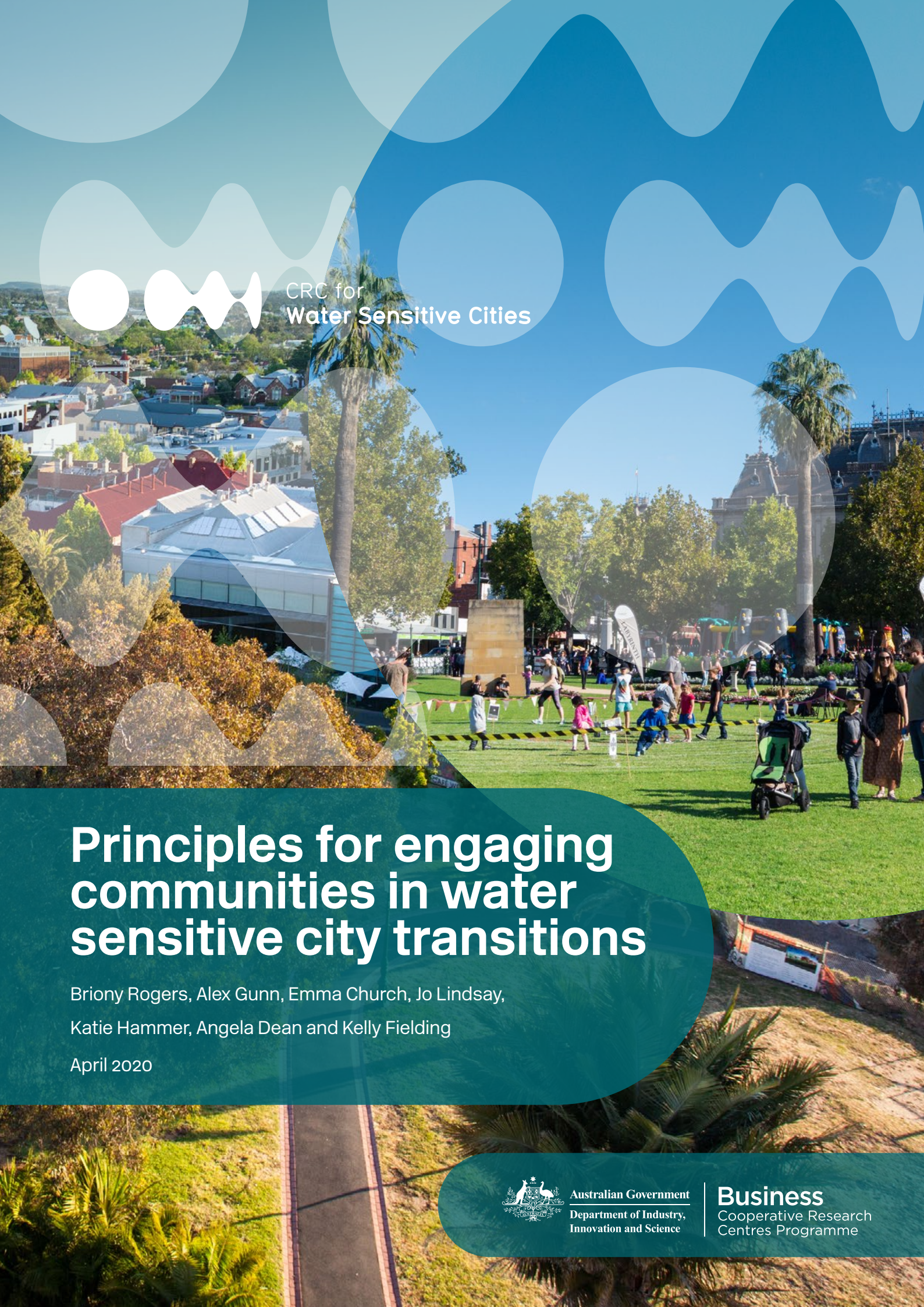

CRC for
Water Sensitive Cities

Principles for engaging communities in water sensitive city transitions

Briony Rogers, Alex Gunn, Emma Church, Jo Lindsay,
Katie Hammer, Angela Dean and Kelly Fielding

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Principles for engaging communities in water sensitive city transitions
Water sensitive city visions and transition strategies (IRP1)
IRP1 – 5 – 2020

Authors

Briony Rogers[1,2], Alex Gunn[1,2], Emma Church[1,2], Jo Lindsay[1,2], Katie Hammer[1,2], Angela Dean[2,3], Kelly Fielding[2,3],

[1] School of Social Sciences, Monash University
[2] CRC for Water Sensitive Cities
[3] The University of Queensland

Publisher

Cooperative Research Centre for Water Sensitive Cities

Level 1, 8 Scenic Blvd, Clayton Campus
Monash University
Clayton, VIC 3800

p. +61 3 9902 4985
e. admin@crcwsc.org.au
w. www.watersensitivecities.org.au

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Executive summary

The purpose of this report is to provide practical guidance on engaging communities in local water sensitive city transitions. It presents key principles for policymakers and practitioners, especially local and state government, water utilities and catchment management authorities. It was developed as part of the Cooperative Research Centre for Water Sensitive Cities' first integrated research project (IRP1) titled, *Water sensitive city visions and transition strategies*, which aimed to deliver a suite of participatory methods and tools for guiding cities and towns in accelerating their water sensitive transitions. The project delivered transition planning processes for six case studies across Australia: Perth, Adelaide, Bendigo, Sydney, Townsville and the Gold Coast.

The principles detailed in this report are drawn from critical reflection on the findings from IRP1, as well as several other CRCWSC research projects focused on community engagement. Results of transition planning processes in Bendigo and Elwood, Victoria, are included throughout the report, to illustrate how key principles were implemented and to provide examples of how associated risks were managed. The 10 principles for engaging the community in water sensitive city transitions planning processes are set out below:

Framing

1. *Establish clear scope* – Clearly communicate the scope of the engagement process: who is being asked to participate, what agenda or issue is being influenced, and how the engagement will inform planning.

