governance in the early stages of the project that led to avoiding it. One council officer described the early governance as "more of an ad-hoc and reactive thing" (council manager 3) while another responded:

> It's making up its own ... and so the structure is being made up by people who don't really have a lot of experience in structures. It's not my area of expertise to set up ... you know ... the constitutional ... you know there is just this real lack of what's going on. And a lot of informal relationships, but they could fall over at any time if individuals leave. (Council manager 1)

According to one long-term council staffer, poor governance early on led to later issues. The informality of the approach was considered an excuse to get things done through any avenue and some behaviours went unchecked. Community advocates were focused on winning people for the goal of a GreenWay vision and councils let them do it.

> Some community members were allowed strong positional power, free rein…then he/she was reined in later as the projects ramped up and staff and coordinator on board, then the community needed managing. That worked well until we realised some reporting was necessary and managing people was needed. (Council manager 3)

Some community members recognised the governance limitations, with this comment made on the early version of the steering committee (before the Greenway Sustainability Project), with council staff and community tasked with running a project.

And that had a committee, but I thought poorly resourced and poorly run. The outputs from the process were … there wasn't a good enough follow up from what was being spent. (Community leader 3)

There was a difference in perspectives regarding governance especially with the growing complexity of the GreenWay and its relationships. Some saw the need to formally progress the governance of the GreenWay, while others who were used to the 'fly by the seat of your pants' approach showed resistance to developing processes and structures. One voice of strong opposition from the community claimed governance to be "a distraction from the GreenWay" (community leader 3). A council manager also recognised that embracing the phases of change in governance was a challenge for some.

Some wanted to keep it thus… others saw that its transition through stages would allow it to be achieved. (Council manager 1)

As the first major grant (won by the work of community volunteers) came through and a GreenWay employee started, their accountability on paper was to council but in practice community leaders demanded it and the relationships became complicated. Next time around, with the Greenway Sustainability Project funding, there was focused attention given to sustainable governance structures and accountability measures as mandated by the terms of the grant. This period saw the Steering Committee reformed, constitutions developed including refining processes and involving more community. The GreenWay Coordinator led a refinement and formalisation of the GreenWay Steering Committee supported by the researchers from Macquarie University.

Previously the steering committee had no terms of reference. It had none, true. It had a purpose, but it was not defined. And the members that were sitting on the steering committee seemed to drop in and drop out as it suited them. And so there was no continuity of membership. And there was no protocol of membership or guidelines, or equality of membership. So, when restructuring, we strived to have equal voices across the whole GreenWay family... and so that everybody gets an equal say and no faction is …. it isn't biased.... there isn't bias to different factions. And we strive to have proper community representation.... through having four community reps. We actually tweaked the structure as we've gone along. We've reviewed it. (Community leader 4)

This period also saw the development and refinement of an operations focused steering group to work with the Greenway Sustainability Project staff. In forming this group, the council chose early on not to invite the community, aiming to improve efficiencies, and this led to barriers on community input and an early breakdown in trust.

I can clearly remember the time when there was pressure to get a community rep on those meetings. And I remember at the time thinking that I don't think that is the right way to go from my mind. And for me, and maybe I'm wrong but I just feel like having one representative on there is not the way to go. That there are many community voices and that we need to be hearing from them. And so I think we could have done a better job at getting better community input early on – in the Greenway Sustainability Project... (later) But somehow we could have done a better job at building the trust earlier on, so that they didn't feel that needed to come to the ... because to me those meetings were operational. (Council manager 1)

As the GreenWay community grew, issues relating to inefficiencies, and the need to have open channels of information emerged. Another mid-term problem was a lack of integration of the GreenWay (vision and credibility) into council core business. In time, governance issues and practices were dealt with proactively by the Greenway Sustainability Project staff running collaborative workshops on the issues and supported by a governance component in the Environmental Trust grant. Meanwhile other issues emerged relating to politicking, lack of respect of procedures, lack of trust, and a desire to lead and advocate in multiple directions by a growing number of people.

The people who don't fit, or follow the structure that we have strived to establish are incredibly annoying. And the... it is quite frustrating with the people who don't...it's an organisation with a history of people starting something on their own and then bringing it back to the group. Now we seem to be having satellites of people taking stuff from the group... changing it and taking it up a higher level to a general manager, or mayor level or state level... which I think is quite destructive in our united front, and quite divisive between our groups in the GreenWay family. (Community leader 4)

From the other perspective:

The GreenWay has come from the community. The sense of I suppose the council kind of taking control and treating the community groups like stakeholders has been a bit... a bit disempowering I suppose. (Community leader 1)

Governance support and mentoring

Support for the development of sustainable governance of the GreenWay was provided by The GreenWay Governance Research Project partner, a team from Macquarie University who worked closely with staff, community and stakeholders to support the development of their governance current and future over a three-year period. Broad stakeholder feedback suggested its value to the GreenWay. A council manager said it "encouraged critical thinking" and "innovative ideas" (council manager 1), an accelerated the development of new concepts (council manager 1). A community

member highlighted that it gave a "community perspective to council" (community leader 1) and a Greenway Sustainability Project staff member mentioned that it "provided mentoring, guidance, and a sounding board" (para-organisation 1). Even from the state government perspective, governance processes assisted to some degree in managing challenging individuals according to one state government partner.

> Other strengths I think were the overall structure, that there was a framework that was set up to manage the governance, and I think that sort of kept it somewhat in control. I think that if there wasn't that framework, it would have gone all over the place to be honest with you. And I think that framework or that governance structure that was set up was reasonable… and I say reasonably effective in keeping some individuals in some degree… under control. (State government manager 1)

The mentoring support provided to key GreenWay staff through the changing times was indicated to be of value.

> I would say that having the governance partner active – I think that it has been less of a critical friends relationship and more of a supporting mentoring role, but that has really helped. Not only having someone can draw on personal experience, but also what the literature says about these situations. (Para-organisation 1)

The workshops discussing possible GreenWay governance futures were highlighted by this council manager as a major success.

> Major successes… is getting the Urban Sustainability Project funding, and I think having the governance discussions (Council manager 1)

Independent evaluation of the Governance Project in 2010 highlighted the work towards sustainable development.

> Of importance is that the project has an eye on the present, in that implementation of all components is its challenge, prior to the completion of the project in mid 2012. It also has an eye to the future, in that it is looking to establish a governance structure, policy and programs that will last beyond its own lifetime. This project is working highly effectively at both of these levels. Governance has been an exceptionally strong feature of the development and delivery of the GreenWay Sustainability Project. (T-Issues Consultancy 2010)

5.6.2.6. Financial uncertainty

In community visioned green infrastructure projects, several participants responded that the short termism of the funding sources creates uncertainty and there is a constant imperative to be always

planning for the next funding. In the GreenWay case, that sometimes meant using the current small grant to plan for a larger future grant to take the project that little bit further.

> Need to act now to seek funding – To keep the project alive. (Community leader 2)

While one community member pointed to finances as one of those things that "makes the key difference" (community leader 2) and allows the vision and project to progress more quickly, others were not so sure.

> Well, everybody cheered when they got the Greenway Sustainability Project grant, but at the time I actually thought it could actually end up being a negative, in that it sort of almost took over from the 'grassroots' nature of the project. And I guess my experience up until then had seen council and small government agencies stifle a lot of projects just through the bureaucratic maze. And the more people that got involved, and the more funding that became available I could just see the whole thing becoming bogged down, and that was the Greenway Sustainability Project grant. (Community leader 3)

It was often due to the generosity, time and expertise of volunteers, supported by council officers, that grants were won, success celebrated and community interest sustained between grants. One community member highlighted that funding does not happen in a vacuum, it is part of a broader picture, a planned strategy for the development of the project including "lobbying and getting it noticed as part of getting it funded" (community leader 1). On the back end of the funding and throughout big funding allocations, resources are administered, including justifying where the monies are spent. Some objectives are more difficult to account for than others.

> But I guess that is the trouble, that in the end, the more hard-edged and objective stuff is accounted for, then the more difficult to sort out community awareness, environmental type of stuff – the value of that is difficult to quantify. (Community leader 3)

One council officer, involved and committed through the early stages of the GreenWay vision, made the following observation about grant administration.

> Multiple grant accounting! And then it gets quite difficult to explain everything. And just the paper work – is pretty onerous. (Council manager 2)

There was also an indication from a state government stakeholder that good governance affects the funding opportunities from grant providers.

> I think a good governance structure, certainly, assists your opportunity for funding better than if you don't have a good governance structure. (State government manager 1)

5.7. Lessons from GreenWay primary research findings

The strengths of the project;

- The GreenWay demonstrates that community visioned green infrastructure projects like the Greenway are possible in NSW.
- GreenWay leadership was key to its success and the leadership characteristics changed as the project moved on.
- Greenway governance was needed, workshopped and reflexive according to variable circumstances including money, staff and community will.
- Early governance was informal and ad hoc and driven by the community, and this gradually changed as processes and structures developed to enable the council staff, the growing community and other stakeholders to work together more productively.
- A stakeholder steering committee has maintained the common thread throughout most of the project.
- Incredibly long-term displays of passion and commitment to the GreenWay and its vision by long-term council staff, politicians and community representatives have contributed to its growing support and ultimate success.
- The shared partnership demonstrated between the various community groups and the various councils was key to the project's influence with state government and in state politics.
- Volunteer contributions of expertise and time in the GreenWay were impressive and acknowledged.
- Multiple stakeholders have managed to work together, to achieve collaborations beyond political, institutional and cultural barriers.

The challenges of the GreenWay project;

- Maintaining genuine community governance has been difficult in this project due to changing circumstances, resources limitations, institutional willingness and community capacity and the NSW political environment.
- The GreenWay context was dynamic and at times it was very difficult to sustain the vision due to the political nature of the NSW planning system and required adaptability and resilience.
- Good genuine working collaborations between stakeholders are very difficult in NSW, and the GreenWay tended towards adversarial collaborations.

- Financial uncertainty has been a concern along the lifetime of the GreenWay, especially in recent years.

- Breakdowns of relationship and a difference in shared vision affected trust between long-term stakeholders and leaders leading to stress and divergent actions.

Learnings from the GreenWay;

- Community-visioned projects like the GreenWay are inspiring, however run the risk of being under-supported.

- In marginal swinging seats like Sydney's Inner West of the GreenWay catchment, the role of politics (both local and state) was significant, influencing the project in both good and bad ways.

- Sustained collaborative partnerships are possible but need open-mindedness, perseverance and resources.

- The GreenWay has demonstrated some phases in its development and progression that may assist understanding of its governance and sustainability.

5.8. Discussion

This section integrates the results from the three sources, the desktop and background material, the online survey and the in-depth interviews and presents a summary of the analysis under key observations from the GreenWay case study project for community governance.

5.8.1. Key observations for community governance of green infrastructure in NSW

The GreenWay case study suggests that long-term collaborations between the community, the local government and the state government in NSW can be difficult and are politically motivated (especially from a state perspective). The notion of community governance of urban and regional green infrastructure in NSW being sustained throughout a project's life is not common. There is evidence to suggest that good adaptive governance can help to assist in successful collaborations, both in the decision-making towards the vision and in winning grants. Good community governance in the GreenWay context includes visionary and coordinated leadership, adaptability to financial and political uncertainty, persevering through difficult collaborative partnerships and capitalising on political opportunities. The ongoing community empowerment in projects was challenging due to economic rationalist priorities and state government dominance in planning and needed an understanding of the benefits, resources invested and benefits of shared decision-making. GreenWay stakeholders suggested that good governance did not just happen but needed to be

actively developed and participants coached and supported especially when the context is highly dynamic and political.

The GreenWay project demonstrated some positive and negative attributes through its governance, decision-making and strategic planning. Some of the best characteristics of community governance were embraced in this project, such as a community led vision that demonstrated local expertise, perseverance, flexibility and collaboration from the willing stakeholders, although these things were pushed to their workable limits by limited resources, the political context and external conditions. Opportunity to improve the local environment leveraged inspiring and at times intimidating community leadership from local advocates who saw the vision, applied their expertise, drove the project to reality and then became unsettled with broad stakeholder collaborations as the project complexity grew and the singular original vision became compromised. On the other hand, a genuine collaboration with the state government was difficult to access and unpredictable and their heavy handedness significantly impacted the project on several occasions.

5.8.2. Leadership and expertise

The birth of the vision can be credited to the community with impressive volunteer expertise from the local inner west community. This included a small and passionate group of place-related professionals including an architect, place manager, environmental professionals, lawyer and others who gave significant time and energy over a long period. They were deeply invested and productive and at times challenged professional norms and issues of power and control especially when new leaders emerged from other stakeholder groups to join the project. The responses suggest there were some challenges between the long-term volunteer experts and the paid staff experts and that several people saw this as a governance issue. Through the transition period where the employed project staff came on board, community workshops were run to develop a collaborative and positive culture and active mentoring of key people helped to allow reflection and adaptation.

5.8.3. Expectations and reputation

The GreenWay is a model of how a community vision, along with advocacy and collaborative partnership over an extended period, gradually builds a reputation and puts an issue on the agenda of government. There was also a period where the community was perceived as difficult to work with, with a split vision. At that stage two more community groups with different visions, EcoTransit and Weston St Residents, had entered the public debate and muddied the waters. The GreenWay project stakeholders sought to manage the different public messages, and this hampered progress.

After a period of sustained action and growing the number and diversity of voices, regardless of setbacks, it became clear to the state government that the issue was not going away (Chapman 2016a). This might be attributed to the growing reputation of the GreenWay and the political gravitas of the government to align with a "green" project given recent changes in attitudes of society and in the changing institutional emphasis with the Greater Sydney Commission. The various GreenWay governance models have served their purpose with an adaptive approach and the project has been sustained. Persistence in garnering support, maintaining the vision and resilience through project phases and dynamic institutional changes have been key elements.

5.8.4. Collaborative partnerships

This project is a best practice example of community led collaborative projects in NSW winning two key industry awards. It demonstrated an ideal of several councils working together over the long term and collaborating with several community groups towards a genuine community-inspired vision. However, in NSW, this was not enough and while the state has supported these stakeholders and their early projects with Environmental Trust grants, it also presented ongoing barriers to progress for much of the life of the project. The fallout from the position that "the state either disengages or dictates" in planning was a disillusioned, non-trusting community and local government that lost motivation and became reactive rather than pro-active for its place.

5.8.5. Proactive and adaptive governance

In a highly political dynamic context, proactive, adaptive and supported governance helps to sustain a project. The context in this case was highly dynamic and various governance phases have been identified. From an informal community led model to a well thought through adaptive collaborative place-based approach, the project continues to proactively evolve. Independent governance guidance with project support and mentoring added significant value through difficult times and resulted in a model that has been sustained. A para-organisational project staff for the GreenWay made significant holistic progress on the project, trying to maintain a community focus. The government led place management on the GreenWay was productive towards collaborative institutionalism. This led to a state of 'active governing' typically used where social capacity is low and institutional capacity high. However, this means that rather than 'dynamic governing' in achieving sustainability, where both social capacity and institutional capacity are high (Evans et al 2006), community engagement and capacity building may in fact be reduced as outcomes-based stakeholder partnerships and physical outcomes for place become the focus. There is also the potential opportunity to explore a state government based place management approach for

improving community and stakeholder collaborations for green infrastructure projects as highlighted earlier.

5.8.6. Community and other partners in decision-making

All invested stakeholders in the GreenWay recognised a role for the community in decision-making and its need to be incorporated into the governance (model, structure, entity) but were also quick to acknowledge that the community volunteers could not do all the work and that the project needed significant support and capital investment. Results showed that both the community and project staff grappled with the challenge of working collaboratively, including sharing and promoting the vision well, managing expectations and adapting to the changing roles, resources, partners and leaders. Growth and change presented challenges to ongoing community involvement in the project and still appears to. Governance sought to address this in part through shared committees and yet the place management model (agreed on by the community) was an institutionally based, rather than community based, arrangement.

More significantly, genuine engagement by the state government with the community was raised as an ongoing challenge despite the strength of the GreenWay's attributes, both physical and social. When politically motivated, this shifted. Concerns were raised about the need for the state government involvement in the project to get financial support, yet the risks were also acknowledged due to the inability of the state government to maintain a local community focus. These concerns were borne out in practice in 2011 with project promises during a spectacular demonstration of political opportunism during the state government election. The collaborations that then ensued left the GreenWay community and stakeholders somewhat split and disempowered. Finally, a deferment of the project was very disappointing leaving the community and councils in a reactionary position for several years. While the GreenWay collaboration needed time to regroup, the shared decision-making process regarding governance led to the place-based governance model leading the project for the community for several years. By 2016 the latest collaborations with the state government have again resulted in promises to build the GreenWay, yet perhaps more characterised as actions on behalf of the community rather than by the community.

5.8.7. Physical fabric versus community ownership

While the benefits of the GreenWay 'build' are clear, there may have been some costs that may need to be readdressed. Indications from recent stakeholder comments suggest that the social

capacity may be weakening as fewer community representatives are as involved in decision making and the local bushcare activities on the GreenWay are decreasing. This community engagement was made more difficult by the reduction in resources available to the vision and a redirection in focus by the Place Manager on collaborations with stakeholders.

While funding of the infrastructure asset now looks to be secured, funding of any significant community governance is not, and this takes time, social investment and shared commitment. In keeping with the original mandate and vision for community voice in the GreenWay decision-making, the Place Manager model may need to readdress how to rebuild social capital and build the engagement and collaboration of community groups in decision-making and action along the GreenWay. Should resources be focused on engaging and empowering the community to continue to develop their capacity, especially in the areas of biodiversity and education and community engagement or perhaps once the GreenWay is built, then there is no more perceived benefit to involve the community. The long-term future of GreenWay governance, driven by the community or not, again needs reconsideration and the benefits and sustainability of community governance in a society with an economic rationalist paradigm are again under question.

5.8.8.   Is this community governance?

While the institutionally based place management approach in recent years has served the GreenWay well, it is important to note that it is an institutional role, serving the shared agendas of the broad-minded institutions involved, purposed toward maintaining and realising the GreenWay vision. The Place Manager model depends on internal council and external collaborations, especially with the community, developers and state government. While the project has been sustained through a difficult time into the current phase of the GreenWay, in 2016, the project achieved significant state government funding and support towards realising the GreenWay. Yet a question remains on whether, in the long term, this approach may lessen community ownership of a place and result in place management being absorbed into the institutional fabric of local government.

The GreenWay now has significant funding from the state government for the physical infrastructure and governance and management capacity to guide it through the council structures. This certainly serves the community and adds value to assets and liveability of the inner city area, for cycling, walking, organised community events and green passage through urban areas. However, the harder question raised and acknowledged by the Place Manager is Mant's deeper challenge on whether the GreenWay place needs to be more than the physical fabric and also "a focus for community

interaction" (Mant 2000, 59). Does the GreenWay provide a focus for community interaction and belonging of the community to the place? There is an ongoing challenge for institutions to deliver physical community assets such as parks, open space, pathways, community building, BBQs, playgrounds, signage and toilets. There is another challenge to deliver community events to enhance the community's use of the place. A final much harder aspect that rarely gets delivered well in the current political and economic environment is the ongoing avenue for the community to feel ownership of, and involvement in the place, the decision-making and active management of the place.

5.8.9. Community resilience

Resilience is necessary in community-based initiatives stretching over a long time and dealing with rapid change like the GreenWay. A resilience perspective helps deal with complexity and the nature of change found in human-environment systems (Maguire and Cartwright 2008). When significant community resources have been invested towards a goal over many years, the impact of a deferred government decision takes a toll. Taking a resilience perspective encourages an adaptive approach to governance, encouraging the use of resources (or ecosystem services) in a sustainable way (Folke 2006). It is not a one-off assessment but instead recognises that a system's dynamics change (Resilience Alliance 2007) and this is particularly the case for the GreenWay.

The need for resilience from the GreenWay community and stakeholders is a result of several of the less ideal elements of the GreenWay project demonstrated over time such as some breakdown in trust and ongoing financial uncertainty combined with some major expectations and disruptions. Fortunately, the informal governance early on provided plenty of flexibility in the approach. However, with the need to manage the growth of the project, the challenge for governance as it was formalised was allowing for ongoing adaptation and flexibility, thus training and building in resilience.

5.9. Findings compared to the literature and "contribution" assessment

The GreenWay has enjoyed significant and enduring leadership; medium levels of trust and openness; mixed approach to inclusiveness (starting first with the community then building local government partners) over time; and improved systems as the project formalised. The issues emerging as important in this project but different from the literature include: the significant role of volunteer experts; the role of reputation; the importance of state government collaboration with not just the green infrastructure but also the benefit of and role for community governance; the

dynamic impact of swinging seat politics and the need for a deliberate approach to shared governance especially community governance.

The ability to assess the contribution of the community governance towards the GreenWay outcomes is still a work in progress. According to the criteria listed in Chapter 3, Table 3-6. the GreenWay assessment shows that while it has achieved some outcomes of the criteria it is not operating under a community governance arrangement. A full assessment is shown in Appendix 11 and a summary as to its contribution is given here. After over 20 years, the project has shown longevity, been unpredictable, adapted several times, grown and reduced in staff and community support, and been both highly and non-effective at times in realising quadruple bottom line goals. The development of pathway infrastructure and the growing capacity of the community have been under-realized up to now, mostly due to complex external conditions, resource constraints, and a risk adverse approach. The project has moved from voluntary governing (with high social and low institutional capacity) to active government (low social capital to high institutional capital) (Evans et al 2006), currently under a place management model endorsed by stakeholder deliberation. Its efficiency and effectiveness has varied mostly due to changing circumstances beyond the GreenWay leadership control such as NSW political machinations. Finally, the GreenWay has a chance of being sustained into the future as a community governance arrangement once the project is built, if the governance of the project adapts back toward a community governance model again. More likely though, by following its current course, it will evolve into an institutionally managed green infrastructure corridor, typical of state planning in NSW, albeit one visioned by community.

5.10. Conclusions

The elements of the GreenWay case study reinforced similar views on the value of community input into decision-making and governance, and on the importance of leadership, expertise, good governance and volunteering. Responses from the interviews and the survey show that GreenWay project stakeholders believe in the worth of the GreenWay project to improve liveability in the area, and for the good of the community, the environment and the education of the children. It showed that all stakeholders in this case study share a passion for the project vision for a green infrastructure corridor, with some impressive commitments of time and expertise from the community to achieve this. It did not show a commitment of all stakeholders to community governance (under current conditions) but to community involvement in a cross-council place-managed project. Further issues which emerged from the interviews included relational challenges, trust, resilience and financial uncertainty.

The GreenWay vision has demonstrated a long-term collaboration between the local community and local government. The state government politicking around the project has had disrupting effects on the sustainability of the vision and project. There is much to be learned from the highs and lows and the impacts of the Australian political system on good sustainability planning especially in contested urban areas. The governance has been deliberate and adaptive, allowing it to flex with the dynamic and at times very difficult challenges. With the GreenWay offering a flagship of excellent collaboration across government jurisdictions and proving it can work with multiple stakeholders, new commitments from government partners have emerged, now promising its development. A key governance issue remains unresolved for the GreenWay infrastructure. Once built, should it be managed by council for the community to use, or, under a community governance arrangement, as it is a living breathing community project with the community exercising the key role in decision-making about its use and management?

Chapter 6 Case study 2: Merri Creek project

6.1. Overview

The Merri Creek project incorporates partnerships between key stakeholders associated with the Merri Creek corridor, including various Councils and community groups in a goal aimed towards conservation and recreation. The Merri Creek Management Committee is a not-for-profit association focused on environmental management of the Merri Creek corridor in Melbourne that plays a key role in the corridor planning and management. The initial indicators (from Chapter 4) like its longevity, suggests it is an excellent case study for this research demanding academic scrutiny. This chapter outlines the context, location, history and vision of the Merri Creek project and the findings from the Merri Creek empirical work to understand the conditions and reasons for the longevity and apparent success of this project, especially the MCMC community based organisation and the partnership with Councils that operate under a community governance arrangement.

6.2. Vision

Merri Creek is a 60 kilometre reclaimed multi-use urban and semi-rural river corridor in Melbourne, with surrounding riparian banks, open space, bushland, bridges and paths (see Figure 6-1). Merri Creek is a tributary of the Yarra River, Victoria, located in the southern-eastern part of Australia. Merri Creek starts in the Great Dividing Range, near Wallan, and flows south for 60 kilometres through some of the low and medium density northern suburbs of Melbourne. It then flows into the Yarra River at Dights Falls, flowing through Melbourne City and into Port Phillip Bay. Tributaries of Merri Creek include Merlynston, Edgars, Curly Sedge, Aitken, Central and Malcolm Creeks.

Figure 6-1 Merri Creek catchment showing municipal boundaries and tributaries

Source: Merri Creek Management Committee website – Merri Creek and Environs Strategy Agency Roles and Responsibilities, http://www.mcmc.org.au/about-merri-creek/merri-ck-enviro
Permission received with thanks from L. McMillan from the Merri Creek Management Committee

During the 20th century, the creek was the site of heavy industrial use, including quarries and landfills, and received factory waste runoff. Over recent decades it has been reclaimed by the Merri Creek Management Committee and partners, a group that predominantly focuses on environmental planning management of the Merri Creek corridor. It carries out environmental coordination and management towards a shared vision. The vision or desired future state articulated in the MCMC Annual Report (2014-2015) among other documents is to ensure "the preservation of natural and cultural heritage, and the ecologically sensitive restoration, development and maintenance of the Merri Creek and its tributaries, their corridors and associated ecological communities" (MCMC, 2015 p. 1). Merri Creek catchment has grown in popularity with the local and regional community enjoying its recreational uses and scenic beauty.

Figure 6-2 Merri Creek south of Blyth Street, Brunswick East as a flood recedes

Source: Merri Creek and Environs Strategy 2009-2014 (MCMC 2009, 9)
Permission received with thanks from L. Macmillan from the Merri Creek Management Committee 2018

Figure 6-3 Merri Creek looking south from Blyth Street

Source: Merri Creek and Environs Strategy 2009-2014 (MCMC 2009, 10).
Permission received with thanks from L. Macmillan from the Merri Creek Management Committee 2018

The mission or the purpose clearly outlined in the Annual Report (2014-2015) is that "MCMC respects and honours the spirit of the land and its peoples, indigenous plants and animals, and works with the community to preserve, restore and promote the Merri Creek, its catchment and neighbouring region as a vital living system)" (MCMC 2015, 1). It has worked over several decades with the community and local stakeholders to build a trusted reputation for ecological restoration, community engagement as well as good management.

Merri Creek Management Committee has representatives from various stakeholder groups that form the committee and guide the organisation's activities. There are now eight member groups that form the committee along with key staff. These include the municipalities along the creek catchment including Darebin, Hume, Moreland, Whittlesea, Yarra and Mitchell and two community groups with an active interest in the catchment, the Friends of Merri Creek and the Wallan Environment Group.

The MCMC developed the Merri Creek and Environs Strategy (2009-2014) together with the Urban Growth Addendum (2013) to guide its broader cross-municipal strategic direction for the creek's ongoing conservation and management. This document was a revision of the 1999 Merri Creek and Environs Strategy and other earlier plans and documents. The Urban Growth Addendum (2013) addressed the unprecedented changes to planned urban growth in the northern catchment of Merri Creek by clarifying the objectives and actions to deal with upcoming challenges and issues. Good management practice presents that, with a clearly articulated vision and mission held by members and understood by supporters and partners, there is an opportunity for positive culture development, inspiration of individual purpose, a means towards attracting, engaging and retaining aligned talent; and improving output by leveraging available resources toward the strategic plan. The participants in this research give some indications as to how well this is being done in this organisation through good governance including leadership and processes.

6.3. Context and history of Merri Creek catchment

The traditional owners of the Merri catchment are the Wurundjeri Tribe. MCMC has a good relationship with the traditional owners and actively partner with the Wurundjeri Tribe Council Elders and staff in environmental and cultural projects. The lands adjacent to Merri Creek are owned by various entities including Melbourne Water, the Crown and councils. In addition, private individuals and companies, VicRoads, SPAusNet and the Public Transport Corporation own some

land often purposed with certain priorities other than environmentally sensitive creek management. All the works along the creek through MCMC are done with the approval of the applicable landowner. Acting for the Victorian Government, Melbourne Water is responsible for managing water supply catchments, treating and supply drinking and recycled water, managing Melbourne's sewage, and managing waterways and major drainage systems in the Port Phillip and Westernport region (Melbourne Water Corporation 2017). Victoria is divided into ten catchment regions and governed under the Catchment and Land Protection Act 1994 (the CaLP Act). A Catchment Management Authority (CMAs) manages each regional waterway, floodplain, drainage and environmental water under the Water Act 1989 (Victorian Water 2018).

While the next paragraphs give a summary of the Merri Creek history, a more complete story is provided in Appendix 4. In 1976, a collaborative group of stakeholders called the Merri Creek Coordinating Committee was set up to allow the community to advocate for creek and environmental restoration to the managers of the corridor (local and state government). The group did not have staff but relied on grants and volunteers to influence change, including acquiring public access (and in some cases ownership) to riverside land along the corridor. This group carried on for 13 years, and over this time they also saw the design and development of a path along the corridor. Growth and momentum led to the need for a different governance model, one that recognised the need for a professional organisation to formalise partners and processes, the need for staff to support volunteers, and the need to secure a broader avenue of funding, including commitment from partnering councils. The other new direction was a focus on staff expertise in environmental conservation to service council needs. During the 1990s there was a rapid growth in staff and projects and a steady growth in volunteers and the adoption of a catchment-based approach and a strategic plan.

Other significant events during this period were: council amalgamations (from 8 to 5 councils) with two representatives from each on the MCMC board; reduction in state government funding and involvement on the board (Department of Natural Resources and Environment pulled out due to lack of resources in 1996, later Melbourne Water withdrew in 2001); broadening the vision to a whole catchment perspective (included in the strategy); an increase in contract tendering to councils; partnering with Jobskills and many short-term staff; building environmental significance capacity; and establishing a tax deductible environmental gift fund in 2000 (MCMC website). This rapid growth period saw MCMC double income and staff between 1990 and 2000 and then enter a period of consolidation to manage over staffing, over administration, overly hierarchical processes,

and return to resourcing within limits. This stabilising period has sustained the organisation over the last decade till now, with approximately 18 staff and a clear focus on their vision with recent changes including service agreements with councils and city growth pressures on the upper catchment.

The Merri Creek is under the regional catchment strategy of the Port Phillip and Western Port region. The catchment authority works cooperatively with the MCMC and other stakeholders towards the strategies and plans of each of the environmental health targets including to "show where government organisations, councils and communities can work together to achieve the targets, monitor, learn and adapt". (Victorian State Government 2012)

The members mentioned above form the committee and there are many other partners that work alongside the MCMC, fund the organisation and share some common vision for the creek. The local communities along the creek are actively involved and interested in Merri Creek as individuals and through local and regional community groups. These many partnerships are discussed further in the governance section.

Direct grants and contracts from councils fund the works carried out by the MCMC and grants are obtained through various sources, including the Australian Government's Natural Heritage Trust and Landcare Australia. Partnerships with other agencies are common including those that undertake revegetation and restoration along the Merri Creek including the various councils, the Wurundjeri Tribe Council, the Victorian Department of Environment, Melbourne Water and APA Group and agencies that manage the easements and utilities within the creek corridor including SPI AusNet, CitiPower and Yarra Valley Water. Partnerships with educational institutions are also common including the local primary and high schools involved in planting, water education, indigenous education, use of the outdoor classrooms and RMIT for student interpretative excursions.

6.4. Governance of Merri Creek catchment

Good governance has been recognised as a key component of the MCMC's success and sustainability in conjunction with the other Merri Creek stakeholders. The Myer Foundation's support through a grant to record and share the MCMC governance is an indication of its unique success. Bush et al (2003, 177) also highlight this point:

> The challenge for MCMC is to build and maintain trust and a shared vision for
> restoration with communities, local government and other agencies. This is an ongoing
> process requiring a strong emphasis on communication. As it is neither an agency nor a

community group but contains attributes and elements of both, MCMC treads a fine line between agency and community, aiming to provide a bridge between the two. We believe that it is in this role that MCMC, working with the management agencies and the broader community, has been able to achieve what it has to date.

Macmillan (2004, 2) highlights the factors for sustaining involvement as:

- community origins of the Merri Creek project

- proper resourcing

- continuity of staffing

- appropriate structures and processes to facilitate formal involvement

- organisational commitment to regular, frequent informal opportunities for involvement

- shared vision and goals.

Continuing to understand the governance strengths and weaknesses in community governance arrangements, 12 years after these two articles, is part of this study.

6.4.1. Stakeholders

The stakeholders in the current MCMC board include two representatives from all the catchment councils and the two community groups. It is up to each organisation to decide who their representatives are on the committee, however a policy officer working in the environmental conservation field and an elected councillor has been suggested in interviews as the ideal mix for the committee's work. Increasing the number of community members represented is a current discussion underway.

6.4.2. Partners

The partners of the MCMC are many and varied and are essential to its success. All the organisations represented in the committee can act as partnering organisations at times as well as member organisations. There are several state government organisations, including previous early members of MCMC, that currently form strong and important partnerships with the MCMC. These include Melbourne Water Corporation, Victorian Department of Environment, Catchment Management Authorities and Waterwatch Victoria. Academic partners such as the University of Melbourne and RMIT, cultural partners like the Wurundjeri Council, private partners such as APA Group and school partners including Brunswick North West and Thornbury Primary Schools were all involved in recent years. Funding partners include Melbourne Water Corporation, ClifRoy Community Bank and Merri Creek Environment Fund including many private donors such as the Schudmak Family Foundation.

Other affiliations and partners include the Centre for Education and Research Environmental Strategies (CERES).

6.4.3.   Structures

MCMC Inc is a not-for-profit organisation registered as an incorporated association in Victoria. A statement of Purposes and Rules governs its operations. Overall, there are benefits of this arrangement that appeal to the community due to the separation from government and focus on community ownership. A summary of these benefits and constraints is included in Appendix 6. Figure 6-4 shows the structure of the MCMC including the four subcommittees.
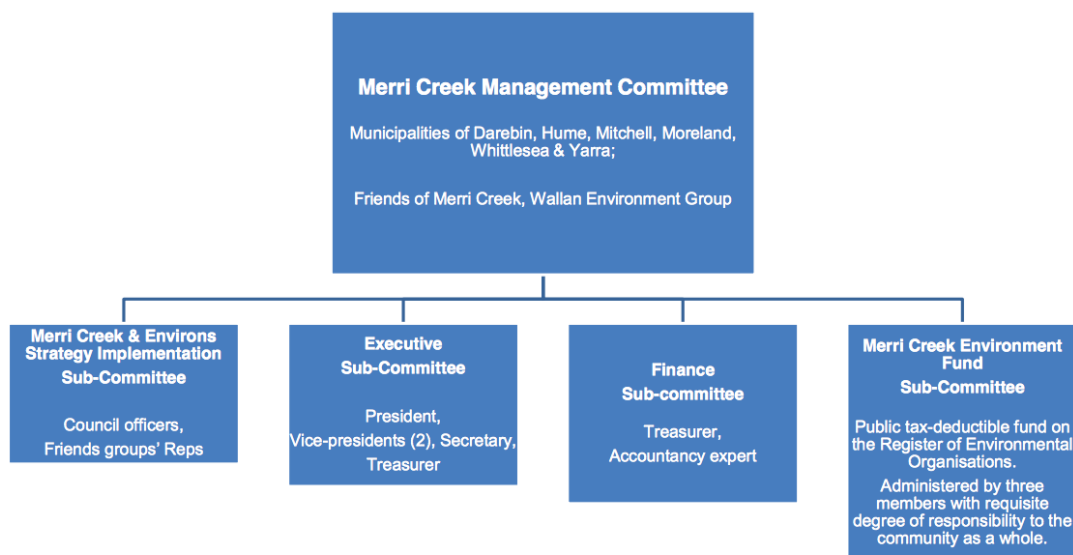
Figure 6-4 Merri Creek Management Committee governance structure chart

Source: MCMC website http://www.mcmc.org.au/images/Structure_of_MCMC_2017.pdf
Permission received with thanks from L. Macmillan from the Merri Creek Management Committee

The MCMC has an Annual General Meeting and a committee structure with elected office bearers including a President, Vice President, Secretary and Treasurer. There is a Manager and a staff of around 20 people working in three teams including the Planning and Coordinations Team, Catchment Programs Team and Parkland Management Team. Volunteers have led the vision of the Merri Creek work and continue to be an active part of the MCMC work and are included in committees, office and governance roles as well as on the ground works.

6.4.4. Funding and marketing

The outreach, marketing and communication of the works and programs along Merri Creek are covered by the councils along the corridor, the MCMC and the various Friends groups through their event management, print resources, newsletters, local media, local offices and websites. The MCMC staff, office and website is a considerable resource, developing and sharing many reports, plans and strategies from the work done over the years. For example, the Merri Creek and Environs Strategy 2008 (and addendum) with over 200 pages of information on the corridor is freely available on the website. The website development and a written record and posting of the governance were assisted by philanthropic grants (eg The Myer Foundation) to make information freely available to other similar groups. The reputation of the MCMC is important to maintain to continue gaining funding and their conservation expertise and community engagement events and outreach are positively recognised by the partnering governing authorities.

The sources of funding for the MCMC are diverse including multiple and ongoing local government funding; state government funding for one year in the early stage; NGO funding from the Myer Foundation and the Ian Potter Foundation and others; funding raised through consulting business services and the Merri Creek Environmental Fund for community donations through the MCMC website. Details are described further in Appendix 7.

6.5. Purpose – Environmental management

The basic functions of the MCMC are broadly described as: coordination of member groups' work and policies; vegetation restoration works, environmental conservation and planning advice to partner councils; co-managing parklands and waterways with the community; community education; and negotiating on key issues with government. There are some fundamental management coordination principles understood and applied by the Merri Creek team. From the strategy, they are summarised as: recognising different roles of key stakeholders in creek management; coordination to enhance consistency and avoid duplication; improving communication to improve coordination; working with collaborative partners to enhance funding opportunities; being inclusive of all views from all sectors; and willingly providing feedback and advice to member organisations (Merri Creek Management Committee 2009, Chapter 5).

6.5.1. Planning and coordination

This area focuses on governance and communication services, broader strategic planning, land development and urban growth issues and political issues around biodiversity, landscape and

amenity applying to the broad corridor. In practice this may involve some master-planning work, strategy writing, government policy and plan comments and feedback, panel hearings, publication preparation and event communications. Effective advocacy has been part of the community's work in the corridor from the early days (1980s) as described by Bush et al (2003, 171).

> Initial work was to prevent the construction of the Merri Creek Freeway and associated development, and secure this area as open space for the northern suburbs (Radford 2002). The latter was seen as a compelling objective given the considerable lack of recreational space per head of population compared with other, better-endowed, areas of Melbourne.

Bush et al (2003) list many conservation oriented achievements along the corridor, and since the MCMC formed it has focused on river corridor restoration through an integrated planning approach.

6.5.2. Parkland management

This group focuses on restoring and managing over 60 indigenous vegetation sites along the creek corridor and working with hundreds of volunteers in training and planting days (see Figure 6-5) Ranging from individuals to regular teams of local volunteers to corporate groups, MCMC runs a range of events for volunteer bushcare and creek regeneration. MCMC also has several experts in the team recognised for this work. MCMC was invited to contribute to new National Standards for Ecological Restoration having followed and recorded the success of the six principles of ecological restoration over four decades of work. The biodiversity on the site varies with the range of habitat types, including native grasslands and grassy woodlands and many species of native wildflowers, insects, birds, reptiles and mammals. Bush et al (2003) list the range of species returning to the area with habitat restoration.

Figure 6-5 Volunteers working at Merri Creek

Permission received with thanks from L. Macmillan from the Merri Creek Management Committee

6.5.3. Catchment and community programs

This part of MCMC's work develops community engagement programs focused on waterway health and biodiversity including school environmental audits, education initiatives in cultural and environment areas and water monitoring. Outdoor classrooms offering activities with MCMC staff and education events on topics such as volcanoes, birds, water bugs and frogs are popular. Cultural and heritage events include reaching out to diverse language groups from the local area with English and nature, art and creek awareness projects. Night events, safaris, eco walks and spiritual healing walks are all part of a rich program run by MCMC staff and volunteers for the community along the corridor. In 2015-16, "539 community, student and corporate volunteers contributed 1,119 hours to restoring and monitoring the Merri Creek environs (equivalent to $33,567)" (Merri Creek Management Committee 2016, 2).

6.6. Key findings from the primary data

The data sources for the Merri Creek case study included twelve online surveys, six in-depth interviews, and desktop research from a range of Merri Creek stakeholders.

6.6.1. Survey results

There were 12 completed online surveys from Merri Creek participants. The value of this survey, with short and open-ended questions, is in the broader group of views accessed, the indications of case study effectiveness and the profile of respondents. Of the 12 respondents, the largest proportion choose to work 3–20 hours a week on the project followed by 1–3 hours a week mostly as volunteers from local or regional community groups. This shows a significant commitment of time. Interestingly most have volunteered on the MCMC for more than 10 years although several joined in the last two years suggesting both long-term satisfaction and the ability to attract newcomers. Of the MCMC respondents who are volunteers, most are well educated with tertiary level training, and half work full-time and nearly one third are retired. The survey results generally confirmed the results from the interviews.

6.6.1.1 Leadership and expertise

Respondents strongly agreed that leadership and expertise were the most effective components of the projects they were involved in. It is worth noting that the broader group of volunteers themselves recognise and value the expertise and leadership that the MCMC brings to the work. The other factors of structures, processes and personal relationship were also reported to run effectively.

6.6.1.2 Community involvement

Overall respondents felt the governance was satisfactory. While most did not think more community involvement was needed, there was a split in view that community expertise could have been used more. This perhaps raises a question about the processes used by the staff and organisers of Merri Creek projects regarding community capacity and expertise, although according to respondents, barriers to community involvement were not considered an issue.

There was agreement by most respondents that the Merri Creek stakeholders are working toward the same shared goal with agreement that trust is present. It was broadly agreed that decision-making in the MCMC was open and transparent to the community and that the organisational aspects of this project allowed for flexibility in decision-making although they were uncertain

regarding innovation. One of the interviewees pointed out that it is the community who often bring the ideas.

