

Water trusts: What role can they play in the future of environmental water management in Australia?

Proceedings of a workshop held on 1 December 2011



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The workshop was co-convened by the Water Trust Alliance and the Australian River Restoration Centre.

The Water Trust Alliance is made up of the following Australian water trusts: Australian Conservation Foundation, Murray-Darling Association, Murray Darling Wetlands Limited., Nature Foundation of SA, Healthy Rivers Australia and the Environmental Water Trust established by Nature Conservation Council NSW. It aims to build capacity and exchange lessons between water trusts and build constructive associations between water trusts and government, landowners, business and community groups to optimise the effectiveness of environmental water management. It seeks to be the peak body for co-ordinating information on water trust models, water entitlements and interests for trust acquisition and effective mechanisms for management of those interests.

The Australian River Restoration Centre (www.rrrc.com.au) is a not-for-profit organisation committed to providing those with an interest and passion for river restoration with access to information and knowledge to assist them achieve the goals to which they aspire. The Australian River Restoration Centre seeks to facilitate people getting together to share experiences and explore ways of working together and developing partnerships between scientists, interest groups and people working in river restoration.

The workshop organisers would like to thank the sponsors of the workshop, the Murray-Darling Basin Authority and the Department of Sustainability, Environment, Water, Population and Communities.



The workshop organisers would like to thank the following people who delivered presentations and chaired or participated in panel sessions: Craig Knowles, Sue O'Keefe, James Fitzsimmons, Gary Jones, Deborah Nias, Paul Sinclair, Matthew Harding, Jen St Jack, Leith Bouilly, Benjamin Docker, Michael Peat, Heather Hill, Mike Jensz, Lin Crase and Howard Jones.

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Front cover photos: Southern Purple Spotted Gudgeon juvenile from Paiwalla Wetland. Photo: Kate Mason, South Australian Murray-Darling Basin Natural Resources Management Board (Top left); Growth of wetland plants following private wetland watering. Photo: Murray Wetlands Working group Inc. (Bottom left); Release of water into the Hattah Lakes. Photo: Mallee CMA (Right).

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EXECUTIVE SUMMARY

Australia has one of the most advanced water reform agendas of anywhere in the world and has seen a rise in the importance placed on water being allocated to the “environment”, which will soon become Australia’s largest single holder of water entitlements. A consequence is that the responsibilities and governance arrangements for managing water will start to come under increasing scrutiny.

Water trusts have existed for at least 10 years in Australia, and form part of the institutional landscape for environmental water management. A workshop co-hosted by the Water Trust Alliance and the Australian River Restoration Centre was held at the Kurrajong Hotel in Canberra on 1 December 2011 to bring together people from NGOs, government agencies and research organisations with an interest in exploring the role that water trusts can play in the future management of environmental assets. The objectives of the workshop included identifying the advantages and shortcomings of existing water trust models; exploring current institutional arrangements for water management and determining key features of future regional water trust models that connect government, community and business.

After a decade of operation, water trusts were found to have achieved significant environmental outcomes through delivery of water managed on behalf of government, or through facilitating delivery of water donations to government and community projects. For example, over sixteen projects were identified as having delivered over 8.8 GL of donated water to environmental projects in the southern MDB since 2004/05.

The water trust model has gained traction for a number of reasons. Trusts have been able to achieve real and substantial outcomes with relatively small volumes of water demonstrating an ability to “do a lot with a little”, which was especially valuable during the Millennium Drought when Government’s were not able to meet all environmental water demands. Water trusts have also proved very successful at getting community buy in to projects from people living on the river and in the city. This has endured beyond the end of the drought and is a result of a focus on building relationships and demonstrating outcomes or “proving the point”. One of the lessons from the ability of water trusts to achieve community buy in has been recognition of the importance in the way people “experience” a project, which is much more than just the outcomes they observe and extends to recognition of their effort and an ability to share in the success.

All government entities involved with the workshop recognised a role for water trusts to play in future water management and in the case of the MDBA, localism was recognised as a central tenet of the overall policy approach guiding the draft Basin Plan’s environmental watering plan, which is something that is embodied by most trusts.

Further maturing of the water trust concept should consider the following key issues:

Good governance - Future work could include examining existing not for profit governance models and guidelines to develop a set of principles for water trust operation.

Consolidate resources – Trusts could consider merging some organisational, administrative and financial functions as well as capitalising on those organisations that have tax deductibility status.

Site prioritisation – Trusts should consider working more closely together to identify priority areas for action rather than responding ad-hoc to water and sites becoming available.

Learn and share knowledge – Water trusts need to learn and share knowledge through delivery trials and adaptive management approaches.

Sell the story – Water trusts need to get even better at “selling the story” and letting more people know what trusts can achieve.

Aboriginal water management - Water trusts can work with aboriginal groups to explore models for facilitating land and water management on aboriginal managed land.

Work with government to develop enabling policies – Water trusts could work with government agencies to formulate additional policies on how to engage with water trusts in terms of co-funding and roles and responsibilities in delivering and/or partnering in local and regional projects.

1 INTRODUCTION

1.1 BACKGROUND

Australia has one of the most advanced water reform agendas anywhere in the world. Current progress with water buybacks in the Murray-Darling Basin, investment in irrigation infrastructure to generate water savings, and work to date on the Basin Plan are testimony to this.