2. *Ground discussions in local values* – Relate the content and process to a community's local and historical context to create insights that are relevant and meaningful for participants.

3. *Focus on the long term* – Concentrate on community aspirations for the long-term future to establish a truly transformational and motivational vision.

Participation

4. *Develop community capacity* – Provide opportunity for community participants to learn about the issues and solutions under consideration, and develop their personal and collective capacity to drive change.

5. *Be inclusive* – Attempt to reach out with alternative forms of engagement to parts of the community that may be underrepresented in participatory workshops.

6. *Foster openness and trust* – Foster openness and trust among community participants through effective process design and facilitation.

7. *Build ownership of the process* – Build the community's sense of ownership of the process and its outputs through longer engagements that create opportunity for iteration and refinement.

8. *Identify meaningful actions* – Arrive at opportunities for tangible and meaningful actions that empower the community.

Translation

9. *Present content in ways that resonate* – Use a variety of methods to represent and translate key content in ways that will resonate with a broad community audience.

10. *Maximise visibility for impact* – Strategically promote the process and its outputs to maximise its visibility and impact.

Contents

1. Introduction

1.1 About this report

This report provides practical guidance on engaging communities in local water sensitive city (WSC) transitions. It presents key principles for policymakers and practitioners, especially local and state government, water utilities and catchment management authorities.

It was developed as part of the Cooperative Research Centre for Water Sensitive Cities' (CRCWSC) first integrated research project (IRP1) titled, Water sensitive city visions and transition strategies. This project aimed to deliver a suite of participatory methods and associated tools for guiding cities and towns in accelerating their water sensitive transitions. The project involved developing visions and transition strategies for six case studies across Australia: Perth, Adelaide, Bendigo, Sydney, Townsville and the Gold Coast. The project delivered a transition planning process in each case study, which involved a desktop review of local policies and plans, stakeholder interviews, a series of participatory workshops, and application of diagnostic tools to inform detailed analysis. Participants included 274 leaders and strategic thinkers across water, planning, environment, development, and other related sectors. The Bendigo case study included a parallel transition planning process and additional activities with 57 community members.

The WSC transition planning process involves the five phases outlined in Figure 1.

The principles presented in this report are drawn from critical reflection on several community-focused CRCWSC projects, evaluation of the transition planning processes trialled in Bendigo as part of IRP1, and an earlier transition planning process trialled with community members in Elwood, Victoria. Experiences from the Bendigo and Elwood processes are included throughout the report, to illustrate how key principles were implemented and to provide examples of how associated risks were managed.

Section 1 of this report introduces the concept of a WSC, the need for WSC transitions, and the critical role of communities in city transitions. It also outlines CRCWSC research on community and WSC transitions that informed this report.

The WSC transition planning process involves the five phases outlined in Figure 1.

Section 2 presents key principles for engaging communities in local WSC transitions. Each principle is illustrated with examples from CRCWSC community transition planning case studies in Elwood and Bendigo.

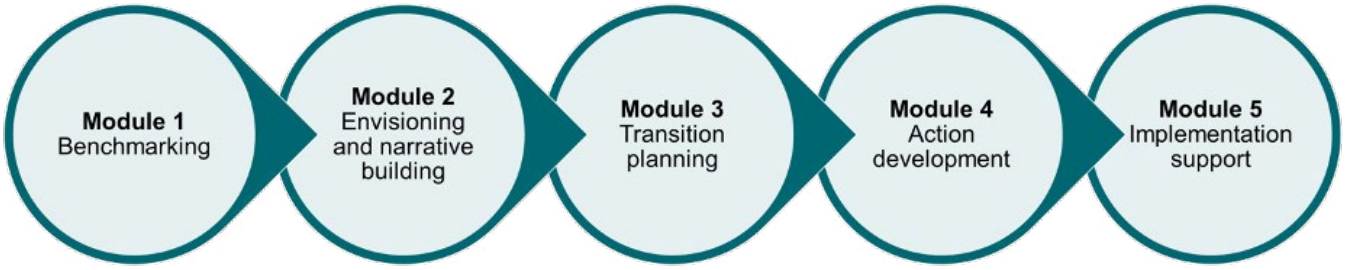

Figure 1: WSC transition planning process

1.2 Community and water sensitive city transitions

What are water sensitive cities and towns?

As cities and towns grapple globally with the challenges of climate change and rapid urbanisation, communities and governments are recognising the importance of water in supporting urban liveability, sustainability and resilience for a city's long-term prosperity.

In Australia, the concept of the WSC is now widely used to represent an aspirational state in which efficient, sustainable and productive water use and management is integrated throughout the urban system. The term WSC was originally coined to refer to metropolitan areas but it is equally relevant to regional cities. In a WSC, people can enjoy reliable water supplies, resource-efficient sanitation, protection from environmental threats, healthy ecosystems, beautiful landscapes, new business opportunities, and cultural and recreational pursuits that help build community resilience.

A WSC incorporates innovative infrastructure, design and governance solutions. For example, water recycling at different scales through wastewater recovery and stormwater harvesting provides a diversity of water sources and improves the health of downstream rivers and creeks by reducing pollution and flow impacts. Water sensitive urban designs integrate nature-based infrastructure into the landscape to provide hydraulic and water treatment functions, as well as amenity benefits such as an aesthetic environment and mitigation of urban heat island effects. Integrated and collaborative land use and water planning results in catchment-scale approaches that enhance flood resilience and connect areas of green and blue to create ecosystem and recreation corridors throughout the city footprint. Citizens are active in caring for water and the environment, and there is cohesion among the community as their sense of place and collective identity is nurtured through their connection with water.