6.6.1.3 Motivation for Merri Creek

All respondents rated themselves as feeling passionate about the work and project with most regarding themselves as quite or very passionate. Their motivation to be part of the project revolved around their interests, passions and geographical location including their location near the creek, and their interest in the creek conservation and environment. Several also have a desire to participate with others and to give back.

6.6.1.4 Passion and positive volunteering

The emphasis that respondents put on their answers can indicate the importance of certain factors associated with governance from their perspective. One of the long-term staff, passionate about the work, added a comment to the governance question in the survey by emphasising the importance of culture over the other more process oriented elements of governance.

> The most important thing is the 'culture' that the organisation creates (and this crosses a number of your categories) – a respectful, participatory, committed, visionary, energetic but also systematic approach to the project. In my answer to 'processes' I was thinking much more about this 'culture' than the formal rules about how things are supposed to be done.

Another expert volunteer from the local community highlighted MCMC's excellent structures and its success.

> The organisation with which I am involved, Friends of Merri Creek, has been going for years and has built up an excellent structure which works very effectively.

The involvement and work associated with MCMC mostly makes the participants feel good according to nearly all the respondents of both the interviews and surveys, however the following response suggests that high hopes for environmental outcomes are not always met.

> Most times very good; but sometimes seeing impacts of poor land use and over-development and destruction of natural assets, it's hard to stay feeling good.

The factors that contribute to a positive volunteering experience for the Merri Creek volunteers (summarised in full in Appendix 5) include the following: to see the natural environment improve, to work in a group, to work with good people and to do something worthwhile, and to have a supportive purposeful, organised project with ability to input. The things that may contribute to a

negative volunteering experience include an unwelcoming environment, feeling under-valued or ill-equipped for the task, poor communication about the event or about the work, boring work, lack of support, bureaucratic form filling processes and working alongside difficult personalities. An expert volunteer from the local community group highlighted a point that several other volunteer respondents also mentioned regarding valuing volunteers and matching their interests and skills with work they are inclined towards. This raises a key theme that may need to be further explored.

> A clear sense that your contribution makes a difference, the possibility to find something that matches your taste and aptitudes, being with like-minded people, feeling that the professional staff will take care of what needs to be taken care of and are themselves suitably valued professionally.

Some helpful comments about good practice regarding volunteers and managing projects also extended into a very insightful comment about creating a learning culture and cycle of improvement in this quote from an expert volunteer in a local community group who may have been involved in a difficult project.

> Again, it can depend on the subproject. In the overall lifespan, some subprojects turned out unsatisfactory for diverse reasons at various times. Having the capacity to reflect on that setback is more important than the setback. It would also depend on who you ask, it is impossible to satisfy everybody 100% nor all the time.

While initially perception may be that this comment suggests some weaknesses in the organisation where projects involving volunteers are concerned, the response and inherent attitude is consistent with the interview responses to keep positive and keep trying to improve the work of the MCMC to a higher standard. The final two sentences demonstrate the perspective of a realistic practitioner seeking to keep thing in perspective when the going gets tough – a great attitude of resilience.

6.6.2. Interview results

Six in-depth interviews were conducted for this case study, each taking a minimum of one hour and several two hours. The participants were all involved in a significant way with Merri Creek, with three paid staff and three volunteers representing various stakeholder groups and organisations. Follow up data was sought several times to get updates on the case study situation to keep up with any changes over time. The major themes that emerged from the in-depth interview data are summarised below in order of emphasis given by the participants.

6.6.2.1 Reputation and expertise

The interviews suggested that reputation and its role in community governance in green infrastructure is significant. Its prominence was clearly indicated as a major issue in the Merri Creek case study and this response was unprompted. Interestingly, the literature about community governance did not refer directly to reputation as an important issue. However, upon further consideration (see later discussion) it became apparent that many related terms like 'trust' are regularly mentioned in the literature as key issues in community governance. Upon deeper reflection, there are other closely related issues that build reputation such as expertise which contribute to understanding the term 'reputation' and its use. Also 'expertise' was not well discussed in the literature as a key community governance issue, however it emerged as an issue in the researcher's experiential anecdotal observations in earlier work and was included in the survey. Through the interviews, mostly unprompted, it also emerged as an important issue.

The notion of reputation was well discussed by the respondents in the interviews. Several participants recognised the MCMC and its staff as a well-known beacon in the community who were recognised by the broader corporate and government sphere for being excellent and unique in their roles. One participant even joined the organisation due to that reputation.

> I was aware of Merri Creek Management Committee, and it had a good reputation. And I thought it would be a great opportunity to get involved and to see how what I consider a fairly elite organisation works. (Community leader 2)

Several areas of excellence were mentioned in the interviews such as the MCMC's impressive longevity and its role operating as an authentic community organisation, known positively by the local community.

> It's become such an icon locally, which is fantastic…
> So I think there is a certain level of success in just being established for that period of time. And not just existing but obviously achieving things that are seen and recognised by the wider community. (Para-organisation staff 1)

Others highlighted the expertise of staff that gives MCMC a positive reputation with government organisations for their biodiversity, creek conservation and environmental management. Their expertise in remnant vegetation management was noted as being a skill the state government look to MCMC for. MCMC also operates as a voice of influence in planning matters, and while active in state issues, their influence seems to be more at a council level than at state level.

(The MCMC) has got some really good staff there – widely acknowledged experts – environmental and fauna and flora experts. Gives us a lot of credibility with a lot of things… But in terms of influencing outcomes, no we are just another voice amongst many. (Community leader 2)

Particularly the management of remnant vegetation, which is a skill that we've focused on developing too. And we are probably one of the highest skilled groups doing that work in northern Melbourne. (Para-organisation staff 2)

The expertise of the management committee and the good governance has also contributed to its reputation.

The management committee is quite highly regarded in Victoria. (Community leader 2)

I think that the Creek, the organisation's had… has had good governance and, and … has remained relevant and, and all the stakeholders have continued to participate because they, they see it as valuable. (Council manager 1)

A good reputation has also been developed in financial management and in achieving and reporting the outcomes to the broader stakeholders. It is a combination of these factors contributing to the MCMC's respected reputation, locally and more broadly in Victoria and nationally, that has assisted in its ongoing ability to develop respected partners and win competitive grants.

I guess they've developed a good reputation with ... with grant providers like governments, so, there, there's you know, there's that legacy there of managing things well, ... and I've got no doubt that they'll continue to attract state and federal government funding because they've got that good reputation. (Council manager 1)

The MCMC serves a role as an example to be copied or emulated by other similar organisations and projects in regional environmental management and conservation in the region and even more broadly.

No doubt it's been used as a model around Australia in any number of different environmental groups, for how to organise, well in a sense, not-for-profit community, local government off shoots. (Elected councillor 1)

An example that has inspired a lot of other work around Melbourne. And from that perspective it has been really successful. It is certainly well known and well respected in the community – both the wider community, and the waterway management community, for the work it has done. (Long-term staff)

Another factor related to the growing reputation is the passion of the MCMC staff and volunteers and committee for what they do.

> More important than the skills and expertise is the passion for the issues. (Community leader 1)

> So, yes people do individually influence decision-making because of their particular passion, experience, knowledge. (Elected councillor 1)

Even philanthropic donors support excellence in community governance and saw the value in supporting MCMC to get their model of community governance written up and shared.

> Another big philanthropic grant was to put on the website – a lot of the materials… the written … the documents like our constitution and policies and descriptions of our structures and procedures as models for other groups that might want to set up. (Community leader 1)

The organisation having paid professional staff that aim to pursue a high level of excellence has also built credibility. In the last decade, much work has been done to improve and rationalise systems and processes that has resulted in increased accountability and transparency of project outcomes including finances.

> I think having a paid manager and some paid, kind of senior staff, providing that governance, there's more accountability, there's a higher level of commitment, to, to achieving outcomes and to meeting, you know, requirements and... and I think that that's the thing that works the best at Merri Creek. (Council manager 1)

> It has been important to have been audited. We haven't always been required to be audited, but that has been good for the council's sense of comfort in terms of funding us.

> We've… always prepared annual reports which act as a way of just reporting on the governance side of the things that we do, as well as the outcome. (Para-organisation staff 2)

MCMC was aware of using the media to develop a public profile and good reputation. Building a good reputation through the media was a focus that really helped to build the reputation with the community over the last ten years. This also acted as an insurance policy for maintaining some of the partnerships. As one of the staff highlighted, part of his role was related to sharing positive stories about the MCMC work and maintaining a media profile.

Ensuring that the local papers carried Merri Creek's stories regularly, every week if he could. And I think that built up a very strong perception in the community that MCMC was doing really good things. And certainly was a good defense against any council thinking about saving money by not funding us. (Long-term staff)

6.6.2.2 Financial uncertainty

The financial uncertainty associated with the MCMC has been raised by most of the respondents as a key concern and framed both negatively and positively. This is an issue that has long been a challenge for many community governance initiatives and can signal the end for some.

Relying on charitable donations is not a sustainable way of running an organisation. It forces NGO leaders to spend a lot of time, energy and money on fundraising efforts. Even when these are successful, most NGOs are perennially strapped for cash and unable to sustain, let alone expand, their most effective programs. (Yunus 2010, 6)

The types of issues being raised are a refreshing mix of determined and passionate people highlighting the problems honestly and even at times optimistically, willing to explore the opportunities that these challenges present. The approach to this major issue discussed at length by respondents may well be part of the key to the success of this significant organisation and even community governance more broadly. The analysis divided the related topics into categories including funding uncertainty, funding strengths, funding challenges, funding arrangements, and funding improvements. Funding is also related to the MCMC reputation.

Financial sustainability remains a challenge for some business models including social enterprise and not-for -profit charity models and the respondents recognise this is MCMC's major weakness.

Probably the biggest weakness is, its finances, which is something that the committee has been in the process of renewing, or determining what the future of is, is the... it's probably its... business model in terms of how its, how it attracts money, where its money sources are. And it's, the, probably financial sustainability ah... at times there's been a couple of years where there have been deficits, where it's experienced deficits. (Council manager 1)

Funding uncertainty has been a long-term problem for MCMC. Funding arrangements from the early days were set up with a funding commitment from the councils to sustain some certainty. Other sources were also available such as grants from local, state and federal government and other philanthropic sources.

When the committee was first set up, there was a funding formula proposed that the member councils committed to, which provided a substantial core, from which we

could reach out to access grants and other fees and service funding opportunities. (Para-organisation staff 2)

Most of these sources operated on a year-by-year arrangement and this kind of short-termism limits growth and long term strategy development and also creates some uncertainty in the culture and staff. Furthermore politics and ideology of government play a role in sources and success.

It's still mainly year by year. Which is a bit … hmmm [chuckles] yeah a little bit insecure. (Community leader 1)

I think probably the funding model is another one (challenge). It is totally reliant on the councils that the Merri Creek flows through for their finances, plus government grants… So for instance, Abbott gets into power and he cuts all the grants for certain things, and that can halve the income. (Community leader 2)

Another representative on the committee recognises financial uncertainty is the biggest weakness and this creates a challenge to maintain staff salaries at a competitive level to maintain the best people and the expertise that MCMC is known for.

For the committee to remain competitive, in terms of, being competitive on the market cause, you know, they do tender for contracts, they need to ensure that their staff are paid to a level that's competitive. (Council manager 1)

Another respondent recognised a good staff member's natural desire to progress.

Staff progression – we are not big enough for staff to progress through the levels; people have to move on if they want to progress often; just because there are a limited number of positions here. And sometimes that can mean losing really important staff. (Para-organisation staff 2)

Managing benefits such as superannuation remains a challenge and even a risk for a not-for-profit organisation like MCMC.

There are still members that the MCMC is responsible for in terms of their pay out. And these defined benefits are a guaranteed amount of money to be paid out upon retirement. And because the stock market has been going, at times, terribly, we've had calls by the superannuation... Anyway, they had made calls on the MCMC to top up the pool of funding. (Para-organisation staff 2)

In the early days, an arrangement was set up that relied on a funding commitment from the councils, which provided some certainty for the development of the organisation. Given these council contributions were yearly, some short termism and uncertainty in planning was still a challenge. Funding improvements now include service agreements that are being developed with

some of the councils that lock in MCMC and a member council under contract for three years with certain services agreed on.

> Some councils… at least one or two have signed an MOU now, and a 3-yearly commitment. So it is still not a written-into stone ongoing – forever commitment. So we have to keep delivering [chuckles] good services and good work to justify the continuing contributions. (Community leader 1)

From the perspective of a council officer the service agreements offer expectations and accountability of the contractor provider, in this case MCMC.

> There's milestones that they need to meet, and they need to make sure that all the committee meetings are being held, the sites are being managed and there's a work plan for the sites as well. (Council manager 1)

In the case of the funding agreements, a council manager reported on the reliance on the MCMC on partner councils and another that while these partners seemed largely committed the smaller matters like CPI increases could create some minor tensions.

While it is apparent that the funding situation is dependent on performance, it is also influenced by politics. In this case, the large number of member councils helps to relieve the dependencies that could occur with fewer councils and positively affects the MCMC's ability to advocate to councils.

> There have been times when we have alienated one or other of the municipalities by coming up with policies on for example freeways, that they disagreed with us as a council, and while on the whole they have respected our right to do that, sometimes it hasn't – there has been councillors that have been really upset about that. But having seven councils – if one gets upset and doesn't fund us for a while, then we can still survive, whereas, as I said before, if it were a smaller number it would be difficult. So that is one strength. (Para-organisation staff 2)

Apart from these ongoing funding sources already discussed, funding for the MCMC is also sourced from various local, state and federal government grants. The MCMC has a very good track record with obtaining grants and has a demonstrated excellence for delivering various grants. Also, "the role of grant money allows the organisation to achieve more" (council manager 1).

> Most of them are federal. Some of them are state-based grants. And a very small number are philanthropic organisations…. We have been quite successful in getting grants. A lot of Caring for Our Country – that was the most recent one. Before that – Natural Heritage Trust funding and so on. Which are quite large scale grants. And went for several years in some years. You know – several $100,000 each of them. (Community leader 1)

There has also been success in indigenous partnership development and grants.

> For particular purposes there has been some interest in developing relationships and recognising indigenous people who lived along the Merri, and their history – their culture and … what they … how they related to the wildlife and so on, the plants and other animals. (Community leader 1)

The discussion of grant success suggests a notion of strength in the adaptability and responsiveness of the organisation. Several of the respondents suggest that this is a fairly adaptive group of people, able to respond quickly and successfully to current opportunities along a broad catchment.

> We are not structured to own any land. We are neither a landowner nor a committee of management under the Crown Lands Reserve Act. Although it sounds like we are, but we are not. Which means that our resources aren't permanently focused on any small plot of land along the creek. We can take interest in the whole catchment, which we do, and we work by negotiation with the landowners, or being funded by the councils or through contract work for the councils. (Para-organisation staff 2)

And so the financial uncertainty of the organisation remains its most vulnerable area. Some predict that the conditions for organisations like this are getting tougher, especially finances, but they have learnt to operate with excellence and with risk.

> At MCMC, it's got long term policies, and it's reactive in terms of its income sources due to grants programs, which are fluky at the best of times. And so I think for a not-for-profit, when you go for grants every year, it's how you rely upon a significant portion of your income. That's a risk to the organisation. (Elected councillor 1)

> It's a constant one of continuing to win funding for the work we do. In a political environment that is quite anti-environment at the federal and state level. It is not at the local government level, but that's a challenge for us. Especially seeing that about a third of our program is funded by state and federal grants. (Para-organisation staff 2)

The possibility for philanthropic donors believing in the cause and supporting it is proven to be an added source of funding. There have been some significant donors in the past including the Myer Foundation and other private donors as demonstrated by a group of supporters that work in fundraising to achieve this.

> It's not really a part of the MCMC, it's just a group of interested individuals who are out there raising funds. Interesting – staff could explain it better than me that's for sure. They promote us, and are raising funds that… are yeah a separate organisation. But very interesting. Ex-politicians actually. And an ex chair of the MCMC as well. Lovely people. But they have an ongoing passion, which is why they are a lot of help. (Para-organisation staff 2)

Financial reporting

A significant investment has been made at MCMC to get the best possible financial reporting system in place for consistency of reporting despite much variety on requirements demanded by all the partner organisations. With a high level of customised reporting to account for use of funds and many various client sources to account to, the requirements for reporting are intensive. The organisation is often seeking to do things better including the program management system. Over time, this has become an area of excellence for the MCMC by consistently improving systems and solving challenges that arise due to the very nature of the type of organisation. This kind of response demonstrates how a challenge can become an opportunity to improve standards that then wins more trust, a bigger and better reputation and more work.

> And so yes, applying for money, and acquitting the money is a big administrative burden… we have experimented with different ways of keeping track of all the projects that we've been doing. Which at any time can be as many probably as 60 or 70 different projects, that are separately funded, and tracked separately, and acquitted separately. So, we've, that mix of methods has been a weakness and bane [chuckles] of our governance for a while because it makes it very difficult to then do any joint projects between departments. This year we've unified our management. Though that has been a very time consuming and costly thing to do, just because of the amount of time that is involved in getting familiar with the new package. (Para-organisation staff 2)

Flexibility and innovation

By the very nature of the uncertain funding arrangements the MCMC has developed flexibility and innovation to sustain themselves using the grant system.

> It can be very opportunistic in terms of, you know, what types of projects to undertake, because, because grants are so, because they depend on grants so much, and the grants form quite a large percentage of their annual income, I think they've got that flexibility to be quite creative and innovative in the way they pursue projects, the way they put projects together. They need to, they need to constantly be competitive and they need to be putting, they need to be putting quite innovative ideas forward, for when they put grant proposals forward to be considered. So I think they've got that flexibility in their structure to allow that. (Council manager 1)

6.6.2.3 Vision and leadership

A key element of the Merri Creek case is the role of effective leaders who together share the vision. This was strongly conveyed by the interviewees, who spoke of being "on message" and about the role of the leaders in shaping cultural direction. The leadership of the Merri Creek case is broadly spread across several stakeholder groups including the senior staff, members from the key

community groups and some of the council officers. Several of these key leaders have been sharing the vision for an extended period (20 years) and this has increased trust among the leadership group, the staff and people involved in the Merri Creek initiatives. One of the councillors involved highlighted the quality of the leadership.

> In terms of some of the senior people… that we've had have been again very competent people, and good leaders. And we've been very fortunate there. Some of the key people who represent Friends of, and the councils, and again the quality and the membership comes and goes, but we've had a really good core… And I think we've had good leadership all the way through. (Elected councillor 1)

And the representation from the start has hoped to get a balance of groups, roles and expertise on the committee, however it seems this occurred without a formally articulated approach.

> I think it was just a matter of sort of understood practice that the aim was to get a Member Council Councillor and a council officer representative from each council. So we had different sets of skills and sort of political [chuckles] orientations shall we say – or influence, ah – coming from each council to contribute to the committee. (Community leader 1)

While leadership was driven mostly by the community, strong political presence and support has added value through the early development of the MCMC. In the early stages, there were more senior representatives from the council that were helpful in advancing the credibility and work of the organisation, while more recently the representation from the councils have been mid-level, with senior people too busy and the organisation and its work after 25 years now "well bedded down" (para-organisation staff 1).

The leadership is responsible for providing a strong understanding of the vision throughout the organisation and this seems to have been done very well at MCMC. It is interesting that leadership at the MCMC appears to be operating under a distributed leadership model and shared among those on the committee who then successfully lead by sharing the MCMC vision among their own member organisations.

> I think there are, there's leadership.. coming from a lot of people within the Committee. (Council manager 1)

Leadership has been aligned with passion and sharing the vision. Given many of the participants in the MCMC work are volunteers and partner organisations, the need to inspire their belief in the vision is important. Several interviewees highlighted the presence and importance of passionate leaders across the MCMC.

It has a clear vision and aims and so on….critical. … in Merri Creek Management Committee in leading the agencies involved, yes very much so. (Para-organisation staff 2)

The senior staff are particularly passionate about what they do. The organisation is run professionally, so that, …. The passion, the passion is definitely there. (Council manager 1)

While a clear and simple vision needs to be communicated broadly among the broad range of stakeholders, within the committee itself the vision of Merri Creek needs to be more thoroughly understood than merely a one-line slogan. Among members, especially those from councils, it needs to translate into environmental strategies, plans and policies in each of the councils to be successful. Those members become advocates for the sharing of MCMC work in each of their organisations.

And it is now, so I guess you know local governments come along on the journey, and embedded in place their own strategies. And their own staff who are working towards the same – the same vision. (Para-organisation staff 1)

There was also mention of the importance of trust and respect by one of the key leaders.

So I guess there is a high level of trust within … so this is not within the formal structures, but within the cultural processes and working reality of the working relationships between the employed staff and executive committee of management. There is a lot of trust and support for initiatives that staff make. (Para-organisation staff 1)

The notion of trust is mentioned often in the literature, however the word itself was only mentioned once in responses. That said, the notion of trust is embedded in much of the discussion around the organisational strengths, especially the relational, leadership strengths and the reputation of the organisation. Reputation is also related to trust and to respect. Respect is required for a functioning shared dialogue. One of respondents emphasised the role of open dialogue (Ansell and Gash 2008) as a demonstration of the organisation's ability to work towards a shared understanding (Walls 2007) in a respectful way. The idea of deliberate, transparent decision-making has certainly been reinforced by comments about robust but respectful discussion.

The leadership – I think one of the strengths is that it is such a diverse group, but all very good in their own field. Very good in their own right. And there is a lot of respect for everybody. (Community leader 2)

I think there has always been the ability to ask robust questions and have discussions on areas of risk. (Elected councillor 1)

There were also comments on the opportunity for further leadership opportunities from some council representatives (particularly councillors) to be more committed to attending meetings and sharing the vision, thus taking on some form of vision leadership. There are indications that the leadership would be open to others from the stakeholder member groups getting more involved and the message of the work being shared more broadly through people and reports.

> So it goes up to the CEOs of the councils, and the councillors. We try and make them as sort of easily readable so that members of the public can get a good sense of what we are doing as well. (Para-organisational staff 2)

Observations have been made that the more stakeholders involved in attending meetings (even the state government) then the more chance they will believe in the vision and trust the organisation. This emphasises the inclusive nature of the MCMC, and the acceptance of newcomers and their desire to share the vision with them.

> It's a very inclusive sort of environment. Even though we get different representatives coming and going on the board, it's a very inclusive and cooperative environment. And everyone is very committed to the outcomes. (Community leader 2)

The strong vision or shared joint goal of the MCMC has been emphasised in the responses, however it is interesting to explore what that vision is and whether the various representations of the vision align, especially as the organisation and its works grew over time. The other core value in responses seems to be a belief in the value of relationships alongside the vision.

> It's always an interesting benefit of the management committee, and previously the coordinating committee, has been getting to know people from the different organisations. And establishing personal networks and relationships with them. And, getting people quite enthusiastic about the aims of the management committee, and the vision of regenerating the creek. (Community leader 1)

The vision to be shared to a new member was articulated by a long-term member.

> When new members come in, probably have an idea of what it is about, but it takes a few meetings to get the fact that it's about the whole catchment – the health – the catchment has a bio link, has a recreation link – it is very holistic…. and it's very communal and friendly. (Community leader 2)

The idea of a shared joint goal is demonstrated strongly through the key stakeholders and the staff. Early on, it had a clear singular focus of environmental conservation of the Merri Creek. More recently, the focus includes the recreational elements of the corridor which is clearly understood as a secondary shared goal to the first. The extent of "the creek" has also expanded over time to

include the tributaries (and groups associated with those), the full extent of the creek to the mountains and the breadth of the creek corridor beyond the riparian vegetation to include grasslands, woodlands and other associated vegetation in some regions where possible. Some respondents mentioned that vision of the work of the MCMC has experienced change over the years. It has certainly grown with the geographic expansion of the work. In other ways, it has been reined in over the life of the MCMC, such as cuts to earlier ambitious education projects and publication writing. The only area emerging as having some variation of understanding in vision is MCMC's role in advocacy (discussed later).

6.6.2.4 Learning culture

The idea of a learning culture was not discussed literally as "we have a learning culture" but instead was alluded to by how interviewees discussed their challenges and opportunities. All the participants responded well to the research and were keen to hear about the results, with several invitations back to share among the broader MCMC community. In most instances this came through in the post interview banter.

Learning culture links closely to other themes such as an organisational culture that enables innovation and a reflexive approach. As mentioned earlier, it is perhaps the uncertain nature of the funding that has forced a culture of learning and improvement. As the MCMC is reliant for 30% of its funding from the highly competitive and changing government grant system, the organisation is forced to do its job at a high standard and be flexible and highly innovative in its approach.

6.6.2.5 Advocacy

The MCMC does an important job acting as a helpful independent voice in commenting on key environmental issues, although this was an area with some difference in opinion.

> Merri Creek is an independent voice, although we're all members. The committee itself is still, you know, is independent of the councils. So, it can provide additional or a different voice than what the individual councils may provide on certain issues. So, I think that, that, that's really useful. (Council manager 1)

The members seem to recognise that there is a potential for conflict in the political advocacy area.

> What we want is sometimes aligned with what they want, but other times it is not. And we can be quite political in what we put out there, in what we agitate for. There is always a little bit of a … ah… trying to search for a word; almost a conflict between what we want as an organisation and what some of their constituent organisations want. It can be a clash. (Elected councillor 1)

Some members were clear about the need and opportunities for the MCMC and the Friends of Merri Creek group to advocate more on the issues around the urban growth boundary and creek health.

> So the bigger we become, if we do grow, which would be nice; the more influence we could put. Because we could do more campaigning, as I support that. There's an element of campaigning that we just haven't got enough time or resources to be able to undertake. (Elected councillor 1)

In recognition of the role of the MCMC and its client base there was also comment about achieving a balance when considering advocacy.

> It's an interesting thing, because the MCMC tread a bit of a tightrope of advocacy – how strongly can we push for things, or oppose the government views. Or even a member council's views. There have been occasions where we've had a different policy from a member council on any particular issues. And how much can we... how much we have to appease them. So we keep on-side, so we keep getting financial contributions or grants, or whatever. (Community leader 1)

There was also a view that some do not see advocacy as a main role of the MCMC and it is better left to the community groups.

> The community have always participated in meetings. And have often lead policy development at MCMC. Certainly, been active in political arena. And that was part of the design that MCMC wouldn't primarily be a lobbying organisation. Friends of Merri Creek would be free to do that. (Para-organisation staff 2)

6.6.2.6 Positive place

The responses from all the interviewees and their tone suggested that the MCMC was a positive place both to work and volunteer. This may be a key factor in both attracting volunteers to the organisation and in the long-term involvement of volunteers. The positive relational aspects of the organisation suggested a high value placed on relationships.

> It works as I said collaboratively. And it's very communal and friendly. (Community leader 2)

> The people are wonderful. They love the involvement in environmental areas, because the people you get involved with … not just at MCMC, but beyond that, generally very very well intentioned and nice people, and very passionate for want, and in the very positive sense of the word. And so in this world, sometimes it's not that easy to find people like that. (Elected councillor 1)

The positive perception of the work environment may have some links to the type of people who have a passion for their local environment and that contributes to making this a unique kind of operation. The committees of the MCMC that are responsible for decision-making apparently are not troubled by difficult or power driven people.

> We've never had any questionable people on it. Which to me is quite remarkable. We've had no disruptable influences for 17 years. I've been on many committees, and all it takes is one person to be a bit of a stirrer. And perhaps it is just the environmental area that brings in certain people. Not too sure – they are passionate people, don't get me wrong, there are good robust discussions, because of that, but not disruptive. (Elected councillor 1)

Another long-term member did mention the 1990s when there was some tension over MCMC financial practices and the challenge of different personalities and expectations.

> There was quite a lot of work involved in preparing those (reports) and he got impatient, and there was quite a lot of tension from him in particular. Who, he sort of then wanted scalps when it didn't happen quickly. Scalps of the president of MCMC and the secretary of MCMC and the manager whose job it was to prepare them. It was a fairly unpleasant time. (Para-organisation staff 2)

This kind of tension can be especially prevalent in community governance based organisations where staff work alongside volunteers. In general, for the long life of the organisation and the number of people involved over the long term, it appears to have been a pleasing environment to work in and belong to.

6.6.2.7 New challenges – Length of corridor and its northern region

The Merri Creek corridor has increasing challenges on the northern section with development impacts and new partners emerging. There were three main points raised by interviewees. The first is that the major landholders and land uses vary from the lower part of the corridor. The land adjoining the northern section of the Merri Creek corridor is mostly owned by private developers and as the urban growth boundaries for Melbourne shift northward, the development of low density residential villages (greenfields development) runs right to the edge of the creek.

> On the upper Merri, it is all on private land. You've got no access to Merri Creek at all. …So from probably the Craigieburn north, for 25 kilometres or so, it is all private land, and you really don't have a lot of access. (Community leader 2)

The second is that new issues have emerged in the upper catchment for MCMC that are unlike the lower experience. For example, there is no public land buffer between the creek and the private land, therefore negotiation around green space and parkland is essential so there is the ability for consistent environmental management and river conservation policies and practices. Also, council resources on the upper catchment are limited.

> Although our focus – over the years, our focus has changed from the lower end of the creek, where most of the community interest was, and where most of the revegetation needs were, and funds were, to have more interest further up, and further up the creek; taking interest in remnant vegetation patches. But also as urban growth has spread out along the Merri Creek corridor, we've been involved in planning issues, in new urban reserves along the creek further out. (Para-organisation staff 2)

The third issue is that there are not very many representatives from the two northern councils on the MCMC, and it is difficult to have regular attendance of those members due to long distances to travel to a meeting. This can limit the MCMC's plans and actions in this region.

6.6.2.8 Volunteer management

There is much evidence that one of the risks facing a community organisation is the possibility that volunteers can become tired and disillusioned. The role of staff is to support them.

> It's been really critical in terms of not burning out the small number of people who are active. Active office bearers in that group – in the Friends group. I think that is a common pitfall of a lot of these volunteer groups. On ground groups, and it's been a great arrangement – [chuckles] – makes life a lot easier for the Friends. (Para-organisation staff 1)

There are also some indications that there are limits to how much consistent time, energy and expertise the volunteers have to completely drive a project. This seems to be especially true if the works includes tedious, difficult or unsatisfying jobs. The MCMC members highlight that in such work staff support is essential to the long-term sustainability of initiatives that stretch beyond a single project. Where available, staff should be supporting the volunteers, to maintain the interest and passion for the work and to do the support work to allow the volunteers to do the work that they love. For example, staff support volunteer planting days by having many of the behind the scenes jobs already done, and they support the Friends groups with an administration team to assist in grant applications and similar work.

> The big weakness is probably the reliance on volunteer labour for the administrative functions. And all the admin functions … seems that anything that the committee actually wanted to do, like writing grants or run a project, or advocacy work with state

government or commonwealth government, or the member councils even. It all had to… it relies on volunteers. So that's pretty hit and miss, and it is not really sustainable for the indefinite future. So the big strength, the big change is to have.. to set up a paid staff capability. (Para-organisation staff 1)

So we depended on their (MCMC) technical expertise, but also their doing the work – a lot of the work is difficult for volunteers to do. (Community leader 1)

A respondent who represents a local council and has worked with several community groups of a similar nature mentioned the importance of councils having confidence in the organisation and in its ability to deliver. In volunteer community organisations, there can be a risk around deliverables and time frames that volunteers juggle with other commitments.

I think, having, having the, the staff actually as paid staff, cause when I've been involved with committees that rely on volunteer members to be volunteers, and I think having a paid manager and some paid, kind of senior staff, providing that governance, there's more accountability, there's a higher level of commitment, to, to achieving outcomes and to meeting, you know, requirements... and I think that that's the thing that works the best at Merri Creek. (Council manager 1)

The cooperation that the MCMC shares with the Friends groups means that the communication about roles is understood and that while the volunteers give a lot of volunteer hours, some for over 20 years, the staff try to carry the burden of the work.

6.6.2.9 Community input

The input of the community into decision-making is understood as important, with two representatives on the MCMC board, however there is also a sense that the mixed partnership and the decision-making shared between stakeholders allows for a more balanced result. The issues around the expert versus non-expert voice in decision-making and the priority given to the voice of the local community was addressed by one of the respondents.

One of the potential problems of having too much community input is that you actually just get people who really don't know what they are talking about and really that aren't interested. So you actually get a popular outcome rather than a good outcome. (Community leader 2)

I don't think I would say that the community is broadly represented.. It's represented by stakeholders that have an interest in, in the environment and in protecting the environment, which is appropriate in this context. (Council manager 1)

Expert volunteering is clearly evident on the MCMC and in the broader community groups as well. Motivation of the long-term volunteers is in many cases both personal and professional. This is demonstrated by several of the professionally aligned long-term members from the local community who were the visionaries with the ability to see the potential of the catchment thirty years ago. Impressively they are still involved.

6.6.2.10 State government relationship

Several of the respondents feel that there is no role for state government on the committee, acknowledging their resource limitations and the history, however they did recognise a need to relate more closely to the state regarding state government land.

> We've certainly had quite a lot of conflict in approaches and views, between the coordinating committee, the management committee and Melbourne Water over the years. And so there has been that sort of tension I guess. And that was certainly a factor in them choosing not to continue as a member. Approaches to waterway management in other words. (Community leader 1)

> Where state government's role could be strengthened would be.. would be how they interact with the committee in relation to their ongoing management of those sites [that they land manage along the Merri Creek]. (Council manager 1)

It is also acknowledged that the committee's advocacy with the state government may be stronger if the state government is not on the committee.

> You know, the growth, the urban growth that is occurring along the corridor, now and into the future will have a big impact on the creek, and there'll be a strong advocacy role of the organisation going forward to ensure that.. you know it's putting its position forward in terms of what is to happen, to ensure that ultimately the environmental values of the corridor are preserved. (Council manager 1)

In contrast, other respondents saw some benefit of the state government organisations being represented on the MCMC and there was also comment on the benefit of having members from the two unrepresented councils also attend.

> Having representatives from state government, or at some level would be excellent… At the moment the whole Merri corridor is going through massive growth. So it is in the growth corridor. So there is a chance to put aside environmental land for future generations, that you only get once in a lifetime. And that's all been managed by the … I think it has changed its name… but it used to the Growth Area Authority here. And I think if we had something from them it would be good. Look yeah, if all the councils send reps [chuckles], like the others would be good. (Community leader 2)

6.6.2.11 Partnerships

Partnerships are integral to the role and success of the MCMC, as described by one of the staff.

> Yeah well integral. I think we are a partnership project by our very nature. There are the embedded partners that are our members, and our work is done with them. But there are other partnerships that are also integral but aren't reflected in the governance structure of the organisations. It ranges from partnerships with indigenous, traditional landowners through to informal partnerships, that nevertheless working partnerships with government you know state government organisations, and regional government organisations. And then on a project by project basis, most – many of the projects involve partnerships with groups that I've already mentioned, but including local schools, other community groups; other indigenous organisations, that aren't the traditional owner organisations; ah, neighbourhood houses; a potential range – diverse range depending on the nature of the project and the funding of the project. (Para-organisation staff 1)

There are several strong partnerships with schools along the corridor, and some occasional short-term partnerships with business however there are no long-term partnerships or financial arrangements with business. Councils would be open to MCMC realising more in the way of business partnerships along the corridor, however some of the respondents on the committee may have a mixed response. The topic has been discussed by the committee.

> All the member organisations would be supportive if there were another partner that was prepared to invest, invest money into the betterment of the corridor, and we would all try to find a way to source that if we could. Again, it would just depend on the nature of the relationship they would want us to have. (Council manager 1)

6.7.   Lessons from Merri Creek primary research findings

Strengths of the Merri Creek Case

- A clear vision was shared by all the Merri Creek stakeholders and communicated through a passionate distributed leadership team.
- Leadership in the Merri Creek was important and successful. It was led and driven by the community representatives and then Councils, particularly in the early stages and then by the MCMC staff as well. Strong political leadership has added value through support.
- MCMC has a many stakeholders including staff and volunteers reporting on a positive working environment and culture.

- The MCMC has developed of a local reputation for expertise, good work and good management helps the organisation to attract funding, grants, clients and good volunteers.

- MCMC approach challenges with a constant effort to improve of processes and systems according to available resources.

Challenges from the Merri Creek Case

- Financial uncertainty is a characteristic of this type of organisation. Broad funding, with some more secure mid-term sources, helps continuity of staff and programs but the uncertainty also encourages leadership to develop a culture that strives for excellence, continual learning and innovation.

- The MCMC had different attitudes as to the amount of input of the community voice into decision-making in community governance.

- The MCMC differed in their views as to the inclusion of state government partners into decision-making in community governance.

- The northern corridor is posing new challenges beyond current resources and capacity

Lessons from the Merri Creek Case

- The Merri Creek case study demonstrates an effective community governance example for green infrastructure sustained over a several decades in the Australian state of Victoria.

- Staffing and positive attitude are essential to enable volunteers to flourish in their areas of interest and expertise and shown through a growing and happy volunteer membership

- The importance of relationships in decision-making may be perceived differently by different groups.

- It is agreed that the key leaders, as representatives of various stakeholder groups, should have some discretion as to who's voice should be heard and when.

6.8. Discussion – Key observations for community governance of green infrastructure

This section integrates the results from the three sources, the desktop and background material, the online survey and the in-depth interviews and presents a summary of the analysis under key observations from the Merri Creek case study project for community governance.

The Merri Creek case study provides strong messages on the success of a community governance organisation. One respondent helpfully listed their criteria for a successful community governance organisation:

- improvements on the ground in the core focus area (in this case environment management for the creek corridor)
- extent by which community involvement can be maintained
- a viable organisation. (para-organisation staff 1)

6.8.1. Reputation matters

Many respondents clearly articulated the positive impact of having an excellent reputation for the work done by the organisation. In this case environmental management of a river corridor and engaging volunteers to do it, coupled with the high regard for the organisational management. This is a circular loop that then leads to more grants and work. When outcomes are met, it continues and gradually broadens the partnership base. The sustainability of the MCMC is based on excellence built gradually and consistently over several decades. The pursuit for excellence and the claim to have leading expertise needs to be maintained to stay successful in winning grants.

Gaining a credible reputation in community governance is arguably even harder than in traditional spheres of business due to the high number of community groups and organisations that exist for only a short term, and the heavy reliance on volunteers who usually have other priorities. There are often limits to adequate staffing, funding and barriers due to commonly held views in the marketplace on poor or limited performance. The MCMC has actively sought to address these challenges and perceptions, building credibility over time. According to respondents, one of the greatest risks MCMC faces is the loss of staff expertise due to the competitive labour marketplace (even competing with its own clients such as government) because it cannot match salary offers.

The cross-boundary nature of the MCMC work with eight councils is one of its strongest features towards environmental management. It attracts institutional interest by assisting local councils in

catchment and corridor based work that would be difficult to achieve otherwise. Coordination, sharing resources and stories and best practice expertise assist councils in their work, adding significant value. This helps them to build their reputation for excellence in managing complex cross jurisdictional environmental problems and remain relevant to the stakeholders.

Another factor in community governance organisations is the benefit of the uncertainty associated with the governance especially funding and its link to reputation and trust. The Merri Creek responses indicate uncertainty promotes and is an incentive for excellence and creativity. Uncertainty acts as a motivation for the organisation to be an innovative and adaptable organisation with a desire for ongoing learning. Over several decades this has allowed for a clever community governance model to develop and be refined, and a staff and culture to develop seeking excellence through new processes and solutions.

6.8.2. Not business partnerships

The financial uncertainty of the MCMC was also mentioned by all the respondents and is linked to the previous point. There was also a desire to broaden further the funding sources of the MCMC and yet the idea of long-term business partners or more secure ongoing funding was not particularly embraced due to larger ethical questions on maintaining independence and the MCMC role in advocacy for environmental standards. The MCMC has shown that community governance organisations are now under pressure to consider a broader range of financial sources, such as the private sector and more reliable long-term provisions, to reduce risks and maintain high standards. Many of the new stakeholders in the northern corridor are private developers and private consultants presenting an interesting new set of relationships.

6.8.3. Getting the right balance in decision-making

The MCMC respondents also differed in their views on shared decision-making with the major key stakeholders involved in formal role and processes via the committees. There is frustration that some partnering council representatives do not attend regularly. There was discussion about whether to encourage avenues for other partners to be involved informally on a "needs be" basis. One of the questions is which stakeholders fall into what category. Should more community groups be represented on the committee, should the state government agencies have a place at the table and if invited would they turn up, and finally should the partners associated with the MCMC broaden and include long-term business partners?

There are some possible applications for green infrastructure that emerge from the Merri Creek case study. Observers previously have identified this case as having lessons for community governance of green infrastructure. The Myer Foundation provided a grant to document the MCMC governance and share it on the website. The case study suggests that the MCMC's way of managing a vast range of stakeholders, both as members and as clients, in a competitive business environment over a broad geographic range is worth sharing. In addition, the results on the ground in creek restoration and community engagement are also impressive and acknowledged.

6.8.4. Strong shared vision

The significance of the shared environmental management vision is clearly strong enough to generate committed locals to lead and volunteer their time and expertise over several decades. Many people feel strongly about the Merri Creek and the commitment has been sustained. This vision was both a very local one impacting their personal quality of life and a regional one and this may tap into multiple motivations for action. The belief for the shared environmental vision has also enabled expert staff to accept sometimes lesser-paid positions for the cause even though it was raised as a risk in responses. The work has also extended in its reach up the corridor to an as yet undeveloped portion with limited local residents and this may affect relevance for some. This raises questions about whether there is something special about this location or this community when compared to other Australian communities. This question needs consideration in light of political allegiance, socio-economics of the area, amount of available open space and even perhaps age and gender.

6.9.   Findings compared to the literature and "contribution" assessment

Merri Creek Management Committee has enjoyed significant and enduring leadership; high levels of trust and openness among the stakeholders with good relationships, mutual respect and a positive culture; medium to high levels of inclusiveness over time (local government and community together with intermittent state interest); and development and fine tuning of systems as the project consolidated. The issues emerging from this case study as important but different from the literature include: the key role of a strong reputation for good management and unique expertise in riparian conservation; the significant role of volunteer leaders who were enduring, passionate, positive and expert; the finetuning of systems as a response to financial uncertainty; the importance of local government collaboration with not just green infrastructure but also the benefit of and role for community governance in good practice service provision. Over 40 years it has been a project

with an enduring community governance history, struggling in the early years with state government withdrawal of funding. Several committed leaders persevered towards the vision and successfully realised a sustained and beneficial partnership between local government and the incorporated association. Now operating with a dynamic governing model with high social and institutional capacity (Evans et al 2006) and through expertise and creativity, it has developed a reputation for being highly effective. Its efficiency in recent years has been high, refined by challenges (especially financial uncertainty) and it has a reasonably good chance of being sustained into the future Community governance is assessed as making a "high" overall contribution to the Merri Creek outcomes for the local and regional environment and the community. Appendix 11 shows an assessment of the case study against the criteria developed in Chapter 3 (Table 3-6) to establish the case study's "contribution" to sustainable planning and management of green infrastructure.

New challenges and threats face the Merri Creek Management Committee as it extends into the northern corridor including the need for resources, new partners, new expertise and creativity. Through the strong reflexive community governance arrangements, the Merri Creek project is well equipped to deal with these challenges through further partnership, funding and innovation. It is a green infrastructure corridor with a significant contribution as a reputable leader in community governance, with good management practice and expertise in ecological restoration in Australia. With ongoing partner support, it is well equipped to evolve to new challenges and demonstrate leadership for adaptive capacity and good sustainable practice in Australia.

6.10. Conclusion

The Merri Creek corridor is an impressive example of creek restoration in urban Melbourne over several decades, with many stakeholder groups working together towards the vision. Several unique characteristics have been highlighted in this case study including the unique and sustainable governance model, significantly involving the community who visioned and worked on the project and the separate organisation that was formed to focus on the planning and managing the asset of Merri Creek corridor. The Merri Creek case study surveys and interviews have provided understanding about the key issues for a community governance organisation. The features of the MCMC operating in the Victorian context have become clearer especially its operation as a community volunteer conduit, an expert consultancy and conservation manager for the partner institutions. Its reputation for excellence in community engagement, restoration and management are key to its success and longevity although there are constant challenges for the stakeholders

interviewed including funding uncertainty, maintaining broad stakeholder especially community input, maintaining excellent staff and developing cutting edge practices. These challenges raise ethical questions on the sourcing of resources, the types of partners for MCMC and the competitive market in which they operate.

Chapter 7 Case study 3: Bibbulmun Track

7.1. Overview

The Bibbulmun Track is a regionally driven project emerging from a community vision spanning several decades. Located in the south of Western Australia, it is a world-class, long distance wilderness based walking track that stretches nearly 1,000 kilometres between Perth and Albany. While the Department of Biodiversity, Conservation and Attractions (formerly DPAW, formerly CALM) acts as manager of the track, the Department works in partnership with the Bibbulmun Track Foundation, the community focused arm of the initiative. This chapter describes the case study, the history, context and the governance arrangement. It also considers many stakeholders' views from interviews and surveys and reports and presents the findings, the themes and learnings for community governance. The findings help understand the conditions and reasons for success and failings of the community governance arrangements adopted and practised in this case.

7.2. Vision

The Bibbulmun Track begins in Kalamunda, a suburb in the hills of Perth, and continues 1,003 kilometres to the historic town of Albany on the south coast (Figure 7-1). The track stretches through the heart of the scenic south west of Western Australia (Figures 7-2 and 7-3) and through the Darling Ranges and the towns of Kalamunda, Mundaring, Dwellingup, Collie, Balingup, Donelly River Village, Pemberton, Northcliffe, Walpole, Peaceful Bay, Denmark and Albany.
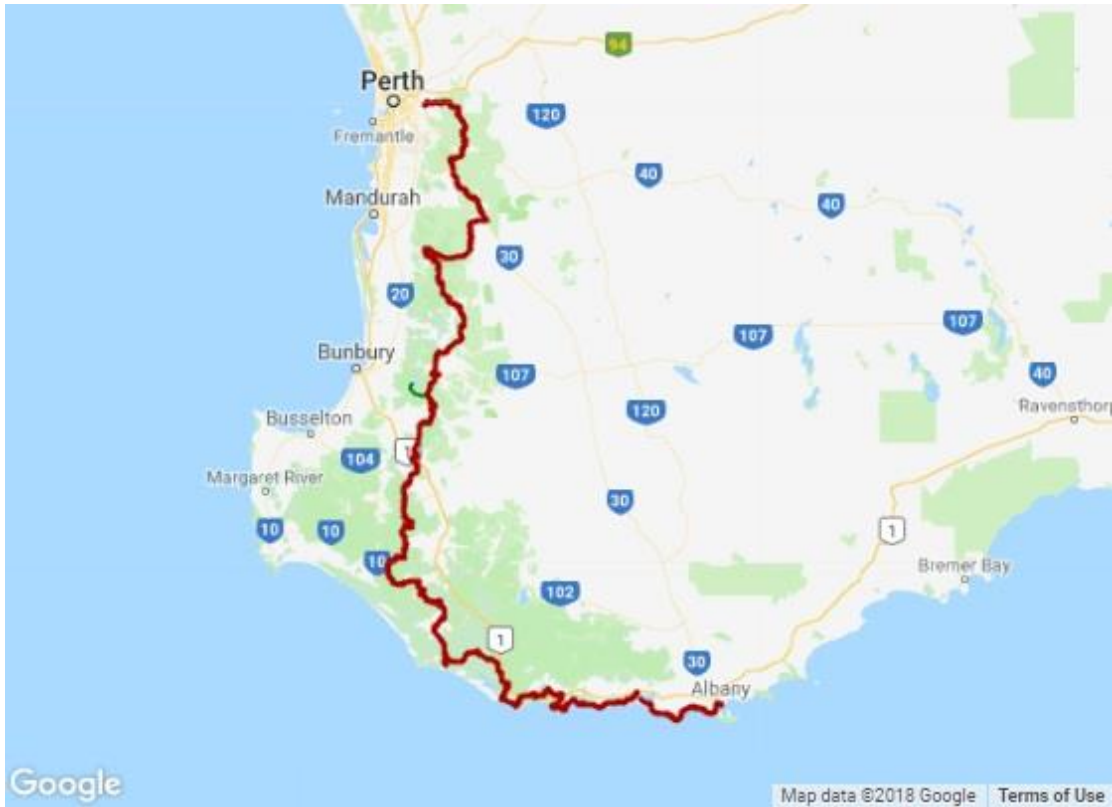
Figure 7-1 Location of the Bibbulmun Track, Perth Western Australia

Source: Google Maps and Bibbulmun Track Foundation 1 nd.

Figure 7-2 The Bibbulmun Track near Dwellingup

Source: J. George.

Figure 7-3 The Bibbulmun Track and signage near Pemberton

Source and permission with thanks: Garry Middle.

The track is divided into sections that form many day walks of one long walk. Between each section is a purpose-built campsite with tent sites, a shelter, tables, a pit toilet and a water tank, with towns along the way. The track has many landowners, stakeholders and partners and is managed by a not-for-profit organisation.

> The Bibbulmun Track Foundation is a vibrant, soundly managed and economically stable organisation which utilises a strong community base to provide essential support for the ongoing management, maintenance and marketing of the Bibbulmun Track. (Bibbulmun Track Foundation AGM Report 2012, 2)

The mission statement is outlined below.

"To support the management of the Bibbulmun Track so that it remains a sustainable long distance walk trail of international significance and quality" through:

1. Community participation contributing to physical and social well-being
2. Development of opportunities for tourism, employment and education
3. Protection of the natural, cultural and heritage values of the Track
4. Attraction of funds and other resources

5. Being an advocate for the Track in relation to the formulation and implementation of relevant government economic, social and environmental policy. (Bibbulmun Track Foundation AGM Report 2012, 2)

7.3. Context and history

The Bibbulmun Track is named out of respect for the connection of the indigenous people to the land and to the Australian Aboriginal trading routes. The Bibbulmun were a subgrouping of the Nyungar or Noongar people, whose country comprised the land from what is now Jurien Bay to Esperance covering many hundreds of square kilometres. They lived in the forests near rivers and water holes and were known to walk long distances for ceremonial gatherings. (Bibbulmun Track Foundation 2 nd).

While the next paragraphs give a summary of the Bibbulmun Track history, a more complete story is provided in Appendix 4. In 1972, the idea of a long walking track was raised by bushwalking enthusiasts with the Minister for Forests and the concept was developed over the next five years. In 1979, the Bibbulmun Track first opened with significant media coverage and over the following decade the track was realigned several times in collaboration with several key partners and financed by several large grants and overseen by a committee. In 1998, the full track in its final route opened, with only 10% of its original route. It passes through state and national forests and reserves and some small areas of farmland with three main landscapes types: the Jarrah Forest characteristic of the Darling Ranges for the first half of the track; the tall Karri Forest on flatter land near Walpole; and the coastal forest, scrub and the beaches on the South Coast (Figure 7-4). Some work was also done in this period on track identity, route finding and outreach to the public.
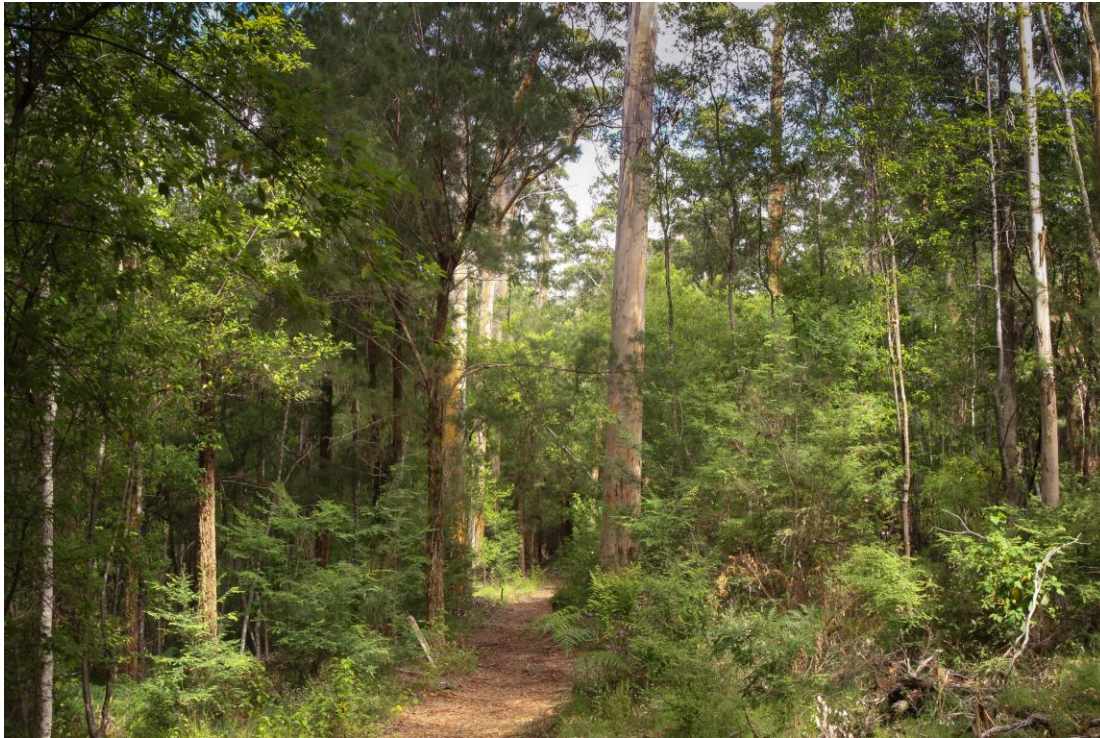
Figure 7-4 Bibbulmun Track through the forest

Source and permission with thanks: Garry Middle.

In the next stage of the track's history from 1998 the focus shifted from development to management, marketing and maintenance. A community governance model then emerged, first starting as a Friends group and then evolving into the Bibbulmun Track Foundation in 2002 with a relationship with the Department of Biodiversity, Conservation and Attractions articulated through a Memorandum of Understanding and a new strategic plan outlining the mission. Under this model the staff, volunteers and popularity of the Bibbulmun Track continued to grow. As membership grew, information sharing improved, innovative funding partnerships emerged, more track events occurred, and projects such as new campsites continued to develop the track to an international standard. Challenges such as natural disasters and particularly the 2015 bushfire event in the Nanga region created a significant setback requiring more resources for the rebuild of track infrastructure and campsites, and regeneration.

The Bibbulmun Track goes through National Parks and State Forests, these lands are managed by the WA Department of Biodiversity, Conservation and Attractions. Some of the state forest land has been logged and includes pine plantations. The Bibbulmun Track also goes through reservoir protection zones including Mundaring, conservation lands and through several active Bauxite mining leases (past and current with Alcoa) with future expected expansions by Alcoa and Worsely/BP. The

bushwalking areas affected by Bauxite mining will stretch from Bannister Hill in the south to beyond Mt Dale in the north. The mining leases alongside the Bibbulmun Track are shown in Figure 7-5. It also runs adjacent to a gold mine and processing operation run by Newmont Boddington Gold located 120 kilometres southeast of Perth, in the Mt Wells area (Osborne 2013).

There are also some private owners on the Bibbulmun Track such as privately owned farmlands, with which there are various arrangements including MOUs, licenses, leases or agreements by letter, depending on the landowner's preference. The track passes a working sawmill and goes through several small towns along the way. The socio-economic and political context along the track varies greatly and due to its mostly regional nature has a minimal impact.

Land ownership changes can be a challenge and managing the impacts of the neighbouring land uses (such as mining) on the track experience is necessary including negotiated track realignment to allow the mining interests to expand. This means that while access to some walk areas will be lost during the mining operations with planned 'rehabilitation' work, in time new forest will be established on the new landscape.
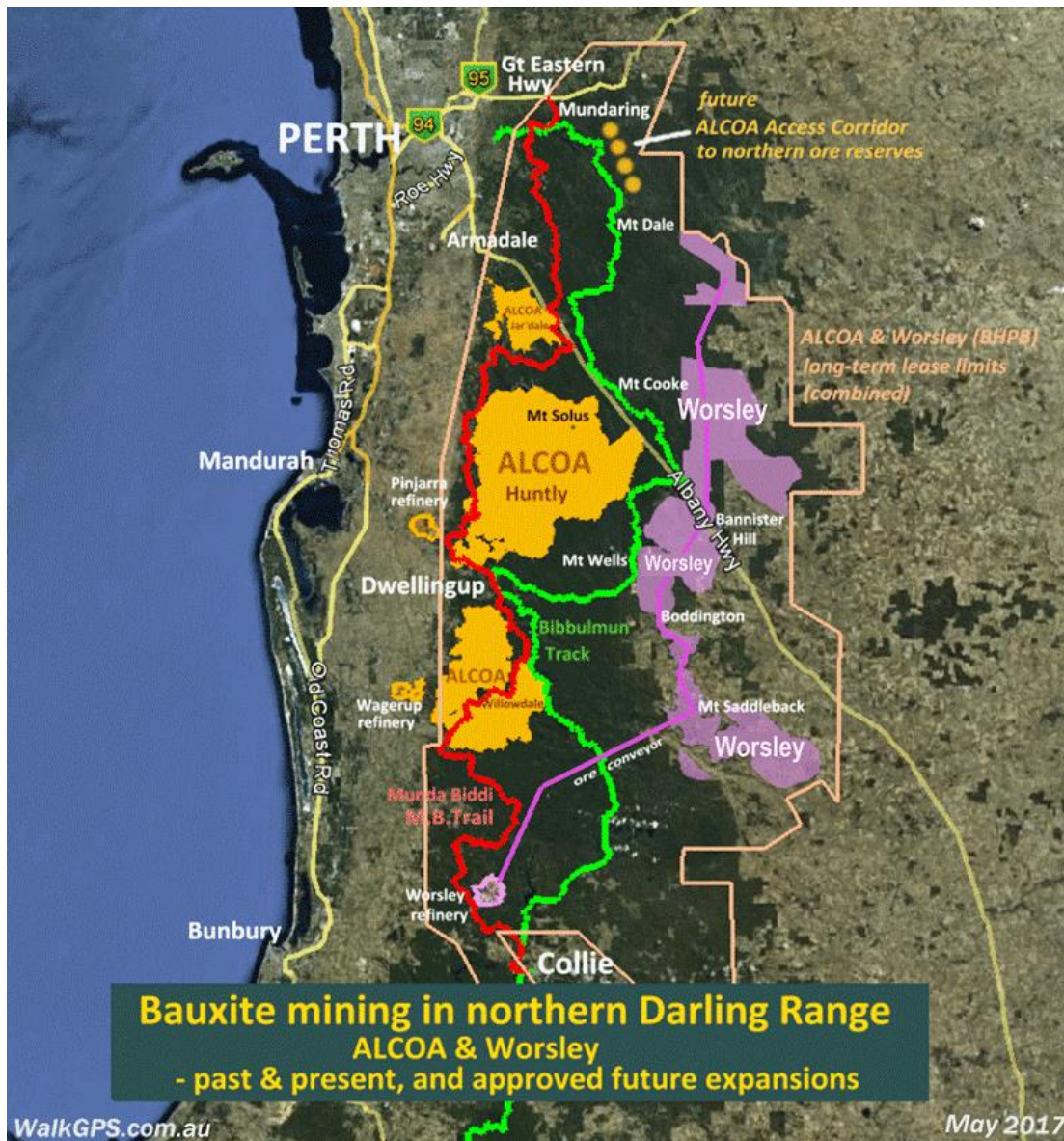
Figure 7-5 The Bibbulmun Track and mining leases

Source and Permission with thanks: Compilation courtesy Dave Osborne, from 'Bauxite mining' page, www.walkgps.com.au.   Imagery source: Google Earth.

7.4.   Governance of the Bibbulmun Track

The Western Australia trail network has been acknowledged by the Western Australia Government as important for the greater community benefit including environmental, social and economic and wellbeing outcomes. A Western Australian strategic trails blueprint (2017–2021) replaced the previous blueprint (2009–2015) and addresses the governance and funding of these assets including operational and aspirations objectives. It seeks to be a strategic platform to guide policy and resource decision-making. The first listed guiding principle is to "develop trails that are sustainable in their own right" (Department of Sport and Recreation 2008, 6). This document recognises that

Western Australia has an effective governance model, sharing the task of trail care and development between government agencies and community groups.   In a strategy to strengthen statewide governance arrangements, a community based body promotes trails alongside TrailsWA (the representative body convened by the Department of Sport and Recreation focused on trails development). This would link various trails across Western Australia and extend to a national platform leveraging coordination, advocacy, promotion, sharing best practice ideas and funding. Furthermore, the document gives ideas to the 18 key stakeholder groups of their roles, including some governance roles in the furthering of trails strategy in Western Australia.

> Keeping in mind the role of communities the need to "investigate resources to ensure the continued role of key community organisations that represent trail users and support the trails sector across the State. (Department of Sport and Recreation 2017, 40)

7.4.1. Stakeholders

The Department of Biodiversity, Conservation and Attractions is responsible for management of the Bibbulmun Track, and is well supported by the Bibbulmun Track Foundation, a community-based organisation that contributes primarily in the maintenance and marketing of the track. This arrangement has a Memorandum of Understanding setting out the obligations and responsibilities of both organisations for the management of the track. With the ongoing growth in the use of the track over the last 15 years the demand on staff and volunteers has continued to increase and this arrangement has sustained this growth successfully.

7.4.2. Partners

There are also many other partners contributing to the ongoing work of the Bibbulmun Track as listed.

1. Department of Biodiversity, Conservation and Attractions
2. Bibbulmun Track Foundation members, staff and board (over 300 over 10 years)
3. Councils along the track
4. Communities along the track
5. State government agencies (Tourism, Corrective Services, Planning Commission)
6. State government ministers
7. Landowners in and adjacent to the Bibbulmun Track boundary
8. Bibbulmun Track catchment residents and neighbours
9. Other community groups eg Munda Biddi
10. Businesses.

The founding and current chair of the Bibbulmun Track Foundation attributes the success of the Bibbulmun Track to the partnerships. From the Foundation's AGM report (Bibbulmun Track Foundation 2012):

> We have been successful because of the strong relationships we have forged over the last fifteen or so years with a multitude of individuals, organisations and government departments.

The government partnerships over the years are highly valued especially the Ministry of Justice (now the Department of Corrective Services) partnership allowing prisoners to assist in building the track and the facilities along the track. This became a benchmark partnership that continues today and has been duplicated around the country.

> No prisoner has ever tried to escape while working on a Bibbulmun Track team. Furthermore, there are cases where prisoners, after their release, have returned voluntarily to do more work on the track, and have brought their children on walks, to proudly show off the work that they did outside while "inside". And there is strong evidence that prisoners who have been involved with community projects have a lower rate of re-offending than those who have not. (Baker 2010, 28)

Other key government partners included the Department of Tourism, federal employment programs, Regional Development Commissions and local councils along the route. Other crucial partnerships are mentioned in this report. The Department of Sport and Recreation in its role as convenor of the WA Trails Reference Group is responsible for guiding the development and coordination of WA trails and managing the Lotterywest Trails Grants program which contributes $1 million to trails projects annually. In recent years, the Department funded the Foundation framework for volunteer management and office volunteer training. Lotterywest has provided funding for many Foundation projects including the new spur trail at Wellington Dam and the new website. Partners from the private sector that provide ongoing support to the Foundation include Newmont Boddington Gold, Western Power and Mountain Designs who have recommitted to the Foundation and providing international level services to walkers. Specific project sponsors are also important such as Alcoa who assisted with the realignment of the track and the Mt Cooke campsite. Verve Energy considered the walker experience on the Bibbulmun Track in their expansion of the Albany Wind Farm.

7.4.3. Volunteers

The Foundation averages 400 active volunteers who contribute around 20,000 hours per year. This is an extraordinary component of the Foundation program and one that all the other partners value highly. The five key areas that volunteers contribute to are:

- track maintenance (around 300 volunteers)
- event promotions (30 volunteers)
- guiding (20 volunteers)
- office work and trip planning service (15 regular volunteers)
- management (9 board members) (Bibbulmun Track Foundation AGM report 2012, 5)

Every year volunteers are recognised and rewarded for the milestones in the time volunteered (100, 300 and 500 hours) and thank you days are spread across the region. One volunteer describes his reason for volunteering in the AGM report:

> There is no doubt about my reasons for volunteering – it is the contact with people. From the other volunteers, the staff, and the many interesting (and sometimes perplexing) people who come through the door; everybody enhances my life to some degree.
> Office and Maintenance Volunteer (Sullivan Rock to Mt Cooke Campsite) (Bibbulmun Track Foundation AGM Report 2012, 5)

The Department of Biodiversity, Conservation and Attractions also provide prizes for outstanding service highlighting the shared partnership that both organisations have in their focus towards a successful track of international standard.

7.4.4. Funding

The Bibbulmun Track Foundation is funded through a variety of sources including membership payments, sponsor contributions at various levels (Bronze, Silver and Gold) and partner contributions to projects and other in kind support. There have been various grants over the years that have been significant such as the Lotterywest grants and other government grant funding such as a significant federal grant from the Department of Housing and Regional Development. The Foundation AGM reports contain regular updates of the income and expenditure of the Bibbulmun Track and the Foundation. Income from several grants in 2012 was approximately $36,000 and net assets were close to $500,000 with a surplus of $106,000 (Bibbulmun Track Foundation AGM report). In 2012, the income was divided into earned income from Bibbulmun Track walking breaks, tours, guided walks, hire gear and merchandise sales (38%), from sponsorship contributions $89,000 (14.7%), from membership fees $60,000 (9.86%), from a fee for services from Department of

Biodiversity, Conservation and Attractions (11%) and from income generated by donations, fundraising and interest (26.44%). More broadly the Bibbulmun Track has an annual direct visitor expenditure estimated at $13.1 million annually (Hughes et al 2016) which is part of tourism in Western Australia. According to Timothy and Boyd (2015), while the trail development and maintenance can be expensive, the return on investment is usually worthwhile from a regional economic perspective.

7.4.5. Governance phases

1970s–1979: Community idea – Government management

A committed bushwalker had a vision for a long-distance track through the south west of Western Australia (Perth to Albany) and met with the government Minister for Forestry for support. This developed into a government initiative to plan, fund and build the Bibbulmun Track. It was launched by the government in nine years with community support.

1988–1997: Government management – Develop partners in government

Over the next phase the track was managed by the Department of Conservation and Land Management (CALM) with the growing support of key government partners who had senior representatives serving on a committee overseeing the work. This group also started to involve the community and other stakeholders such as visitors centres. Major funding in this period came from the federal government.

1998–2018: Community governance organisation begins and thrives

A community governance organisation, the Bibbulmun Track Foundation, was born, formalizing from previous "Friends of the Bibbulmun Track" and a committed partnership (with an MOU) between the Department and the Foundation commenced. This moved the management to a shared arrangement and resulted in many complementary benefits for Bibbulmun Track support, growth and maintenance. The growth in community support, in partnerships (private and government) and in funding sources was significant. This governance arrangement enabled the Bibbulmun Track to continue to grow in success supported by a growing foundation Foundation growing with a strong board and staff.

7.5. Purpose – Recreation and environmental management

The Bibbulmun Track and governance is modelled on the Appalachian Trail as reported in the history written by Baker (2010). According to Stender (2017) there are two types of trail management models: the government provided version with community contribution that originated in the United States, and the more business-like approach of European trails (Stender 2017, 89). The Bibbulmun Track is more in keeping with the US model and was developed as tourism infrastructure by the government department responsible for protected areas through income from its forestry operations (Buckley 2010). According to Buckley (2011), the Bibbulmun Track is widely considered an example of successful parks and tourism management, however no money was contributed directly to conservation. The community governance partnership of management is widely regarded as best practice and has been duplicated in other green infrastructure in Western Australia such as the Munda Biddi Track.

7.5.1. Track use

There are over 300,000 nature-based visit days on the Bibbulmun Track annually (Hughes et al 2016). In accordance with the findings of Newsome et al (2013), the walkers of the Bibbulmun Track regarded the access to scenic natural areas, and connection with and increased appreciation of nature as the top two nature-based personal benefits, and walking as a physical and mental health activity was a top activity-based benefit (Hughes et al 2016). Track statistics are reported in Table 7-1.

Track use	• 302,960 visit days per year • More than half of respondents were on overnight walks (53.4%) of varying distances and time • Average distance walked for overnight users was 110 km with an average duration of 5.6 days • 97.5% of respondents were satisfied with their recent walk on the Bibbulmun Track
Track expenditure	• Average total annual direct expenditure of Bibbulmun Track users was estimated at A$13.1 million
Respondents' answers on community benefits	• contributing to healthy lifestyles • provision of access to green spaces/corridors • increased community wellbeing and pride • increased tourism in regional WA
Respondents' answers on social benefits	• access to scenic natural areas • walking as a physically and mentally healthy activity • escaping the urban environment • connection with, and increased appreciation of nature

Table 7-1 Bibbulmun Track use in 2014-15

Source: Adapted from Hughes et al (2016).

Most walks on the Bibbulmun Track are by independent walkers, either solo or with family and friends. The new website was designed with these walkers in mind by greatly improving the trip-planning aspects and gets 12,000 visits by 8,000 individuals monthly. The Bibbulmun News magazine reports on achievements of walkers with 142 walkers registering their end-to-end walks in 2017, with most of these (105) Western Australians (Bibbulmun Track Foundation 2017).

7.5.2. Events and environmental education

Around 60 events were held in 2018 with 754 people attending including 109 children. The Foundation liaised with the Department of Sport and Recreation to provide several events for the Culturally and Linguistically Diverse community. The track is used for corporate and team-building events, that double as fundraisers for the Bibbulmun Track and offer outdoor skills, problem solving and environmental awareness, plus mental and physical challenges and walking 15 kilometres a day along the Bibbulmun Track. Outdoor and environmental education is interwoven into many of the events that take place on and around the track. The guide books provide a wealth of environmental information to accompany walkers.

7.5.3. Environmental management

Responsible environmental management is important to support the primary purpose of recreation for the Bibbulmun Track. Dieback (*Phytophthora cinnamomi*) presents a significant threat to the Western Australian bushland and especially susceptible plants and in turn threatens the wildlife that is dependent on those plants. As a result, boot cleaning stations and information about the problem is part of the Bibbulmun Track experience. Fire and water are carefully managed as are any cases of erosion. The rules of the track and campsite codes encourage users to respect the bush.

The Foundation offsets all greenhouse gas emissions from its events and tours through the planting of trees and shrubs, with an estimated 17 tonnes offset in 2011-12. The Foundation is involved in environmental management and advocacy by protecting the track and its surrounds from encroaching development, with ongoing negotiations with neighbours with diverse land uses. The ongoing promotion of sustainable tourism and economic benefit to the local communities it passes through is encouraged (Bibbulmun Track Foundation AGM Report 2012, 8).

7.5.4 Advocacy

Foundation staff and board members are actively involved in various committees and projects in the Trails and Recreation area and in the formulation and implementation of relevant government

economic, social and environmental policy including; Lotterywest Trails Funding Panel and the WA Tracks and Trails Conference (Bibbulmun Track Foundation AGM Report 2012, 8).

7.6. Key findings from the primary data

The data sources for the Bibbulmun Track case study included twelve online surveys, five in-depth interviews, and desktop research from a range of Bibbulmun Track stakeholders.

7.6.1 Online survey

The Bibbulmun Track case study data collection included 12 completed online surveys with short and open-ended questions. The value of this survey is the broader group of views accessed and the indications of case study effectiveness. Most of the respondents work 3–20 hours on the project. Most have a medium to long-term (5 years or more) involvement with the project and are involved in a wide range of activities including decision-making and leadership. All respondents mentioned some volunteer involvement while three were also paid in some capacity. Of the volunteer (unpaid) respondents, there were more men than women, most were well educated (tertiary level) and now retired, aged 65–74 years. The survey results broadly confirmed the results from the interviews. Both are presented in this section and then analysed and discussed toward the end of the chapter.

7.6.1.1. Leadership and expertise

All aspects of Bibbulmun Track governance were rated well for effective decision-making with leadership and expertise most strongly agreed with and considered essential to good decision-making. This is in keeping with the major theme of people, leadership and expertise raised in the interviews and discussed later in this chapter.

7.6.1.2. Community involvement

Most respondents strongly agreed or agreed that the community had satisfactory involvement and that community expertise was well used although respondents were split as to whether the community and the community's skills could be used more. Respondents agreed governance and decision-making were satisfactory and most agreed that it was open and transparent. Many agreed that the stakeholders were working towards the same goal although they were uncertain as to whether the project allowed for innovation.

7.6.1.3. Motivation for the Bibbulmun Track project

Respondents' motivation to be part of the project was most clearly related to believing in the vision and work of the project for the good of the community, the environment and themselves.

> I get satisfaction from being involved in an organisation that I am passionate about.

Also:

> A long held interest, wanting to help, enjoyment, satisfaction. The environmental factors were reinforced as of benefit to the community. I enjoy contributing to the maintenance and ongoing care of the Bibbulmun Track so it continues to be available for those who enjoy walking in our amazing and unique bush.

Also:

> I believe it is essential that everyone should help to look after our natural resources.

A number of the Bibbulmun Track stakeholders were motivated to get involved to serve the community and give back. They value "returning something to the community after others have gone before" and "community participation/giving back".

7.6.1.4. Passion and positive volunteering

Passion from all the respondents rated highly with most being quite or very passionate about the Bibbulmun Track and they feel good or very good about working on it. Respondents reported there is great pleasure in being part of a well-run project, that is meaningful, and attaining the goals were factors mentioned: "Excellent coordination and personal contact, feeling valued, meaningful contribution, fun and sense of inclusion". A full list of the positive and negative factors of volunteering on the Bibbulmun Track is included in Appendix 5. Getting feedback and being appreciated were also important factors for volunteers: "The project is well run, volunteers feel they are doing a worthwhile task, appreciation shown for their efforts". The positive social environment is part of the attraction for several people and the sense of inclusion and community: "Shared passions and a sense of community spirit" and "Everything about volunteering makes me feel good".

The difficulties that can make volunteering a challenge include feeling that the job is not valued, over expectation and lack of support. The challenge is to get the balance right between support and overwhelming the volunteer. Several comments referred to "too much red tape" and "too much regulation and micro managing" suggesting that regulation can be burdensome. Another referred to a "lack of flexibility and support, poor training and having too greater expectations put on

volunteers". The positive side of this is "ensuring that the social side is enjoyable is also important, assisted by clear guidelines but not over control". On the group dynamic side of things, "disharmony in the work group" and "too much talking" were detractors.

7.6.2 Interview results

Five in-depth interviews were conducted for this case study, with each taking a minimum of one hour and some up to two hours. The participants were all involved in a significant way with the Bibbulmun Track, with three paid and two unpaid volunteers representing various stakeholder groups and organisations. Follow up data was sought several times to get updates on the case study to keep up with any changes over time. The major themes that emerged from the in-depth interview data are summarised below in order of emphasis given by the participants.

7.6.2.1. Partnerships

The definition of the term partnership in community governance is much broader than in the business world. For example, a "partnership is a strategic alliance or relationship between two or more people. Successful partnerships involve trust, equality, mutual understanding, and reciprocal obligations". Two key stakeholders form the key partnership in this case study: Department of Biodiversity, Conservation and Attractions and Bibbulmun Track Foundation. Secondary partnerships include a number of other partners that fall under the Foundation's scope. All interviewees talked at length about the Foundation partners and the collaborative arrangements and benefits. The core partnership between the Department and the Foundation is critical. The shared belief in the vision is a core feature.

> We've been able to convince government that there is a benefit in trails – both in health
> benefit, tourism benefit, public benefit, and conservation benefit, and government
> understands that those benefits are worth putting money into. (Community leader 1)

Several respondents from both the Foundation and Department recognised it is important that this relationship works with mutual respect and reciprocity. The complementary nature of these two organisations, the mutual benefit of the arrangement and the essential nature of a governance structure that enables the community voice of those who use the resource to participate in decision-making was highlighted.

> But the governance of a trail or a governance of a resource, would be because of the
> land on which the trail sits, has to be a relationship between the government that
> manages the land, and the community that uses the trail, and uses the land. We've

been lucky that that has been a really great relationship between us and DPAW (Department of Parks and Wildlife) as it is at the moment. (Community leader 1)

Well I think that between DPAW and the Foundation, I describe it as a partnership. We both have our core roles, and I think really it's the Bibbulmun Track really wouldn't be what it is today without either organisation. I mean the Foundation on its own couldn't handle the track. We would need DPAW to do the major maintenance. But the track would not have … would not be maintained to such a high standard without the volunteers' Foundation. And to be quite honest, it would probably be used so much less than it does now. (Para-organisation staff 1)

But the two organisations work in parallel. (Community leader 2)

The government has to hold certain responsibilities that they couldn't pass onto the community. and those responsibilities … are compliance [and liability] visitor risk management, which comes back to liability. So the infrastructure and the standards. I think some of that can be passed on, but there always has to be somebody who holds the final responsibility. And because we do fire management as well – has an impact. And harvesting operations. So the impacts from those on the trails, which result in diversions. So definitely everyone has their strengths in the relationship, and there are lots of things that the Foundation could do that would give the Department a hard time. But same the other way around. So not one necessarily has more powers but I guess different powers. (State government manager 1)

Regular and transparent communication and an agreement stating the nature of the partnership is essential to the ongoing success of the partnership.

And to make sure that that stays happy, and functioning, we have an MOU, which I believe is a part of the governance. And so the communication about who is responsible for what, is quite clear, and we don't get too many crossed lines. (Community leader 1)

On going communication. So as well as the board reports, obviously we in-between actually communicate with the Recreation and Trails Unit. So other things that are happening in-between, we report with them; or liaise with them. (Para-organisation staff 1)

In this partnership, the landowner arrangements dictate the terms of the relationship as well with the Department managing land arrangements and insurances.

Most of the Bibbulmun Track is on DPAW land. Not all of it, but most of it. There are no major issues on sections that aren't. Because DPAW covers liability for the entire length. I guess there are 100 or so non-departmental owners on the Bibbulmun Track.

We have MOUs, licenses, leases or just like agreements by letter, depending on what the other landowner wants really. But mostly we don't have big problems unless there is a change of ownership, and people don't notify us. So, no it works alright. (State government manager 1)

The distinction that the Bibbulmun Track Foundation is in partnership but not part of government is enormously helpful to build community ownership and allows for advocacy and sharing of community concerns when necessary. One of the enthusiastic long-term volunteers suggests that the volunteers know and like this element.

> I think also the thing that we are a non-profit, we're not a government department, is a good thing. People see us as a community volunteer organisation. So one of those you know – working at the ground level. Grassroots I guess you want to call it. Doing, working with government and very closely with government, but still being separate from. To the point where we are independent enough, that we can voice the walker's concern to government if we see things not going the right way. And that happens from time to time. That's all part of it. But I think that because people can rely on us to give them a voice is another measure of the success too. (Para-organisation staff 2)

> So the lobbying side of things, is also a strong power in the community arm, that the government hasn't got. And so together I think it is a good partnership. (State government manager 1)

Impressive displays of local community ownership have been seen along the track both during the build and management. Local communities have shared their understanding of the local area and demonstrated long-term displays of commitment to the good of the track and for tourism for their town. Interviewees noted the participation of a wide range of partners was key to building the track in the early stages.

> They called it a rainbow coalition. But it came from all over the place. So a lot of the.. well it wasn't really funded; it was in-kind. So labour and services were donated by a lot of organisations. Even schools, like Scots College built one of the campsites. So you basically had a project, where you had all this work that needed doing, and community groups were involved in it that way. So a lot of volunteer labour in building the campsites; building the track. A huge project, as you can imagine, which people wanted to get involved with. (Para-organisation staff 2)

Some of the neighbours such as a neighbouring mine contributed significant funds for their gold status sponsorship. One community representative reflected on that.

> It's good from their PR point of view, when you're going around digging up the bush [chuckles], to be seen to be supporting it in some way as well. Yes those partnerships certainly are important. (Community leader 2)

This is also viewed with some scepticism.

> You know, very convenient for anyone to be a major funder of the track. So you know it keeps the Foundation quiet in that regards. But the Newmont Mine is right next to Alcoa mine, so Newmont are pushing the Bibbulmun Track closer to the Alcoa one. And

actually Alcoa are going to use some of the soil that Newmont are going to put up in stockpiles. Because that is good for Alcoa. So in all of that, the track still has to go through. So it has to go through some operations. And both are sponsors. And so how do you negotiate that, will be one of the challenges over the next few years. (State government manager 1)

Over 50 affiliated organisations also provide support for the Foundation. Through negotiated arrangements, along the lines of the gift economy, they provide many services and products including in kind support, gear, office accommodation, guide training program and track maintenance.

> The Wilderness First Aid Consultants. Obviously all our guides need to be first aid trained. So we get free first aid training, in return for promoting their courses. So there is a lot of contra accounting working as well in that respect. (Para-organisation staff 2)

The volunteer network and the local partners along the trail are certainly recognised by several respondents as strengths of the Foundation. All the individual members also offer a partnership, many volunteer hours and some funds. This is further discussed in the next section.

7.6.2.2. Shared community vision and community ownership

The visionary leadership from the early days brought a shared vision that was based on an understanding of national and international best practice.

> They also had a varied background of expertise, but also big vision people who were probably aware of other things going on. Because of their roles, they'd be able to see the project in the light of the bigger picture of what was happening in the state. What was happening in national parks; what was happening internationally even. (Para-organisation staff 1)

From a community visionary leader, the vision quickly became focused to be about a community based foundation and people who knew trails.

> Very early on, in this project, I determined, in my own mind, that this was going to require some sort of foundation, some sort of community group, to keep pressure on the government. Firstly to finish the project, and secondly, if and when the project got to fruition, it was going to need some community involvement.
>
> And I've thought that the Foundation would be a sort of a club as well. I was really keen to have an organisation that where people who felt really strongly about the track could express themselves, and be part of it, and contribute to the track. (Community leader 1)

Right from the beginning the emphasis was on a community shared vision with volunteers playing a key role and feeling that they were an important part of the vision and project. It was necessary to be a shared vision among the board, the staff and the volunteers. Regarding the board one respondent said:

> They all share it. If they didn't share the current vision, they wouldn't be there. (Para-organisation staff 2)

This extends back in time and to the broader community especially along the track.

> I think also that community support is a measure. As well, as I spoke earlier about you know just ringing up people in towns and saying I need a favour. Just that goodwill that you've got – that's just ... yeah it's definitely there. It's huge. (Para-organisation staff 2)

Several respondents suggested that an invested community such as the Foundation is more likely to care for, support, give resources and promote the initiative.

> Yeah I really think that is a big one. If they can feel... if they feel like they are being involved from the inception, ah and they are building something: they are more likely to take care of it; more likely to use it; and promote it as well. So, you know you get everybody involved at the ground level and then you build from there. I think that is a really good thing. (Para-organisation staff 2)

One staff member spoke of his own experience of belonging and how he observes it works for others.

> And you can call it an attachment if you like but it's … you do have this kind of … almost a vested interest or an ownership in what's going on. But the other thing that helped the project along and what is still to this day helping the track, is this ownership of sections of the track. So volunteers can maintain a section and continue to look after it. And that is their section; they kind of own it. The same thing was happening with the construction in terms of the shelters. They got a plaque saying: 'this shelter was built by…'. You know, so there was that recognition of that club or organisation or whatever it was involved in that point. And whenever they go back out there, they are reminded of that. (Para-organisation staff 2)

A community volunteer who gives 600 to 700 hours a year said:

> I think if I developed some sort of reason for not being able to bushwalk, I would still come in here and do what I do. It would be I think it's partly ... most of the people that do this sort of volunteer work, just enjoy the company of like-minded people.

The state government representative also recognises the strength of the model and the highly committed community that thrives within the Foundation well beyond what the government can

offer. The representative mentioned the issue three separate times in the interview and highlighted the positive perspective from the government.

> Strengths of the Foundation – that they are the community representative. And the Bibbulmun Track Foundation in particular has a very strong membership – like good numbers. And a high level of volunteering. They do a huge number of hours. So anyone who is interested can, you know, can get involved through them. And gives more meaningful opportunities for the volunteers…
>
> It has a higher involvement for the community.
>
> And I think that the more the community can cover, the more the longevity is supported I guess. Any model that relies on government funding in these days may struggle in the future.
>
> And they have a very strong membership who has strong views about what they like and what they don't like. And I think that is great, because that means that's very protective of the trail, and there is a very strong commitment to the trail. And so when we try to put in things that they don't like, they certainly let us know. (State government manager 1)

7.6.2.3.   People, passion and expertise

The type of people that are attracted to work and volunteer on the Bibbulmun Track and in the Foundation are presented by the interviewees as offering a high quality of input due to their passion, their expertise and their service orientation. This seems to extend across time and roles in the organisation, from the key visionary leaders to the volunteers on the track and in the office.