The need for water sensitive city transitions

Many places are starting to articulate aspirations represented by the WSC concept. Becoming a WSC involves significant change from the conventional way of providing water services. In Australia, the conventional way is characterised by centralised infrastructure that typically manages water as separate streams for supply, wastewater and stormwater. These traditional water systems have given us critical benefits, such as clean water, safe sanitation and effective drainage, and this mode of servicing is still an important part of a WSC. But we now recognise that adaptations are needed to address key social and environmental vulnerabilities, such as degraded waterways, uncertain and extreme rainfall patterns, and growing community expectations for greater liveability.

Enabling transitional change requires coordinated and aligned action across the many diverse stakeholders that influence water management and practice. Driving change relies on a shared vision as a framework for orienting action towards common goals and a clear understanding of the range of strategic pathways that must be pursued to achieve the transition.

Community involvement in WSC transition planning

The characteristics of WSC transitions—complex, long-term, and involving technological, cultural, social and institutional changes—mean that top-down processes on their own will be insufficient for driving change. Communities therefore have a critical role in WSC transition planning.

Contributing local innovation and local knowledge to the design of strategies and actions may improve their effectiveness. Knowledge of local history can help in tailoring strategies to local conditions and addressing community members' needs. Engagement with local communities may also produce insights into how sustainability innovations can be scaled up and implemented more widely.

Community involvement can generate legitimacy for action—this is particularly important for addressing environmental challenges, which are often contentious and with ambiguous interpretations (Hogl et al, 2012). Perceptions of fairness and legitimacy have been found to increase broad acceptance of decisions and aid implementation (Cloutier et al., 2014). Community involvement in decision making can improve the prospect of successful implementation; for example, through providing insight into how support for desirable innovations can be fostered.

Finally, bottom-up action will be a critical part of WSC transitions; for example, through changes in household practices and communal action in neighbourhood initiatives. Community involvement in long-term WSC transition planning can inspire personal and collective responsibility, creating community champions that partner with local authorities to drive and sustain the WSC transition agenda.

1.3 CRCWSC research on community

The CRCWSC has undertaken several research projects that have focused on community engagement and WSC transitions. These projects provided foundational insights for this report; brief summaries and key insights gained are provided below.

Citizens' water knowledge, attitude and appreciation

Community action to drive WSC transitions needs citizens to be knowledgeable about the water cycle and how the different elements of the water system work together. Pride in their neighbourhood and awareness of water's role in the landscape helps citizens to welcome opportunities to be engaged in managing and protecting it. CRCWSC research projects (A2.1 *Understanding social processes to achieve water sensitive futures* , and A2.2 *Accelerating transitions to water sensitive cities by influencing behaviour*) aimed to build an understanding of community norms and expectations about water use practices and develop potential behavioural pathways for reducing water footprints. These research activities enhanced understanding of how Australian communities currently understand water issues and make water-related decisions.

Appendix A has a list of further reading.

Interacting and engaging with citizens in water sensitive decision making

The transition to WSCs requires citizens to be involved as partners in decision making, and their meaningful engagement and empowerment should be actively pursued. CRCWSC research project A2.3 *Engaging communities with water sensitive cities*[3] focused on engaging the community to support them to make informed decisions about their water systems and personal behaviours. The project developed guidance on how to engage and influence the community in water decision making, including processes and terminology to use for effective communication and behaviour change initiatives.

Appendix A has a list of further reading.

Water sensitive city visioning and transition planning

Achieving water sensitive outcomes requires a shared vision to orient collective action. The A4.2 research project, *Mapping water sensitive city scenarios*[4] , focused on facilitating collaborative workshops to help stakeholders develop a shared WSC vision and transition pathways. Twenty-seven community members in Elwood, a bayside suburb in Melbourne's south east, undertook a process to develop a shared water sensitive city vision over three participatory workshops in 2015. IRP1 further developed the CRCWSC's participatory transition planning methods and tools. They were tested in six case study cities, including Bendigo which engaged 31 community participants in the process. The Elwood and Bendigo cases demonstrated that community stakeholders are capable of constructively engaging with WSC problems and solutions, and that they valued the opportunity to engage in long-term planning discussions and contribute their ideas. In both cases, community members expressed hope that this type of dialogue could continue, with them being active partners in shaping their water sensitive future.

Appendix A has a list of further reading.

[1] https://watersensitivecities.org.au/content/project-a2-1/
[2] https://watersensitivecities.org.au/content/project-a2-2/
[3] https://watersensitivecities.org.au/content/project-a2-3/
[4] https://watersensitivecities.org.au/content/project-a4-2/
[5] https://watersensitivecities.org.au/content/project-irp1/

2. Principles for engaging communities in WSC transitions

WSC transitions require change via local innovation and adaptation. Planning WSCs at the local scale means recognising that the needs, values and priorities of citizens in one place may be quite different from those in another, which demands a nuanced and targeted engagement process that elicits a variety of perspectives and localised knowledge. Successful WSC transitions need the community to be engaged as active partners in driving change through their grassroots actions and through lending legitimacy to the actions of industry and government.

This section critically reflects on CRCWSC research and draws on relevant academic literature to offer 10 guiding principles for practitioners engaging with community as part of WSC transition planning. The principles may also be relevant for engagement processes beyond WSCs and transition planning.

Framing

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Framing

2.1 Establish clear scope

Principle 1: Clearly communicate the scope of the engagement process: who is being asked to participate, what agenda or issue is being influenced, and how the engagement will inform planning.

To achieve clarity of purpose among community members and other stakeholders, and to manage their expectations, it is important to clearly define the scope of the engagement process being implemented. This includes the community of interest and spatial scale that is relevant to the issue (Reed et al., 2018). The intended ultimate outcome of a transition planning process (e.g. a WSC Vision and Transition Strategy) and how it relates to other activities being undertaken in the area should be made clear to participants and other stakeholders, to encourage participation (de Vente et al., 2016). Community members will be interested in questions about how governments and other key decision makers will use the outputs of the engagement. For example, is engagement linked to formal initiatives, such as a forthcoming strategy or a policy under review, or is it (as in the Elwood and Bendigo case studies) more exploratory in nature?