> I would say the calibre of the people involved. The fact that the people that …. were able to recruit were decision makers. They also had a varied background of expertise. (Para-organisation staff 1)

A board member said:

> Everyone gets on very well. There is no antagonism, or animosity on the board. There never has been in all the years it has been operating. And I work really hard to make sure that it is an affable, friendly, productive and efficient board. (Community leader 1)

A community volunteer said:

> I think the strength of the whole thing has come from just the enthusiasm, of the individuals concerned. It's been a real serendipitous sequence of events that have led to the track being so successful. But I mean these people are not paid. Oh, ok, there are people on staff here who are paid, otherwise you couldn't have a continuity of operation here – it wouldn't work. But I think it has just been the sheer enthusiasm, and

willingness, and sort of love of the concept of tracking, and walking. (Community leader 2)

A state government employee who recognises the expertise throughout the organisation said:

But the great thing about the Foundation is that the people they have there are really knowledgeable. And so they get good advice. They can do the lobbying.

Like I said, the board is very strong as well. And the staff that have been at the Foundation, have also been there for a very long time. So that's a really good sign. And they are so knowledgeable. And they are very strong in their roles. (Para-organisation staff 1)

From the beginning the leadership of the Foundation was a highly effective group with passion for walking, expertise and influence. Yet this seems to be mentioned only when prompted and the feeling was more about the people across the whole organisation rather than any one or two visionary leaders. A community volunteer said:

They were people who could get things done. They were people who could raise money. And the (key leadership position) has been the same man, ever since it was formed. (Community leader 2)

A key leader said:

But we are quite happy to hand off to everybody else, and the people that are involved in it. Not often that you hear someone say that it is theirs. It is everybody's. (Community leader 1)

The broader volunteers refer to each other with respect and have a passion for the vision and for contributing in a positive environment. The Foundation seems to ensure that the volunteers are valued, passion is engaged and that they enjoy what they are doing.

But it's also fun. People seem to enjoy it.

I think it is the common love of the outdoors that pulls people here. And pulls people together…

Most of the people that do this sort of volunteer work, just enjoy the company of like-minded people. (Community leader 2)

It really helps for a healthy organisation. I think it is really important. At the same time, you've got to careful not to burn them out, and so temper that passion a bit. And have some older, wiser heads in there. And can channel the passion. (Community leader 1)

Finally, while nearly all comments about the people were positive there was an admission of a conflict-based difficulty associated with a change in the phases of the Foundation and project.

> Just one key individual who there did end up being a conflict with. But, [….] would be able to elaborate on that. I'm afraid that all I know is that there was a bit of conflict that… who was sort of asked to leave, … and I think possibly it was because … possibly because the next phase was being entered into, and there was strengths that were in the initial phase perhaps didn't translate into the next phase. (Para-organisation staff 1)

7.6.2.4. Funding uncertainty and independence

While financial uncertainty was raised as an issue by every respondent, it has been framed more positively as an opportunity and challenge to be met. From the early stages the Foundation realised that it needed to move towards financial independence. With issues on the track, it was difficult to make a point if money was coming from the funder.

> We had money in the grant application to help set up – not a lot, but it was for the maintenance of the trail. And that helped us get going. But we determined from really early on, that part of the original theory if you like behind setting up the Foundation was that we were going to have to be financially independent at some point – of government, for a number of reasons. (Community leader 1)

A foundation staffer said:

> I guess this was one of the problems with the original two versions of the Bibbulmun Track – there wasn't much funding. So, various sponsorships… companies were brought on board to sponsor.

A state government staffer observed the same is true today.

> And so money is a big issue at the moment for everyone. So trying to diversify income sources, and seeking alternative streams, you know, is important. (State government manager 1)

The sponsor network, especially associated businesses, is variable and not necessarily long term, much like the government funding, and while innovative solutions have been sought, they can have challenges and this was acknowledged by several respondents.

> Because sponsors do come and go, depending on, quite often if the relationship ceases, it's because a staff member has moved on, and the new person goes – oh what is the Bibbulmun Track? You know and they have different priorities. A bit like the government thing. Things can change quite rapidly. (Community leader 1)

The state representative acknowledged the constant challenge to find money for the track and the Foundation and the challenges around innovative solutions.

> Like the funding sources. Like where do you get your money from?
>
> And you not just have to get money for the trail, but you also have to get some money for the not-for-profit partner. And they often struggle.
>
> And yeah, we often have ongoing discussions about, you know, what can and can't be done by either partner.
>
> Sponsorship is a really big deal the moment. So can the Foundation put on sponsorship deals on the Department's lands. So can they put signs everywhere?
>
> So is that something that could be done here? And where does the money go? Does it go to the Foundation? Does it go to the trail? Does it go to the government? Do we want that? What kind of agreements do we have? Who could be the sponsors? You know there are a whole lot of, I don't know, discussions going on because it is a potential mine field. But it is something we are currently working through. (Para-organisation staff 1)

A community volunteer commented more on the viability of the Foundation and its sustainability and financial viability being a community governance model.

> While there will be disagreements, there is no conflict of interest. There are no shareholders. We are not concerned about paying dividends to anyone. There's going to be no argument about what is done.
>
> There is simply not enough money, so the government grants are provided. But I think it is important that the Foundation does raise money. And that we carry on the same way. That we carry on relying at some extent on the community spirit. I mean volunteering is a great thing in Australia. (Community leader 2)

7.6.2.5. Reputation

The Bibbulmun Track and the Foundation have developed a very strong reputation locally and nationally for good practice in several areas, in particular for governance arrangements. The track itself has a worldwide reputation as a wilderness track for walkers. Sharing the best of the Bibbulmun Track has been a positive outcome of the vision.

> You know – this is what we are doing, and it seems to work, and other people bought into. I think at some point we had three ministerial delegations from other states that had come to investigate the relationship between CALM and the Foundation. About why it was working; what we were doing; why was the trail successful? (Community leader 1)

So, having people come to us and go: 'right we want to use your … use the Foundation as a model of what we want to do', is really good kudos I think. (Para-organisation staff 2)

But I think that because people can rely on us to give them a voice is another measure of the success too. (Para-organisation staff 2)

This organisation is sort of looked upon as a leader. (Community leader 2)

The partnerships model has been very successful as well. For example, the partnership with workers from the Corrective Services prison system has been copied in other places and continues.

Their work camps program, which spun out of the Bibbulmun Track and the building of it, has been I believe a very successful story in the prison system. (Community leader 1)

Several of the other trails in Western Australia are modelled on the Bibbulmun Track organisational model and the Foundation staff are also involved in establishing the state peak body as an example of the respect they have in the state.

Trails WA website, in the top trails, that has always been closely linked to the Bibbulmun Track Foundation. And then the executive officer is EO of Trails WA as well. And so there is a lot of crossover there, in regards to leadership in the trails world in WA. (State government manager 1)

To allow others to understand the Bibbulmun Track and the Foundation journey and in response to the many enquiries, a volunteer invested a great deal of effort into writing a history to address key questions.

How is it that your organisation is so successful – how do we do this? So she asked me to write a document, explaining how it had happened, and what they would need to do, and so on and so forth. And from that I wrote a history. (Community leader 2).

7.6.2.6. Visionary leadership and influence

Right from the start the community visionaries sought people who understood and shared the vision and who could influence decision-making in Western Australia and responses suggest this has been to great effect.

I think from the beginning it was very much about who could influence ... not so much government policy, but who could influence, or reach the ears of the powers that be, to enable funding and … yeah I think very much the initial board was very much about getting people who were influential. (Para-organisation staff 1)

> You had people that were visionaries, that saw what the track could offer and should offer the community. (Para-organisation staff 2)

> So I think the Bibbulmun Track board is set up to have high influence: political influence; it's got a lot of high powered people on that. So I think that has been working well. (State government manager 1)

One of the leaders had individual personal characteristics.

> Very determined; very motivated; … had an idea and stuck to his guns about it. (Para-organisation staff 2)

Convincing the government partners that the project was worth supporting took some time and effort, and the right people.

> We've been able to convince government that there is a benefit in trails – both in health benefit, tourism benefit, public benefit, and conservation benefit, and government understands that those benefits are worth putting money into. (Community leader 1)

So while all recognised the key influential leaders, one respondent added the element of the unknown into the equation, claiming it to be "an amazingly fortuitous sequence of events: things seemed to fall into place" (Community leader 2).

7.6.2.7. Innovation

The Bibbulmun Track governance arrangement has allowed for innovation and creative solutions especially for marketing the track, increasing volunteers, and developing partnerships and solutions to funding issues. The Foundation has enjoyed strong marketing abilities in the staff and a community oriented culture.

> (A former staff member) was a real marketing person. And I think it was her flair, and she was a real ideas person, and I think it was her flair that really got the Foundation going. And a lot of the stuff that she implemented was still the core of what we still do now. (Para-organisation staff 1)

The environment also encourages ideas, flexibility and prompt decision-making.

> Cause if people have an idea, they can float it with us. And we'll discuss it, so anyone can submit it – and if we think it is a good idea and it's worth talking about, we will. And I think because within the Foundation, we can make decisions pretty quickly. That is actually one of the advantages, is that we can actually make decisions, and move on things pretty quickly. (Para-organisation staff 1)

It allows opportunity for creative projects and staff and volunteer trust such as several book projects.

> It means that not only do the staff and volunteers not feel watched over, or pressured, it means that there is that space for creative innovation and things to occur. So it is certainly not oppressing in any way like that. And I think that is a really good thing too. (Para-organisation staff 2)

7.6.2.8. Land use conflict

The track is a single use facility that caters for a range of walking.

> I think it has got enough benefits for everybody – not just experienced walkers, and not just beginners, but everyone in between. (Community leader 1)

In the past and currently there are times when the multiple uses of the trail came into conflict and needed active management.

> But we've got this issue at the moment: we are just submitting a review into the parliamentary committee now about hunting on the national parks. But as far as we are concerned, specifically on the Bibbulmun Track. We just think they are diametrically opposed.
>
> Cycling we did have an issue with. We think the trail wasn't really made for cyclists. So the damage to the trail surface in some places was quite bad from bikes. So, the concept of the Munda biddi trail actually came up at a Bibbulmun Track meeting. We thought: how the hell are we going to get these bikes off our trail. (Community leader 1)

From the state government staffer perspective, the issue was handled well.

> When the Bibbulmun Track was first found, and we only had the Bibbulmun Track, we had mountain bikers using the track, and obviously that wasn't very good from a hiker's perspective. So the Bibbulmun Track was one of the key drivers for the Munda biddi trail to be developed. So they had the leadership and the vision to – if we don't want you in this, then we'll help you do something else. (State government manager)

As a passionate advocate for the trail one community member had done a lot of thinking on this issues and gave several examples of problems with shared use trails around Perth. His conclusion after mentioning many issues around the Coastal GreenWay in Perth's northern suburbs was "if you have the land, you are better off separating them out". The use of the track is also at times in conflict with the neighbouring uses and this is discussed further in the risks section below.

7.6.2.9.   Risks

One of the risks mentioned by several people was the succession planning for all levels of the volunteer community from the board through to the office workers and on site guides.

> Because the risk with any organisation is that you have that period of growth, and then you have that plateau phase, and then your support can drop off quite dramatically. (Para-organisation staff 1)

> Try to balance old blood with new blood. I try to look for succession for me, and for other members of the organisation. (Community leader 1)

This was especially important to one of the respondents who works alongside retirees in the office.

> Finding the right sort of people, it's also true that since we have retired people, retired people get old, and eventually are going to fall off the perch. (Community leader 2)

Another interviewee mentioned the current talent on the board.

> I guess a risk might be that three or four of the really long-standing, and influential board members could all retire at the same time, given the time that they have been on the board. (Para-organisation staff 1)

He also mentioned the nature of community governance and, while being an avid supporter, he mentioned the risks it raises.

> There is an absolute intrinsic weakness that you are depending on goodwill. (Community leader 2)

Overuse of the track was mentioned as a risk and an issue that needed managing and new infrastructure.

> We can't curb the use of the track. It's impossible. But I think we do have to make sure that if there is overuse, that it is taken care of in some way or other. (Community leader 2)

Risks were also associated with the activities of neighbours and their dominant legislation.

> A lot of Water Corp land. A … water catchment land, yes. That's the thing that almost everywhere from here to Collie, is water catchment, and you're not allowed to camp in water catchment land, except the designated campsites. And the only ones are virtually the Bibbulmun campsites. So … that sort of government regulation could impinge on the track. (Community leader 2)

Another issue raised was the overregulation of the volunteers. This was presented as a growing risk area as volunteers question their involvement given the demands.

> The ever increasing control of what people can do – let me give you an example, as a guide: That's a specific job for which you have to be trained. You have to have certain abilities in first aid, and so forth, and requirements are becoming more and more strict: if you are working with children, you have to have a police clearance and so on and so forth. And the more rules and regulations and things like that, I think the less people are going to be saying – well come on, I'm doing this on my own free time and for no reward – well no financial reward – let's be specific there. (Community leader 2)

The changeable nature of government and politics is an ongoing risk and one that the Bibbulmun Track is well aware of and manages actively.

> Government department priorities change depending on the policy of the moment; where the funding is; what the priorities are. And so at any given moment the Bibbulmun Track could have become a non-priority, and so that was a definite weakness. (Para-organisation staff 1)

7.6.2.10. Communication and transparency

There are regular opportunities for communication between key stakeholders, staff and volunteers through meetings and events. There is a shared strategic visioning process and formal reporting to share information regularly.

> Yes, we have our three year strategic plan; an annual business plan; an annual marketing plan; obviously an annual budget. So the business plan reflects obviously the strategic plan etc. So it sort of filters down. So the board has direct input into the strategic plan; in fact it is them who do the strategic planning. But the staff – it's involved with that. I think that is probably one of the key strengths: with the strategic planning it involves staff as well.(Para-organisation staff 1)

The office environment is noted by one stakeholder as being very inclusive and transparent.

> They are very open in the way they work within the organisation. And the board meetings are held in the common room. You know, staff might be sitting on their desk, and it is all open. And so there are no secrets and that kind of thing.(Community Leader 2)

7.7. Lessons from the Bibbulmun Track primary research findings

The strengths of the Bibbulmun Track:

- The Bibbulmun Track is an excellent long-term example of sustainable community governance in Australian green infrastructure.
- The model for the Bibbulmun Track involves a core partnership between the government agency that is tasked to manage the track and a community organisation that complements that agency's work to make the track a success. Both organisations see the benefits the other brings and share the vision for a successful and sustainable wilderness walking track.
- The Foundation has a staff of approximately five and a volunteer network of 2,000 and continues to grow.
- The staff and volunteers are passionate about the track and walking
- Several influential expert community leaders visioned the track and the Foundation with its community governance emphasis
- The board had long-term commitment from expert respected people committed to the vision and acting in positions of influence in Western Australia.
- The partnerships that the Foundation have developed have continued to grow and have led to steady and diverse funding sources, making it less reliant on government funding.
- The number of walkers using the Bibbulmun Track continues to grow.
- The Foundation is a positive and open place to work.

The challenges of the Bibbulmun Track:

- Funding has been a challenge, leading to creative solutions and partnerships.
- The Bibbulmun Track relies on volunteers and needs to manage their succession.
- Over administration and bureaucratic approaches associated with volunteering can impact enjoyment.
- Neighbours with conflicting land-uses and bushfires have created challenges that on the whole are managed well.

The lessons from the Bibbulmun Track:

- The track is a single use track and seeks to avoid multiple uses thus minimising conflict.
- The leaders are delighted to share the track's success and ownership with all the staff and volunteers.
- The work of the community governance project needs to add value to volunteer quality of life to maintain support.

7.8.   Discussion

7.8.1   Key observations for community governance of green infrastructure

All interviewees shared stories and descriptions that suggest the Bibbulmun Track Foundation is a highly functioning community governance organisation. Respondents all spoke about the many members of the organisation, the volunteers involved in the Bibbulmun Track and the many community associates and partners, businesses and government organisations connected to the project. The opportunities afforded to the Foundation due to its community governance structure are essential to its success and ongoing sustainability. These included the possibilities for funding sources, for a breadth of partners under different innovative arrangements, the freedom to advocate and lobby for the mission (ie bushwalking and establishing a track) and the ability to generate community volunteers sharing in the passion and mission. The fostering of enjoyable working and volunteering conditions and the social nature of the organisation also seems to be understood by all as important. The returns to the state of Western Australia of a project such as the Bibbulmun Track cannot be underestimated, especially in terms of building community fitness, wellbeing and belonging.

7.8.2   Visionary influential leadership

A new descriptor has emerged that seems to characterise the visionary leaders on the Bibbulmun Track and this word is influential. The Bibbulmun Track was set up by influential leaders with a passion for bushwalking and walking tracks and with positional influence in the key government organisations. This enabled strategic partnerships for the success of both the building of the track and the setup and sustainability of the Foundation. Unique to this case study, this founding group of visionary leaders seemed unusually well suited to making this idea happen and with an unusual community wellbeing focus. They each had a passion for bushwalking, experience of other walking trails and their management, friendships and connections, professional expertise and roles in government organisations, with several carrying diverse positional power and influence for a long period. Possibly more unique was their belief in the community governance model and in a genuine role for ongoing community participation through volunteering.

7.8.3   Friendly, passionate, expert people

The culture created by the current leadership and staff and volunteers stands out as an essential part of the success of the community governance model and its sustainability. The ability to continue to grow volunteers and new walkers is due to the evangelical nature of the mission (try bushwalking) and the easy, friendly, fun and inclusive nature of the organisation. Maintaining an environment of

passion and joy for walking in nature and community participation is broadly understood by the staff and by all the stakeholders interviewed, however they may have growing threats due to the changing nature of regulation of volunteers.

7.8.4 Innovative culture of creativity and partnerships

The innovative culture has been fostered in parallel with the community governance agenda. The two work well together and the Foundation board and the government partner both recognise and acknowledge this as a key part of the Foundation's current and future success. It has enabled the CEO and staff to develop interesting partnerships, sometime financial and other times more mutually complementary. The partners include several significant mining companies which raises interesting ethical questions on the theoretical propositions underlying this research. The interviewees did not seem to be overly concerned with the nature of these partnerships or even that a board member works in a mining company who is a significant sponsor. This arrangement, different from a public private partnership, is based on the corporate social responsibility funding model and motivated by positively influencing the significant community membership. The Bibbulmun Track Foundation has sought to be innovative in its partnerships, something that a government run trail could not easily attain due to lack of community buy-in, bureaucratic processes and hierarchical decision-making.

The partnerships associated with the Foundation are many and varied, and are a significant component of the Foundation's success in getting the track built and in maintaining long-term alternative funding sources that allow the Foundation to remain independent from government. These partners include the other state government agencies such as Corrective Services and Tourism WA, the many councils along the route, regional business and regional development associations, trail and track associations, schools and businesses along the route, and the many sponsor organisations and membership categories from business to individuals (many of whom are active volunteers).

The core partnership of the Bibbulmun Track is the Department of Biodiversity, Conservation and Attractions and Bibbulmun Track Foundation partnership which has been developed over time with a shared belief in the value of the track for Western Australia. The shared vision and the cooperative approach between the state and a community foundation for a green infrastructure asset is a unique and key feature of the Bibbulmun Track's success. Both organisations speak honestly of their own limitations and their need for the other to have a successful community based wilderness track. The

role of leadership, expertise, passion for walking, influence and power in Western Australia and even friendship has been key to its success in both organisations and led to inspiring leadership in other projects beyond the Bibbulmun Track. This scale of community and government partnership is largely unrivalled in Australia (although common in the United States, on which it is based) and offers an example of alternative practice for Australian green infrastructure management. The track's location in Western Australia, a state with an independent and pioneer reputation, a love of camping and wild spaces and where decision-making (government) is based in the "smaller" Australian city of Perth (still operating like a large country town) may also play a role. Certainly, the level of connection between people of influence in this project is noted.

In summary, the breadth of partnerships beyond the core partnerships is another area that is exceptional for green infrastructure in Australia. The proactive approach towards negotiating partnerships of a wide variety is significant and innovative, demonstrating an open-mindedness and willingness to try out and manage new opportunities. It is also resource intensive and an investment made at the highest level of the organisation. Structures and processes are established around partnerships, memberships, and sponsorships and these have some generic and flexible and interesting skill service exchange arrangements and contra accounting.

7.8.5   Risks remain and are managed

There are many risks needing managing now and in the future. Interestingly, the interviewees framed risks as challenges and opportunities. The risks for the Foundation include replacing aging volunteers, even on the board, continuing to manage and encourage volunteers positively, and managing increasing levels of regulation which may discourage volunteers. On the track itself, the actions of neighbours, their approved land uses and the potential impact on the track remain a challenge. The ongoing need for funding also remains a challenge. The Foundation seems better set up than most for these challenges although the ongoing threat to volunteering in Australia from increasing regulations is an issue of concern for many not-for-profits relying on volunteer workers.

7.8.6   Project phases

There were several unprompted references by the interviewees to support the notion that the formalization of community governance goes through "phases".

> Once the Foundation became established, I guess there were different aims and motivations. So things changed at that point. (Para-organisation staff 2)

In this case study, any phases relate to the informal and formal stages of the project and the shifts in leadership, in stages of the built asset, in partnerships and in structure.

7.8.7 Transparent and open structures and processes

Communication and transparency of the organisation is encouraged in the day to day culture. New ideas by any members and volunteers are encouraged and listened to by the staff and then shared with the board. Reporting to partners is taken seriously and done regularly and well.

7.9. Findings compared to the literature and "contribution" assessment

The governance of the Bibbulmun Track has enjoyed significant influential and enduring leadership; medium to high levels of trust and openness; high levels of inclusiveness (first with the government and then the community) over time; and improvements in systems as the project formalised. The issues emerging from the data as important in this project but different from the literature include: the significant role of volunteer leaders who were both expert and influential; the innovative partnerships; and the importance of state government collaboration with not just the green infrastructure but also the benefit of and role for community governance. Over 40 years, it has been a project with an ideal trajectory and has been highly effective. Its efficiency has been high and it operates in a state of "dynamic governing" with high social and institutional capacity (Evans et al 2006). Appendix 11 shows an assessment of the case study against the criteria developed in Chapter 3 (Table 3-6) to establish the case study's "contribution" to sustainable planning and management of green infrastructure. The contribution of the community governance towards the Bibbulmun Track outcomes is performing at a high level with the greatest potential risks being natural disasters and volunteer over-bureaucracy. The Bibbulmun Track has a high chance of being sustained into the future under a community governance model due to strong indicators for growth, in users and volunteers, in partnerships, and in funding and innovation. It remains a flagship green infrastructure with a significant contribution to make as a leader in community governance in Australia and a model well worth duplicating for sustainable development.

7.10. Conclusion

The Bibbulmun Track is an example of a long-term green infrastructure project that has integrated both the community and the Western Australian Government in an authentic and functional way. The current shared governance and management arrangements are working towards the growth and sustainability of both the Bibbulmun Track and the Bibbulmun Track Foundation. The project is community conceived, government planned, built in partnership and managed using a genuine community governance model. The findings show that the stakeholders are broadly positive about the Bibbulmun Track governance and show a deep passion for bushwalking and a sense of ownership for the track and a strong belonging to the Foundation. Leadership has been visionary, inspired, long term and influential allowing opportunities for innovation such as a growing portfolio of diverse partners. As a case study, it raises the issue of ethical trade-offs for community governance purists of private partnerships. The findings also show a positive culture that enables success especially for ongoing work of the community volunteers, many of whom are generous, community minded professionals with expertise. All these factors suggest an exciting and sustainable model that brings quadruple bottom line outcomes, with lessons for other green infrastructure projects.

Chapter 8 Comparative analysis and discussion

8.1. Overview

This chapter focuses on analysis of the primary data of the three detailed case studies: the Sydney GreenWay, the Melbourne based Merri Creek and the Western Australian Bibbulmun Track. Analysis of the data from multiple sources highlights the three cases in their context, general characteristics and key findings to add to our understanding of the role of community governance in green infrastructure in Australia. It also outlines and discusses the shared themes which emerged across the interviews including governance arrangements, partnerships, visionary leadership, financial uncertainty, community involvement, reputation and expertise, positive and innovative learning culture, governance and management structures and conflict. Finally, it compares the similarities of these themes with the literature and highlights new emerging themes in the Australian context.

8.2. Summary of case studies

The case studies represent three examples of green infrastructure with an active community involvement in three different Australian states. The nature of the green infrastructure in each case differs slightly with two mixed use urban green corridors, one with an emphasis on active transport and conservation (GreenWay) and the other on conservation and recreation (Merri Creek) and a single use regional corridor focused on bushwalking (Bibbulmun Track). The role of the community also varies slightly in each project, with the GreenWay now characterised by an institutionally driven approach rather than a community based not-for-profit organisation as seen in the other two projects. While the three projects all rely on partnerships with government, these arrangements differ as do their approaches to funding, each with a different major funding source. The reputation of the projects is linked inextricably to their funding sources and the Bibbulmun Track Foundation and Merri Creek Management Committee have built considerable reputational capacity. The GreenWay context is highly political and entirely urban, with contested land use pressure along its five kilometres; the Merri Creek is mostly urban with some urban boundary issues in the northern section of a 60 kilometre corridor; and the Bibbulmun Track begins on the urban fringe moving into a regional area passing through villages over its 1,000 kilometres. Table 8.1 provides a summary of each case study's characteristics in comparison and Appendix 8 provides a more comprehensive comparative discussion of the case studies.

Table 8-1 Characteristics of case studies

	GreenWay	MCMC	BTF
Topic	**Characteristics**	**Characteristics**	**Characteristics**
Location	NSW, Sydney's Inner West	Victoria, Melbourne, Northern suburbs	Western Australia, Perth to Albany
History since	Late 1990's	1976	1970's
Type of green infrastructure	5km mixed use green corridor in Sydney's medium and high density inner west including light rail, mixed use paths, conservation, recreation, art and education.	Green multi-use riparian corridor including conservation, paths and some education and recreation.	Dedicated bushwalking track, with camping extending 1000km mostly through wilderness
Community role	Community visioned, now the Friends of GreenWay work informally with the place manager	Community visioned, now the Friends of Merri Creek work with MCMC who are a nfp community association	Community visioned, now the BTF, a nfp foundation, manage hundreds of members and volunteers passionate about the BT
Current governance	Institutional governance with a place manager established by the 2 Councils (was 4) in partnership with community and Friends Group represented by a GreenWay Steering Committee	Community governance led by an Association with Staff and a Friends group in partnership with Councils along the Corridors and overseen by a shared board	Community governance led by a Foundation with staff and extended membership in partnership with State Government and overseen by a shared board
Key long-term government partner/s	4 Councils with jurisdiction in the GreenWay corridor became 2 councils, Inner West Council and City of Canterbury Bankstown. Recently the NSW state government announced support.	6 Councils with jurisdiction in the Merri Creek Corridor corridor - Darebin, Hume, Moreland, Whittlesea, Yarra and Mitchell	DPaW (formerly CALM)
Reputation	Low-medium	Medium	Medium-high
Context	High instability A high level of political and institutional uncertainty in boundaries, names and structure of agencies and government, funding emphasis and staff and politician consistency due to its location in a marginal electorate for local, state and federal politics	Some instability Some political uncertainty influenced by state and federal politics contributing to funding uncertainty, agencies names and structure and support for the vision.	Relatively stable Minor political uncertainty with state changes affecting state institutional funding emphasis and agency names and structures.

8.3. Main themes

The next section presents the themes in common from the case study findings, in an indicative order of emphasis. The case study themes are summarised in Table 8-2 (with abbreviations addressing each case BT, GW, MC) with a more detailed comparative table of themes in Appendix 9.

Table 8-2 Main themes emerging from the three case studies

Themes	Summary	Comparative Analysis Summary
Partnerships	All cases mentioned this often, rely on their partnerships and did it differently. Top theme for BT, second most commonly emphasised theme for GW.	There are several key core partnerships in the three case studies, and these are all fundamental to their success. The BT is more state government and private sponsor focused, the MC more focused toward local government as a contract partner and the GW is a local government partnership with a recent partner in the NSW Government.
Visionary Leadership	Visionary leadership was considered important across cases and emphasised often. Top theme for GW, third most relevant theme for MC	All projects had community volunteers as their visionary leaders who had impressive expertise, time and influence. For BT the political influence of the leaders stood out with them being able to influence the state government towards genuine partnership. The MC showed long-term collaborative leadership from several community members. Tension in leadership arose as the GW grew in complexity.
Financial uncertainty	A broad issue of concern for all cases but approached far more positively and creatively by MC and BT. Second most commonly emphasised theme for MC.	All case studies are sustained over time despite challenges with funding. Both GW and MC endured difficult, similar circumstances, with state government withdrawal of promised financial support (majority of funding). All interviewees talked about financial uncertainty as a challenge, however MC and BT framed the issue more as a challenge with opportunities than as a problem.
Community involvement	Clearly important and mentioned in many different contexts highlighting volunteering education and engagement. Second most common theme for BT, third most commonly emphasised theme for MC.	Community involvement was clearly important and mentioned in many different contexts including memberships (BT), in decision-making (MC, BT and GW) and bush regeneration (MC and GW). All projects highlighted the role of community volunteers in environmental programs and education. All projects were visioned by visionary leaders in the community and show impressive long-term demonstrations of expertise, passion and volunteering.
Reputation and expertise	Highly significant for MC (and important to BT) because their future depends on it due to their business model. Also relevant in the GW more recently.	Government and other grants have played a significant role in the development and progress in all three projects and winning grants and making partnerships depend on developing and maintaining a good reputation. This reputation is based on having expertise in the field and good management of grant funds.
Positive learning culture	Innovation and positivity essential for community governance. Third most commonly emphasised theme for BT and fourth theme for MC.	Both MC and BT have a positive culture with a passion for the work. At a deeper level, they have engendered a culture of learning, innovation and flexibility which aligns with the success of a community governance organisation. GW has passion and positivity for the project, less for other participants.

Several other themes emerged as important in one of the case studies. Governance was mentioned by GreenWay stakeholders as their fourth most commonly emphasised issue, specifically formal versus informal governance arrangements and mentoring and support for governance direction. Managing risk was mentioned, mostly in its association to uncertain funding. The other two cases, Bibbulmun Track and Merri Creek, mentioned management challenges and innovation more than governance given general contentment with their governance arrangement. Reflexive practice, organisational learning, systems improvement and innovation were all responses mentioned to improve their management. Conflict in relationships was raised as an issue (for a certain period) in the GreenWay project but not in the other projects and mostly related to a breakdown in trust among stakeholders. The GreenWay situation was also aggravated by external issues of complexity, especially around competing land uses for the corridor and political pressure. Land use conflict was also raised as an external issue on the Bibbulmun Track with careful management of neighbouring mines and a proactive approach. Land use pressures through residential subdivision on the upper Merri Creek corridor also put some external pressure on the stakeholders. Complexity related to the project's geographic and social political context is an external issue that raises challenges.

8.4. Main themes in academic context

The major literature informing this research includes Erickson (2004), Ansell and Gash (2008) and Lockwood et al (2009) and more recent literature by McKinlay et al (2011), Abbott (2012) Frantzeskaki et al (2016), Tilbury and Wortman (2004) and Buijs et al (2016). These authors provide the basis for consideration of the principles and dominant themes to understand sustainable community governance. Certain themes are raised and reiterated in much of the literature on sustainable governance, collaborative governance, good governance and community governance and particularly as applied to green infrastructure and greenways. These themes are compared to the themes raised in this study's case studies and, where comparable, are used to assess the case studies' effectiveness. They include themes of strong influential leadership with a vision for sound environmental outcomes (Erickson 2004), reduced administrative and financial constraints (Lockwood et al 2009), power and resources (Ansell and Gash 2007), collaborative and deliberative decision-making (Ansell and Gash 2008, Abbott 2012), subsidiarity (Marshall 2008) and public support and trust building (Erickson 2004, Lockwood et al 2009). More recent literature has highlighted themes of systemic thinking, innovation, adaptability and reflexivity (Frantzeskaki et al 2016) and partnerships (Mathers et al 2015). I Tilbury and Wortman (2004) proposes five components to engaging people in sustainability: imagining a better future, critical thinking and

reflection**,** participation in decision-making, systemic thinking and partnerships. Lockwood et al (2009) developed a list of eight normative principles after consideration of many case studies in Australian natural resource management which inform the values associated with all good governance:

- Legitimacy
- Transparency
- Accountability
- Inclusiveness
- Fairness
- Integration
- Capability.

The results of this study show that while many of these principles (Lockwood et al 2008) have a broad relevance, they address the challenge from a normative perspective rather than a practice perspective. Therefore only a few of the actual terms in the literature were mentioned by the respondents in this study. Although related concepts were mentioned, many of these words are not in general use in day to day practice and so their application takes some careful thought. Given that this study took a pracademic approach, Tables 2-3 and 3-6 show principles and ideals from the literature synthesised and simplified as best practices for community governance of green infrastructure projects, those of vision leadership, openness and trust, inclusive partnerships and working systems.

In addition, a framework by Evans et al (2006) that describes sustainability governance as "dynamic governing" comparing it to active, passive governing and voluntary governing provides a simple and effective tool for consideration and application. It is important to understand what forms of social and institutional capital need to operate respectfully alongside each other to achieve a state of "dynamic governing" and realise the potential for community governance. This tool is tested here for its potential effectiveness in assessing effective community governance scenarios and for further application in practice.

The following section discusses the findings from this study and incorporates the findings from the literature as well as new information for consideration and application in the Australian context of community governance for green infrastructure.

8.4.1 Partnerships

Across the three case studies observed in this study and other projects reviewed in brief partnerships were mentioned often. Tilbury and Wortman (2004) promotes collaborative partnerships as important governance initiatives towards sustainability and Evans et al (2006) suggest that the stronger they are the greater the likelihood of sustainable development policy success. Lawson and Gleeson (2005) suggest that integrated governance with an emphasis on collaborations between governments, agencies and non-government agents is opening the door for exciting new partnerships and a growing awareness of the need for community representation in green infrastructure. The use of the term partnership as applied in community governance has a far broader understanding than in other fields and, when understood, gives organisations more scope for innovation.

The findings of this study suggest that a successful green infrastructure program with community governance aspirations requires a respectful, reliable partnership with government (either the land owner, land manager or leaseholder) as the cornerstone of its sustained existence. There are several key core partnerships recognised in the three case studies, and these are all fundamental to their success. The most unique is an ongoing, sustained and positive partnership between the Western Australian state government, through its Department of Biodiversity, Conservation and Attractions, and the Bibbulmun Track Foundation. A shared belief in the vision is a core feature of this partnership and the roles of both organisations are outlined in a legally loose but highly successful arrangement known as a Memorandum of Understanding. The financial commitment from the key state government partner while impressive at times is variable, resulting in the Bibbulmun Track Foundation seeking other funding sources to complement its work. The 'in kind' support from both sides of the partnership is strong, especially the maintenance works and shared knowledge and passion for walking tracks. Both parties appreciate what the other party brings and acknowledge that they could not do it alone. It is also clear that this arrangement takes professional and relational investment, significant senior management buy-in and regular communication to work well. The governance partners of the Bibbulmun Track have shown subsidiarity (Marshall 2008) in action works and the Western Australian Government has demonstrated legitimacy with their "acceptance and justification of shared rule" with the Bibbulmun Track community.

The Merri Creek Management Committee and the GreenWay both have strong ongoing relationships with the councils in their corridors, although some are stronger than others, and these have resulted in service agreements that provide some financial continuity (usually 3 years) and 'in

kind' support. They also provide other benefits such as expert capacity (especially in council staff contributing to the GreenWay) and community engagement capability (the Merri Creek Management Committee on behalf of the councils). The GreenWay is a little different in its partnership because it is operated within a council framework by a dedicated GreenWay Place Manager who is leading the process as a council staff member for a place and a cause (the GreenWay) and whose role is to engage community rather than be accountable to an independent community based organisation.

The three case studies have demonstrated broad cross-sectorial partnerships (Buijs et al 2016) beyond the key government partners discussed earlier, as a feature in common and support the notion of inclusiveness especially in the role for citizens in decision-making. Inclusiveness is highlighted in the United Nations good governance principles published in 2009 and the good governance principles developed by Lockwood et al (2009). All of three projects partner with community groups (approximately 14 each) encouraging citizen input and the Bibbulmun Track Foundation partners with over 50 organisations including a range of community, government and private businesses embracing the development of their networks (Putnam 2000). A list of each case study project's partnering organisations is included in Appendix 10. The extent and range of other partnerships varies in each case and decisions about the choice of partners have raised some ideological questions. While the GreenWay and the Merri Creek Management Committee have engaged actively in community partners, especially community groups associated with the green infrastructure corridor, they have not engaged in long-term private partnerships although some smaller occasional links have been made. At Merri Creek Management Committee this has been considered and actively discussed, with disagreement on the value of such connections due to the ideological questions associated with influence and 'ownership' of a private long-term funder on a community organisation. Merri Creek Management Committee has a unique area of success in their contract partners and their ability to win significant grant monies especially from philanthropic sources. At Bibbulmun Track Foundation interesting membership options have been explored and embraced including significant sponsorships from private companies (various mining companies and expedition supply companies) and a range of other companies that support the Foundation with their services. These partnerships (numbering approximately twelve) vary in their arrangements and rely on regular updates and relationality, a focus of the Executive Director's work. They include geographical neighbours like Alcoa and Western Power as partners and sponsors and they provide the Foundation with further financial security beyond government sources. The Foundation also has a significant and broad range of other government partners like the Ministry of Justice and the

Federal Employment Action Programs known as LEAP. The Foundation has worked very hard to develop a shared understanding with each partner through negotiating their desired relationship and common goals and has demonstrated leadership and excellence in community governance associated partnerships.

8.4.2 Visionary leadership

The findings from this study suggest that strong, visionary leadership is essential to influence stakeholders towards a joint goal. Both Gottleib (nd) and Tickell (2005) list leadership as the most important characteristic in good governance in green infrastructure and Abbott (2012) highlights community leadership as providing new drivers to change in collaborative planning. In this study, all three of the projects reported community leadership as a key governance issue and key to their success. They each reported an impressive level of vision leadership from the community on their projects. They combined forward looking leadership with an ability to influence towards a shared vision. In the early stages of all three projects the leadership was characterised by a strong connected individual (or several individuals in the case of Merri Creek) who had a vision for an exciting green infrastructure idea. They were also successfully able to influence people (including first other local members of the community, and also elected representatives and staff from government) over time towards the idea and to build the process to realise the idea. Respondents also mentioned the role of facilitated shared leadership as each of the projects evolved. Put into context, there is a suggestion that the leadership necessarily transitioned towards a distributed facilitated model once the project grew in complexity and the stakeholder groups broadened. This facilitated leadership is more akin to the leadership presented by Ansell and Gash (2008). There was some indication that the GreenWay community leaders struggled as the leadership diversified from a strong community leadership to a distributed multistakeholder facilitated model. Expectations and changing roles need to be managed positively and the reinforcement of the shared objectives for the project (both community and government agreed) seemed to enable a smoother transition as in the Bibbulmun Track Foundation and Merri Creek Management Committee.

The dynamic nature of leadership in the various phases of community governed green infrastructure projects is thus noted. Further, the leadership that results in community governance is likely to emerge from a community leader, however a community visioned project may not result in a community governed project. Finally, influential community leaders, with leverage in government and willingness to promote an understanding of the need to evolve from strong visionary leadership

towards a distributed model, can add significant value to long-term partnerships and stability of community governance for green infrastructure projects.

The role of influence in leadership is important in community governance and differed in each of the cases. Characterising the nature of this influence is more complex. All cases show that relevant professional expertise is an element of the influence of the community leaders. There is also a common element of friendship, either developed during the project as in the GreenWay or existing beforehand as in the Bibbulmun Track Foundation. A shared passion of the visionary leaders was evident and necessary, obviously a passion for bushwalking with the Bibbulmun Track, although this was much more diverse and complicated in a shared-use corridor like the GreenWay (where the leadership's individual passions included active transport, bush regeneration, education, art and sustainability. In Merri Creek, the leadership seemed to focus more specifically on environmental regeneration of the river corridor as their joint shared passion. All projects had people who understood and advocated for the joint vision. Other influences that seem more prevalent in the Bibbulmun Track project than in the other cases were access to positional power with board members carrying significant roles in the Western Australian government.

8.4.3 Financial uncertainty

Financial uncertainty was a broad issue of concern for all the projects and extended over the lives of the projects. This challenge seems to have been approached more positively and creatively by Merri Creek Management Committee and Bibbulmun Track Foundation and this proactivity has contributed to their success. Several of the Australian based green infrastructure projects outlined briefly earlier in Chapter 4 also had financial uncertainty reoccur as a theme of concern with some indications that this contributed to their downfall. Sadly, this specific problem appears to be a common characteristic of community governance of green infrastructure in Australia and can undermine progress as noted in the natural resource management case study analysis by Lockwood et al (2009). This challenge further extends to other community governance initiatives in Australia like housing and, as noted by Crabtree (nd), requires creative solutions towards financing.

The literature highlights several reasons for financial uncertainty that are confirmed in the case studies including a lack of government support and trust for green infrastructure and community governance (Lockwood et al 2009, Ansell and Gash 2008), excessive reporting requirements (Lockwood et al 2009), political and institutional change (Erickson 2004), lack of strategic transformative systems, (Baker 2016, Agger and Lofgren 2008) and innovation in their approach

(McPhearson 2016, Buijs et al 2016, Burch et al 2016). Many of these reasons have become better understood through this research. The three case studies have been sustained over time despite some of the challenges above. Both the GreenWay project and Merri Creek Management Committee have endured very difficult circumstances that involved the state government withdrawal of promised financial support which was the majority of their funding. Interviewees talked about the issue of financial uncertainty as being a challenge in all cases, however the Merri Creek Management Committee and Foundation participants framed the issue more as a challenge with opportunities rather than as a problem. The related concepts that were discussed emphasise the need to develop a reputation of expertise and good management (Merri Creek Management Committee) so that grants could be more easily won and the need for innovative alternatives as thoroughly explored and demonstrated by the Foundation and reinforced in recent literature (McPhearson 2016, Buijs et al 2016, Burch et al 2016). The Foundation also recognised that they did not want to rely on funding from the state government (their major partner) as they saw this as riskier than private and community partners. This was shown to be an accurate judgement considering the other two case studies and the unreliable promises for funding from the government. The GreenWay community and councils were more concerned about the administration effort associated with grants and the risks and challenges in accessing alternative funding. Thus, they relied nearly entirely on government funding and grants rather than broader collaborations. Avoiding unnecessary risk was an ongoing issue for the GreenWay when exploring alternate governance models during the GreenWay Sustainability Project and resulted in the stakeholders opting for the more conservative institutionally-based place management model. Table 8-3 highlights each project's key funding sources and shows the emphasis on different sectors and highlights their dependence and risk.