Providing information on the scope of the project prior to the formal start of the process is helpful, and can be done through advertising material or in personal communications with potential participants (see Box 1 for an example of engagement methods). In all communications, it is important to use clear, jargon-free language the community understands. In both the Bendigo and Elwood cases, it was clearly communicated that the workshops were part of a research project that aimed to develop and test process methodologies and accompanying tools while creating outputs that would become locally valued resources. This helped community participants understand the informal nature of the CRCWSC's transition planning engagement, and that key stakeholder organisations were still in the process of resolving their WSC aspirations and strategies.

Where resources permit, one-on-one communication with participants can be a very useful technique to address the individual information needs of potential participants. In Elwood, face-to-face interviews were conducted with most of the participant group, and telephone interviews were held with Bendigo participants. These contact points were important opportunities to raise awareness of the role of the CRCWSC in relation to the council, water corporation, catchment management authority, and other agencies; address any concerns about the process; and implement a form of onboarding that gave participants a better idea about what to expect of the process. One-on-one conversations can also be important in alleviating people's concerns about their capacity to participate effectively, which is recognised as a typical barrier to participation.

There may also be some benefit in tailoring the scope of the project to local priorities. This can help connect the engagement to what is most meaningful to community members and build the case for WSC transition planning (and for the time participants will need to invest in the process). There is a risk that focusing on participants' specialist interests may impede a balanced consideration of all connected WSC issues, but in the CRWSC's experience, this risk can be managed with effective facilitation.

Stakeholders such as agencies, governments and industry groups are important for the ultimate success of a WSC transition planning process, even if they are not directly part of the participatory workshops. They are vital to implementing many WSC actions, and will likely be planning and implementing initiatives that are relevant for the community, either in association with the transition planning engagement or independently. Attention to the framing of the process around the present and future operations of these stakeholders is needed. It may be useful to establish a local industry steering committee to oversee and inform the process.

Box 1: Interactive maps

For Bendigo and Elwood, one of the ways the CRCWSC clarified the scope of the engagement project was to use maps on the front page of project websites, which were scaled to show the area of interest. These maps were interactive, so website users could add markers and comment about what they did and didn't like or suggest ideas to improve on water or environmental management in the area. In Bendigo, for example, the maps helped to emphasise that the scope was not the whole municipal area, just the city itself.

2.2 Ground discussions in local values

Principle 2: Relate the content and process to a community's local and historical context to create insights that are relevant and meaningful for participants.

Box 2: Bendigo's water story

Bendigo's community participants co-developed a water story that would ground their WSC vision and transition strategy in local values. The activity asked participants to build a collective narrative for the city by looking to the past and exploring how certain events and trends have shaped how water is managed today. Participants populated a timeline ranging from pre-history to the present, identifying key events and changes related to infrastructure and technology, policy and regulation, environmental events, community trends, and personal experiences and interactions with water.

The local scale is increasingly seen as an important focus for WSC transitions, given the need to align strategic action to a community's liveability aspirations and their capacity to co-design WSC ideas and solutions (Seyfang and Haxeltine, 2012). Since community needs vary according to social, environmental and urban context, there is no 'one-size-fits-all' solution to creating water sensitive cities, towns and suburbs (de Haan et al., 2014). In addition, engaging communities in local-scale sustainability planning at an early stage will help integrate local knowledge into detailed solution design (Cloutier et al., 2014). In conservation projects, for example, integrating local values and knowledge into planning has been found to lead to better attitudes towards conservation among stakeholders (Sterling et al., 2017). Grounding a WSC transition planning process in a local place may also make it easier for participants to identify effective solutions because they better understand the connections and interdependencies between their local social and natural systems (Gray et al., 2012). Considering place-based values can also inform local stakeholders' strategies for making incremental transitions over the long term (Marshall et al., 2012).

Centring WSC transition planning processes in a local place opens numerous opportunities for participants to deeply connect with each other, their neighbourhoods and their values. Discussing local history, drilling down into major events, exploring local lore and customs, or simply revealing what participants like and appreciate about their area can be useful and valid activities.

Stories or narratives help individuals and groups make sense of the world. In groups or communities, a sense of unity can be fostered by co-creating a story, because 'my story' becomes 'our story' (Davis, 2002). Local knowledge and lived experience of community members is a rich source of history. Understanding why a system has evolved into its current state goes some way towards finding solutions to the problems it has developed or may yet develop in the future. Boxes 2 and 3 detail examples from Bendigo about creating shared narratives. While there is value in having a collective narrative that everyone understands and connects with, it is also important to recognise the many different narratives that feed into it.

Box 3: Why we love Bendigo today

'I love Bendigo' was a group activity in which participants were asked what they loved about their local area and wanted preserved in the face of challenging future contexts of climate change and population growth. It was an open discussion that invited personal reflection and facilitation but did not seek consensus. Taken as a whole, the story that developed about Bendigo's attributes was, however, cohesive and broadly shared. It considered social, cultural, economic and environmental services, such as the city is 'friendly', has an arts infrastructure and a strong built heritage, job and training opportunities, and is close to national parks and reserves.

To further connect people with their local place and ground their WSC transition planning, the CRCWSC also engaged participants on what they love about their area. This activity elicited diverse contributions from participants, encompassing recreational opportunities, social values, interest in the urban and rural environment, infrastructure and services. While direct connections were not always apparent, it was valuable to identify local strengths that provided a foundation for developing a future WSC vision that would have broad endorsement.

Figure 2: Collective timeline to develop Bendigo's water story

2.3 Focus on the long term

Principle 3: Concentrate on community aspirations for the long-term future to establish a truly transformational and motivational vision.

The goal of a vision is to orient, unite and align the actions of stakeholders over the long term. A vision has value if it can convey meaning for diverse people, help to simplify complex issues, and make a compelling case for change (Robinson et al., 2011). An extended timeframe enables people to stretch their ambitions beyond today's systems and constraints, and reflect on the transformative change that is possible over such a period (Davies et al., 2012). It can help clarify communities' shared goals and motivate them to pursue the actions that may achieve them (van der Helm 2009). A long-term perspective helps people reassess assumptions and accepted norms, and lifts aspirations beyond current social or technical limitations.

While a long-term vision should be aspirational, its effectiveness as inspiration and motivation for change also depends on it being tangible, articulating what would be experienced in this future. A broad range of community members should be able to connect with it, through language and imagery that resonate with people.

Each case study adopted a 50-year timeframe for the vision. This made it easier to consider serious long-term threats—notably the severe consequences of unaddressed climate change—and to avoid focusing on current constraints. Box 4 illustrates the Elwood vision and why focusing on long-term threats and outcomes was important.

Box 4: Elwood's shared WSC vision

The vision for a water sensitive Elwood featured five distinct outcomes that captured many changes across environmental, social and economic factors. Given the then-recent experiences of many participants, the risk of flooding was a strong influence on the outcomes. Participants were encouraged to consider threats that may affect Melbourne's resilience in the long term, such as drought, reduced drinking water quality and sea level rise, to ensure broad liveability and resilience outcomes for the future. Encouraging participants to think beyond current policy concerns also led to more constructive discussions rather than a critique of current systems and policies.

Participation

2.4 Develop community capacity

Principle 4: Provide opportunity for community participants to learn about the issues and solutions under consideration, and develop their personal and collective capacity to drive change.

People who are passionate about sustainability in industry and government can strengthen learning networks and build collective commitment to action (Kemp et al., 2007). Citizen or 'community champions' are those who provide important grassroots leadership for WSC transitions, and are important sources of knowledge and on-ground action to drive local solutions. These champions are likely already highly engaged with their community, whether in environmental groups; Landcare; as 'Friends of' public reserves, parks or waterways; or as volunteers in various service groups. With effective support and drive from their champions, communities can become important advocates for WSC transitions, promoting changes in behaviour across their personal and professional networks and to politicians (Lindsay et al., 2019).

Potential community champions may need support to successfully drive action on the ground. Exploring WSC futures may mean participants are introduced to new approaches, concepts or solutions.

For example, water sensitive urban design (WSUD) may be unfamiliar to many community members, but offers tangible solutions that they may wish to implement on their private property. In Bendigo and Elwood, experts in water sensitive planning and design presented examples of transformative large-scale urban designs and smaller-scale urban form solutions as inspiration for what could be possible (see Box 5 for specific examples). A WSC transition planning process is a valuable opportunity for community participants to build their knowledge and ability to personally and collectively undertake follow-up action. It is therefore important to consider what information needs to be provided before, during and after the process to best support its legitimacy, participant motivation and subsequent actions.

Beyond technical capacities, a WSC transition planning process can strengthen the relationships among community members and with stakeholder organisations, to build their collective capacity to influence others as they champion water sensitive practices. Establishing a core group of community champions was an explicit objective of the Bendigo process, around which a broader network of people interested in the city's WSC transition could grow.

Box 5: Elwood solutions presentation by experts

In Elwood, architects from Monash Art Design and Architecture provided useful context for discussion by presenting an overview of Victoria's topography of low-lying land, of which Elwood is an example. Later, features of a hypothetical WSC were presented alongside real-world case studies. The cases discussed included:

- Cooks River restoration, Sydney
- Los Angeles' revitalisation of previously concreted urban waterways
- Rotterdam's city-wide catchment planning and neighbourhood stormwater capture and storage
- Cheonggyecheon River restoration project in Seoul to daylight a waterway that was concealed by a freeway (now demolished)
- Rotterdam's temporary stormwater storage solutions such as water squares and tanks in underground parking garages
- Stawell's flood levy and parkland sculpture mixed use.

2.5 Be inclusive

Principle 5: Attempt to reach out with alternative forms of engagement to parts of the community that may be underrepresented in participatory workshops.

As described in our other principles, sustained engagement with a committed community group is beneficial for tapping into local knowledge, gaining legitimacy for decisions, and enhancing the potential for community-led action. Community champions can play an important knowledge-brokering role by sharing information and understanding among professionals and diverse community groups.

Yet it is also important to note that some community members are likely to be more engaged in water planning and sustainability issues than others (Dean et al., 2016). For example, a national survey conducted by the CRCWSC found that people with higher levels of education, homeowners and older women were more likely to be engaged with water use than others (Dean et al., 2016). In Bendigo, the CRCWSC observed that the community participants who volunteered to be part of the workshop series were a highly educated group with a good understanding of water and sustainability issues in the region. There was only a handful of young people or people with low levels of education in the group. Targeted promotional campaigns and other efforts should be used during the recruitment stage to seek the participation of diverse parts of the community. Of course, many members of the community do not have the time, interest or confidence to participate in workshop activities, which highlights the importance of offering alternative ways to contribute, to complement in-person discussions.

It can be difficult to balance the dual objectives of WSC transition planning processes: incorporating inclusion and diversity while building a community champion network through the process. Both objectives are important, but a champion network may be more naturally achieved by bringing together like-minded sustainable water advocates. One way to resolve this potential tension is to use focus groups and other complementary methods to test and enrich the workshop outputs with non-represented community segments (see Box 6). This approach helps to refine the vision, determine how best to communicate it, and identify strategic priorities so that the process outputs will resonate with the broad community, giving both the (self-selected) champions in the workshops and industry stakeholders confidence that the WSC vision and transition strategy is a representative and reliable base from which to guide action planning and advocate for change.