Table 8-3 Funding sources for three case studies

GreenWay	Bibbulmun Track	Merri Creek
•Council partners •NSW state government committment to funding the pathway 2016 •GreenWay Sustainability Project (2008-2011) 3 staff subsidised by state government grant •A Place Manager (2012 onward) subsidised by 4 councils	•Private sponsors: gold, silver and bronze •Lotterywest grants •Private company grants •Bibbulmun Track Foundation individual and corporate membership •WA government funding for trail and major works •Funding from philanthropic grants and donations	•MCMC Board with council and community representatives •Federal and state government grants for projects •Philanthropic grant for not for profit organisation •Service agreements with partner councils for conservation and maintenance works •Consulting works contracted to clients •Philanthropic donations

8.4.4 Working Systems

More comprehensively, the term 'working systems' has sought to incorporate the literature across this topic to include a range of strategic and operational systems, including financial and administrative and IT management. These include a broad set of operational qualities relating to resources and processes and are essential for responsible resource use and maximising available capacity (Abbott 2012, Lockwood et al 2009). In assessment of the working systems all case studies have shown competency based on available resources and building on organisational strengths. Merri Creek has led in this area with their business model demanding leading excellence as it depends on managing multiple grants, projects and consultancies competently so they can continue to win more grants and work. In contrast the Bibbulmun Track Foundation has state government, business and community partners in their vision and spends more time emphasising relationships and good communication with their key stakeholders and partners through regular meetings and processes for sharing information and resources. In the GreenWay, local councils and community collaboration have experienced dynamic circumstances (affected by political opportunism, institutional changes and contested vision) affecting their financial sources and working systems. In addition their governance model has limited their breadth of options such as consulting, grants and donations for creative solutions. This means GreenWay operates more like an institutionally based subproject operating with the benefits of a shared council place management project but within limiting bureaucratic structures. The adaptive innovative approach of the Merri Creek Management Committee to their working systems and Bibbulmun Track Foundation to their funding partnerships

has seen these projects thrive by realising opportunities afforded to them by their community governance model. Having survived through difficult times and perhaps now that GreenWay funding for the project build is secured, the GreenWay stakeholders and community may (or may not) choose to realise and leverage the benefits (and challenges) of a community governance model.

8.4.5   Community involvement

Community involvement was clearly important and mentioned in many different contexts including memberships (Bibbulmun Track Foundation), decision-making (Merri Creek Management Committee, Bibbulmun Track Foundation and GreenWay) and bush regeneration (Merri Creek Management Committee and GreenWay). All projects highlighted the role of community volunteers in environmental programs and education. All three projects were visioned by the community or visionary leaders in the community and understand the value of community involvement. Impressive long-term demonstrations of volunteering from community members and community leaders, including many experts, have contributed to the community good. All three cases have sought to involve and build community participation with various emphasis and arrangements. While all the projects relied on the expertise and willingness of community volunteers in the early days, they now vary in their reliance on volunteers.

The establishment and maintenance of trust is crucial to healthy community involvement as demonstrated by the GreenWay case in which a breakdown of trust and compromise in vision impacted the ongoing commitment of long-term participants. The Bibbulmun Track Foundation has significant numbers of community members (2,000) and many active volunteers (500), mostly in track maintenance, mostly trained and very positive about their role. They continue to grow in number and training. GreenWay has very active community volunteers in bushcare, education and art events and had engaged community leadership that became affected by government broken promises. The GreenWay has invested less time into volunteer development after the GreenWay Sustainability Project (2008–2011) finished, mostly due to a lack of resources and to its institutional base. Merri Creek is in the middle with a strong community engagement program and volunteer based bushcare events and partners closely with several highly effective community groups along their corridor. All three cases studies have sought open and inclusive processes and transparent systems such as quality websites for information sharing.

Openness and trust in relationships are considered important for deliberative and collaborative decision-making (Ansell and Gash 2008, Lockwood et al 2009). However, the results from this study

suggest that these qualities take time to develop, especially cross-sector relationships, and require respect, openness and confidence to build, unless a pre-established relationship is present as in the Bibbulmun Track Foundation. All three projects have had key people (both unpaid and paid) invest impressive time, expertise and passion for the shared goal over very long periods of time. This built trust over time, increased expert and referential power (French and Raven 1959) and influence and improved capacity towards community governance. In French and Raven's (1959) basis of power theory, several powers operate in group dynamics including: legitimacy (the formal right to make demands and expect compliance); rewards (compensation for compliance); expert (skills and knowledge); referent (developing the right to respect); and coercive (punishment for non-compliance). Findings from this study suggest that expert and referential power are the key areas of power in community governance organisations and these differ a great deal from other hierarchical, for profit organisations. Such influences also impact organisational culture. These two types of power take a long time to build and in the case of referent power, a moment to lose. They relate to personal reputation and therefore to organisational reputation.

However, difficult personalities and difficult circumstances as seen in the GreenWay can undermine referential power and trust. The Bibbulmun Track Foundation seemed to build trust early, between key people of influence in Western Australia that shared a common passion for and friendship in walking that then assisted in building long-term collaboration and even trusting each other later with the co-partnership of the project. The early days of Merri Creek and GreenWay saw each community build trust among their own and gradually with local councils. In both projects, trust with the state government was more difficult to build, collaboration was not open or dependable. After a short time, the state government withdrew their funding support for the Merri Creek project and in the GreenWay project the state government avoided collaboration with the project, then agreed in principle to support its development and then withdrew again after a change of political parties. Broken promises break down trust and affect motivation and passion of stakeholders and especially volunteers for some time after. When done well, open dialogue between stakeholder groups can help build transparent processes and build trust (Ansell and Gash 2008) and all the projects have sought this with various successes. The GreenWay had successes with the broad stakeholder deliberation at governance workshops, however struggled with the state government getting involved and then cutting them out of planning processes. This undermined community participation, damaged trust between participants, and affected the openness of the decision-making processes that followed. The Merri Creek stakeholders collaborated in open decision-making practices through their board and community group committees, even in difficult situations, and

have successfully continued to maintain some long-term and expert community participation. They continue to challenge their openness to community voices and the scope for more community representation. The Bibbulmun Track Foundation has enjoyed the long-term commitment of several members of the volunteer board and commitment by the same government partners over time showing the strongest example in this characteristic.

From the literature (Hustinx 2008 and Rochester et al 2016) and the survey results regarding volunteers, there is a growing understanding that people want to give in an area where they feel they add value, enjoy, and have a special contribution to make, but not to overcommit. Recent research shows that people tend to volunteer for personal interests and needs such as a love of a sport, a hobby, a shared community good, or a shared belief (Hustinx 2008). This is confirmed in the responses from the GreenWay, Bibbulmun Track Foundation and Merri Creek volunteers who highlighted that joining a group for a purpose, especially in an area of personal interest, helps to find like-minded people. Volunteers especially seem to be prepared to give where they have confidence, the necessary skills and the interest. They participate to contribute back to society, to do something they love for the environment and community and build friendships. An indicative response from a community volunteer shows the benefits.

> Connection to people, community and environment. A feeling of empowerment as you
> play a part in shaping your neighbourhood or city. (GreenWay Community volunteer)

From an organisational perspective, there is a need to provide sufficient support and independence for the volunteers to ensure that volunteering is not a burden and remains a pleasure.

The positive culture of the organisation is recognised as a key part of the volunteering environment and this is especially demonstrated in the comments from stakeholders (especially staff and volunteers) from the Bibbulmun Track Foundation and Merri Creek who put an emphasis on good leadership, well run projects, a positive environment and seeing the results. The responses also suggest that volunteering on projects can be hampered by conditions being too controlled or overly bureaucratic, or in contrast leaving volunteers with lack of leadership, guidance, input or training. A balance needs to be struck and the expectations and the competencies of the diverse volunteers understood, respected and appreciated.

All cases understood that volunteering takes resource allocation and have done an excellent job in encouraging and developing their volunteers in multiple ways. The GreenWay has some good examples in education, art and bushcare projects, while the Bibbulmun Track Foundation and Merri

Creek have very well developed social, training and appreciation programs for volunteers. The Bibbulmun Track Foundation is aware that stricter legislation for volunteers can limit willingness. Paperwork, unreasonable training requirements or limits to activities and freedoms can limit volunteer interest. Acknowledgement of volunteering expertise and positivity of culture is also key according to respondents and good for growing capacity.

8.4.6   Reputation and expertise

Reputation emerged as a key theme in the successful community governance projects. The term reputation as it applied to the organisation was raised many times and across projects, both in the interviews and in the online survey. However, it was not a theme that emerged overtly from the literature reviewed but more covertly in associated themes like leadership (Erickson 2006, Evans et al 2006), integrity (Evans 2012), trust (Provan and Kenis 2007), transparency (Ansell and Gash 2008) and sound governance systems. Reputation is an outworking of the process of legitimation according to Rao (1994). In the sustainability discourse, Dovers (2005) places demands on institutions and policy towards notions of responsibility, stewardship, participation, and duty of care, all contributing factors to organisational reputation and integrity. This link between an organisation's reputation and the sustainability of an organisation (and most likely the project), can be seen in the work of the IUCN and their emphasis on partnerships, trust building and combining expertise and resources (Tilbury and Wortman 2004, 73). It is worth noting that the link between reputation and corporate governance has been well addressed in the literature and understood in practice with a Deloitte (2016) governance report describing organisational reputation as one of an organisation's most valuable yet fragile assets worth approximately 25% of a company's market value and able to be destroyed overnight. It reinforces reputational risk as the key business challenge. The research has shown positive links between environmental sustainability and financial performance (Porter 1991), corporate social responsibility and financial performance (Flammer 2015) and more recently between organisational reputation, and the management of sustainability practices resulting in improved social sustainability performance and economic performance (Sroufe and Gopalakrishna-Remani 2018). The findings from this study (both interviews and online survey) suggest that community governance and sustainability in green infrastructure in Australia depends on its reputation, a factor downplayed in the community governance and environmental planning literature.

Merri Creek Management Committee depends on their reputation built through their expert consulting, their service agreements with councils and their well-managed federal grants to finance

their organisation. The reputation of Bibbulmun Track Foundation and their work builds both community memberships (paid) and significant private partner sponsorships. Reputation can enable longevity in a community governance organisation in Australia and it appears that the bar may be set higher than for other organisations in the sense that barriers to entry still exist. The findings from this study suggest that organisational reputation includes a combination of expertise and excellence with an ongoing demonstration of integrity and trust from and between partners as well as a positive culture. This broke down for GreenWay in 2011 and their reputation as a cohesive collaboration of partners was undermined. It is worth noting that organisational reputation is a subjective assessment (Rindova et al 2005), viewed differently by different stakeholders using different criteria. For example, the findings from this study suggest that having a reputation as an organisation with a positive culture is a key emphasis for volunteers. Partners though, especially financial partners, emphasise the organisation's reputation for excellence and trust, and clients emphasise organisational expertise. Rindova et al (2005) provide insights to the findings of this study: the two dimensions of organisation reputation are the stakeholders' perception of an organisation to produce quality goods and the prominence of the organisation in the minds of stakeholders or the influential third party, with the latter having the more significant impact.

A reputation of excellence has developed to influence the work of the Bibbulmun Track Foundation and Merri Creek Management Committee and is just now starting to influence the GreenWay. Bibbulmun Track Foundation's vast membership of supporters has positively influenced their reputation especially with business partners and government. This is mentioned as a key strategy for the Bibbulmun Track Foundation in influencing government and staying independent. This has also been a strong part of the work of Merri Creek which has successfully maintained a strong network of citizen volunteers and an independent voice for advocacy in planning and environmental matters along the corridor. By building this support, Bibbulmun Track Foundation and Merri Creek are viewed by government and other partners as organisations of reputational excellence in matters relating to community engagement and participation and environmental conservation. Their partnerships and influence continue to develop a positive reputation and their positive reputation develops more partnerships and influence. On the GreenWay, although they advocate for their project to be known and funded, establishing an organisational reputation is a lesser priority for the GreenWay Place Manager, given the current arrangement working from within government, and may impact its ability to become an authentic community governance organisation. As a consequence, the community is not as engaged, advocacy is restricted and they have no financial independence from government.

8.4.7 Volunteer expertise

An interesting finding from all three case studies was the level of expertise of the volunteer contribution, especially in (but not limited to) the leadership roles. This factor was confirmed as a key feature of the community governance by the interview responses, by the profiles of the volunteers interviewed and by the profiles of the broader group of online survey participants. A combination of factors of this group included tertiary training often in professional areas related specifically to the needs such as urban design, environmental management and education and governance; vast experience in their fields; long and deep local knowledge from living in the area; passion for the area and the project outcome; and most importantly a very long term commitment to the project (15–20 years was not uncommon). In broad terms, a case study volunteer gives an average of 15 hours per week (taken from the average 10–20 hours a week indicated in the online survey profile of volunteers involved in leadership roles) at an average professional hourly rate of $80 (based on the neuvoo website with Town Planner hourly rate in Australia in 2018) over 18 years (an average from the 15–20 years given in the online survey). As such, the economic contribution from each individual towards the project could be around $1 million per volunteer. Several Bibbulmun Track Foundation volunteers also had influence and positions in state government, a value that cannot be estimated but was used for considerable community benefit.

Apart from the obvious benefit, challenges can emerge when the project development, management or leadership activities shift from volunteers to paid staff. Difficulties can arise when others who may or may not have the same expertise or experience, may or may not be rewarded equally. This can generate tensions about loss of control and ownership, and cause disagreements between experts. There was evidence of this disharmony emerging in the GreenWay. In contrast, in both the Merri Creek Management Committee and the Bibbulmun Track Foundation, the key project contributors managed a positive collaborative and mutually respectful environment to bring out the best in everyone.

Another factor emerging out of the GreenWay example was community members without expertise felt intimidated and underequipped. While the literature does address challenges with significant disparities in capacity, it does not address this challenge associated with the high expertise volunteer and the high excellence community organisation, sometime operating beyond paid staff. Even the work of Ansell and Gash (2008) on social and institutional capacity building may have a different angle to consider from these findings. Active multidirectional accountability and the role of social network analysis (Holman 2008) could be applied to benefit in such cases.

8.4.8 Organisational excellence and independence

Community governance organisations generally have a degree of independence from government that allows them freedom to represent their membership voice and advocate on matters to the state. By maintaining a significant financial and political independence from government through developing a broad range of partners and a broad community membership, they can develop their expertise and reputation as organisations that deliver excellence in their area of focus. This in turn builds trust and complementary relationships with the government organisations they work alongside. Independent staffing, respected expertise, community influence and referential power built over time in the Bibbulmun Track Foundation and Merri Creek Management Committee. This then enables community based organisations to respond to issues more quickly, to be more innovative in their approach to issues and funding, and to genuinely build community goodwill for good management and as a trusted interface with the community, as seen in Bibbulmun Track Foundation and Merri Creek Management Committee. These factors are no longer necessarily strong elements of local government and perhaps even less likely with the state government as seen in Merri Creek Management Committee and the GreenWay. This may be due to lack of community trust, poor management or lack of available resources and perhaps a lack of passion for the vision. Also, the growing focus on transactional management and efficiency is often at odds with community building and engendering community ownership. By local and state government being able to acknowledge the limits of their ability to do this work, they can then actively seek out partnerships with community organisations (demonstrated in all three cases and especially the Bibbulmun Track and Merri Creek cases), to take advantage of their expertise and to encourage and invest in them. As seen in Merri Creek and Bibbulmun Track, this enabled them to flourish for the good of the society, sharing and believing in the vision of green infrastructure as an exercise in building community goodwill, community ownership and community independence well beyond the other well discussed benefits of health, accessibility, environmental and economic benefits.

Government and other grants have played a significant role in the development and progress in all three projects and winning grants and making partnerships depends on developing and maintaining a good reputation. This reputation based on expertise in the field and good management of grant funds has put all three case studies and especially the Merri Creek Management Committee in a position of advantage for further grants. The single use of the Bibbulmun Track for bushwalking and limited focus of Merri Creek for waterway corridor conservation appear to have made it easier for the organisation and its staff to develop specific expertise than the multi-use shared corridor of the

GreenWay. Expertise is then also useful for alternative funding sources through consulting, and continues to build organisational reputation to win more grants.

8.4.9 Double trust

A situation of double trust is described here as necessary in the Australian context and stands out as a unique feature of the success of both the Bibbulmun Track and Merri Creek case studies. The collaboration between the government and the community in the case of community governance of green infrastructure needs a recognition of mutual credibility that involves a double agreement between parties towards two objectives not one. This concept implies a step further than mutual respect as explained by Lockwood et al (2009, 182). Both groups, the government and the community, and each may be represented by multiple groups, must show a shared trust and commitment towards the green infrastructure project and to the benefits of and role for community governance as the best practice option for the provision of the service. This demands an agreed partnership and respect towards two goals extending as a multidirectional partnership of respect. Without this, as seen in the GreenWay, there was a weakening in commitment due to complex external pressures and some internal trust challenges.

8.4.10 Positive learning culture

A positive organisational culture was noted by many involved in the Merri Creek Management Committee and the Bibbulmun Track Foundation projects and especially among the volunteers as making the participants feel good. Results showed that positive relationships were considered very important in volunteer projects, especially to maintain healthy community input. Volunteers used words like "friendship", "camaraderie" and "communal", and staff used words like "harmony in the work group" and "a positive friendly environment". Staff and volunteers working in the office reported a positive culture and every participant (paid and unpaid) in the online survey that gives more than 1 hour a week to their project noted that they had passion for the work. The importance of culture was noted by a respondent from the Merri Creek staff team.

> The most important thing is the 'culture', that the organisation creates a respectful, participatory, committed, visionary, energetic but also systematic approach to the project.

At a deeper level, going beyond positivity, the Merri Creek Management Committee and Bibbulmun Track Foundation have engendered a culture of learning, innovation and flexibility which aligns with the success of a community governance organisation and extends to all those involved.

An expert volunteer from a local community group highlighted a point that several of the other volunteer respondents also mentioned on valuing volunteers and matching their interests and skills with work they are inclined towards.

> A clear sense that your contribution makes a difference, the possibility to find something that matches your taste and aptitudes, being with like-minded people, feeling that the professional staff will take care of what needs to be taken care of and are themselves suitably valued professionally.

Some helpful comments about good practice on volunteers and managing projects also extended into a very insightful comment about creating a learning culture and cycle of improvement in this quote from an expert volunteer in local community group who may have been involved in a difficult project.

> Having the capacity to reflect on that setback is more important than the setback. It would also depend on who you ask, it is impossible to satisfy everybody 100% all the time. (Long-term community volunteer)

This links closely to other themes such as a positive organisational culture that enables a reflexive approach and innovation. As mentioned earlier, it is perhaps the uncertain nature of the funding that has forced a culture of learning and improvement. As Merri Creek Management Committee is reliant for 30% of its funding from the highly competitive and changing government grant system, the organisation is forced to do its job at a high standard and be innovative and flexible in its approach.

> I think they've got that flexibility to be quite creative and innovative in the way they pursue projects, the way they put projects together. They need to constantly be competitive and they need to be putting quite innovative ideas forward, for when they put grant proposals forward to be considered. So I think they've got that flexibility in their structure to allow that. (Council manager 1)

8.5. Practices enabling sustainable community governance of green infrastructure in Australia

Beyond the categories of best practices in Table 3.6), other practices that have been emphasised in the findings of this research regarding sustainable community governance of green infrastructure in Australia are organisational reputation, community expertise, double trust, and positive culture and passion. A new category of organisational reputation has been added to the categories of best practices (Table 3.6), those of vision leadership, openness and trust, inclusive partnerships and

working systems. A positive organisational reputation incorporates excellence and expertise, passion and positive culture and the notion of double trust. Organisational reputation stood out in the projects examined in this study as an important and different quality from those highlighted in the literature. It seemed that sustainability of the three projects under their various community governance arrangements and especially their funding was heavily dependent on their reputation. A second part of that consideration was that community governance requires absolute excellence so it is not assumed as a second-rate alternative. In this study, two of the projects demonstrate community governance to be flourishing (Merri Creek and Bibbulmun Track), and the GreenWay in the early stages, and had beyond-impressive contributions of long-term volunteer expertise and passion. Also, they demonstrated some impressive attitudes of positivity, innovation, integrity and approaches to risk management. While trust building is already a noted practice, the notion of double trust takes the concept beyond legitimacy to mutual credibility and respect and acknowledges performance and therefore deservedly a reputation. While all community governance practices should seek excellence, it is suggested that the organisation reputation is an equally important practice to ensure sustainability. As it takes time to establish and attention to maintain and much depends on it (such as funding), it deserves its own focus alongside the other qualities. Table 8-4 provides an outline of the best practices needed for sustainable community governance of green infrastructure in Australia as a compilation of the literature (Table 3.6) and the case study findings.

Table 8-4 Best Practices needed for community governance of green infrastructure in Australia showing the added findings (in grey)

1. Vision leadership; (Leadership)	2. Openness and trust; (Structures and relationships)	3. Inclusive partnerships (networks and shared power)	4. Working systems (Processes and resources)	5. Organisational Reputation
Forward-looking leadership	Deliberative, transparent decision-making	Partnerships	Systemic thinking	Organisational Expertise (volunteer and paid)
Shared joint goal	Trust building	Networking	Critical thinking	Organisational Excellence
Facilitated Leadership	Public participation	Legitimacy	Reducing barriers in administration and financial	Double trust
	Collaborative planning	Subsidiarity	Adaptive and reflexive	Positive culture and passion
		Shared power	Shared Resources	

8.6. Community governance in complex green infrastructure can be both excellent and sustainable

The future of community governance in complex green infrastructure requires it to be authentic, enabled, partnered and respected. The qualities to ensure its sustainability include vision leadership; openness and trust across structures and relationships; inclusive partnerships promoting networks of shared power; working systems characterised by reflexive processes to maximise resource and capacity; and organisational reputation with expertise, excellence and a positive culture. Working towards these qualities, community governance in green infrastructure can move towards a long-term position where it can realise triple bottom line benefits and be sustainable. Both Bibbulmun Track and Merri Creek have realised this long-term stable governance arrangement over 20 to 30 years and demonstrate organisational good governance and good practice.

There is further evidence to suggest that this approach can also be applied in complex and contested situations because of the adaptable and innovative excellence that community governance organisations need to develop to thrive. For Merri Creek, complexity and uncertainty were embraced by the finetuning of management systems to improve organisational excellence; for Bibbulmun Track Foundation financial risk management became opportunities for new partners; and for the GreenWay adaptability of governance approaches sustained the project in the face of disappointment and conflict among the community. Effective community governance embraces opportunities for innovation, creativity and reflexivity, using a broad range of partner contribution and competencies.

New challenges for governance and management occur as external factors increase complexity in all three projects demanding more from community governance organisations and their partners. While it is single use, the scale and location of the Bibbulmun Track and the number of partners and volunteers added complexity. The Bibbulmun Track Foundation has challenges with the logistics of working with multiple councils along the vast 1,000 kilometres especially the rebuild of four campsites, bridges and tracks after the 2016 fires and challenges with incompatible adjoining land uses (especially mines) and various neighbouring leaseholders' expectations, some who are also sponsors. Stakeholders of the now 60 kilometre Merri Creek corridor acknowledge a growing complexity that the issues at one end of (inner city focus on creek restoration and recreational use) differ from those at the other end (urban fringe focus on greenfield development, riparian buffers

and public open space provision) requiring new skills and spreading resources. Merri Creek also has continuing impacts of water quality issues, heavy metals and polluted runoff events and weed spread across jurisdictional boundaries that increase management complexity and pressure on resources, staff and volunteers. In the GreenWay corridor, urban politics and contestation of uses between light rail and green space split people and resources in 2011. Now, with the validity of the GreenWay as a green corridor and trail in Sydney's green web acknowledged, the infrastructure is being funded and built by state government, and its future governance remains undetermined.

8.7.   Community governance is dynamic governing

Ideally, according to Evans et al (2006), a condition of 'dynamic governing' enables a move towards sustainability, where both social capacity and institutional capacity are high. This is the ideal condition of community governance but not a common condition for government organisations in Australia to achieve. In general, government agencies tend to conform to Evans et al (2006) category of active government where they maintain most of the control. Each of the three case studies showed some fluctuation between the conditions described as voluntary governing and active government, on their journey toward dynamic governing (see Figure 8-1). All projects started with voluntary governing with strong visionary leadership emerging from an individual and then from a group in the community. Their path then varied depending on the available resources, their capability and the government support for double trust.

Merri Creek took a direct route from voluntary to dynamic governing, as the community visionary leaders and community groups rallied support from the local councils and the state government and formed a shared stakeholder committee committed to the restoration of the creek. Under this arrangement they developed programs, won grants and built a trail. Under advice they formalised into an incorporated association overseen by a shared stakeholder committee and employed staff and developed expertise and partnerships. High levels of institutional and social capacity were demonstrated as people and organisations (especially some of the councils) adapted to new challenges and partnered in various projects, deepening trust and capital. An incentive by the MCMC of subsidised funding of waterway and open space work also enticed council support (Merri Creek Management Committee 2009, Chapter 5).

In the Bibbulmun Track the move was from voluntary governing through an inspired and visionary community leader who took the initiative to approach state government with the idea to build the

track. High social capacity of an individual shifted quickly to high institutional capacity as the state government saw the potential of the project. The project shifted to active government while the infrastructure was being built and this resulted for a period in the community taking a lesser role. Aware of walking trail governance models showing genuine community partnerships, an influential community member took a proposal for a foundation to share the governance of the track overseen by a shared stakeholder board. High levels of social and institutional capacity were demonstrated as both communities and government established an arrangement of mutual respect and dependence. This important decision saw the project shift towards a condition of dynamic governing condition by partnering with the Bibbulmun Track Foundation. Since then the Foundation has continued to diversify funding sources and develop community membership and business partnerships. This model arguably puts them in the strongest dynamic governing position of the three projects for their smooth and inspired passage toward shared decision-making and dynamic governing demonstrating high social and institutional capacity.

The GreenWay community moved from voluntary governing to active government and then through collaborative decision-making they chose to stay in a condition of active government with a place management approach. The state government currently now funds the GreenWay infrastructure, while the place management model continues, keeping them for now in an active government status until (and if) they can redevelop social capacity and institutional capacity towards a community governance arrangement to move to a dynamic governing condition. The lines on Figure 8-1 show these moves, adapted from Evans et al's (2006) understanding of dynamic governance which aligns well with community governance.

INSTITUTIONAL CAPACITY

		High	Low
		Dynamic Governing	Voluntary Governing
SOCIAL CAPACITY	High		
	Low	Active Government	Passive Government

Bibbulm

← Merri Creek

← GreenWay

Project governance transition (Phase 2)
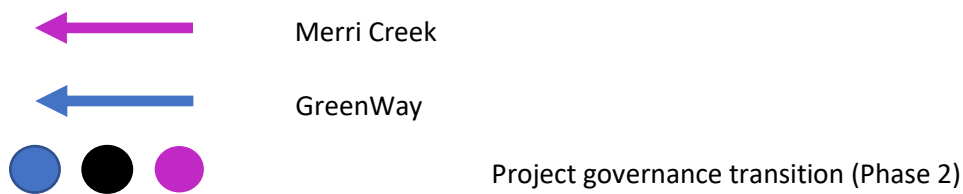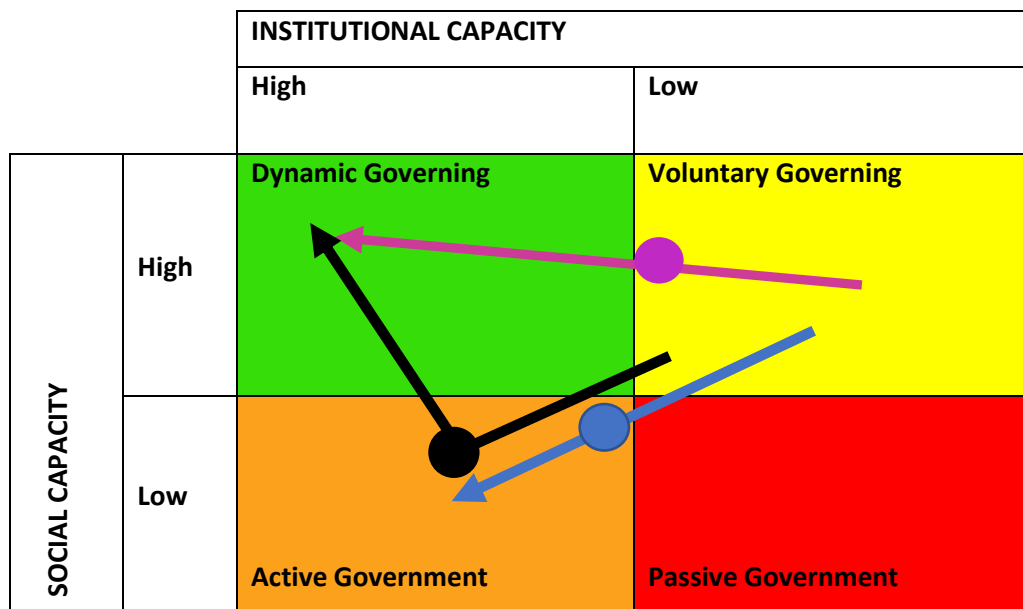
Figure 8-1 Applying the dynamic governing assessment to the three projects

Source: J. George adapted from Evans et al (2006).
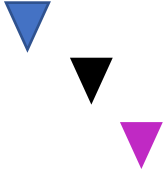
Applying Evans et al's (2006) dynamic governing assessment relies on a social and institutional capacity assessment or as Holman (2008, 525) suggests a 'social network analysis' to "deliver better levels of trust and social capital ... to the [governance] process". Institutional capital is developed through a collaborative exercise of social learning within institutions involving a "process of iterative reflection that occurs when we share our experiences, ideas and environments with others" (Keen et al 2005, 9). Active adaptive management incorporates such practices into institutional norms. This tool can be used to help understand a project's capacity for community governance and manage governance adaptive capacity towards dynamic governance. For further understanding of the journey towards community governance, the findings from the three case studies suggest that there may be phases emerging from commonality in governance and these show links to this understanding of dynamic governance. This is explored further later in this chapter.

8.8. Emergence of governance phases

Various external factors, socio-political differences and contexts has resulted in three quite different community governance models for green infrastructure. There may be some shared learnings when tracing the history of the projects and their governance journeys. This is referred to here as governance phases and similarities in governance phases or stages are mapped across the case studies. These four phases are: start up and support, project transition, project growth and professionalism and project maturity or project transitions (see Table 8-5). This understanding needs further research and may provide a helpful guide for community-visioned green infrastructure projects and their evolution towards a sustainable governance models such as community governance, including understanding their likely transitions and their vulnerabilities. This table could be further informed by Tuckman's work on group development (1965).

Table 8-5 Governance phases in the history of the three case studies

Phases	Description related to the history of each case study	Governance description
Phase 1 Start-up of project and support	The vision begins with community leadership, formation of a passionate group and identification of and communication with interested stakeholders.	During start-up, organic informality dominates, as does strong visionary leadership and advocacy to win over key stakeholders and support. Voluntary governing or voluntary governing and active government.
Phase 2 Project transition 🟣 ⚫ 🔵	After around 10 years, each case study had gained enough momentum to move ahead, and there was a period characterised by changing agendas and power dynamics. These changes signalled a transition period from an informal to a more structured organisation with an agreement about the governance model suitable to move the project on. In two cases community governance models emerged, one as a foundation and the other as an association. In the other a shared local government based place management approach with a shared stakeholder committee emerged.	Structure, people and processes move from informal to more formal. Possibly an unsettling period of change that may involve shifts of power especially in leadership. A shared governance model emerges either with a strong partnership arrangement between a community organisation and a government organisation or its arrangement stays embedded in government.
Phase 3 Project growth and professionalism	In two cases, the organisation now has developed its vision to become an organisation that operates professionally and starts to build a reputation. The governance model is starting to get outcomes both on the ground and within the organisation (especially if the external factors are consistent). This is a period of growth in strategic plans, policy development, key partnerships, staff numbers	Formalisation, professionalisation develops and structures emerge in the organisation with an agreed governance model for the future. Distributed leadership is more common and organisational achievements are starting to be perceived and owned by a range

	and scope of activities in two cases. This period lasts 5–10 years. In the other case, following unpredictable external factors that led to disappointment, this was a period of re-grouping and re-planning as resources and staff and community support dropped.	of partners. Growth in the number of staff and range of activities is experimented with. Towards dynamic governing
Phase 4 Project maturity or project transitions (back to Phase 2)	Two case studies continued to evolve into mature organisations following another 10 years, with valued reputation established with many partners and stakeholders, a sustainable staff and organisational confidence that it plays a key role in the future of the region. The third case successfully repositioned conservatively under the local government structure in an "active government" situation and after time won new partner support and funding for the development of infrastructure. After the development period there is an opportunity to return to project transition (Phase 2) to reconsider governance again.	Reputation, financial sources are secured and a sustainable future is broadly understood. Management judgement exercised in the type of activities, range of partnerships and make up and number of staff. Dynamic governing.

8.9.   Dynamic governing and governance phases linked together

This dynamic governance assessment may be linked loosely to the community governance phases that emerged from the case studies. Both the Bibbulmun Track and Merri Creek projects have transitioned towards formalised community governance arrangements and now after 15 years are in their mature governance phase (Phase 4), having established an organisational reputation for excellence in the public realm and slowly developing trust and diversifying their support base. These projects are dynamic governing with high social and institutional capacity. Still institutionally based, the GreenWay is reemerging at another possible transition point like the Bibbulmun Track project did after the active governing phase of the development of its infrastructure. This brings an opportunity for social and institutional capacity assessment, capacity building and collaborative decision-making for the GreenWay governance in the post development phase.

Applying frameworks like Evans et al (2006) can assist in understanding the journey towards dynamic governing, especially when linked to assessing and understanding social and institutional capacity for community governance and, in addition, recognising the governance phases associated with effective community governance. For example, consider the evolution of a young community visioned project and how, whether and when it might expect to transition into a formal community governance organisation then mature towards sustainability. Realistic expectations of time, capabilities and resources must play a role in informing decision-making and support towards effective community governance or not.

8.10. Partnership can be empowering as well as risky

In community governance, the term partnership is broadly used and more generically understood than in business environments. A definition of partnership in community governance is a "strategic alliance or relationship between two or more people. Successful partnerships involve trust, equality, mutual understanding and reciprocal obligations" (WACOSS website). In the business world, a business partnership is defined by the Australian Taxation Office as "a group or association of people who carry on a business and distribute income or losses between themselves" and this strict definition tends to limit people's openness to the broader ideas and concepts of partnering and collaborating with community governance organisations due to the perceived legal implications. WACOSS highlights a significant mindset gap in understanding the nature of partnerships between community service providers (not-for-profit organisations) and government funding bodies and this can also include for profit organisations. Without an understanding of this difference a "risk" may be perceived before the benefits of a potential collaboration are even considered.

Instead the nature of partnerships or collaborative practice in Australia especially in community related work ranges from formal to informal, including networking and information sharing, for mutual benefit arrangement, through to mergers. Variables in partnering relationships include: the length of relationship (one-off activity, time limited or ongoing), the type of outcomes sought, the degree of risk and commitment, and level of organisational autonomy retained (Centre for Corporate Public Affairs 2008). Good partnerships "are negotiated, have a clear vision and objectives, have decision-makers at the table with a commitment to working collaboratively to achieve common goals, have good processes for collaboration and have the capacity to maintain the motivation of the people involved" (Community door website). Both cases show that a broad range of partnerships are indicators of effective community governance, as shown in the Bibbulmun Track and the Merri Creek projects and they allow organisational independence, alternative sources of funding and resources and social relevance. Herein lies the power of partnerships. However, the risk is that this open and flexible approach to partnerships is not broadly understood or embraced in Australia. Given this, rather than trying to change the understanding of the meaning of "partnership", an alternate term like collaborations or network partners could improve the situation.

While the Centre for Corporate Public Affairs (2008) reports that corporate community partnerships (those between not-for-profit community organisations and corporate community investment) in Australia remain in the early stages, the Bibbulmun Track Foundation has demonstrated that they can be very successful in community governance for green infrastructure. They have embraced

'transactional' collaboration, which is "characterised by an exchange of resources through partnership activity, producing mutual reputation and positive outcomes for society" and realised some 'integrative' collaboration "in which partners create new services and activities resulting from their collaboration" (Centre for Corporate Public Affairs 2008, 5.) especially through complementarity in sharing resources and services. Aligned to effective community governance are hybrid organisations engaging in social enterprise where communities initiate, control and govern through entrepreneurship to contribute to community issues.

8.11. Community governance offers independence

Community governance organisations have a degree of independence from government that allows them freedom to represent their membership voice and advocate on matters to the state. By maintaining a significant financial and political independence from government through developing a broad range of partners, and a broad community membership or partners with a broad community membership (Friends of Merri Creek) they can develop their expertise and reputation as organisations that deliver excellence in their area of focus. This in turns builds trust with the local community and develops complementary relationships with the government organisations that they work alongside. Both the Bibbulmun Track Foundation and the Merri Creek Management Committee have independent staffing, respected expertise, community influence and referential power built over time, enabling each community based organisation to thrive. The respondents also suggest that these organisations are able to respond more quickly to issues as they arise, to be more innovative in their approach to issues and funding and to genuinely build community goodwill and volunteering capital through positivity, relationality and belonging. However, there is also a degree of tension acknowledged by respondents in both projects as they seek to keep their government partners on side and committed to the vision. The challenges that the GreenWay has faced have resulted in some trust damage (especially around 2011) both in the community and among council stakeholders and led to risk averse governance decisions. While community connections have been loosely maintained as resources allowed, a Place Manager working across the councils has continued to lobby for the GreenWay vision and place, focusing on buy-in from state government partners. The decision to move towards an independent community governance arrangement into the future remains a possibility as capability and will warrants. In this next step, the GreenWay may learn from the Bibbulmun Track.

8.12. Contribution of community governance

The Bibbulmun Track and Merri Creek cases have shown they are highly effective in their leadership, inclusiveness and ability to maintain collaborative trust. They are efficient in their use of resources and their working systems including being innovative and adaptable. Both projects are evaluated as sustainable both from a traditional economic premise and by triple bottom line measures (social, environmental and economic) contributing impressive social and environmental values. The GreenWay will be built, slightly differently to the way the community originally visioned it, and the current place management model is slightly short of community governance and therefore unable to leverage some of the benefits. However, this may be all that is possible and suitable under current circumstances as its social capacity waivers. The sustainability of the GreenWay in the mid-term with a place manager was a community driven initiative that has proven successful for realising the infrastructure and in the longer term its future as a community governance organisation remains unresolved. All three cases are assessed against criteria shown in Table 3-6 and results are shown and case studies compared in Appendix 11.

Evidence for the contribution of the community governance in the Bibbulmun Track and Merri Creek case studies is further reinforced in the survey responses that showed strong support for the effectiveness of community governance. Perhaps the ultimate confirmation of the functioning of community governance partnerships is that success is reinforced by multiple stakeholders involved in long term partnerships. This is a very broad range of partners including the users, the members the volunteer community, the clients of the organisation (usually various state and local organisations and agencies, community groups, schools and private organisations at times), the paid staff, the green infrastructure users and the broader community. Interview and survey feedback and organisation reports all suggest that this is strong especially for the Bibbulmun Track and Merri Creek. Quadruple bottom line assessment of the cases, a key measure towards sustainable development, suggest that the four quadrants of social, environmental, civic and economic are all producing outcomes, especially the two cases with community governance arrangements.

8.13. Summary

The comparisons of the three case studies have shown some interesting common features that align closely with the literature such as the importance of partnerships (although very different partners in each case) and the role of visionary leadership from community volunteers. They have also all showed impressive demonstration of long-term commitment from community volunteers and perseverance through financial uncertainty. The two cases, Merri Creek and Bibbulmun Track, are arguably truer examples of community governance due to their condition of dynamic governing and governance independence and have some other common elements including the high value of a good organisational reputation, significant expertise (both paid and unpaid), a positive community engagement culture, embracing innovation and flexibility, and building on impressive volunteer passion, expertise and trust. These later points of reputation, volunteer expertise, passion and positive culture are not strongly emphasised in the literature and together summarised as practices of organisational reputation. They are all connected to a notion of double trust, a concept beyond legitimacy that has emerged as a key observation of successful community governance in green infrastructure in Australia. The main differences between the projects include the single land use focus of the Bibbulmun Track simplifying the message and vision, its key partnership with the state government and its multiple other partnership arrangements with private companies and businesses as sponsors and partners. The Merri Creek Management Committee acting as expert contractor for partners in conservation and community engagement is also a unique feature, and the new environmental issues it is facing which are not core business at the other end of the corridor. The GreenWay has faced the most contested land use debates and politically unstable context of the three projects affecting its progress. While community visioned, it is a multi-use corridor proposal with a high cost build and some trust-damaged community and council stakeholders continuing on with government support and leadership. Finally, community governance in green infrastructure has been shown to make a significant contribution to environmental planning and management with indications that it brings an added dimension to traditional institutionally based governance in its sustainability, through its triple bottom line achievements when it has a condition of dynamic governing. This can be seen in the Bibbulmun Track and the Merri Creek projects that have set a high benchmark for other green infrastructure planning and management projects across Australia.

Chapter 9 Conclusion

9.1. Introduction

This chapter presents the conclusions of this research project on the question: what contribution can community governance make towards the sustainable planning and management of green infrastructure in Australia? The main research finding was that effective community governance for the planning and management of green infrastructure can make a valuable contribution towards the planning and management of green infrastructure in Australia, as it has the potential to be more efficient, effective and sustainable than traditional top down governance. Community governance was shown to provide opportunities for building social capital, active citizenry and broad benefits for government and business partners. The research also found that effective community governance in green infrastructure has the potential to add capacity to existing arrangements providing leadership and a benchmark for good governance practice. Of the three case studies, the Bibbulmun Track and the Merri Creek projects were the better examples of inspiring community governance arrangements at the same time as developing mature community organisations.