Careful thought and planning should be given to engaging with First Nations people as traditional land owners and cultural and environmental stewards. In the Bendigo case study, representatives of the Dja Dja Wurrung community participated in a parallel workshop process with industry professionals, recognising their role in the formal governance landscape for Bendigo. Process participants would have welcomed a dedicated way to seek further input from the Dja Dja Wurrung community and they appreciated the important role and potential of the Dja Dja Wurrung to be community champions and contribute to community-led stewardship and long-term water planning. Planning for First Nations involvement in WSC transition planning processes needs to consider the financial and other support that may be necessary for their participation and contribution.

Box 6: Bendigo focus groups

To test the co-developed WSC vision with different groups in Bendigo, the CRCWSC employed a social research company to recruit participants into three targeted focus groups. Each focus group targeted a community segment: low socioeconomic status, young people aged 18–35, and active gardeners. Each focus group had 10 participants and ran for two hours.

The focus groups highlighted the challenges that decision makers would face in implementing the vision. For example, unlike the workshop participants, the focus group samples did not have a strong affinity with the concept of stewardship. The youth sample showed little attachment to Bendigo Creek in its present form, and this appeared to negatively influence views of its potential naturalisation as a pathway to water sensitivity. These insights were shared with the main workshop participants so they could consider how the content they were producing could be reshaped in response.

2.6 Foster openness and trust

Principle 6: Foster openness and trust among community participants through effective process design and facilitation.

Trust among participants is important for eliciting authentic and diverse perspectives. Establishing confidence in the participatory process and openness between people is important for building legitimacy in the outcomes. Trust helps to transform adversarial relationships into those where mutually beneficial solutions can be identified and supported (Stringer et al., 2016). Maintaining transparency and open communication is important for building trust and increasing the likelihood that solutions identified in the process will be implemented (de Vente et al., 2016). Strategies to foster openness can be embedded in both the process design and its facilitation.

Design is concerned with setting the overall process objectives, deciding on the activities to be facilitated, and planning how the activities will be organised (van de Kerkhof and Wieczorek 2005). Making sure these design decisions will lead to open and transparent deliberations means carefully considering how information will be presented, how feedback will be managed, and what steps will be taken to accommodate different participant needs. Striking a balance between structured methods for collecting and sorting insight from participants (de Vente et al., 2016) and opportunity for free-flowing dialogue among the group can enhance trust and learning in the process. Allotting time for collaborative review and feedback of previous workshop outputs can help participants develop a shared understanding of, and respect for, different perspectives. Similarly, mixing participant groups to balance expertise or viewpoints can allow new types of interactions and insights.

Skilled facilitation is critical for creating and maintaining a safe space in which participants can be open and trusting. Facilitators must elicit diverse opinions from the group, creating an atmosphere where participants naturally and curiously engage with each other in meaningful discussion. They must also respectfully accommodate and explore passions and tensions while keeping the activity focused. Facilitators should bring energy to the discussions, while responding to the pace of learning and connection among participants. It can be helpful to have regular pauses to 'check in' with the participants, providing opportunity for collective reflection on the process, their expectations, and the group's dynamics.

2.7 Build ownership of the process

Principle 7: Build the community's sense of ownership of the process and its outputs through longer engagements that create opportunity for iteration and refinement.

The WSC transition planning methodology implemented in Bendigo and Elwood was based on the premise that the same group of community participants would be involved in the process over several months. This allowed time for ongoing shared reflection and iteration of the co-created content, which was critical for building their sense of ownership. While this and similar deliberative engagement processes may require longer timeframes than other methods, there is strong evidence claiming the benefit is often worth the time cost (Dean and Smith, 2016). Long engagement periods risk 'attendance fatigue', which could cause attendance to drop off towards the end of the process. Therefore, it is important to communicate early to participants how long the process will take, so they are committed to the entire process from the beginning, and so you can continuously demonstrate value for the participants. One way of demonstrating this value is to provide new content at each engagement point (e.g. interim reports, refined outputs, expert speakers) rather than simply start from where the previous engagement session left off.

Iterative discussions help people explore and clarify ideas, which makes the ideas more robust and participants more likely to connect deeper with them. For example, early workshops should involve more brainstorming discussions, and later workshops should focus more on clarifying and refining ideas. Participants can see how the final output has taken shape throughout this iterative process, which helps build ownership of the outputs. It is important to provide space for participants to discuss their values and points of view, and multiple opportunities to distil initial ideas into sophisticated and well-informed concepts (Hedelin, 2007). Allowing enough time for community members to engage with concepts and develop informed views was important in Bendigo and Elwood for developing transformational yet feasible goals for long-term city shaping.

Box 7: Iterative content development in Bendigo

In Bendigo's first vision brainstorming exercise, which was writing 'headlines' for a future article about the city, prominent themes were complete self-sufficiency in water, energy and food. At the next workshop a month later, discussion of the synthesised vision raised the importance of Bendigo's regional connections and dependencies in water management. As a result, full self-sufficiency was considered an unrealistic and even undesirable goal. Instead, participants reflected on what greater self-reliance could mean in the Bendigo context, as well as their shared responsibilities across the region.

2.8 Identify meaningful actions

Principle 8: Arrive at opportunities for tangible and meaningful action that empower the community.

While Principle 3 recommends undertaking WSC transition planning with a long-term view, articulating what needs to change and how change can unfold, it is important that the process eventually leads participants to consider tangible and meaningful actions for implementation. Without this closure, participants may feel the process was based on hypothetical discussions, rather than a valuable approach to building collective momentum, commitment and strategy for action.

The scope and focus of actions may vary from process to process, depending on their framing and objectives. For some processes, particularly longer ones that present opportunity to reach further level of detail and clarity, it may be desirable to develop action plans that define timeframes and responsibilities. For others, this output may be beyond the desired scope of the process. This is likely to be the case for community-oriented WSC transition planning processes, where the key agencies have not (yet) endorsed the ideas that participants are co-creating. In such processes, it can be productive to focus on community-level action. Actions could be aimed at, for example, harnessing community energy to increase the effectiveness of political processes that promote a WSC transition, or driving water sensitive behaviours and practices at the household and neighbourhood scale. These types of tangible local actions can help community participants to determine meaningful next steps against the scale of transformation envisioned (Seyfang and Haxeltine, 2012).

Participants in Elwood and Bendigo enthusiastically embraced the prospect of radical long-term changes to their urban landscape, to increase water sensitivity. They translated these visions into short- and medium-term actions that local or state governments could implement with broader community support, or citizens themselves could implement. This helped identify actions that the community could be responsible for, against the backdrop of larger scale issues that would also need institutional action. See Box 8 for examples.

If time in the process permits, consider discussing priorities. When participants engage in brainstorming actions, they typically develop long lists of possibilities. Identifying shared priorities for at least the short term makes it more likely that community champions will exit the process with a commitment to implementing a meaningful suite of actions. As part of the priorities discussion, cover how participants will organise themselves going forward (see Box 9). Think about each action's strategic benefit, its likely success, cost, broader feasibility, and alignment with any upcoming local opportunities.

Box 8: Practical action in Elwood

The Elwood community champions generated ideas that elaborated on the vision themes and pointed to potential practices or biophysical changes that would realise the vision. These ideas ranged in scale and responsibility, some of which will require collaboration across community and organisations. Examples of these actions include:

- Planting more drought-tolerant gardens and trees to lower water used for irrigation
- Identify opportunities for greening streets and lanes
- Retrofit laneways with permeable pavement and bioretention
- Pursue a formal coalition of councils around the Elster Creek catchment
- Raise awareness for water sensitive practices through communication channels and networks
- Encourage community gardens and public orchards
- Foster local innovation through demonstration projects e.g. at the Ecocentre.

Box 9: Pursuing local action in Bendigo

Participants can be important vectors for disseminating results. In the closing stages of the final workshop for the Elwood and Bendigo community groups, participants were asked how they could carry the work forward. Bendigo participants were particularly active in embracing their role as champions for a WSC transition, and explored the options for engaging their individual networks.

Since the Bendigo process also involved industry stakeholders, these participants were keen to become part of a formal reference group or similar, to provide feedback on the unfolding implementation of the transition strategy.

Translation

2.9 Present content in ways that resonate

Principle 9: Use a variety of methods to represent and translate key content in ways that will resonate with a broad community audience.

Typically, WSC transition planning process discussions are documented as short notes or verbatim during workshops and then fleshed out by the analyst team for participant review at the next workshop. For the Elwood and Bendigo cases, iterating content based on community feedback meant elements were expressed differently, which had value for participants. For example, the WSC visions were expressed as a single high-level statement, capturing their essence for easy communication. They were expressed as a set of outcome statements that collectively reflected the shared aspirations, and were therefore useful as a framework around which strategies and actions could be structured. The visions were expressed through rich narrative text that brought each outcome statement to life with illustrative local detail, and this provided inspiration and connection.

It goes without saying that the language used for WSC visions should be as plain and simple as possible, without diluting the ideas the participants want to express.

The CRCWSC report, *Getting the message right* (Schultz et al., 2017), offers guidance on using visuals, framing, and terminology for WSC messaging that appeals to different target audiences. This report may be useful for WSC practitioners who want to avoid jargon when framing and facilitating a community WSC transition planning process.

The *Getting the message right* report says appealing images can elicit a strong positive emotional connection and help participants perceive a concept as personally relevant. Imagery can be an effective 'storytelling' medium. Bendigo's historical water story was rendered in a simple graphic (Figure 3), which helped summarise and communicate its different time periods. Research has identified that visualisations can help people better understand how a vision will transform a local environment (Salter et al., 2009). But be careful when selecting images because they can overwhelm the nuances of the vision.