These conclusions are further elaborated and justified in the following sections, which report on the four subquestions on the more specific dimensions and implications of the overarching research question. Each subquestion had a series of research objectives that drove the research process. These objectives are reviewed to determine the extent to which they successfully contributed to addressing the research subquestions and the extent to which they answered the overall question.

9.2. Subquestion 1: What role is community governance playing in the conceptualisation, planning and management of greenway projects around the world?

This subquestion established the background to understanding the context of the research through developing an appreciation, from both an academic and practical perspective, of the role of community governance in greenway projects around the world. Two objectives guided the research process for this subquestion.

9.2.1 Identify emerging initiatives in the conceptualisation and theorising of community governance for green infrastructure

A range of literature was considered, including both theoretical and case study articles from Australia and across the globe, to understand the research topic. The literature was synthesised to develop a table of best practices that exemplified community governance for sustainable planning and management of green infrastructure (Table 3-6). The best practices included vision leadership, openness and trust, inclusive partnerships and working systems, each with several complementary qualities.

While this extensive literature illuminated the community governance perspective of the research, there was less material applying this perspective to green infrastructure, particularly in Australia. Bringing the two concepts, community governance and green infrastructure, together revealed a small but significant international literature (Erickson 2004, Green et al 2016, Frantzeskaki et al 2016 and Perkins 2013) based on empirical case studies. This was largely absent from Australian literature. While single jurisdictional, small scale green infrastructure projects such as community gardens were well covered, they were limited in relation to both scale and governance organisation. This research gap has been noted by others (Mathers et al 2015, Buijs et al 2017, and Young and McPherson 2013) and confirmed the significance of the focus of this research on community governance for complex, multijurisdictional green infrastructure projects.

Nonetheless, the literature did provide several case studies and reviews on the key features of community governance in the conceptualisation, planning and management of greenway projects around the world including Erickson's work (2004) in community governance in greenways and two Australian reviews of the community's involvement in associated fields of natural resource management (Lockwood et al 2009) and in local government partnerships (McKinlay et al 2011). Findings from these studies were synthesised along with other literature to summarise governance factors for sustainable community governance in green infrastructure. Common operational issues include the need for strong influential leadership with a vision for sound environmental outcomes, reduced administrative and financial constraints, public support and trust building.

9.2.2 Analyse international examples of greenways and their communities to consider the effectiveness of their governance systems

International examples of greenways (or green corridors) and their communities were reviewed using the literature and web-based sources. While many greenways across the globe have communities engaged, especially in their use and promotion of greenways, the details of governance were often obscure and lacked critical analysis. However, several examples showed that local

communities can be integrally involved in local and regional greening projects towards sustainability in cities. The Highline in New York was one very good example of a green urban renewal corridor that was well promoted for its community ownership and benefits and was proving inspirational to other similar projects in the United States that are using city and community partnerships to realise project outcomes. An examples from South Korea was identified revealing leadership by local mayors under what was described officially as triangulated governance arrangements but unofficially understood as top down governance. While European projects demonstrated motivated community grassroots movements for green infrastructure, their governance and funding appeared to be dependent on national and international (e.g. European Union) frameworks.

9.2.3   Summary of subquestion 1

The research undertaken on these objectives answered the subquestion: What role is community governance playing in the conceptualisation, planning and management of greenway projects around the world? In summary, while some inspiring examples of community and government partnerships in greenways were found, particularly in US cities, analysis revealed differences to the Australian context in their approaches to funding and governance, and a lack of clear evidence for the role of community governance in Australian green infrastructure especially corridors.

While an old concept, over the last two decades, community governance as an idea and a practice has seen a renewed emphasis around the world as a response to society's problems emerging from the economic rationalist approach (Putman 1995, Hilder. 2006). Restating the importance of civic values like "trust, generosity and collective action" (Bowles and Gintis 2002, 214) various authors (Somerville 2005, Bowles and Gintis 2002, Hilder 2006) argue community governance is a governance option with benefits that can fill gaps in society including a role in maintaining democratic legitimacy, problem solving and risk sharing. Bowles and Gintis (2002, 419) emphasise that the role of communities will increase in importance in the future (Bowles and Gintis 2002) by applying the "superior governance capabilities" of community governance and its better practices of problem solving, multilateral monitoring and risk sharing (Bowles and Gintis 2002, 433). The literature around sustainability also promoted devolved collaborative processes to address complex global problems and seek new approaches to developing resilience in communities (Chandler 2014, Frantzeskaki et al 2016). To this end, Evans et al (2006) linked governance for local sustainable development to high levels of institutional capital and social capital, an idea termed 'dynamic governing'. This concept is further considered in the other research subquestions.

9.3 Subquestion 2: What are the factors associated with effective community governance in green infrastructure planning and management in urban and regional areas in Australia?

Having assessed the international and theoretical context in the last research question the research then concentrated on the Australian context. With a continuing focus on effective governance within green infrastructure projects the first objective identified existing projects and then using selection criteria three case studies were identified for in-depth analysis. The following objectives identified the characteristics and enabling factors of effective community governance in green infrastructure projects in Australia and considered the importance of social and institutional capacity for community governance in green infrastructure.

9.3.1 Develop and apply selection criteria to identify the best practice examples of community governance projects in green infrastructure projects in Australia

The criteria for the final case study selection were derived from the literature and designed to build on the sparse research in the field about sustainable community governance in green infrastructure corridors focused on environmental management and situated in complex governance contexts (such as urban environments) in Australia. Eleven green infrastructure projects were identified from across Australia using a desktop study. Criteria were applied (on a scale of 1 to 5) to each of the projects with the top three ranked projects selected as case studies. The criteria were:

- The projects cross council boundaries thus fitting the subregional criteria.
- The projects are characterised as a greenway or green infrastructure corridor indicating an environmental management priority.
- The projects are urban examples, due to the gap in the research and the different and complex issues they raise.
- The projects have a shared governance arrangement – they are governed by several government bodies or by a not-for-profit governance arrangement in partnership.
- The projects have an active community associated, involved in decision-making and other activities.
- The projects are situated across different socio-economic areas and land use types.
- The projects are situated in different cities or states across Australia
- The projects demonstrate longevity (sustainability) in their lifecycle.

The three projects that were considered to best meet these criteria were:
- the Cooks River to Iron Cove GreenWay, Sydney, NSW

- the Merri Creek catchment, Melbourne, Victoria
- the Bibbulmun Track, Perth and regions, Western Australia.

In applying the selection criteria, these projects stood out for their longevity (lasting over 10 years), project complexity (multiple partners, multiple jurisdictions and multiple land use pressures) and for being in different Australian states. There were a number of challenges in applying the selection criteria, particularly evaluating the projects on their community involvement. This criteria required the projects have an active community associated with the case study that was involved in some way in decision-making and other activities. Applying the selection criteria and scoring projects revealed much about the extent and character of community governance in green infrastructure projects in Australia, and offered a range of insights across a number of Australian projects. It identified three Australian projects that demonstrated a range of best practices across a range of governance characteristics. These best practices provided the source material for detailed investigation and analysis to answer the broader research question on effective governance.

9.3.2 Define the characteristics of community governance in green infrastructure projects in Australia

While many definitions for community governance exist in the literature (Somerville 2005, Bowles and Gintis 2002) the definition developed in this study came from a comprehensive research report by Australian Centre of Excellence for Local Government exploring community governance across Australian local government: "a collaborative approach to determining a community's preferred futures and developing and implementing the means of realising them" (McKinlay et al 2011, 5). It required citizens to "play a direct role in delivering services and undertaking projects in order to achieve the kind of future they want" (McKinlay et al 2011, 4). This definition was selected after careful consideration of the following factors.

- It was based on work done in Australia on community governance case study examples associated with local government.
- It incorporated a full timeline approach to the project by mentioning "determining", "developing" and "implementing" thus acknowledging the community's ongoing or sustained role in a project.
- It focused on the "community's preferred futures" rather than the government's or experts' desired futures.

- By describing the role of citizens as "direct" it acknowledged the range of possibilities of community groups and citizens' capacities for leadership, management, learning, maintenance or capacity for any skill or expertise they brought directly to the project.

9.3.3 Investigate the enabling factors for effective community governance in green infrastructure projects in Australia

This objective explored the conditions at play both in the external environment and within community governance organisations themselves. Initial insights were found in the literature (Lockwood et al 2009, Abbott 2012) and in prior work (George et al. 2012, George et al 2015) on the GreenWay, indicating that a significant perceived barrier is the belief that community governance is associated with high levels of financial and social risk, especially within the government sector. This research built understanding of effective (and ineffective) community governance to identify enabling factors to potentially address such negative perceptions.

Data from the case studies and analysis of the barriers, risks and enablers identified six key themes: partnerships, visionary leadership, financial uncertainty, community involvement, organisational reputation, and the development of positive learning cultures. These themes were compared with those from the literature review and synthesised to develop a revised list of practices for effective community governance of green infrastructure in Australia: visionary leadership, openness and trust, inclusive partnerships, working systems and organisational reputation which included organisational excellence and expertise, double trust and a positive learning culture.

9.3.4 Assess the importance of social and institutional capacity for community governance in green infrastructure

Analysis of the primary research found that social and institutional capacity were prerequisites for effective community governance and a sustainable organisational culture. Applying frameworks like Evans et al (2006) assisted in understanding the process towards dynamic governing, especially when linked to assessing and understanding social and institutional capacity for community governance and, in addition, recognising the governance phases associated with effective community governance. For example, having realistic expectations of time, capabilities and resources can play a role in informing decision-making and support towards transitioning to community governance.

9.3.5 Summary of subquestion 2

The research on these objectives answered the subquestion: What are the factors associated with effective community governance in green infrastructure planning and management in urban and regional areas in Australia? As the study progressed, the characteristics that contributed to an effective community governance arrangement became clearer. For example, factors such as the need for high social and institutional capacity helped understand the necessary conditions for community governance as dynamic governing (Evans et al 2006). However, this study suggests that dynamic governing is a relatively rare achievement in Australia, where government agencies tend to maintain a level of control and/or oversight (Gazley 2008) that inhibits the development of high levels of social capital. Each of the three case studies showed some fluctuation between the conditions described as voluntary governing and active government, on their journey toward dynamic governing. This understanding of changing capacity was linked to analysis of their governance phases and revealed the government and community's appreciation of risk management in community governance.

As established in the literature review, Australia has its own embedded approaches to tri-level governance and market based priorities, and the idea of governance partnerships in green infrastructure mostly prioritised the private sector over the community (McGuirk and Dowling 2009). This context suggests a scepticism towards community governance regarding its worth, high use of resources and its risk. It appeared both from the literature, the gaps in the literature and the case study analysis that there were misunderstandings about community governance, a lack of bureaucratic expertise when dealing with the complexity associated with community governance arrangements, and an inherent propensity to erect barriers to restrict the emergence of community governance initiatives (Marshall 2007, Somerville 2005, Lockwood et al 2009). The barriers and risks associated with community governance were apparent in the broader sample of Australian projects considered in Chapter 4 but not selected as case studies for this study such as Bayswater Main Drain, Alexandra Canal and the Great Kai'mia Way. However, they were also observed in one of the three studies, the GreenWay, especially with the emergence of complex external factors such as changing political conditions, government reversal of commitment and multiple split community agendas for a corridor vision that created negativity and difficult internal conditions and affected trust.

However, this research also showed there was some high institutional capacity for community governance in Australian councils such as various councils along Merri Creek and in state government, the Western Australian Department of Parks and Wildlife, that appeared to deeply

understand the value of working not just with communities but in support of community governance organisations. In the cases of Merri Creek and the Bibbulmun Track, this realisation led to an ongoing core partnership of respect and commitment between the government and community that is considered the key to effective community governance.

Further key features emerged from the interviews and online surveys of case study participants, which were common across the three case studies. A visionary community leader or leaders guiding the community towards involvement in community governance for green infrastructure was found at different times in all three case studies, as was the development of a positive learning culture of the organisation which facilitated the emergence of the next generation of leaders and encouraged volunteering.

Partnerships were a theme raised in the literature and reinforced in the findings of this study. These partnerships included the central partnership between the community organisation and the government (the land owner) and secondary partnerships that included a broad range of negotiated inter or cross-sector arrangements. Community involvement and inclusive practices form the core business of a community organisation and were leveraged to promote excellence in working systems and partner growth. Organisational reputation was mentioned across all of the case studies as a significant counter to negative perceptions about community governance, and a way of bridging differences between organisations in different sectors, especially not-for-profits and government. Key factors contributing to a good reputation included organisational excellence, expertise (including that of community volunteers), double trust (mutual respect between core partners) and a positive learning environment.

9.4 Subquestion 3: What contribution can community governance make to the value of social capital and active citizenship in urban and regional green infrastructure in Australia?

An emerging issue for the government in Australia has been a recognition of the need to maintain and build 'community' and this question developed an understanding of the role of community governance. The scope includes impact of community governance on social capital and its influence on active citizenship in relation to green infrastructure. The following objectives addressed this important link for Australian communities.

9.4.1 Assess the opportunities for active citizenship in community governance in the planning and management of green infrastructure in the Australian context

This research objective assessed how community governance created opportunities for active citizenship. The three case studies showed impressive statistics and positive enthusiasm for users, events and volunteers. The statistics on increasing community participation in the Bibbulmun Track and Merri Creek projects suggested that community governance played a key role in developing active citizenship through accessible non-partisan organisations like the Bibbulmun Track Foundation and Merri Creek Management Committee that offered positive environments for citizens who wanted to get involved. This growth in volunteering in two of the three case studies differed from downward trends in volunteering rates and hours in Australia more generally (Australian Bureau of Statistics 2014). The findings showed that the positive organisational culture associated with the three case studies allowed community organisations to build connections into communities by connecting with people's environmental and recreational interests and respecting their skills and expertise. Volunteers valued good leadership and well run projects and enjoyed seeing the results of their varied endeavours. Volunteering can be hampered by conditions that are too controlled or overly bureaucratic or, in contrast, that leave volunteers with lack of leadership, guidance, input or training. The analysis suggested that a balance is needed and that the expectations and the competencies of the diverse volunteers need to be understood and appreciated. Results showed that community governance organisations have highly developed capacity to run a wide variety of events such as heritage, art and environmental education (GreenWay and Merri Creek Management Committee) that encourage active citizenry, as well as active workforce events such as training volunteers (Bibbulmun Track Foundation).

9.4.2 Identify the benefits for people and partner organisations involved in community governance in the planning and management of green infrastructure

The interviews and online surveys provided insights on the benefits for people and for partner organisations involved in community governance. The reputational benefits for partner organisations reinforced the findings in the literature (Centre for Corporate Public Affairs 2008). Organisational expertise, trust and positive culture were considered for their importance in community governance especially in their role in building social capital. The findings of this study showed that in all these cases community leaders working as volunteers developed inspiring ideas and garnered support from the local community for their vision and then continued to garner support from government partners. This contribution of voluntary visionary leaders was evaluated

and shown to be significant in producing creativity as well as social, environmental and economic value. The findings suggested that local people gave their volunteer support toward projects that were directed at positive local change and represented personal or professional interests and values.

9.4.3   Analyse the role of volunteers in effective green infrastructure community projects

The types of work project volunteers undertook, their attitude to the work and the impact of their work were all considered to address this objective. Organisational statistics showed that volunteer numbers have been growing in the Bibbulmun Track Foundation and Merri Creek Management Committee and results of the online survey suggest they played wide ranging roles, including acting as guides, administration, maintenance, decision-making and leadership. Across the case studies the volunteers were mostly over 40 years old, passionate about their work and happy to share their expertise and skills. The roles and participation of volunteer visionary leaders showed extraordinary contributions of time, expertise and passion and this also applied at some level to most of the volunteers. The findings from this study suggested a difference between community engagement in government-run projects and in community-governed projects, with community-governed projects revealing a deeper and more sustained approach to volunteering supported by practices such as memberships, training, partnerships and shared decision-making to take the level of the relationships between community and government to a position of respect and co-dependence.

9.4.4   Summary of subquestion 3

The research on these objectives answered the subquestion: What contribution can community governance make to the value of social capital and active citizenship in urban and regional green infrastructure in Australia? The findings from this study suggest that community governance may be well positioned to make a significant contribution to the value of social capital and active citizenship in urban and regional green infrastructure in Australia. Given the decrease in volunteering rates and hours in Australia (Australian Bureau of Statistics 2014), this study's findings that community organisations involved in the planning and management of green infrastructure are showing growth in volunteering suggest that important lessons may be learnt by analysing these organisations.

Both the literature review and the findings from this study suggested that effective community governance is fulfilling a function in the consolidation of democracy by offering a non-partisan, non-government alternative for a citizen to act out their expression of civic responsibility toward the common good (Somerville 2005). The community governance arrangement adds a dimension of

positivity and of accessibility to the involvement of citizens as volunteers and the building of social capital in Australia. The Planning Institute of Australia and its partners are encouraging Australians to develop and use green infrastructure to promote active citizenship and the personal wellbeing benefits through their Healthy Spaces and Places guide (Moroney 2009). The three case studies in this research showed impressive achievements in the number of users of green infrastructure, people attending events and volunteers involved in their projects. They also demonstrate a breadth of activities offered to the public and are run in a professional manner.

The positivity of the organisation culture associated with these projects and the excellence aimed for when connecting with the community has ensured that the two community governance organisations, Bibbulmun Track Foundation and Merri Creek Management Committee, have continued to grow community support and interest. The limits to growth in developing active citizenry and social capacity are over-administration, limits to resources and negativity. Trust also played an important role across all relationships (volunteers, staff, partner staff and partner business staff) and relies on time and resources to develop. Long-term participation both by volunteers and staff, together with their excellence and expertise, helped to build referential power, that in turn built trust and contributed to their positive organisational reputation.

9.5 Subquestion 4: What contribution can community governance make towards sustainability in green infrastructure planning and management in urban and regional areas in Australia?

This subquestion explored the opportunities for community governance to contribute towards sustainability in green infrastructure by considering the benefits for people, communities, physical environments and civic wellbeing.

9.5.1 Assess the contribution of community governance towards sustainability in planning and management of green infrastructure

A simple process was developed to assess the contribution value of community governance in each case study, using the widely accepted corporate values of effectiveness and efficiency, which offer the common language of Australian governance and management practice, and the holistic value of sustainability respecting the quadruple bottom line and maintaining future oriented needs (Mohrman and Shani 2011). These were applied across the criteria that were developed from the literature: vision leadership, open trust, inclusive partnerships, working systems and organisational reputation. Project KPIs included longevity, personnel growth and progress in the development of

the infrastructure. Other considerations were the dynamic governing assessment (Evans et al 2006), the quadruple bottom line and the case study potential to deal with risks and challenges. The last criteria also related to the next objective. Data was used in a qualitative analysis on an overall judgement on the sustainable effectiveness (Mohrman and Shani 2011) of the case studies and their contribution for Australia. The data was drawn from a broad range of sources including the interviews and online surveys and desktop information such as ongoing grants, partnerships, development of strategic plans, and development of governance procedures.

9.5.2   Determine the value of community governance in complex green infrastructure corridors and projects in Australia

With recognition of the limits of both the state and the market to deal with complex environmental challenges and social equity issues (Baker 2016) this objective considered whether community governance in green infrastructure may have value. The literature raised some of the issues facing complex green infrastructure as urban contestation and cross-boundary environmental issues (Tilbury and Wortman 2004, Eggers 2008, Garmestani and Benson 2013, and Chandler 2014). Governments were also found to be facing increasing concerns relating to complex health and wellbeing problems of citizens and possible connections to active citizenship and adequate public open space in cities. Emerging and complex new challenges have presented new organisational demands for differing expertise including multistakeholder collaborations. The literature (Somerville 2005, Enroth 2013, and Bowles and Gintis 2002) has suggested that community governance may have capacity for collaborative problem solving and risk sharing. The capacity of community governance organisations in this study, especially the Bibbulmun Track Foundation and Merri Creek Management Committee, showed strengths in the areas of adaption, collaborating with stakeholders effectively, building mutual benefit from partnerships, using community expertise, and creative and innovative solutions. Together the literature and study finding suggest that effective community governance may well have a contribution to offer to complex contexts and challenges. The counter view was shown in the GreenWay case study where the complex surrounding urban environment led to a wide range of external pressures leading to the breakdown in trust that threatened its sustainability and capacity to engage with its affected communities.

9.5.3   Summary of subquestion 4

The research on these objectives answered the subquestion: What contribution can community governance make towards sustainability for green infrastructure planning and management in Australian urban and regional areas? Community governance can make a valuable contribution

towards sustainability in green infrastructure planning and management in urban and regional areas in Australia when done well and operating under supportive and stable external conditions, as clearly demonstrated by the Bibbulmun Track and the Merri Creek case studies. The clearest (market-based) indication of their success has been their economic sustainability combined with their other attributes for social, environmental and civic outcomes. This has resulted in both organisations developing positive organisational reputations that underlie partnerships with a broad range of other organisations and individuals for mutual benefit. They have also demonstrated organisational competencies in planning and management that include crossing jurisdictional boundaries, dealing with complex land leasing and stakeholder environments, and realising new visions for sustainable cities. They may be more effective and efficient than government when assessed from a quadruple bottom line perspective.

The future of community governance in complex green infrastructure requires it to be authentic, enabled, partnered and respected to achieve a mature stable state. The qualities to ensure effective community governance include vision leadership; openness and trust across structures and relationships; inclusive partnerships promoting networks of shared power; working systems characterised by reflexive processes to maximise resource and capacity; and organisational reputation with expertise, excellence and a positive culture. These characteristics, especially expertise in partner collaborations, adaptability and problem-solving ability, have positively positioned mature community governance organisations for their contribution to complex situations associated with green infrastructure. After 20 to 30 years, both Bibbulmun Track Foundation and Merri Creek Management Committee have developed a positive organisation reputation for effective community governance with holistic outcomes. In contrast, this research suggests that poorly functioning community governance does not have capacity to deal with complexity and/or crisis situations and may well become a risk itself.

9.6 The main research question reviewed: What contribution can community governance make towards the sustainable planning and management of green infrastructure in Australia?

Community governance in green infrastructure, when done well, is effective, efficient and sustainable as shown in two out of the three case studies in this research, the Bibbulmun Track and Merri Creek projects. Combining the results from the literature review and the case study analysis from this study, the practices of effective community government for sustainable planning and management of green infrastructure included vision leadership, openness and trust, inclusive

partnerships, working systems and organisational reputation. The governance phases associated with effective community governance from these case studies may be useful in understanding capacity and time frames associated with community governance. During the formative phases, unstable external conditions, as seen in the GreenWay, may undermine community governance efforts. However, if these conditions can be overcome, community governance organisations can reach maturity and attain a condition of dynamic governing (Evans et al 2006), by demonstrating high social and high institutional capacity which facilitated problem solving, creativity and a positive learning culture.

A core partnership between a community organisation and the government was a key part of effective community governance. A broad range of negotiated partnerships established through community governance arrangements offered benefits to people and society through reputational benefits, resource and expertise sharing, and community trust building through collaborative approaches. Developing and recognising mutual credibility (through 'double trust') are key to the success of a community governance partnership. Community governance arrangements, particularly mature stable community governance arrangements, may have a contribution to make in complex situations and complex problems especially through their expertise in developing collaborative partnerships.

Effective community governance organisation in green infrastructure offers:
- a trust brokerage role between communities and government
- advocacy influence due to their independence from government
- community leadership, expertise and insights towards green infrastructure opportunities
- adaptive and innovative solutions to challenges such as funding uncertainty due to independence from government
- a positive culture that encourages active citizenship and opportunities for volunteering in the planning and management of green infrastructure.
- excellence across social, environmental, governance and economic values, indicated by government, business and philanthropists recognising and seeking expertise from community governance organisations across environmental and conservation, community engagement and partnerships development.

9.7 Implications of these findings

9.7.1 Implications for government

The findings suggest that there is a perception of high risk associated with community governance models and that this can create barriers especially within government. However, equally, these perceived risks can be at least partially overcome through a focus on the opportunities and enabling factors identified above. There is a great deal of scope for green infrastructure based community groups and government organisations to work towards realising more of this type of community governance partnerships. Given the benefits to be gained from community governance in action there are compelling reasons for governments to invest in expressions of interest to partner with groups with a community vision for their neighbourhood, local area or region. This would be particularly worthwhile if government organisations also engaged in capacity building staff in the benefits and opportunities that community governance presents, and that are difficult to achieve through current approaches to planning and community engagement by government and private organisations in Australia. The initiatives needed to develop this balanced and sustainable approach to green infrastructure provision and management could include:

- calling expressions of interest for great community visions
- building capacity of leadership and staff in government organisations on the benefits and opportunities of community governance, and enabling of community governance and evaluating social capacity
- establishing strategies and planning policies that incorporate this model of portfolio planning that legitimises the work of community organisations in green infrastructure planning and management
- allocating funding and resources towards key community governance in green infrastructure initiatives
- recognising community governance organisations as the new community engagement arms of council, in partnership and outside institutional limitations
- enabling and sustaining projects by understanding the need to support leaders, support set up, assist with the build, empower over the long term, and encourage the ongoing governance and management of the infrastructure and the community supporters and volunteers.

9.7.2 Implications for planners

Planners working in government have statutory requirements to engage the community but do this within institutional limits, many of which are driven by the expectations of an efficiency and

outcomes based context. Planners need to "find a role as independent arbitrators of global, national, local, individual and future values" (Steele 2009, 199 citing Bradwell et al 2007, 15) and avoid becoming sandwiched between conflicting ideologies of public and private interests. In hybrid organisations that combine public, private and community sector concerns, new roles for planners may emerge with broad briefs to focus on facilitation between sectors and stakeholders for broader societal benefit and quadruple bottom line initiatives. Planners could be social enablers, community brokers and place stewards, as place managers guided by civic values of inclusion, participation and trust building. Community brokers (or facilitators) are already working with communities to identify key capacities and build more sustainable communities. They assist in the identification of key issues and the development of local strategies and the coordination of community in taking practical action on local issues. Planners as community brokers need to understand the role of trust and be enablers. They may be involved in projects as skilled community members volunteering, or as planners in local government, regional development organisations or not-for-profit community organisations. Their capacities need to be able to support the integration of a network of spatial and community 'participants', both individuals and organisations, through facilitation aimed towards collaboration and empowerment. By realising collaborative exchange, communities and community organisations, government and business can share expertise for mutual gain including expertise in urban planning and governance, risk and law, occupational health and safety, accounting, science. This can be as an active management committee or board or council team overseeing functions of association to advise and keep accountable.

9.7.3 Implications for business

Both the literature and the experience of the Bibbulmun Track Foundation indicate that the interests of business can be aligned with those of community governance organisations. Specific opportunities include:

- seeking out negotiated custom designed partnership arrangements with traditional business of various scales and focus, with benefits for business including reputational gains, trust building with the broader community, corporate social responsibility and market alignment if it's the right project.
- investigating opportunities for hybrid organisations that combine community and business creating creative alternatives for philanthropy, grant funding, volunteering and research and development opportunities.

- considering opportunities for social enterprise and the links with green infrastructure in the area of new products, new localised and connected markets and fresh approaches to partnering.

- Business can be involved with community governance and leverage its role an integrity broker, simply by being aligned with a community vision and allowing it to do its thing.

With these potentially aligned interests in mind, there may be some worthwhile learning opportunities in sharing the different norms associated with business and community governance. For example, lessons that business can take from community governance might include understanding authenticity, listening to the market, genuine ongoing engagement, transparent communication, fundraising and philanthropy, visionary distributed leadership and triple bottom line accounting. Conversely, worthwhile lessons that community governance can take from business could include management and information technology systems, administrative best practice and project management. By identifying and sharing areas of expertise a mutually beneficial partnership can emerge. This study demonstrated various models of this such as a gold mining company partnering with a community governed wilderness walking track.

Thus, an important finding emerging from this study is that community governance, in common with business, can be significantly enhanced by building and maintaining an excellent reputation. This suggests that organisations from different sectors can 'piggyback' off each other's reputation and resources for mutual gain, offering corporates an avenue for pursuing ethical futures.

9.7.4 Implications for communities

Communities involved in community governance organisations can leverage a range of competencies and capabilities beyond traditional organisations including the notion of expertise sharing (Ackerman and Halverson 2003). The findings of this research, mostly from the online survey of participants, suggest that many of the volunteers (mostly aged 40 years or above) were motivated by the desire to give back to society in an area they are passionate about and have expertise in. As noted earlier, the level of skills, expertise and passion and the amount of time contributed by volunteers, especially leaders, in these three case studies was very impressive. Further, analysis suggests that the adaptive and creative abilities of community volunteers, harnessed through community governance organisations, combined with the incorporated benefits from their government partnership arrangement, can increase capacity. Together these community

organisations are better equipped to face emerging and complex environmental challenges such as pollution, climate change adaptation, and open space needs for urban populations.

Communities of interest need to realise their shared potential as a group and work together towards a collaborative partnership arrangement. The norms or rules of conduct of collaborative groups and especially community governance need to be negotiated face to face. The role of the leader or leaders is very important, with leaders having capacity to inspire, vision and collaborate inclusively within their group and with other organisations, and endorsing individual passion and skill sharing through a positive culture. The findings also showed that a leader's influence with people in government or in government processes was helpful and demonstrated a positive attitude towards the role of governments.

The community governance arrangement provides a platform for communities to re-engage with their local place and green space and realise their civil responsibility in a non-partisan environment. These two personal functions may also contribute to personal and societal wellbeing through endorsing and enabling active citizenship, both socially and physically. The results from this research suggest the personal benefits for citizens involved in community governance are very beneficial, providing friendships and purpose, especially when the organisations they participated in were both positive and effective.

Not all community groups have the expertise, skills, passion and civic mindedness characteristic of many of the community volunteers in these three case studies and especially demonstrated by the Bibbulmun Track Foundation and Merri Creek Management Committee. As the GreenWay case study demonstrated, difficulties can result in breakdowns in trust and relationships within a group, affecting volunteers' involvement. Community volunteering circumstances can also change. An accurate assessment of the internal and external factors associated with the project, of the community and institutional capacity, and the risks associated with the project throughout the project development can guide choices. Communities may need to be open to assessment and support by third parties. Communities need to be prepared to share and grow together alongside government and corporate partners to build trust over time, more than 20 years in these three cases, and to develop a reputation for excellence.

9.8　Further research

The findings on community governance and implications may seem overly positive given that real barriers remain. The perception of risk associated with community governance is strong, due to a lack of understanding, a lack of evidence of its effectiveness or the messy remains of previous attempts. This was apparent in interviews with a number of public servants involved in the case studies, who presented as community governance champions. Their insights and understanding into the benefits of community governance were apparent yet they struggled with other bureaucrats' misunderstandings and with institutional norms that did not allow this idea to progress or be developed (cf. Aulich et al. 2010). To understand the full picture more research is needed. While this research deliberately focused on successful case studies, it is also important to understand why community governance can and does seem to fail, how often and the reasons behind failure. This study indicates that internal issues like breakdowns in trust or in community support, lack of expertise, and lack of leadership may contribute, while external issues may include lack of respect, lack of resourcing, and the lack of political will, particularly within the public sector. Understanding these barriers more completely will complete the picture. To understand the full picture more research is needed. While this research deliberately focused on successful case studies, it is also important to understand why community governance can and does seem to fail, how often and the reasons behind failure. This study indicates that internal issues like breakdowns in trust or in community support, lack of expertise, and lack of leadership may contribute, while external issues may include lack of respect, lack of resourcing, and the lack of political will. Understanding these causes more completely will complete the picture.

When community governance fails, it is often complicated and personally challenging because much has been invested by many at a personal level. The GreenWay was evidence of this and, as disappointment with the project grew, it impacted culture and community motivation. The two highly successful case studies in this study show that community governance in green infrastructure is attracting people passionate about the planning and management of green infrastructure, and who are also grounded, altruistic, optimistic, and focused on sharing and their civic responsibility. This raises questions about the relationship between community governance, green infrastructure, and the development of such personal qualities.

The principles developed and refined in this research could be seen as representing a kind of 'ideal' community governance, which could inform other projects and governance arrangements. Further research (for instance into site based governance of green space, international examples of

community governance of complex green infrastructure, community governance of housing co-operatives, schools and sporting clubs, and government-led governance of greenspace) could explore the way these principles interact in different contexts. They could also form a theoretical basis for action research to help develop sustainable community governance arrangements for future green infrastructure projects.

9.9   Concluding comments

Given Australia's governance arrangements and the priority of state governments in planning matters especially in our cities, the open mindedness and genuine connections that state and local governments have towards local communities are crucial to the success of community visioned and community governed green infrastructure. Counter to previous paradigms of state driven management, or expert control, these case study projects demonstrate examples of government enabling, equipping and allowing the community to envision, connect and make decisions about their places and spaces. This is community governance and it can work. When done well, as seen in the Bibbulmun Track and the Merri Creek projects, the authentic community involvement realised through effective community governance (rather than just token short term community engagement practices) is well beyond what a local or state government body can achieve. This is acknowledged by the Bibbulmun Track stakeholders and reinforced by the partnering Western Australian government agency, both are supported and enabled by the Bibbulmun Track Foundation for the greater good of the Bibbulmun Track and the community.

The three projects researched in this study have approached the governance of their green infrastructure project with an ambitious plan to realise environmental, social, economic and civic values for sustainability and the common good. Two of the projects, the Bibbulmun Track and Merri Creek, are achieving this through effective community governance arrangements in partnership with government, although with slightly different models. Both are achieving effective, efficient and sustainable results. Their institutional partners in these two projects, state government in one and several local governments in the other, have demonstrated high institutional capacity, understanding that effective community governance organisations can leverage sustainability outcomes, benefits and innovative potential far beyond traditional government approaches. These benefits are put forward in the literature as problem solving, risk sharing and multilateral monitoring (Bowles and Gintis 2002 and Somerville 2005). The findings in this research suggest, in practice, benefits are high social capacity, community participation, impressive sharing of expertise, high levels of passion, positive learning culture, innovation, positive approaches to risk, adaptability and

good practice systems. Recognition of the role of organisational reputation may provide the bridge needed to build respect, or double trust, especially in organisational excellence and expertise in the broader market. The benefits of community governance are well suited to the complex societal challenges that arise in complex green infrastructure.

This research has made a contribution to our understanding and theorisation of community governance by developing a set of principles through which to assess and implement community governance for green infrastructure. These principles help to operationalise ideas about 'genuine', 'authentic' or 'empowering' community engagement, often invoked in both scholarship and policy, such as Arnstein's (1969) ladder, but rarely fully explained. Modern interpretations of empowerment include work such as the dynamic governing concept and the principles developed in this study which, in a sense, operationalise the ideal of Arnstein's higher levels of empowerment. Although developed in the Australian context, the principles developed here could be used to consider or guide other community governance arrangements and to inform the broader literature about community governance in other parts of the world and other contexts.

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Appendices

Appendix 1 – Information and permission request to participate in research

Information sheet for Interview subjects

Study Title
The role of non-profit, non-government organisations in achieving sustainable governance for Australian urban trails and greenways.

Study aim
The aim of this study is to consider opportunities for community governance (community governance is understood as decision-making processes, relationships, and structures that involve and affect the community) in green infrastructure including greenway and open space management in Australia. It will explore the avenues for improving community governance (governance through alternative structures such as non-government, not for profit organisations and will seek to understand their potential in working towards sustainable governance to develop environmental management processes for sub-regional scale green infrastructure.

Study description
This study will take three years and involves a combination of theoretical studies and case study investigation focusing on the following projects:
1. Cooks River to Iron Cove GreenWay, Sydney, NSW
2. Merri Creek Catchment, Melbourne, Victoria
3. Bibbulmun Track, WA
It will seek to will seek to explore the various governance approaches to sub-regional greenway, green infrastructure and open space management.

Study method
- The research methods including a literature review to develop a theoretical framework and investigation into four case studies including an integrated site analysis, interviews and on-line surveys to gain a greater understanding of a broad range of issues.
- The people invited to participate will be stakeholders associated with one of the four case studies. Invited stakeholders will come from a diverse range of stakeholder sectors (various local and state government agencies and various community groups) for each case study project.
- Interview participants will be selected with consideration of the following: all stakeholder chosen have active regular involvement in the case study and have been involved in the project for a various time periods but all for a minimum of one year.
- An in-depth semi-structured interview lasting approximately 1 hr will be carried out (see attachment). However, in the company of stakeholder interviewees with a significant case study involvement it may extend beyond this period. These participants will be asked if they would prefer to stop at 1 hr or continue.
- The interview will be divided into five parts.
  - Knowledge of and history of the case study project governance

- o Current situation of the case study project governance
- o Ideas for the future of the case study project governance
- o Other Issues relating to case study project governance
- o Profile
- • The interviews will be recorded and then transcribed for analysis using grounded theory to realise themes and theories.
- • The researcher's intent is to analyse feedback from this research and its findings along with other data (questionnaires, observation and theory) alongside other case studies to inform and improve governance outcomes.

Role of participants
Should you agree to be part of this study, you will:
- • be interviewed and have your responses to questions recorded either in writing as notes taken during the interview or on an audio recording device,

You can request that you be sent a transcript of the interview or the comments made at a meeting to enable you to correct any inaccuracies or to withdraw consent to use that information.

Confidentiality
The names of people making comments will not be shown in the thesis, however where an individual is representing an organisation or community group, the name of the organisation or group will be shown and their role.
All information will be confidential and kept in a secure location, only available to the PhD researcher and supervisor.
In the case of forthcoming publications, the participant's names will be kept confidential however their roles and sector may be identifiable.

Participation is voluntary
Participation in this study is completely voluntary. You can withdraw at any time from the study and have any information you have provided return to you and not included in the results of the work. Any decision to withdraw from the study will be kept confidential.

Risks and benefits to participants
The only risk to a participant in taking part in this study relates to being identified as making a particular comment. As stated above, you will be provided with an opportunity to correct the transcript of the interview or comments at a public meeting.
Further, you can withdraw at any time from the study and have any information you have provided returned to you and not included in the results of the work if you do not want to be identified as making a particular comment.
Contact

This study is for a PhD thesis for Jennifer George. She can be contacted by phone on 0401849432 or email Jenny.George@curtin.edu.au
The supervisor for this study is Dave Hedgcock who can be contacted by phone on 9266 9057 or email D.Hedgcock@curtin.edu.au

Human Research Ethics Committee
This study has been approved by Curtin University's Human Research Ethics Committee. If you have any concerns regarding the conduct of this study please contact Secretary of by Curtin University's

Human Research Ethics Committee on 9266 2784 or email D.Hedgcock@curtin.edu.au or in writing C/- Office and Research and Development, Curtin University, GPO Box U1987, Perth WA 6845.

Time-line for study

The study commenced in 2012 and is due for completion in 2016.

Consent form for Interview subjects

Study Title

The role of non-profit, non-government organisations in achieving sustainable governance on Australian urban trails and greenways.

Study Researchers

This study will form the major component of a PhD dissertation for Jennifer George from Curtin University, Department of Urban and Regional Planning. Jennifer can be contacted by phone on 0401849432, or email Jenny.George@curtin.edu.au

The supervisor for this study is Dave Hedgcock of the Curtin University who can be contacted by phone on 9266 9057 or email D.Hedgcock@curtin.edu.au

Consent

I _____ of _____
_____ consent to participate in this study.

I have read the Information Sheet and understand the procedures that will be carried out, that is interviews.

I have been advised of the benefits/risks associated with participation.

I have had an opportunity to ask questions.

I understand that as a participant, my privacy will be maintained and that the information obtained in this research will be used in a manner that respects my personal rights

I understand the research will maintain my anonymity and my confidentiality, although my organisations name will be identified, unless I have given permission to the contrary.

I give permission for the results from this study to be used in reports or research papers or thesis consistent with the above understandings, especially in relation to anonymity.

I understand that I may withdraw from the study at any time without prejudice.

Signed _____

Date _____

I agree to allow this interview to be recorded by electronic device and to be transcribed verbatim with a copy of the transcript stored for a period of five (5) years in a secure place.

Signed _____

Date _____

Appendix 2 – Survey and open ended interview questions

Governance in Green Infrastructure Community Projects

Introduction

You are being asked to complete this survey because you recently have been or are currently involved in a community project relating to an urban green corridor or open space.

By answering this questionnaire you are contributing to a Curtin University research project focused on understanding and improving the governance of green corridors and open space for communities in cities.

There are five aspects of 'governance' in relation to decision-making:

1) The structures for the project - organisational set up, flows, roles and responsibilities;

2) The processes during the project - protocols, rules, transparency and accountability;

3) The partnerships involved in the project - stakeholder involvement and influence;

4) The relationships between people in the project - the ways of relating and behaving;

5) The leadership of the project - individuals guiding and inspiring others towards the vision.

'Community governance' refers specifically to those aspects and decisions that involve and / or affect the community.

The first five questions are about governance issues in general; a second group are about your own experience in a particular project; and a final four are to provide demographic information.

Governance issues in general

The first five questions are about how important you think that different aspects of governance are in community projects.

✱1. The governance STRUCTURES set up for community involvement in urban 'green infrastructure' projects are important.

  ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment

✱2. The governance PROCESSES set up for community involvement in urban 'green infrastructure' projects are important.

  ○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment

Governance in Green Infrastructure Community Projects

＊3. PARTNERSHIPS BETWEEN DIFFERENT STAKEHOLDER GROUPS are essential in community projects in urban 'green infrastructure' projects

○ Strongly Agree　　○ Agree　　○ Neutral　　○ Disagree　　○ Strongly Disagree

You might like to comment

[text box]

＊4. PERSONAL RELATIONSHIPS are important for community involvement in urban 'green infrastructure' projects

○ Strongly Agree　　○ Agree　　○ Neutral　　○ Disagree　　○ Strongly Disagree

You might like to comment

[text box]

＊5. EFFECTIVE LEADERSHIP is essential for community involvement in urban 'green infrastructure' projects

○ Strongly Agree　　○ Agree　　○ Neutral　　○ Disagree　　○ Strongly Disagree

You might like to comment

[text box]

The 'green' community project in which you have been / are involved

The next six questions are specifically about your own view of how well the different aspects of governance contributed to good decision-making in the 'green infrastructure' community project in which you participated.

＊6. For the 'green infrastructure' project in which you were / are involved the GOVERNANCE STRUCTURES set up for community involvement were / are effective (or not) for good decision-making.

○ Strongly Agree　　○ Agree　　○ Neutral　　○ Disagree　　○ Strongly Disagree

You might like to comment

[text box]

Governance in Green Infrastructure Community Projects

*7. For the 'green infrastructure' project in which you were / are involved the GOVERNANCE PROCESSES set up for community involvement were / are effective (or not) for good decision-making.

○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment

*8. For the 'green infrastructure' project in which you were / are involved the PERSONAL RELATIONSHIPS amongst people were / are effective (or not) for good decision-making.

○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment

*9. For the 'green infrastructure' project in which you were / are taking part, the INVOLVEMENT OF PEOPLE was / is an effective contribution to good decision-making.

○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment about the involvement of people at different levels and from different stakeholder groups (e.g. community, local government, state government etc.)

Governance in Green Infrastructure Community Projects

*10. For the 'green infrastructure' project in which you were / are taking part, the QUALITY OF LEADERSHIP was / is an effective contribution to good decision-making.

○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment about the strengths and weaknesses of the leadership in the project

*11. In the 'green infrastructure' project in which you were / are taking part, the EXPERTISE OF DIFFERENT MEMBERS OF THE COMMUNITY was / is being effectively utilised in the decision-making process.

○ Strongly Agree   ○ Agree   ○ Neutral   ○ Disagree   ○ Strongly Disagree

You might like to comment about the expert contributions different members of the community

Your overall impression of the project in which you were / are involved

The following question is about your overall assessment of several aspects of the 'green infrastructure' project in which you have been / are involved - from the point of view of making good decisions for your community.

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Governance in Green Infrastructure Community Projects

*12. This question is about your overall impression of different aspects of the 'green infrastructure' project in which you were / are involved

	Agree	Neutral	Disagree
Overall I think that the governance of the project was / is satisfactory	○	○	○
Overall I think that the involvement of the community in the project was / is satisfactory	○	○	○
I think that the community should have been / be more involved in the project	○	○	○
I think that the skills and expertise of people in the community were / are utilised satisfactorily	○	○	○
I think that the skills and expertise of people in the community should have been / be utilised more	○	○	○
Overall I think that the governance in the project allowed / allows for INNOVATION in decision-making	○	○	○
Overall I think that decision-making in the project was open and transparent to the community	○	○	○
Overall I think that the governance in the project allowed / allows for FLEXIBILITY in decision-making	○	○	○

You might like to add any comments on any of the above aspects of the overall project

Your personal involvement in the project

The following four questions are about your own personal involvement in the project

*13. I would estimate my personal involvement in the project to be:

○ Very high

○ High

○ Moderate

○ Minimal

You might like to describe your own involvement and contribution

Governance in Green Infrastructure Community Projects

*14. Which of the following 'green' community projects were / are you involved in?

○ Cooks River to Iron Cove GreenWay, Sydney, NSW

○ Merri Creek Catchment, Melbourne, VIC

○ Bayswater Main Drain, Perth, WA

○ Torrens River Linear Park, Adelaide, SA

○ Bibbulmum Track, WA

Other (please specify)

_____

*15. For how long were / have you been involved in the project?

○ Less than one year

○ One or two years

○ Three or four years

○ Five or more years

*16. Which of the following best describes your stakeholder group in the project?

○ State Government agency

○ Local government staff member

○ Local community group

○ Regional community group

○ Case study not for profit association

○ Business partner

○ University partner

○ Local Councillor or politician

○ Individual participation

○ Other (please specify)

_____

*17. What is your gender?

○ Female

○ Male

Governance in Green Infrastructure Community Projects
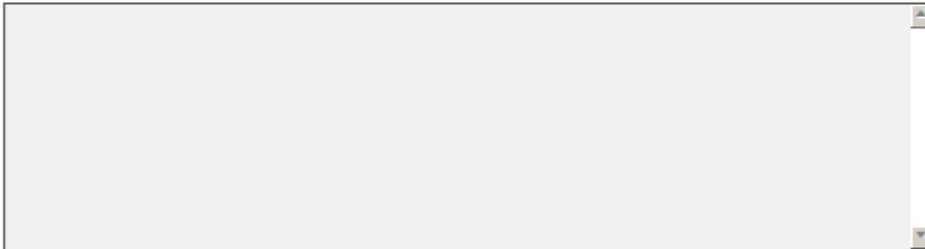
*18. What is your age?

- ○ 18 to 24
- ○ 25 to 34
- ○ 35 to 44
- ○ 45 to 54
- ○ 55 to 64
- ○ 65 to 74
- ○ 75 or older

*19. What is the highest level of education you have completed?

- ○ High School
- ○ TAFE
- ○ Undergraduate degree
- ○ Postgraduate degree

*20. Please explain your motivation for participating in the project

Interview Instrument
Case study Governance interview questions – open---ended semi---structured

1. Knowledge of and history of the case study's governance

What do you understand by the term governance?
As you understand it, can you describe the history of governance for the project?
What are the strengths and/or weaknesses of past governance structures?

2. Current situation of the Greenways governance

What is the current governance structure for your project?
Can you draw it diagrammatically?
How well is it functioning?
What are its strengths?
What could be improved?

3. Ideas for the future of the GreenWays governance

What is the most likely future for the governance of the project?
What is the best possible future for the governance of the project?
What 3 actions will bring about the best outcome for governance of the project?
What barriers and difficulties do you see for the project's governance going into the future?

4. Other issues regarding governance on your project?

How successful do you consider this project to have been and why?
How are the community involved in the project?
What is the role of leadership in the project?
What is the role of partnerships in the project?
Do you think the current governance allows for innovation and flexibility in decision---making?

Profile Questions:

What is the name of your case study project?
How long have you been involved in the project?
What role/roles do you have?
What is your professional training (education and experience)?
What motivated you to get involved in this project?
Please indicate your age range and gender?

Many thanks

Appendix 3 – Criteria rankings of other Australian green infrastructure projects

The case demonstrates longevity with phases	The catchment incorporates urban environment	The case crosses council boundaries thus fitting the sub-regional criteria	They are characterized as corridors indicating an environmental management priority	They are governed by several government bodies or by a not-for profit sub regional Association	There is an active community associated with the case study involved in decision-making and other activities.	The case covers a variety of socio-economic areas and a variety of land-use types adjacent.	Variation in origin of Australia city	Total Ranking out of 40
River Torrens Linear Park, SA				Ranked 4				
25 years with life cycle phases	Yes	Yes 8 LGA's	Yes, River rehabilitation and active transport	Several Government bodies	Consultation only	Yes, to both	Ranked as 1 in Adelaide	
5	5	5	5	2	2	4	5	**33**
Bayswater Maindrain, WA				Ranked 4				
8 years	Yes	Yes 2 LGA;'s and other stakeholders	Creek Regeneration and open space upgrades	Some co-ordinated efforts from LGA's and local community groups	Yes, there has been an active community doing small projects	Yes, to both	Rated 2 in WA	
2	5	4	5	4	4	5	4	**33**
Brisbane active transport strategy: walking and cycling plan 2005-2010, QLD				Ranked 6				
10 yrs and	Yes	Multiple LGA's and	Greenway upgrades	Government	Community	Yes, to both	Rated 1 in	

20yr future vision		other stakeholders	and active transport upgrades for cycling and walking	motivated and co-ordinated	consultation sought to the masterplan		Brisbane	
3	5	5	4	3	2	5	5	**32**
Powells Creek Corridor, NSW				Ranked 7				
13 years, masterplan 2008	Yes	2 LGA's and other stakeholders	Natural creek regeneration, active transport trails and open space upgrades	Government motivated and co-ordinated	Community consultation sought to the masterplan	Yes, to both	Rated number 2 most suitable case in NSW	
3	5	4	5	3	2	5	4	**31**

Possible alternative case studies for this study

The case demonstrates longevity with phases	The catchment incorporates urban environments	The case crosses council boundaries thus fitting the sub-regional criteria	They are characterized as green corridors indicating an environmental management priority	They are jointly governed by several govt bodies or by a not-for profit sub regional Association	There is an active community associated with the case study involved in decision-making and other activities.	The case covers a variety of socio-economic areas and a variety of land-use types adjacent.	Variation in origin of Australia state	Total Ranking out of 40
Alexandria Canal Path, NSW				Ranked 8				
11 yrs since 1997 then vision stalled since 2008	Yes	Yes several local and state agencies working together	Creek Regeneration and paths and significant open space upgrades.	Led by state government	Some community interest followed government plans. Current modified plans led by the community	Mostly lower socio-economic and industrial.	Rated 3 in NSW	
2	5	5	4	3	4	3	3	29
The Great Kiama Way, NSW				Ranked 10				
5 active years then it stalled	Not really	Yes 12 LGA's, Mixed land ownership issues	Natural bushland regeneration, Active transport Trails and heritage	Complex governance including a stakeholder advisory board	Cross community involvement and ownership being sought	Yes to both	Rated 4 in NSW	
2	2	5	5	3	4	4	2	27
Murray to Mountains Rail Trail, Vic				Ranked 10				
Yes, First study 2003, trail finished in 2009	No, just small towns	3 LGA's and other stakeholders	Rail trail conversion	Government motivated and co-ordinated	Community consultation sought to the masterplan	Yes to both	Rated 2 Victorian example	
3	2	5	3	3	2	5	4	27

Less suitable case studies for this study

Appendix 4 – Case study histories

History of Bibbulmun Track

1970's- 1979 Early phase

The idea for a walking track was emerging

While walking has been a recreational activity in WA since 1930's when a bushwalking club was founded. It was in 1972, that an avid bushwalker and visionary had an idea for a long-distance walking trail in WA and presented it to the Minister for Forests. The Forest Department began planning possible routes and after approval of the concept, a route from Kalamunda to Northcliffe was chosen. The route was marked out in 1974, and gradually built over five years with the official opening of the Bibbulmun Track in 1979 which included an end to end walk shared by many groups.

> "Media coverage of the 1979 walk was extensive. Numerous schools took part and the community response along the route showed a growing awareness of the Track as a means of recreational access to the bush and the forests of the south-west". (Baker J 2010 p.12.)

The next 8 years were quiet years for the Track until new management moved in at CALM.

1988-1997

Track planning and construction through innovation and partnerships

Over the next phase the track was upgraded by the Department of CALM (Conservation and Land Management) and this included an extension to Walpole and later a program called "Building a Better Bibbulmun Track Project" aimed to open by 1995.

This project was overseen by a committee of influential people in WA (representing Peel Development Commission, SW Development Authority, Great Southern Development Authority and the WA Tourism Commission), and included four stages 1) Alignment, planning and selection. 2) Assessment of a management models, resource availability and funding options. 3) Development of information systems. 4) Construction of the Track and facilities. The "model" followed for the new Track was the Appalachian Trail in the USA, aimed to

a) Maximise the quality of the users' experience.

b) Minimise conflicts of interest.

c) Attain a high level of integrity as a world class trail.

d) Offer a safe experience to as broad a range of people as possible.

Discussions ensued with other stakeholders including officers of the forest regions, the Water Authority and Westrail. With alignment accepted, and public support evident, funding of $1.25m was needed and further partners were galvanized for support including the CALM/Alcoa Forest Enhancement Programme, Great Southern and SW Development Commissions, Westrek and the Ministry of Justice. Seven thousand signs were installed using a depiction of the indigenous Waugal (a dreamtime creature known for meandering over the land) as the Track's trail markers. (See Figure) Broad community support was the next goal and focused on the tourism potential, developing support from local government bodies, regional tourist centres, Aboriginal corporations, community groups and bush-walking club. Recognising the need to harness the public enthusiasm, the concept of a "club" or association to involve people emerged. The Bibbulmun News was developed to keep the community and stakeholders informed of progress. (History of the Bibbulmun Track Foundation Page…)

Figure 6. The Track's trail markers showing the Waugal

https://www.bibbulmuntrack.org.au

Towards the end of 1994, a trial joint-venture involving the Ministry of Justice resulted in construction of four kilometres of the new Track and a shelter by a work crew from Wooroloo Prison Farm. Construction of the track and campsites by Landcare and Employment Action (LEAP) utilized local unemployed youth projects in Collie and Albany. While, the first section of the new Track, from Kalamunda to Brookton Highway, was officially opened in August 1995, funding challenges slowed progress. Without a large-scale

Government financial commitment, funding was limited to small to moderate contributions from various sources, limiting clear forward planning. (History of the Bibbulmun Track Foundation Page)

This altered in 1996, when a two-year grant worth $1.38 million dollars was made to the Project from the Federal Department of Housing and Regional Development (RDO). This hastened the construction work and contributed to an increase of project staff from one to five over the next few years. In August, 1997 the 'new' Northern section of the Track stretching 453 kilometers in length and featured 26 upgraded campsites was opened. The Southern section which included the construction of the Walpole to Albany extension and work in the West Cape Howe National Park was realized in 1998 through funding obtained under the Federal Government's Green Corps Aboriginal Traineeship scheme.

The whole Track, totalling 963.1 kilometers in length was walked through the work of many partners and volunteers, contained 48 campsites and was opened on 13 September 1998 with an 'end-to-end' walk.

1998- 2016

Management, marketing and maintenance- community governance is born

Another era was beginning with a focus on the best model for management, marketing and maintenance of the track. Some of the elements needed for the tracks success as highlighted in the written history of the track were "Vision, Enthusiasm, Belief, Dedication, Money, Politics and Serendipity". The track had all these things working for it, as described in the history.

> So many things came together at the right time. It couldn't have all been coincidental. There was a vast amount of hard work, sweat, blood and tears. (History of the Bibbulmun Track Foundation Page…)

Over the years' various management structures had been discussed and up until 1997, during the construction period, CALM had retained full management control. Following the example of the Appalachian Trail in the USA and the South Australian based Heysen Trail, the interest was growing towards developing a community group set up to provide resource assistance, both financial and 'in kind', such as a "Friends" arrangement. Despite resistance from CALM, a group of strong minded individuals started the 'The Friends of the Bibbulmun Track' to support the track in 1997.

Funding and maintenance were key issues that the "Friends" focused on. Early on sponsorship and the setting up of a membership base (with an annual fee) helped to address the critical funding issue. Marketing of the organization through media begun and the idea of selling Track related merchandise was also considered. An office space was provided alongside the Perth branch of Mountain Designs. The establishment of a Volunteer Maintenance Programme addressed the maintenance priority. Importantly, a Memorandum of Understanding (MOU) was developed with CALM.   The management responsibilities of both organisations were acknowledged and a 1998 Strategic Plan was developed for the Friends outlying their mission.

> *"To support the management of the Bibbulmun Track so that it becomes and remains a long distance walk trail of international significance and quality"* through:

- Community participation, ownership and education.
- Developing opportunities for tourism, employment and training
- Advocacy for the protection of the natural and heritage values of the Track
- Attracting funds and other resources.
- Promoting the Track as accessible to all.
- (History of the Bibbulmun Track Foundation Page)

In 2002, the 'Friends' were renamed the 'Bibbulmun Track Foundation', retaining the mission but drawing up a new expanded MoU broadening both parties obligations. The Track's popularity continued to grow resulting in growing demand on staff, volunteers and resources. From 300 members in 1998 the foundation grew to 2400 members, 32 trained volunteers grew to 300, one office computer in the office grew to 7. The part time office is now open year-round, five days a week five staff (two full-time and three part-time staff) and three volunteers, and usually three volunteers to handle enquiries. There are five times the number of dedicated events and now a well-used website with over 100 pages helps with sharing information. Track merchandise has been developed from one or two items to around twenty now, as well as many books and maps relating to the Track. Today, the Track's popularity and the foundations support continues to grow, along with the partners and the membership.

History of the GreenWay

1970's- 1990

The idea for a greenway for the inner west was emerging.

Like many urban greenway, this project started as a vision for an inner-city greenway and began as a grassroots effort that emerged from the community based environmental and active-transport groups in Sydney's inner-west. As early as the 1970's, volunteer bushcare groups provided the initial impetus: with a concern about improving the local environment, the degraded Hawthorne Canal, adjacent disused rail corridor, and surrounding green-space (see Figure 6) (these form the main components of the GreenWay vision) (George et al 2015). These early efforts and the need for funding also initiated the start of some key relationships to be developed with local and state governments.

1991 -2000

The GreenWay vision was formally born

With the formation of the Marrickville and South Sydney Bicycle User Group (MASSBUG) in 1991 and the Inner West Environment Group (IWEG) in 1999-2000, and several key community leaders, the momentum developed to formalise a greenway vision.

> These two community groups brought together the two key attributes of the vision: an active transport (cycling, walking) pathway and an integrated restored native bushland. With knowledge of similar domestic and international examples, a few key members saw the potential of turning the canal, and rail corridor into a greenway – the GreenWay vision was born.
>
> In the early 2000's several key local people generously applied their professional expertise, local knowledge, political acumen and time to develop the GreenWay vision into a concept plan. Over the years these individuals shared this vision with a broad cross-section of the community, including local and state government staff, who gave support. (George et al 2015 p.4)

2001-2004

Acquiring funding and the birth of the GreenWay project.

Two funding grants from the NSW Environmental Trust in 2001 and 2004 enabled the planning and development of the GreenWay vision to gain further momentum.

One grant supported MASSBUG to undertake a three-year study known as the Hawthorne Canal Active Transport Study (MASSBUG, 2003), which brought together community bicycle groups, and for the first time, the four councils of the proposed GreenWay corridor.

The other Environmental Trust grant (for $AUS 37,000) enabled IWEG to lead action on a project "Creating a Green-link Project" which had a goal of "re-establish[ing], within a highly urbanised area, a viable and sustainable restored native vegetated corridor linking the Cooks River and Iron Cove" (GreenWay, 2010).   This raised concerns with the NSW railway agency, over access to rail sites for bushcare (NSW Env, 2007). (George et al 2016, p. 4)

Generated in the most part by the work of the local community working with significant capacity in planning and advocacy and now also with support from Council officers, the resources towards the vision grew and the vision itself was developed and linked into strategy.

By the end of 2002, the GreenWay vision was born, mapped and effectively communicated to the public and government, with 10,000 copies of a GreenWay brochure distributed. 'In-principle support' for the vision was attained from the four councils. Funding grants over the next 5 years increased the profile and development of the concept, including a state driven 'Metropolitan Greenspace Program'; a 'Sharing Sydney Harbour Access Program' to improve pathway links within the corridor; and funding of a GreenWay Master Plan Coordination Strategy, released in 2009. (George et al 2015 p. 4)

2007- 2008

Formalisation period - Staffing and governance developed

A GreenWay Steering committee was set up with community and government members to oversee the vision and various projects. This was enhanced by regular public consultations and the development of a GreenWay website for communication and mobilisation.   By 2007 a staff member was employed by Ashfield Council to coincide with the GreenWay Master Plan Consultation period (2007-2008) and given the title of GreenWay co-ordinator. (George et al 2015)

In the area of governance a new non-government organization called the Friends of the GreenWay (FoG) was set up in 2007 to bring together the various community advocates

under one umbrella.   By 2008 the GreenWay project had continued to broaden its reach and acceptance by local and state governments. Through the approved GreenWay Master Plan, stronger community based organisations and increasing public support the momentum was growing. Then, in 2008, it was a significant $1.86 million grant from the NSW Environment Trust, for the GreenWay Sustainability Project (GSP) as part of the State Urban Sustainability Program (USP), which enabled a further major step towards realising the GreenWay vision. (George et al 2015)

2008-2011

GreenWay Sustainability Project – the project matures.

Several staff positions focused on the GreenWay were established over three years following the Environment Trust funding. This enabled a full-time Project Manager, part-time Biodiversity Officer and part-time Education Officer and provided funds for remunerating the Community Coordinators role for 'Friends of the GreenWay'. There were many achievements throughout this period expecially around the formalization of processes and enhanced communication of the GreenWay through a logo and website, video, community workshops and festivals; a social profile consultancy; the development of a biodiversity strategy and an active transport strategy; the hosting of a GreenWay Festival and Arts Exhibition; the establishment of new bushcare sites; provision of free bushcare training and resources; piloting a sustainability education program for primary schools (GreenWay, 2012); and development of a governance model for the future of the GreenWay.

> The GreenWay Sustainability Project grant developed community awareness and engaged a broader array of stakeholders. With the new voices came new agendas and visions for the corridor. For some of the early advocates of the GreenWay, many of whom had been driving the vision from its infancy, volunteered countless hours of expertise, and considered themselves "generators of the GSP grant monies [sic]" (George & Goldstein, 2013), these new agendas were seen as a threat to their ideals and vision for the corridor. Community conflict emerged especially at the time of designing the GreenWay Master Plan, the procurement of the Urban Sustainability Project funding in late 2008, and with the involvement of a new, though influential, public transport lobby group named 'Ecotransit'. (George et al 2015, p.5)

A not-for-profit group called Ecotransit focused on working towards public and active transport in the Sydney region, saw the abandoned freight line as an ideal solution for a new

and cost-effective light rail to service a densely populated area in Sydney. Through leveraging of the media and potential swing seats, the light rail quickly became a major political consideration for the disused corridor. In response, the final version of the GreenWay Master Plan was adapted rapidly to include an integrated light rail option. (George et al 2015)

> Such an extension is well supported in the local community. If it is provided in conjunction with the GreenWay Trail it would result in a greatly enhanced sustainable travel options [sic] for inner west residents (GreenWay, 2009:7).

However, a statement in the executive summary hints at the tension over the inclusion of light rail in the GreenWay:

> There is ongoing discussion regarding the use of the corridor for an extension for the light rail network, which we hope will not preclude the creation of a parallel GreenWay Trail but will be seen as complementary to it (GreenWay, 2009:ii).

Competing sustainability agendas and the limited available space in parts of the corridor resulted in the need for trade-offs between the two community groups. Quick action and leadership resulted in the GreenWay community and Eco-Transit joining together to form a shared vision that attempted to combine the two visions. The GreenWay project then rapidly gained public support and political traction.

GreenWay compromises- squeezing the most out of a small corridor

One of the major challenges for the GreenWay vision was the narrow and constrained sections of the corridor barely wide enough for a two-lane rail line. The GreenWay Master Plan (2009) had a preferred option to use only one of the lanes for light-rail allowing the remaining line to be used for the active-transport path and limiting the damage to or removal of existing bushcare sites. In contrast Sydney's public transport advocates viewed removal of one of the light rail lines as counterproductive and costly. If the two-lane light rail option prevailed, further engineering would be necessary to cater for the cycle pathway in narrow areas, or on road solutions would be necessary. The government's preferred option for a bike detour away from a narrow section onto the adjacent Weston Street drew significant objection from residents who through local media sent a message to the government suggesting that there was community dissent and conflict within the GreenWay project (George et al 2015). Tensions continued to rise throughout various GreenWay stakeholder groups and uncoordinated actions started to break down trust.

"The GreenWay compromises were hard pills to swallow, particularly for some of the early advocates, who were disappointed at the way the GreenWay project was now developing; and they threatened to undermine negotiations with the state government." (George et al 2015. p 6)

Political cycles – the project accelerates then stalls
The "modified" GreenWay is announced as part of the light rail project

The major goal of gaining state government support to build the GreenWay had proved to be elusive through to 2010. With the impending NSW state election called for March 2011, this changed quickly and decisively. After 15 years in government, the Labor Party was polling poorly, with the swinging seats of the Inner-Western suburbs of Sydney playing a crucial role. Due to demographic change and gentrification, the voting public in these inner city seats had swung towards the Greens Party and the GreenWay project provided an incentive, to attract these voters back. In July 2010, the Dulwich Hill light-rail extension including an integrated GreenWay, was announced by the NSW Government:

"The new GreenWay is a first for Sydney – it will ensure the corridor has a 'mixed use' for families, commuters, cyclists, walkers and joggers," (NSW Premier Ms Keneally, Press release, July 19, 2010).

Whilst this was a welcome announcement for the GreenWay community celebrations were short lived. This announcement by the Labor government was followed by pledges of support from the Liberal-Coalition (major opposition) and Greens party, negating the 'green' carrot of the Labor party. In addition, the Liberal-Coalition believed that the GreenWay announcement was premature, and should not be built pending further research. (George et al 2015)

The GreenWay deferred

The new Liberal Coalition government announcement expedited the existing processes of the GreenWay Sustainability Project, resulting in numerous goals being fast tracked, including the final design of the GreenWay in conjunction with the light-rail.

"Alas, the final Government plan did not follow the guidelines of the GreenWay Master Plan. Many of the GreenWay advocates saw their dreams for active transport and biodiversity playing second fiddle to the light rail extension. Bushcare sites would

be damaged, and cycle paths diverted to suburban roads in constricted areas in order to keep costs down." (George et al 2015. p 6)

With the pressure to bring about a compromised alternate GreenWay, the long-term collaborators felt expectations on many fronts proving a challenge to manage and resulted in increasing tensions. By September, 2011, when the new Liberal Coalition government swept to power in NSW, the lack of consensus in the community, such as the Weston St issue plus claims that the costs for the project had been underestimated by the previous government was used as a justification to defer the GreenWay. (George et al 2015)

2012

A case study of the Greenway, published in Australian Planner by J. George *et al* (2015) documented the GreenWay journey up to 2012 and traced the ups and downs of the struggle through a time when the vision become tantalizing close to being realized. The month of August 2012 brought about the end of the five-year GreenWay Sustainability Project and 2012 was also a tumultuous year for the GreenWay as a whole following the two dramatic state government announcements of giving, then pulling support for the GreenWay vision within the corridor. Members of the community, meanwhile again reverted their efforts towards political advocacy for the GreenWay.

2013-2014

A new governance model and time to regroup

By the end the end of 2012, a new governance model for the GreenWay to transition forward had been given a significant investment as part of the GSP. This was fortunate as many of the community stakeholders had lost hope in seeing the Trail realised and biodiversity values restored. A period of change and of rebuilding confidence in the project by all the stakeholders was needed.

The Place Management governance model, arching across the four inner city Councils was proposed for the corridor (George *et al* 2014). This was viewed as a positive move for the GreenWay at the time, and included a 'a type of urban, cross-jurisdictional manager in a mixed-use regional corridor, focused on sustainability' and possibly the first of its kind in Australia. The innovative brief for the place manager arose from a proactive action research

partnership with Macquarie University on governance for the GreenWay from 2010 – 2012 (reported previously in George and Goldstein, 2012).

An important aspect of the Place Management Model chosen for the GreenWay was that key stakeholders, such as Council and elected Councillors, and the community members understood the need for governance, and moreover the reasons for choosing a Place Management Model. Indeed, they were part of the decision-making process for this place based governance approach for the GreenWay.

Hope was placed in the Place Manager being able to keep the GreenWay vision alive, gain funds for infrastructure links for a walk and cycleway under or over busy roads, and continuing the art, community, education and biodiversity work along the corridor. At the time of the appointment of the Place Manager, many of the community stakeholders had lost hope in seeing the Trail realised and biodiversity values restored.

2014-2017

Pulling success out of the jaws of disappointment

In June 2014, in a significant longer term signal of commitment to the vision, the Councils signed a five-year Memorandum of Understanding (MoU 2014 - 2019), which guaranteed funding for the full-time Place Manager for the next 5 years. The key challenges associated with this Place Manager role were the need embed the role into the institutional culture and to sustain resources and commitment to the GreenWay, while still finding resources to continue engaging with the previously heavily invested community. The appointment of the Place Manager has taken the GreenWay into a new phase, consolidating existing community and government relationships; building new partnerships; developing sustainability initiatives and lobbying state government to reconsider the active transport corridor beside the light rail. Over the last four years the Place Manager in collaboration with the Councils and the stakeholders was instrumental in gaining support for further infrastructure to cover some of the missing links in the active transport – walking and bicycle – corridor. With governance structures and advisory stakeholder groups in place the PM worked with many stakeholders to keep the vision alive in a always changing institutional and political context. As a result in 2014, 45% of the GreenWay Trail (shared use path) was reported to be in place, with the remaining 55% mostly along the southern part of the GreenWay (from Longport St, Summer Hill to the Cooks River) yet to be built. (Chapman 2015:1).

The Place Manager coordinated "an analysis and negotiations with Transport for NSW Active Transport Unit regarding priority GreenWay Missing Links and funding opportunities" (Chapman 2015:7) as well as through consultation with "the GreenWay Councils (Canterbury, Marrickville, Leichhardt and Ashfield) and the GreenWay Steering Committee" (GreenWay Missing Links Working Group 2015: 4). The estimated cost of the missing links was calculated at AUD$5,600,000 to $8,150,000 and more recent figures are $15,000,000. The GreenWay Councils and Steering Committee committed to the completing the remaining 55% of the GreenWay Trail by 2020. The Missing Links Report and costing provided a basis for negotiating an agreement for funding from the State Government and Council to share the costs of building the trail.

Success for the GreenWay Missing Links

High level bi-partisan coordination occurred on the 7th April 2016 involving a meeting with the Minister for Transport and four local GreenWay State Members of Parliament and Ashfield Council General Manager, the GreenWay Place Manager and representatives from the Minister's Office, and government departments, Roads and Maritime Services and Transport for NSW with the following outcomes;

- The Minister offered to provide up to 50% of the estimated $15 million required to complete the Missing Links, on condition that the councils fund the other 50%.
- An Agreement is to be developed by the councils and state government to design, fund and construct the Missing Links over the next 4 years to 2020.

Through perseverance and high level work the Greenway has developed a reputation over the years as a coordinated collaborative project, which in this case was essential for gaining increased support. In this show of support, the NSW state government was keen to use the GreenWay to showcase the benefits of councils joining forces to implement urban strategic infrastructure initiatives such as a regional cycle link.

History of Merri Creek

The Merri Creek Management Committee (MCMC) history has been well documented in the Merri Creek and Environs Strategy in Chapter 5 and on the MCMC web site. From this information and from the interview responses carried out in this research a brief history in provided. For the purposes of this research focused on governance the history has been divided into chronological periods

1976-1988

Early history – start up

The Merri Creek Co-ordinating Committee begun in 1976 to allow for a relationship between the community, local government and state government and agencies to work towards protecting the Merri Creek environment.

Early on the start-up was an opportunity for the community action groups to meet the agencies responsible for the creek. The motivated community members around Merri Creek were concerned about the river's state of neglect and were passionate to see the waterway restored.

Developed initially as an incorporated association, it existed for over 13 years representing eight councils, the Melbourne and Metropolitan Board of Works (M.M.B.W.) and several community groups as an advisory and advocacy group to the local and state government organisations managing the Merri Creek. The MCMC did not have its own staff, it was volunteer dependent and managed to apply for grants and studies to advance the development of a path and the creek improvement works. Several of the founding members informed a short summary of written history on the website that refers to this period.

> The need for a pathway along the Creek became a key issue as people needed to have access to the potential recreation area along the Creek, in order to build support for its protection and restoration. The Merri Path was one of the greatest achievements of the MCCC. It involved obtaining funding for coordinated design and construction across eight municipalities. Another big effort by MCCC was put into acquiring large areas of private creek frontage for public ownership, through negotiation, donation or purchase (The Myer Foundation Merri Creek Management Committee Website – Origins of the MCMC http://www.mcmc.org.au/about-us/operation/origins).

Through the recognized success of MCMC more grants were obtained and partnerships continued to develop to carry out works on the ground including a specialist team owned by council to do revegetation works. Recognizing limits to the growth of the volunteer based organization, a management review was carried out by an independent consultant facilitating a transitional period of consultation, change and a move towards a new structure. It recommended

> a new approach to management of the Merri Creek Parklands designed to achieve a
> more sensitive and cost-effective approach to creek management, using limited
> resources on an efficient, effective and equitable basis
> (Merri Creek Management Committee Website - Origins of MCMC
> http://www.mcmc.org.au/about-us/operation/origins).

1988-1989

Transition period

A change of structure to the MCCC was recommended by an independent consultant report that highlighted the need for; a formal mechanism for co-ordinated planning, more staff resources to assist the volunteers, commitment to maintenance of capital works, more specialist skills, and for more forward planning (Merri Creek and Environs Strategy 2008, Ch 5, from Ernst and Whinney Services, 1988). The main function of the new organization was to be additional to existing Council works, including works such as

> specialist vegetation management work and open space development works,
> negotiated with, and part funded by, the member councils… and service the needs of
> the committee including a concept plan. (Merri Creek Management Committee 2009,
> Ch 5, from Ernst and Whinney Services, 1988)

Council and government support was integral to the MCMC gaining support to and emerging as organisation in the model of an incorporated association in 1989. It restructured with an aim to operate as an advisory body to its member organisations, without statutory powers and with a three-year funding guarantee from the MMBW and other sources allowing for a manager and other staff to begin.

> A key element in enticing Councils to support the MCMC concept was the
> continuation of subsidized funding of waterway and open space work on a similar
> basis to labour market programs and the Bicentennial fund of the mid to late 1980's
> (Merri Creek Management Committee 2009, Ch 5).

The idea of staffing the MCMC was generally well supported by the community who recognized the needs and demands were greater than the volunteer community could sustain. The idea of staff to assist in the works was embraced.

The Merri Creek Management Committee was more of a professional organisation with the members being organisations rather individuals.

The Friends of Merri Creek emerged at this time as an umbrella group for the many smaller community groups made up entirely of volunteers. They had representation on the MCMC (six members) and seemed to develop a stronger identity at this time of restructure and formalization. Other representation included two from each member council and initially state agencies represented as well.

1990-2000

Growth and development

This period saw the continued growth of the paid staff of the MCMC (partly due to the Job Skills program running until 1996 and allowed for more staff to be afforded especially in the revegetation team. Several of the community member involved over a long period recalled the increase in staff.

The expertise of staff was also building at this stage and the space required for the organization was shared between two sites leading to some challenges. During the early 1990's paid staff continued to grow and the work expanded into education and publishing work among other things and stretching beyond the core business of Merri Creek conservation work. During job skills program there was an additional 20 staff to the 15 permanent staff. Space became an issue and another building was rented to accommodate workers however this proved difficult to manage.

The preparation of the Merri Creek Concept Plan, one of the MCMC's original objectives, occurred around 1992. In this process, the management committee was set up with a community workshop guiding representation in this governance group to work alongside representatives from councils. The development of the vision then proceeded and identification of the gaps in knowledge around Merri Creek was followed by studies to fill them in 1993. 1994 saw some engaging discussion and some difficult issues debated to work towards a concept plan and strategy and years of lobby to get it supported by the Ministers office. Finally, in 1999, the concept plan, with Melbourne Water review and revisions,

merged into the Merri Creek and Environs Strategy (Merri Creek Management Committee 2009).

Another review was carried out in response to the introduction by the state government in 1995 of competitive tendering by councils for council works. As a response, an idea to evolve into a not for profit company was not adopted. This government policy was perceived by some as a big change and impacted the MCMC work significantly. One of the major changes in the MCMC history was during the time of Kennett, when compulsory competitive tendering came in. In addition to agreed funding, some of council's parks departments began to tender out work and MCMC started to compete in that space. MCMC saw a peak in funding in this period (See Figure. 8).
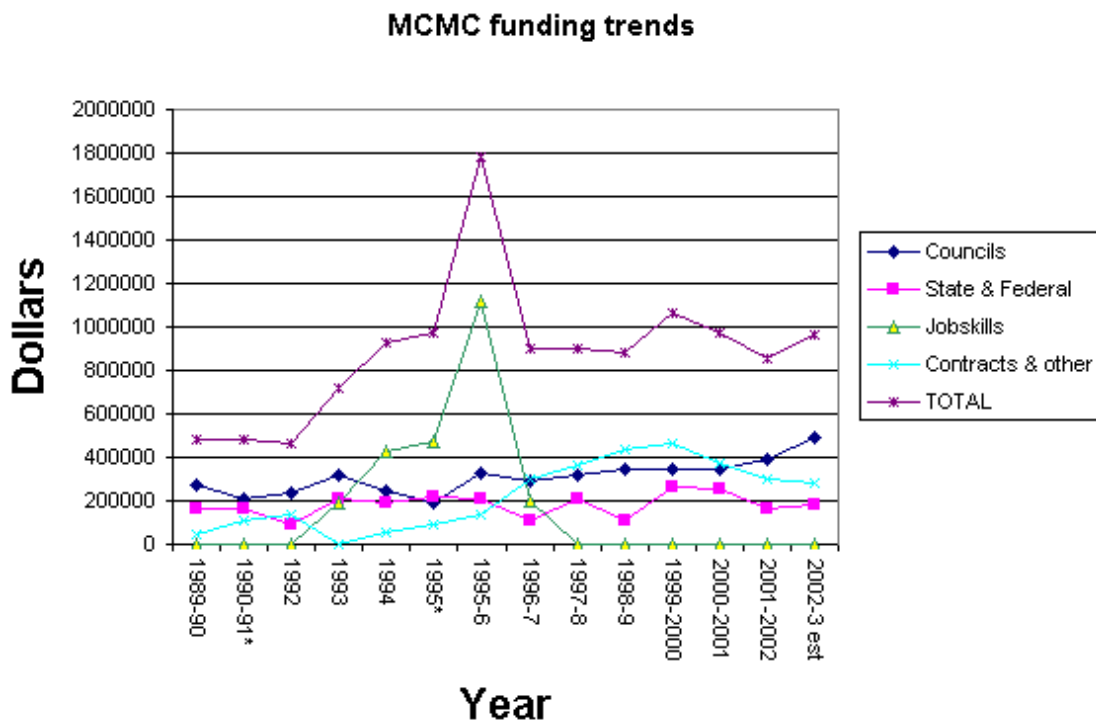
Figure 8. MCMC Funding Trends

Source: Merri Creek Management Committee Website - Funding
http://www.mcmc.org.au/about-us/operation/funding

Another review was carried out in 1997 and the focus was on the co-ordination and management of the four northern waterways including Merri Creek with Councils leaning towards sticking to local organisations and Melbourne Water towards a regional organization incorporating all four waterways. Some helpful recommendations included the development

of more local bodies and the establishment of a regional body and representation of the local organisations on that group and clearer guidelines for tendering for local works.

A catchment perspective was further encouraged by the Catchment and Land Protection Act (CALP) in 1994 to create a Catchment Management Authority (CMA) to plan and co-ordinate strategically for the Port Phillip and Western Port catchment that Merri Creek is part of (one of 10 catchments in Victoria). In 2004, this CMA released its strategy setting out actions in the management of waterway, land, biodiversity, people, monitoring and implementation (See http://www.ppwrcs.vic.gov.au).

Other significant events during this period were: Council amalgamations (8 to 5) with two representatives from each on the MCMC board; reduction in state government funding and involvement on the board (DNRE pulled out due to lack of resources 1996, later Melbourne Water in 2001); broadening the vision to a whole catchment perspective (included in the Strategy); an increase in contract tendering to Councils; turnover doubling between 1990 and 2000 and then declining in 2004 and stabilizing; partnering with Jobskills and many short term staff; building environmental significance capacity; and establishing a tax deductible environmental gift fund in 2000 (MCMC Website).

2001-2016

Case study matures - consolidation

In 2001, the MCMC conducted a review of operations with stakeholders and staff addressing issues relating to purpose, governance, relations and future direction. The main issues highlighted as needing to be addressed are described in the consultant's report.

> MCMC lacks a shared future direction, has a complex multi-tiered structure, supported by complex membership rules, accompanied by some communication challenges and confusion about roles, decision making and delegation (Helen Carr Consulting 2001, p.3).

This resulted in some ongoing actions relating to strategic planning, membership and structures implemented over the following years. The recent feedback from the Merri Creek case study interviewees suggests that many of these things have been successfully addressed over the last 13 years. Since 2002 there has been some consolidation and stabilisation of the size and work of the organization, with a stable team of approximately 18 staff. The reputation of the MCMC has developed for their environmental management works and their

organizational management resulting in consistently winning grants and maintaining and developing council contracts. The major changes during this period were the council amalgamations that affected members, the extension of the urban growth boundary to the northern part of the Merri Creek corridor raising many new planning issues with new stakeholders, and the emergence of service agreement with councils.

Appendix 5 – Case study volunteering - positive and negative aspects

Bibbulmun Track volunteers – positive and negatives

Regarding volunteers, from your experience what are the things that can make the volunteering experience a negative one?	Regarding volunteers, from your experience what are the things that can make the volunteering experience a positive one?
Too much bureaucracy. Too much talking.	Getting things done. Being thanked.
Feeling as though your contribution is not achieving any real result, also believe that enjoying the company of the people you work with	Helpful control
too much red tape expectation that you treat it as a job not as a volunteer	Everything about volunteering makes me feel good
lack of flexibility and support. Poor training and having too greater expectations put on volunteers	involvement in decision making, ownership of the task, less supervision when appropriate, less paperwork
too much regulation and micro managing	Positive feedback from supervisors, and people you work with. Finding that you become friends with other volunteers and staff
Disharmony in the work group, lack of a clear goal, vague planning.	project well run, volunteers feel they are doing a worthwhile task, appreciation shown for their efforts.
Lack of leadership, lack of appreciation	flexible "workplace", a fun environment, the ability to work with positive, experienced and focused staff in a safe environment on projects that offer positive outcomes
Too many rules	excellent coordination and personal contact, feeling valued, meaningful contribution, fun and sense of inclusion
When lack of resources means that a maintenance issue is outstanding for a long time	Positive feedback from walkers. Recognition and Pride in their section of Track
Lack of leadership, lack of appreciation	Shared passions sense of community spirit

GreenWay volunteers – positive and negative

Regarding volunteers, from your experience what are the things that can make the volunteering experience a negative one? -	Regarding volunteers, from your experience what are the things that can make the volunteering experience a positive one? -
The expectation that you will be always the one to organise the stalls	Recognition. Appreciation from the community
Not giving volunteers a clear role or responsibility. It is really important to be clear up front on what can be achieved and supported.	Progress towards the shared goal, meeting project outcomes and delivering on ground works.
Overworked. Lack of flexibility.	Appreciation and recognition.
If people feel that no progress will come of their efforts, or that they are not being listened to. Neither true for me on this project.	Connection to people, community and environment. A feeling of empowerment as you play a part in shaping your neighbourhood or city.
expecting that all your time would be focused on the project	being able to contribute to something worthwhile in the local community and meeting others from all different walks of life
other volunteers not pulling their weight or reading their memos so you have to put in a lot more effort to get communication & progress happening. Too many meetings can be tiresome. None of these have been a problem with the Greenway group, only on other volunteer projects	An exchange with other stakeholders. Good leadership with occasional newsletter etc
Not being listened to. Not having a clear role. Not enough volunteers participating and so they feel overwhelmed.	Clear roles and responsibilities. Being rewarded/acknowledged for your efforts. Having a voice in decision-making
No enough help or other volunteers. Dealing with other bureaucracies	Training, friendship, good morning tea
Lack of time to complete projects	Shared passions sense of community spirit

Merri Creek Volunteers – Positives and Negatives

Regarding volunteers, from your experience what are the things that can make the volunteering experience a negative one?	Regarding volunteers, from your experience what are the things that can make the volunteering experience a positive one?
non recognition	recognition
Not being welcomed on the activity	Interacting with other people involved, and seeing tangible results from your work
Not coming regularly, feeling unable to do the tasks,	Seeing results, short term then inn being involved over a long time
disorganization	clear sense of purpose and well organised project
When times or places that the volunteering is to take place are changed close to the event and the volunteers are not informed.	rewarding to help improve a creek, parkland or wildlife corridor and usually the other volunteers are good people who are they for similar reasons.
If they feel they don't have enough direction	Having the flexibility to have input at all stages of the project
Boring work Lack of support from council	A great outcome. Positive community feedback. Support from council
when they are not resourced appropriately; when they are very mixed up personalities.	Good plans, welcome, resources -e.g. money or food, support
Poor organisation, not feeling valued	A clear sense that your contribution makes a difference, the possibility to find something that matches your taste and aptitudes, being with like minded people, feeling that the professional staff will take care of what needs to be taken care of and are themselves suitably valued profesionally
Bureaucracy - too much form filling and pointless safety lectures.	Comraderie. Sharing stories and ideas.
Volunteers loudly espousing contentious personal beliefs. A difficult task, or one requiring a lot of effort. Having too small a turn-up to enable a reasonable amount of work to be done (too much left	People working happily together on an enjoyable task. A good size turn-up that is able to complete the day's work.

to too few).	
Poor direction and lack of help	Being valued and doing something worthwile

Appendix 6 – Benefits and constraints associated with community governance

Benefits	Constraints
Independence from direct control by Municipal, State or Federal Government;	No power to raise money from rates or fees from residents in the catchment;
Non-threatening to community, in fact provides more freedom for community input;	No power to impose solutions;
Work must be by winning community support;	No disbursement of funds to members permitted.
Allows input to planning processes - objections and appeals;	
Provides committee as management structure.	