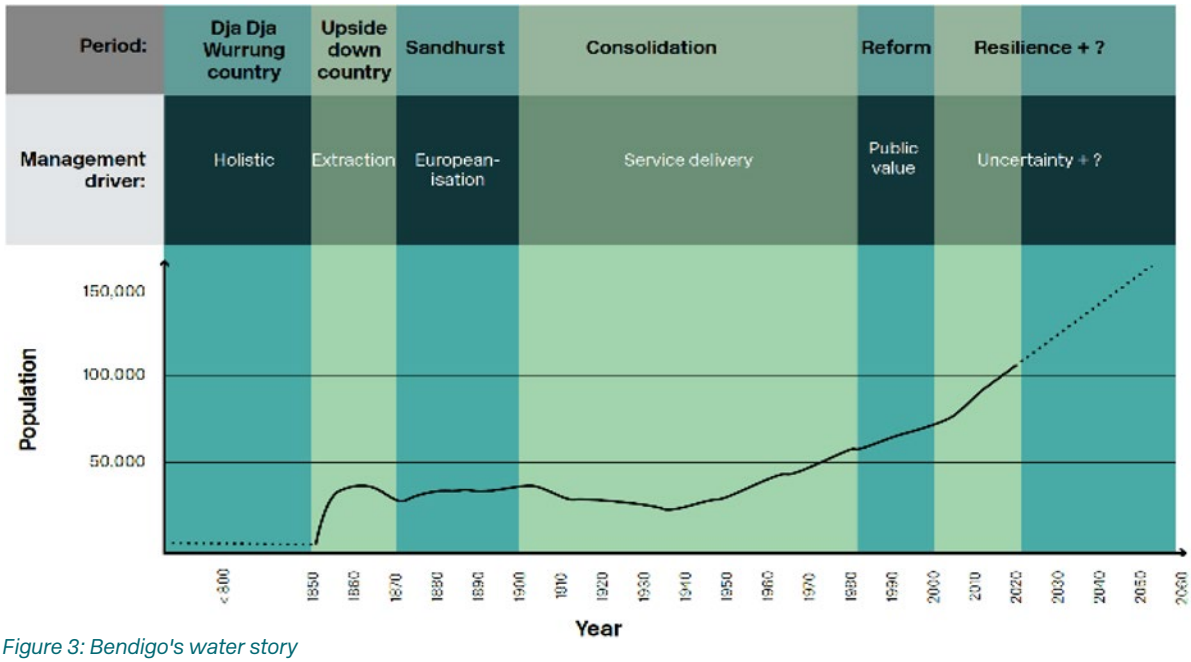

Figure 3: Bendigo's water story

Box 10: Elwood activities

In the Elwood visioning workshop, the facilitators provided participants with magazine cut-outs, printed photos, maps and other image materials to help them express their ideas for local water sensitive solutions through constructed pictures and collages. These media inspired people to see what could be possible, and helped participants articulate their desired on-ground outcomes.

Many tools are available to render visions and images in digital formats, and can be created during a participatory workshop or after the event. Even simple techniques to visualise aspects of the envisioned future can be helpful. For example, participants can use images to help express their thoughts and ideas (e.g. manipulating a scale model of the spatial area, or using the Photovoice method to take photos of their local area that depict their values and priorities).

Alternatively, facilitators could engage an artist to visualise key content from the WSC transition planning process. The artist could produce this live during workshops (e.g. through live sketching) or after the fact using what they've heard (if they attended) or what they've learnt from discussing the workshops with the facilitators and reading their notes.

A local Bendigo artist was engaged to render impressions of the workshop outputs. These illustrations (Figure 4) of prominent local features—the Alexandra Fountain and Bendigo Viaduct—deeply resonated with the community participants, who appreciated the artist's emotional connections to their city.

Figure 4: Local artist illustrates Bendigo's unique water story

2.10 Maximise visibility for impact

Principle 10: Strategically promote the process and its outputs to maximise its visibility and impact.

The ultimate goal of a WSC transition planning process is to catalyse strategic and coherent action among diverse local stakeholders, to drive transformative change towards water sensitivity. To achieve this impact, the process must be visible and its outputs broadly recognised, valued and used. It's therefore important to think about how to disseminate the outputs.

Publicity, such as media releases, social media posts, websites and public information stands, can be valuable. Briefings in which key stakeholders present the process outputs and invite their reflection, particularly around how their organisation could advance the objectives and actions, can also help. Publicising the results of WSC transition planning processes to a broad audience can be an effective way to engage community members who were not involved in the workshops, giving them an opportunity to learn about the WSC transition agenda and any follow-up initiatives (Sefang and Hazeltine, 2012). This broadens interest in and acceptance of the established directions, and creates a favourable context for implementing actions.

A (public or private) event that launches the final report can also be an effective way to shine a spotlight on the process and generate momentum for follow-up action. For both Elwood and Bendigo, key stakeholders were invited to an official release event for the WSC vision and transition strategy. The key content was presented, followed by a facilitated panel discussion with some participants reflecting on the process and sharing their perspectives. Inviting senior leaders from key agencies to a launch event, and asking them to make a speech or opening or closing address, can be a powerful way of sparking their interest and setting the scene for subsequent organisational commitment. Official release events also help to connect industry leaders with WSC champions, strengthening their networks and building support for implementing solutions.

Box 11: Bendigo launch event

In Bendigo, key stakeholders were invited to an official release event for the WSC vision and transition strategy. Brief presentations of key content preceded a facilitated panel discussion in which participants reflected on the process and shared their perspectives. Senior industry members endorsed the process and committed to working together to implement actions. Media also attended to report on the story.

Conclusion

The 10 principles proposed in this report will guide practitioners in preparing and involving the community in developing WSC visions and transition strategies. Recruiting community champions to these processes can powerfully strengthen community networks and establish a collective commitment to action, to drive transitional change. The CRCWSC's research has found that community champions can offer valuable insights into the conceptualisation of water sensitivity for their local area. It has demonstrated the importance of instituting high quality participation that spotlights the local context and allows for reflection and learning.

The CRCWSC developed the 10 principles over multiple research projects, including participatory action research in the suburb of Elwood and the regional city of Bendigo (both in Victoria). Other CRCWSC projects, focused on community knowledge, attitudes, behaviours, practices, and engagement strategies more generally, complemented these case studies.

Applying the WSC transition planning process to multiple cases has allowed the CRCWSC to refine the process and explore principles for engaging communities in different contexts. The principles emphasise the benefits of engaging through place, and the importance of diverse perspectives and focusing on long-term transformations.

The principles describe how, given time to reflect, community can distil initial creative ideas into sophisticated and well-informed concepts. The process illustrates how open and reflective facilitation supports non-experts to contribute in meaningful ways, to build a city vision for sustainable water management. The principles highlight the importance of clear communication and effective imagery in bringing local WSC ideas to life.

While the impacts of the processes in Bendigo and Elwood are yet to be fully measured, the immediate findings suggest there is value in involving community members in the early stages of water sensitive transition planning. Both community participants and key stakeholders are confident that their communities are significantly better positioned for the collaboration necessary for realising their water sensitive transition. Applying these principles to engagement activities will make it easier for community representatives to shape long-term urban water strategies.

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Appendix A – Further reading

Citizens' water knowledge, attitude and appreciation

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Cooperative Research Centre for Water Sensitive Cities

Level 1, 8 Scenic Boulevard
Monash University
Clayton VIC 3800

info@crcwsc.org.au

www.watersensitivecities.org.au