(Source: the MCMC Website)

Appendix 7 - Case study interview participants by sector

GreenWay	Merri Creek	Bibbulmun Track
Community Leader	Community Leader	Community Leader
Community member	Community member	Community Member
Para organizational staff	NFP staff	NFP staff
Para-organisational staff	NFP staff	NFP staff
Council Manager	Council manager	State Government staff
Council officer	Councillor	
State Government staff		

Appendix 8 – Comparison of case studies

Key similarities

- The three case study projects are community-visioned projects with outstanding long term community leaders volunteering generously their passion and expertise in a green infrastructure related area. The communities all value the leadership and expertise as the most effective part of governance in their projects.

- Governance including leadership, expertise, structure, processes, relationships and partnerships were considered important and effective across the three case studies.

- All projects have Impressive long-term demonstrations of volunteering from community members and community leaders, including many experts adding enormous undervalued value.

- Partnership are deemed as very important especially linking with key government agencies. GW and MC partner closely with the councils in their respective corridors under various agreements while BT has its core partnership with the WA state government department DPAW under an MoU.

- Partnerships with the community and other partners are valued by all however they vary significantly and relate to the various governance models, the ethical premise held within the groups and the risk/innovation appetite. The GW stakeholder community has shown itself to be significantly more risk adverse than the other groups. The BT has greatest appetite for new ideas such as business sponsorships and partnerships and large volunteer maintenance crews.

- Financial uncertainty is a challenge across all the case studies and can be framed positively and inspire creativity, innovation and flexibility.

- Community governance organisations may engender more community support and trust than institutional arrangements for planning and managing green infrastructure

- Community governance organisations may engender more passion than other arrangements for planning and managing green infrastructure

- Community governance organisations engender more innovation and creativity than other arrangements for planning and managing green infrastructure

- Community governance organisations may engender more alternate funding opportunities than other arrangements for planning and managing green infrastructure

- Reputation is important for all community governance organisations especially when they depend on partnerships for their sustainability.

- Perseverance and resilience are shared characteristics of community governed green infrastructure projects.

- A successful community governed project in green infrastructure in and Australian context can be successful and sustained, even in an urban context.
- Volunteers in CG GI projects are usually passionate for the project, over 45 and prepared to give a significant long term commitment averaging 3-20 hours per week.

Case Study differences

- Unlike the other case studies, the BTF have really taken advantage of the private partnership concept seeing it as opportunistic for future proofing the organization.
- The BTF have had leadership with a remarkable amount of government institutional influence in the set up and development of the Track and the MoU between State Government and the BTF. This strong long-term partnership between the State Government and Community Foundation sharing the planning and management of significant green infrastructure is unique.
- The BTF have a vast membership (private and individual) and a significant number of volunteers which they view as their security. As well as providing funding this gives the BTF power to influence policy makers and other groups through advocacy for the Track and in other related issues such as the environment. This includes a large and growing number of hits on their website online which also allows them influence people and to get private partnership and sponsors.
- The BTF gave the view that private partners not as uncertain as Government funding and therefore offers a more sustainable option.
- The Merri Creek MC has decided against long term private organizational partners for ethical reasons.
- The Merri Creek have developed expertise and contract services to provide to their government partners for income.
- The BTF and the MC are more adaptable and flexible and innovative in decision-making, dealing with change, and carrying out actions as a result of their independence and need for excellence to survive. Government based green infrastructure management need a long d-m time frame. The GreenWay has had various hybrid arrangements, yet because it is institutionally based it remains more risk adverse.
- Power and transition issues between stakeholders can lead to a lack of trust, lack of fun and lack of impact as seen in the GreenWay.
- Stakeholder difference over the desired goal and mission undermines impact as seen in the GreenWay.

- The Greenway is a very expensive project to build in a highly-contested corridor and significant development pressures.

- The nature of a single use corridor such as the BT is a case study which demonstrates that a simple vision is a far easier mission as it avoids land-use conflicts and complexity that was apparent with the multi-use GreenWay.

- The GreenWay has been situated in a highly volatile political context in Sydney's inner West and its community and vision were affected by this turmoil. The MC is concerned about politics affecting its future, especially funding however the BT stakeholders are not particularly worried, the context reasonably stable and they have future proofed in any case with private partners.

- The GreenWay community has had a difficult relationship with the state government where the idea was used by state politicians as a political football.

Governance summary

GreenWay	Bibbulmun Track	MCMC Board with council and community reps
•Community Visioned •GSP (2008-2011) 3 staff subsidized by state government grant •MOU to support a Place Manager (2012 onward) between 4 councils and then in 2015 for 5 years between 2 councils. •Working with several community groups and individuals •Contested corridor with many stakholders •Shared ownership of land between government stakeholders •Stakeholder streering committee	•Community Visioned •Partnership between state government and BT Foundation •2000 community members •Board •6 staff •Funding from many partners and sponsors, public and private organisations and individual memberships, grants and donations. •Shared ownership of land between government and private stakeholders	•Community Visioned •Partnership between 8 Councils and the MCMC - Incorporated Association working closely with various Friends of groups from the corridor •18 staff •Funding mostly consulting, contracting , donationa and grants •Shared ownership of Land between government stakeholders

Final lessons of each case study, described across themes with commentary

Final lessons categories	GreenWay	Merri Creek	Bibbulmun Track	Author's comment about similarities and differences
Vision	Community vision green infrastructure projects like the Greenway are possible and sustainable in current Australia, despite the planning system.	A clear vision shared by all the stakeholders communicated through a passionate distributed leadership team is important. Unclear or complex messages become more difficult to manage.	A community visioned idea that quickly won state support	All three were community visioned however the path to legitimacy took different length of time and were achieved in different ways. GW lost traction when their vision became disputed due to land-use contestation.
Core partnership	Community led partnership with support from local councils (4), yet a difficult time getting the state to collaborate and commit to help building it until very recently.	8 Councils and MCMC have partnered effectively, all understanding the mutual benefit of their arrangement	The model for the BT involves a core partnership between the state government agency that is tasked to manage the track and a community organization that compliments that agency's work to make the track a success. Both organisations see the benefits the other brings and share the vision for a successful and sustainable wilderness walking track.	Successful key partnership is key to success, MC and GreenWay is with Council, and the BT is with the state government.
Governance	Early governance was informal and ad hoc and driven by the community and then this gradually changed as processes and structures developed to enable the councils staff, the growing community and other stakeholders to work together more productively. Run by a place manager and an advisory group.	Started and maintained a mutual community and council partnership with mixed involvement from the state.

Now run as an Incorporated Association with staff and a board, partnering with councils and Friends of Groups as well as others. | Started with the community inspiring the state who managed the track build and then an formed a community based Foundation and Board and developed an MoU that allowed for a state and community partnership of track management that has since grown many partnerships with businesses and Councils associated with the track. | Three different models of governance. The MC and The BT are most closely aligned with Community governance arrangements. |
| Reputation | Local reputation has gradually grown over 15years with the shared partnership demonstrated between the various | The development of a local reputation for expertise, good work and good management helps the organisation a lot. It attracts funding, | Recognised as a best practice example of trail management using a community governance model. Visited and copied | Highly significant for the MCMC to win and retain work contracts and maintain respect in the community. The other two cases value their |

	community groups and the various LGA's being key to the projects' recent state recognition (award and money)	grants, clients and good volunteers.	around WA and beyond.	reputation but don't depend on it as much as the MCMC for their sustainability.
Leadership	GreenWay leadership was absolutely key to its success and the leadership characteristics looked different as the project moved on	Leadership is important and was led and driven by the community representatives particularly in the early stages and then by the staff as well. Strong political leadership has added value through support however not really leadership.	Several influential expert community leaders visioned the track and the foundation with its community governance emphasis and convinced the government of the day about the benefits if they supported it.	Leadership was absolutely crucial in every case. Innovative, expert visionaries from the community giving long term commitment toward community good both in terms of realising green infrastructure and building community. Issues of control became difficult in the case of the GreenWay. Evidence suggest that it works better when it can be shared among many.
Good people with a long-term commitment	A stakeholder steering committee has maintained the common thread throughout most of the project. Expert volunteers gave a great deal of work.	A positive place to be with many long-term supporters (especially volunteers)	The board had long term commitment from expert respected people committed to the vision and acting in positions of influence in WA.	Each case shows extra-ordinary examples of long term commitment (ten year or more) from several key people with a passion to volunteer so much time and expertise towards the vision. This occurred in every case. Even paid staff (government and par-organisational) seem to commit for long periods assisting in continuation of the vision.
Government collaborations	Good genuine working collaborations between community and local councils have been maintained although they tended towards being adversarial at times. The support of the state government proved the most difficult for the community, eased now by the place manager role.	The MCMC has a strong partnership with the councils and some respect from the state and the Federal government.	The BTF as a strong partnership with the state government and many other established including state agencies, local government and federal government as well as other innovative relationships eg corrective services worker programs.	BT has the broadest range of government associations.
Governance support	Greenway governance was recognised as a need and focused on as part of the GSP grant. It included work-shopping options and needed to	The Merri creek MC are happy with their setup and continue to try to refine their processes to achieve best practice and a learning culture within their limited	Governance model of community partnership emerged with a strong community vision from expert and influential people,	A complex context in inner Sydney on a complex multi-use corridor needed governance support.

	be reflexive to accommodate variable circumstances including money, staff, community will.	resources.	many who are still involved as BTF board and in government roles. Based on the Appalachian Track.	
Broader partnerships	Multiple stakeholders have managed to work together, to achieve collaborations beyond political, institutional and cultural barriers. There are few effective private partners across the project.	A broad display of government and community organisations partnering in various ways, some long term, however no private partners.	A broad and impressive example of public, private and nfp and individual partners operating across a local, state and national level.	BT has the broadest range of partnerships and negotiated arrangements for mutual benefit.
Success	Yes partial, especially in the co-ordination and collaboration between councils and community towards a multi-jurisdictional vision, even lasting through several significant challenges.	The MCMC have developed a well-known reputation in waterway conservation and community engagement.	The number of walkers using the BT continues to grow and it is world recognised. All the stakeholders share the tracks success and feel ownership enabled by the BT foundation. The list and involvement of partners is also a huge success.	MCMC and BT have achieved outstanding success in outcomes for community governance for green infrastructure. The GreenWay has had more ups and downs, and still endured to achieve social and environmental outcomes ii not through a community governance model.
Staff	A small "para-council" GreenWay staff in the GSP was replaced by a senior level GreenWay place manager with "in kind" support from four partner councils	Staffing (15) is essential to enable volunteers to flourish and focus on their areas of interest.	The foundation has a staff of approximately 5 and volunteer network of 2000.	A successful independent community governance arrangement can leverage larger numbers of volunteers and staff for the cause.
Dynamic context	In marginal swinging seats like Sydney's inner West where the GreenWay catchment is, the role of politics (both local, state) was significant, influencing the project in both good and bad ways. Given the GreenWay context was dynamic, at times its was very difficult to sustain the vision, requiring adaptability, perseverance and resilience	A somewhat changing relationship with the state government over the years, yet a more stable relationship with the councils. Political changes (even federal) affect the stability of the MC	A mostly stable environment as West Australian councils are less partisan and at a state level support for bushwalking seems to be bi-partisan. The BTF has planned to be future proofed to government changes is funding by diversifying sources.	Greenway was an unstable political context for securing funding leaving the community and council stakeholders disillusioned.
Positive environment	Incredibly long term displays of passion and commitment to the GreenWay and its vision by long-term	A growing and happy volunteer membership with realistic input into decision-making	The Foundation is a positive and open place to work, growing in volunteers and	Successful community governance arrangements can and should be very positive places for their

			members.	sustainability.
Innovation	The innovation demonstrated by the GreenWay was shown in the programs developed in environmental education and art.	Innovation was demonstrated in its learning culture, grant expertise and educational programs.	The environment is innovative and quick responding due to its structure, demonstrated especially by its partnerships and many events.	Successful community governance organisations and innovation are complementary
Community vision	Community-visioned projects like the GreenWay are inspiring however run the risk of being under-supported by government. Continuation of community in the Greenway management is yet unknown.	Community-visioned and run, informal committee with community expertise from the beginning, growing in its formality and in expert staff with continued input from community, and growing government trust and support.	Community driven vision and willingly shared to allow project development and then formalising to a foundation with a board and staff to allow many people and partners to converge.	Community visioned projects can develop into wonderful long-term green asset management using various community governance models.
Volunteer management	Active and highly engaged volunteers originally led this project and have declined over recent years	Mostly positive and sustained throughout, tapping into expertise and local interest to engage on volunteer projects. Continues to grow.	The BT relies on volunteers and needs to manage their succession. The BTF continues to grow in membership and active volunteer hours.	A successful community governance arrangement can engage the community and grow volunteers more easily than government.
Land-use context	Multi-use diverse mixed corridor creating complexity	Compatible mixed uses	The track is a single use track and seeks to avoid multiple uses and the associated complexity.	This is an important differential for BT.
Passion in line with the vision	High levels of passion in GreenWay stakeholders for multi-use corridor affected by a compromised vision and political uncertainty.	Passion for environment and river conservation	The staff and volunteers are passionate about bush walking and nature.	Passion of community and stakeholders and the vision must align and needs leadership or the mission can be undermined.
Community Governance	Maintaining genuine community governance has been difficult in this project due to changing circumstances, resources limitations, institutional willingness and	MCMC works well with a reputation for community involvement. The importance of community input and maintaining relationships in decision-making may be	This is an excellent long term example of sustainable community governance in Australian green infrastructure	Two excellent examples that it can work very effectively in today environment.

	community capacity and the NSW political environment.	perceived differently by different people		
Approach to Financial uncertainty	Financial uncertainty has been a concern along the lifetime of the GreenWay, especially in recent years.	Financial uncertainty is a characteristic of this type of organization however a broadly accessed range of funding, with some more secure mid-term sources helps continuity of staff and programs however the uncertainty also encourages an opportunity for leadership to develop a culture that strives for excellence continual learning and innovation.	The partnerships that the Foundation has developed have continued to grow and have led to steady and diverse funding sources, making it less reliant on the government funding.	The Community governance organisations used financial uncertainty as a springboard for innovative thinking.
Difficult relationships, trust issues	Breakdowns of relationship and a difference in shared vision affected trust between long-term stakeholders and leaders leading to stress and divergent actions.	Occasional difficult moments in the past however generally an open culture of sharing and respect for different views is maintained.	Positive attitudes and trust has been built over time with the Foundation creating an open transparent culture to share views and work through differences.	Not an issue everywhere, but can occur and can undo and upset some excellent work and people.
Volunteer input	Volunteer contributions of expertise and time and perseverance in the GreenWay have been impressive and often acknowledged.	Impressive display of sustained volunteer input for projects and events and on committee. Volunteers celebrated.	The work in the Foundation and the BT generally adds value to the volunteer quality of life and the volunteer time and number continues to grow. Likewise, maintenance of the Track depends on enthusiastic volunteers. The Foundations has engaged partners over time and along the length of the track who have remained connected.	Impressive and inspiring. Good for individuals, the cause and society. Needs support and acknowledgement.
Structures and processes	Developed over time, especially governance structures in collaboration and with mixed results.	Constant improvement of processes and systems is sought in a learning culture according to available resources	While structures seem to be in place and working, the ongoing relationships are conveyed as more important.	Structures are helpful however not at cost of relationships.

Perseverance and resilience	Sustained collaborative partnerships have been demonstrated but needed open-mindedness, perseverance and resources. Some relational fractures and burnout after very tough times but incredible perseverance also displayed.	Some long term committed community and staff driving through difficulties with an opportunistic approach.	A fortuitous set of circumstances with an ideal functioning happy organisation, long term commitment and a successful project.	A feature of a long-term community governance arrangement. Long-term volunteers show it. Also persevering through major disappointment like on the GreenWay is very difficult and a show of commitment from many stakeholders.

Appendix 9 – Case study comparison of themes

Summation of emphasis (authors analysis)	Author comment	GreenWay (in order of relative emphasis)	Merri Creek (in order of relative emphasis)	Bibbulmun Track (in order of relative emphasis)
Partnerships	All cases mentioned this often, rely on their partnerships and did it differently.	Leadership – Community visionary's Shifting leadership	Reputation and expertise	Partnerships
Visionary Leadership	Important across cases but with BT the political influence of the leaders stood out.	Collaborations and Partnerships	Financial Uncertainty and opportunity Reporting Staffing Multiple funding sources Flexibility and innovation	Shared community vision and ownership
Financial uncertainty	A broad issue of concern for all cases but approached far more positively and creatively by MC and BT	Community trust and relationships	Vision leadership Leadership Strong relationships	People, passion and expertise – active volunteers
Community Involvement	Clearly important and mentioned in many different contexts highlighting volunteering education and engagement.	Governance challenges Formality vs informality Support and mentoring	Learning culture and positive place to be Advocacy	Funding uncertainty and independence
Reputation and expertise	Highly significant for the MC (and important to BT) because their future depends on it due to their business model. Relevant in the GW as well.	Financial uncertainty	Partnerships	Reputation
Positive place and an innovative learning culture	Innovation and positivity essential for community governance survival.	Political uncertainty	Community involvement and volunteer management	Visionary Leadership and Influence
Governance	Covered in several ways such as risk, formal arrangements and communication and included in several other categories above like finances and partnerships as well.	Place management	Good governance arrangement	Land-use conflict
Conflict	Conflict in various areas. On GreenWay, people and vision came into conflict, on BT the surrounding land-uses are in conflict with vision	Conflict in some relationships and vision	Length of the corridor	Risks
		State government relationship	State government relationship	Communication and transparency

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Appendix 10 – Case study partners

GreenWay		MCMC		BTF	
Stakeholder Category	Organisation name and arrangement	Stakeholder Category	Organisation name and arrangement	Stakeholder Category	Organisation name and arrangement
Key government partners	4 Councils with jurisdiction in the GreenWay corridor recently amalgamated to be 2 councils, Inner West Council and City of Cantebury Bankstown, MoU and expertise, leadership, office space and significant in kind support.	Key government partners	6 Councils with jurisdiction in the Merri Creek Corridor corridor - Darebin, Hume, Moreland, Whittlesea, Yarra and Mitchell Financial, expertise, leadership, office space and significant in kind support.	Key government partners	DBCA (formerly DPaW and before that CALM)
Other government partners	NSW Government Environment Trust Dept of Transport Grants and recently huge buy in with a $15mill promise to build and incorporation of the corridor into its strategic green links. Department of Education GreenWay Primary Schools Sustainability Program	Other government partners	Port Phillip & Western Port region. The Catchment Authority Australian Government's Natural Heritage Trust Grant funding Landcare Australia. Grant funding Victorian Department of Environment Melbourne Water Corporation, Victorian Department of Environment, Waterwatch Victoria. Yarra Valley Water	Other government partners	Ministry of Justice Department of Tourism, Federal employment programs, Employment Action (LEAP) Local Councils eg Shire of Manjimup Landcare Lotterywest Great Southern and SW Development Commissions Department of Sport and Recreation (DSR) Department of Housing and Regional Development (RDO). Federal Government's Green Corps Aboriginal Traineeship scheme. National Trust of Australia (WA)

Community group partners	Friends of the GreenWay Active visionaries and ongoing GreenWay Corridor advocates IWEG Active visionaries and ongoing bushcare advocates MASSBUG Active visionaries and ongoing cycling advocates Hawthorne Canal Chapter of GreenWay Birdwatchers Cooks River Alliance Treading Lightly Bikes Botany Bay The Mudcrabs EcoTransit Light Rail advocate	Community group partners	Friends of Merri Creek Wallan Environment Group. ClifRoy community Bank Merri Creek Environment Fund Schudmak Family Foundation. Centre for Education and Research Environmental Strategies (CERES) The Ian Potter Foundation The Myer Foundation Merriang & District Landcare Group Friends of Westgarthtown Friend of Edgar Creek Friends of Malcolm Creek, Friends of Edwardes Lake Merri Edgars Creek Confluence Area Restoration Group (MECCARG).	Community group partners	WA Trails Action Outdoors Association Albany Visitor Centre Bunbury Bushwalking Club Collie Visitor Centre Friends of the Cape to Cape Track ImagineGWNP Munda Biddi Trail Foundation Pemberton Visitor and Tourist Centre Perth Bushwalkers Club (Inc) Perth Hills Visitor Centre Taddy Creek Western Walking Club (Inc) Buggy Buddys
Education partners	Inner West primary schools - Outdoor classroom and GreenWay education tours Canterbury Public School's Cooks River Big Ride	Education partners	RMIT Student interpretative excursions. University of Melbourne Local primary and high schools such as Brunswick North West and Thornbury Primary	Education partners	Local primary and high schools Eg Scotch College, All Saints College, Kolbe Catholic College, Presbyterian Ladies College, Spirit Of Play Community School
Arts partners	ArtEst GreenWay Art Exhibition 2009-2016 Inner West Open Studio Trail event - Art on the GreenWay ArtCycle cinema	Arts partners		Arts partners	
Indigenous partners		Indigenous partners	Wurundjeri Tribe Council	Indigenous partners	
Private partners	Light Rail operator, Transdev	Private partners	APA Group SPI AusNet CitiPower	Private partners	Mountain Designs Office, sponsorship contributions, in kind support Alcoa Sponsor, Forest Enhancement Program,

					Mt Cooke Campsite redevelopment
					Back Country Cuisine Sponsor
					Sea to Summit Sponsor
					World expeditions Sponsor
					Peregrine Sponsor
					Wilderness First Aid Consultants (WFAC)
					Westrek Office, sponsorship contributions, in kind support
					Newmont Boddington Gold Significant sponsor
					Western Power Significant sponsor
					Worsely Alumina Significant sponsor
					Verve Energy

Appendix 11 – Assessment of contribution value of each case study

GreenWay

1. Vision leadership;	High	2. Openness and trust;	Med	3. Inclusiveness	Med	4. Working systems	Med
Forward-looking leadership	High	Deliberative, transparent decision-making	Med	Partnerships	Med (consistent at a local level)	Systemic thinking	Med
Shared joint goal	Med	Trust	Low	Networking	Med	Critical thinking	Med
Facilitated Leadership	Med (in some stages)	Public participation	Med	Legitimacy	Med	Reducing barriers in administration and financial	Med
		Collaborative planning	Med	Subsidiarity	Med (in some stages)	Adaptive and reflexive	High
		Government support	Med (in some stages)	Innovation	Med		

GreenWay assessment against themes in literature

Case Study	GreenWay	GreenWay	GreenWay
List of criteria from literature	Is it effective	Is it efficient	Is it sustainable
1. Vision Leadership;	Various high performing passionate leaders have been part of the nearly twenty-year GreenWay project starting with dynamic volunteer leadership. Currently a shared local government based "Place Manager" is the primary leader of the project.	Three variations of types of leadership have led the GreenWay and this has affected the efficiency of the leadership. Leadership transitions take time.	The sustainability of the leadership has depended on a group of actors from various stakeholder groups who have continued to push forward the vision for an urban corridor promoting sustainability. Its success in this area was that the breadth of leaders allowed for its

			continuation.
2. Open Trust	Trust and openness have varied across the life of the project with a trust breakdown during a difficult period around 2011.	A breakdown in trust between the stakeholder affects the efficiency of the project significantly.	The sustainability of the project has been affected by a breakdown in trust that also led to a breakdown in transparency. This reduces long term viability from a community governance perspective.
3. Inclusive Partnerships;	The key partnership is between the community and the local councils has been mostly functional although the key stakeholders driving the vision shifted from over time from the community to the government	Several partnerships went through a lull during a difficult phase during 2011-2012 and redeveloped with the state government in 2016.	Partnerships have mostly been maintained between councils and community groups with lessening enthusiasm at times and no business partners.
4. Working Systems	Over time the systems formalised and developed although resources dropped off for several years from 2011-2016	The GreenWay did as much as it could with its resources and systems even when it went through difficult circumstances. The Place Manager had to work with limited resources.	The working systems were successfully developed over time as resources allowed and identified priorities (eg the web site) were sustained
Project KPI's Longevity	20 years (Medium length and)	The project continues however resources have varied and external factors have been dynamic.	Projects was sustained through difficult times, with a boost in resources in 2016.
Personnel growth	Changing (No staff and a strong core of volunteer leaders; 3 staff and complicated community leadership with growing numbers of community members; 1 staff with fewer community leaders and members) Constantly changing	Medium (Multiple grants especially in the early years showing support from the NSW EnviroTrust, good reputation) Low (reduced)	The key stakeholders involved in this project grew to include several community groups, and after 7 years 1 staff, and then 3 staff for 3 years, and then 1 staff for 5 years. Several council officers have supported the project as part of their job for

Development of infrastructure	resources, slow at first, then developed support and some progress on the infrastructure, then dropped off until a recent 2016 commitment to fund and build the GreenWay path.	Changes and arguments around the development of the infrastructure created inefficiencies.	most of the project life. A commitment by the state government to fund and build the GreenWay missing links occurred in 2010 and again in 2016. This time it may be built.
Dynamic Governing assessment	Moved from voluntary governing to active government	Moved from voluntary governing to active government	This project is currently in an active governing mode with little likelihood of changing to a community governance alternative unless stakeholders choose to revisit the transition phase again to consider whether a community empowered future and sustainability is possible.
Negative consequences	A breakdown in trust and community motivation occurred in 2011-12 and impacted project effectiveness for several years.	Conflict and burnout among stakeholders led to wasting resources	Social sustainability affected by the loss of social capacity during difficult conditions.
Contribution Summary statement	Medium – Maintained some effectivity despite highs and lows. Successful partnering with the state government now a key challenge.	Low-Medium - loss of efficiency through changing circumstances Still achieving outcomes with fewer resources and now set up for a big surge of activity.	Medium chance of sustaining - Enduring and persevering despite dynamic context, loss of social sustainability.

GreenWay 'contribution' assessment

Bibbulmun Track

1. Vision leadership;	High	2. Openness and trust;	Med-High	3. Inclusiveness	High	4. Working systems	Med
Forward-	High	Deliberative,	Med	Partnerships	High	Systemic	Med

looking leadership		transparent decision-making				thinking	
Shared joint goal	Med-High	Trust	High	Networking	Med-High	Critical thinking	Med
Facilitated Leadership	Med-High	Public participation	Med-High	Legitimacy	High	Reducing barriers in administration and financial	High
		Collaborative planning	Med-High	Subsidiarity	Med-High	Adaptive and reflexive	High
		Government support	High	Innovation	High		

Bibbulmun Track assessment against themes in literature

Case Study	Bibb Track	Bibb Track	Bibb Track
List of criteria from literature	Is it effective	Is it efficient	Is it sustainable
1. Vision Leadership;	Highly effective visionary leadership by volunteers over a long period successfully partnering with government leadership towards the same vision.	Leadership has been highly efficient especially demonstrated by the pragmatic approach to allow the government to manage funding and building the infrastructure and then handing back to the community after it was built.	Leadership has been consistently sustained and on topic seeking quadruple bottom line values.
2. Open Trust	Developed over time effectively built on influential friendships and shared passion for bushwalking.	High trust built over time to maximise efficient functional use of resources	Trust has been high and sustained between key partners
3. Inclusive Support	Many negotiated partnerships designed for mutual gain.	Efficient and positive culture for volunteers and partners realising good outcomes like expertise sharing	Inclusive collaborative approach with many partners and sponsors brings sustained security and builds social capacity.
4. Working Systems	Adequate effectiveness without innovation	Med-high efficiency resource use especially utilizing IT	Rely on expert volunteer capacity to improve working systems.

Project KPI's Longevity	A project growing in reputation and support over its 40 year lifetime.	The track has won grants over the years but now focused on partnerships for its win Multiple grants, good reputation)	Demonstrated the values of sustainability especially since establishing a community governance arrangement
Personnel growth	A stable staff and continual growth of volunteers and member.	High- growing volunteers and stable staff	High sustained growth in volunteers involved in a broad range of roles complimented by staff.
Development of infrastructure	Highly effective in the development, now well managed by shared stakeholders	Highly efficient first build, gradual upgrades and setbacks needing some rebuilding in recent years due to natural disaster.	Medium to high sustainability with main threats of bushfire and mining.
Dynamic Governing assessment	Med-High Moved active government to dynamic governing	Med-High Moved active government to dynamic governing	High - dynamic governing
Negative consequences	Risks of natural disaster or private partner withdrawal under current model	Evolution of project worked smoothly	No as government supported the community governance model as well as the trail.
Contribution Summary statement	Highly effective project history	High- adaptable model with ideal phases for efficiency	High- Community governance model growing in strength and sustainability

Bibbulmun Track 'contribution' assessment

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Merri Creek

1. Vision leadership;	High	2. Openness and trust;	Med-High	3. Inclusiveness	Med-High	4. Working systems	Med-High
Forward-looking leadership	High	Deliberative, transparent decision-making	Med-High	Partnerships	Med-High	Systemic thinking	Med-High

Shared joint goal	Med-High (missing state govt)	Trust	High	Networking	Med-High	Critical thinking	High
Facilitated Leadership	High	Public participation	Med-High	Legitimacy	High	Reducing barriers in administration and financial	Med-High
		Collaborative planning	High	Subsidiarity	Med-High	Adaptive and reflexive	Med-High
		Government support	Med-High (varied stages)	Innovation	Med-High		

Merri Creek assessment against themes in literature

Case Study	Merri Creek	Merri Creek	Merri Creek
List of criteria from literature	Is it effective	Is it efficient	Is it sustainable
1. Vision Leadership	Strongly led by a team of visionary community members and supported in collaboration by Council staff and then by MCMC staff	Depended at first on collaborative approach among several local people sharing expertise, now a MCMC staff with a common shared vision	High level of trust and long term commitment may need to inspire next generation leaders from the community
2. Open Trust	Trust demonstrated through long term participation of many of the founding people and open respectful discussions even when they differ in opinion.	Trust demonstrated in the sharing of expertise enabling efficient use of resources.	Med-High trust will be challenged by new issues and under-resourcing in the northern corridor.
3. Inclusive Support	Med-High. Partnerships with community groups, individuals and councils are all strong and effective. Other partnerships eg state government could be developed.	High support for community and government partners with high level respect. Highly efficient due to the need to win grants and maintain those relationships well.	Med-High In particular these is a need to develop support from new developers and residents as the development occurs. Ethical decision not to have private business as partners, this with be under pressure.
4. Working Systems	Highlight effective systems across the	Under some difficult financial conditions	They are likely to be sustainable under

	organisation from the IT to the project management to the conservation work.	this organisation have continued to improve their product and save resources.	current performance however the length of the corridor poses new challenges to systems.
Project KPI's **Longevity** **Personnel growth** **Development of infrastructure**	High effective (40 years) A significant number (18) of well trained staff and good volunteer numbers. Med-High (new challenge in northern end of corridor)	High (Multiple varied grants) Med-High (adaptive management demonstrated as they grew rapidly then chose to reduced to consolidate according to available resources) High for current practices however Medium due to new challenges with private developers in northern corridor	Long-term committed people and project Med-High (retaining experts is a challenge as is paying market rate wages) Volunteering numbers continue to grow. Med-High – due to innovation and resources needed for the northern corridor
Dynamic Governing assessment	Dynamic governing – started as community group that remains key to the governing.	Dynamic governing is an efficient mode if stakeholders have mutual respect.	Dynamic governing – needing new dimension for private partners
Negative consequences	Limited resources for extended northern corridor	Limited resources for extended northern corridor	Limited resources (council capacity, active volunteers in short term, dedicated riparian corridor for conservation etc) for extended northern corridor
Contribution Summary statement	Highly effective history showing resilience, expertise and creativity	High with new challenges needing resources eg state and private support	High contribution to local and regional environment and community now faced with new challenges needing new partners, new expertise and creativity

Merri Creek 'contribution' assessment

	GreenWay	Bibb Track	Merri Creek
Assessment against the themes in the literature			
1. Vision leadership	All three of the case studies all reported leadership as a key governance issue. They have each reported an impressive level of vision leadership on their projects ie they combined forward looking leadership with an ability to influence towards a		

	shared vision and then a shift towards facilitated leadership to progress and manage the project. In the early stages of all three projects the leadership was characterised by a strong connected individual (or several) who visioned a dynamic idea. They were also successfully able to influence people (especially those from the relevant government and people from the community) over time towards the idea and to build the process to realise the idea. As each of the projects evolved the leadership took another form as the project grew in complexity and diversified in leadership characteristics towards a multiple facilitated leadership model through a distributed mode. There was some indication that the GreenWay stakeholders struggled at time as the leadership shifted from a community dominance to and para-organisational facilitated model.
2. Openness and trust	Openness and trust are considered important for deliberative and collaborative decision-making. They take time, respect and confidence to build. All of the projects have some impressive time, expertise and passion invested by key people over very long periods of time. This can increase trust and as referential power grows so does influence. Difficult personalities however can undermine referential power. The BT seemed to build trust early, between key people of influence in WA that shared a common passion for and friendship in walking that then assisted in their building long term collaboration and even trusting each other later with the co-partnership of the project. The early days of the Merri Creek and the GreenWay saw each community build trust among their own and gradually with local councils. The state government in both projects was more difficult to collaborate with, agreeing to fund the Merri Creek project and then pulling out after a short time and in the GreenWay project avoiding collaboration for a while and then agreeing in principle and withdrawing after a change of political parties. Broken promises break down trust and affect motivation and passion for some time after. Open dialogue when done respectfully and transparent processes can be valuable to build trust and all the projects have sought this with various successes. The GreenWay had successes with the broad stakeholder deliberation at governance workshops however struggled with the state government cutting them out of planning and reduction in community participation in decision-making in recent years. The Merri Creek stakeholders complimented open decision-making practices, some long term community participation and commented on scope remaining for more community representation. The BT have enjoyed the long term commitment several members of the volunteer board and commitment by the same government partners over time showing the strongest example in this characteristic.
3. Inclusiveness	The BT demonstrated a strong ethic of inclusive practice including partnering with a large group of volunteers in their foundation, various business partners and multiple government partners. The sharing of information is apparent by the website and the empowering of their volunteers through training and recognition of strengths has allowed them to work with their volunteers at many level, from their role on the board, their expertise in the field as guides and their participation

	in maintenance projects. The Merri Creek and the GreenWay also demonstrate inclusive volunteer partnerships in their ecological restoration work and on their boards however the Greenway has struggled in recent years with staff resources and capacity to manage community volunteers lessening their ability to realise subsidiarity principles. The networking by the place manager has been focused at a strategic government level and that has paid off building further legitimacy among government stakeholders. This legitimacy may have lessened from a community perspective partly because of previous broken promises. The MC have strong legitimacy with community and broad government respect for the work they do in environmental restoration and good management. The BT have legitimacy for their community engagement and promotion of a high quality wild walking track. The BT and MC have engaged in some innovation that has continued to develop credibility, BT though sponsorships and business partners and MC through advanced accounting and project management systems to manage complex requirements from multiple projects, grants and clients.
4. Working systems	In assessment of the working systems all case studies have shown competency based on available resources and organisational strengths. The Merri Creek do seem to have stepped above the others in this way because their business model depends on managing multiple grants and projects and consultancies well so they can continue to win more grants and work. In contrast the BT has both state government and private support (business and individuals) for their vision and spend more time investing on keeping relationships and good communication with their key stakeholders. In the GreenWay, the local councils and the state government provide main financial sources and the breadth of options has been limited by the governance model (e.g. consulting, grants, donations etc). This sees them run more like a institutionally based sub project. The adaptivity of the Merri Creek and the GreenWay has seen the Merri Creek survive and thrive by leveraging its community governance model, and the GreenWay survive difficult times, perhaps now the funding for the project build is secured, they may (or may not) choose to realise and leverage the benefits (and challenges) of a community governance model.

Contribution assessment (from study question)			
The BT and MC cases have both shown that they are highly effective in their leadership, inclusiveness and able to maintain collaborative trust. They are efficient in their use of resources and their working systems including innovative and adaptable. Both projects are sustainable as from a traditional economic premise and by triple bottom line measures (social, environmental and economic) are outstanding, contributing impressive social and environmental values. The GreenWay will be built, slightly differently to the way the community originally visioned it and the current place management model is slightly short of community governance unable to leverage some of the benefits however this may be all that is possible in the current circumstances. The sustainability of the GreenWay as a community driven initiative remains uncertain at this time.			
Overall case study	MC	BT	MC

Summary			
New themes emerging	the significant role of volunteer experts; the role of reputation; the importance of state government collaboration with not just the green infrastructure but also the benefit of and role for community governance; the dynamic impact of swinging politics and the need for a deliberate approach to shared governance especially community governance.	the significant role of volunteer leaders who were both expert and influential; the innovative partnerships; the importance of state government collaboration with not just the green infrastructure but also the benefit of and role for community governance;	the key role of a strong reputation for good management and unique expertise in riparian conservation; the significant role of volunteer leaders who were enduring, passionate, positive and expert; the fine tuning of systems as a response to financial uncertainty; the importance of local government collaboration with not just the green infrastructure but also the benefit of and role for community governance in best practice service provision.
Volunteer Expertise	High level expertise and generous offers of time across all of the case studies with a broad variety of jobs done by volunteers.		
Role of reputation	BTF has a significant reputation due to its vast community memberships and broad range of partners. MCMC has a great reputation for its expertise in conservation work, community engagement and management. The GreenWay has a reputation for its events, environmental education and community engagement with local community groups.		
Double Trust issue	The double trust involves two levels of trust by both key stakeholder, first in the project and second in community governing. Both the Bibbulmun Track and the Merri Creek cases have developed both. The Greenway has both groups believing in the project however the belief in the community governance model is not apparent by either group.		

Comparison of Case Studies Analysis

Appendix 12 – Permissions to use images

Photo Permission

From: **Garry Middle** garrymiddle@vision-environment.com
Subject: Re: Hello and photo request
Date: 29 May 2018 at 1:06 pm
To: Jennifer George jen.george@me.com

No worries Jen. Happy writing

Garry

On 29/5/18, 10:50 am, "Jennifer George" <jen.george@me.com> wrote:

Wonderful, thanks so much.

Jen

On 29 May 2018, at 12:35 pm, Garry Middle <garrymiddle@vision-environment.com> wrote:

A couple more

Garry

On 29/5/18, 10:04 am, "Jennifer George" <jen.george@me.com> wrote:

Hi Garry,

How are you? I trust things are going well. I am finally coming towards the end of PhD and have I have a special request.

I was wondering if you might have a few of photos of the Bibbulmun Track that you might be happy to give me copyright to use in my PhD.

I am after a coastal track image, a forest image, a campsite image.

With or without people is fine.

Thanks for considering.

Jen

<medium_Deep river Bib track crossing.jpg><Medium_Coloured_landscape_Karri forest.jpg>

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Hi Jenny

I'm happy to give my approval for you to use the image provided you make due acknowledgement to myself (simply as Dave Osborne; and to Google Earth imagery source). With regard to the Google Earth imagery, as far as I'm aware, provided the image is not used for commercial gain in any way and the Google Earth source of the imagery is acknowledged, there should be no problem from Google re copyright.

But you may prefer to use the attached updated May 2017 version of the image which is on the Bauxite mining page of my WalkGPS site and in which I've replaced BHPB's name on the eastern (purple) areas with Worsley's name (BHPB off-loaded their interest into company South32 which is now the main interest behind Worsley).

If using the updated version, you could perhaps just say in acknowledgement something to effect:

- Compilation courtesy Dave Osborne, from 'Bauxite mining' page, www.walkgps.com.au. Imagery source: Google Earth.

If you are looking into bauxite mining impacts on bushwalking more generally you may also be interested in Bushwalking WA's recent submission (Mar. 2018) to a Commonwealth Senate inquiry into rehabilitation of minesites. (See submission #76 on the Parliamentary Inquiry page.

As current President of Bushwalking WA (as well as author of WalkGPS site), I'd be interested to hear about the results of your case study in due course J

Regards
Dave Osborne

Hi Jenny

I'm happy to give copyright permission for use of these photos and for use of the photos, map and diagram as listed below. I've attached a higher resolution version of the map. Let me know if you need same for any of the other images.

Luisa Macmillan Manager, Merri Creek Management Committee www.mcmc.org.au
2 Lee St, Brunswick East, V. 3057 ph. (03) 9380-8199 0418-330-030 luisa@mcmc.org.au
Community Caring for Merri waterways.
Acknowledging the Wurundjeri People as the Traditional Custodians of the land of the Merri Merri

The list of images includes 1 map, 3 photos and 1 diagram.

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INTRODUCTION

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