One outcome of this process is that the “environment” will soon become Australia’s largest single holder of water entitlements. Management of this asset is set to come under increasing scrutiny in future years as many stakeholders ask whether the desired outcomes of water recovery are being achieved, and whether the responsibilities and governance arrangements for managing water are appropriate.

Water trusts have existed for at least 10 years in Australia, and form part of the institutional landscape for environmental water management. They are similar in purpose to long established models of land trusts, and exist to manage water for, and on behalf of, their members or stakeholders. Water trusts are a well established model in the United States of America, where they provide a mechanism for engaging with the communities in which they operate, whilst providing a rigorous framework for responsibly and accountably managing water assets.

1.2 THE WORKSHOP

A workshop was held at the Kurrajong Hotel in Canberra on 1 December 2011 to bring together people from NGOs, government agencies and research organisations with an interest in exploring the role that water trusts can play in the future management of environmental assets. The specific objectives of the workshop, which was convened by the Water Trust Alliance and the Australian River Restoration Centre, were to:

1. Describe the water trust models that currently operate in Australia;
2. Identify the advantages and shortcomings of existing water trust models;
3. Explore current institutional arrangements for water management ;
4. Understand the challenges, opportunities and capacities of water trusts; and
5. Workshop key features of future regional water trust models that connect government, community and business.

The workshop was structured around a series of presentations, panel sessions and small group discussions (Attachment A – Workshop agenda) and was attended by representatives of water trusts in Australia, Federal and state government agencies, research institutions and community stakeholders (Attachment B – Attendees).

2 CURRENT AND POTENTIAL ROLES OF WATER TRUSTS

2.1 WATER TRUSTS - CONTEXT AND CHALLENGES

*Dr. Suzanne O'Keefe, Centre for Water Policy and Management,
La Trobe University*

Substantial reform in water management in the Murray-Darling Basin has occurred over the past two decades. Features of this have been buyback of entitlements under the Australian Government's Restoring the Balance program and the requirement to develop a Murray-Darling Basin Plan.

In the United States of America water reform has been experienced in part through "market environmentalism". This assumes that markets are essential to efficient allocation of resources and questions government's ability to respond effectively to market failures. This leads to the proposition that there is an important role for private organisations in facilitating reform.

Water trusts are one example of a private sector mechanism for facilitating reform. In the US they are typically non-profit organisations that acquire water rights for instream use and represent a coalition of environmental, recreational and philanthropic interests. They seek to transfer water rights from agriculture by means of a lease, donation or outright purchase. The transfer of the right is to the state and seeks to deliver public benefit through environmental outcomes.

One example of a water trust in the US is the Freshwater Trust, which arose out of an amalgamation of the Oregon Water Trust and Oregon Trout in 2009. The Oregon Water Trust itself has a much longer history, having commenced in 1983. The Freshwater Trust represents environmental and recreational interests and secures water rights mainly from agriculture. It brings together scientific knowledge and management expertise and in addition to facilitating on ground projects, aims to play an educative role.

A key water transfer mechanism used by the Freshwater Trust is leasing. This results in a temporary transfer of water rights and can include:

- standard annual or multi year leases,
- dry year leases; and
- split-season leases of a portion of the water right that can be used in irrigation early in the year with the remainder of the right for instream use in the summer.

Leases provide a number of advantages over other types of water transfer including that they are flexible, rights holders can observe the impact on production needs, leasing organizations can assess the effectiveness of the volume leased and the impact on agricultural communities can be observed.

In the US, experience with water trusts has highlighted a number of advantages over state programs, including:

- overcoming inadequate funding, ineffective enforcement, slow and expensive bureaucratic processes ;
- bringing agility to projects creating 'an atmosphere of possibility';
- securing funding from those more comfortable working with the non profit sector²;
- providing resources in the form of people, institutions, infrastructure and funding ; and
- diverting opposition and hostility away from the state, especially from agricultural interests.

In Australia, there is a more recent history in the development of water trusts and follows on from a longer history with land trusts like the Australian Wildlife Conservancy and Bush Heritage. There are commonalities between the Australian and US experience with water trusts, including a targeted approach in water rights acquisition, desire to avoid 'big brother' connotations of government buy-back and an emphasis on building relationships with communities.

There is also some divergence from the US experience. The Productivity Commission has advanced several reasons for this including that members of US trusts may be able to capture most of the benefits of improved environmental outcomes (e.g. recreational fishing) and that the provision of environmental services in Australia may be seen as traditionally the domain of government and further, that government activity in the market may crowd out private participation .

Australian water trusts have also demonstrated some divergence away from our own land trust experience, which may be due to the:

- tangibility and maturity of land market;
- lack of knowledge about the impacts of flow regimes;
- specification of water rights in terms of volume only does not necessarily allow for simple calculations of the extent of overlap between environmental and other benefits;
- relatively recent recognition of non-consumptive values of water for environmental and recreational interests.

Further maturing of the water trust concept in Australia faces some persistent challenges. First an array of information related issues must be addressed, including

- incomplete knowledge of the complementarity between ecological outcomes and between the needs of the environment and cultural and recreational values;
- the need to improve the flow of information between local and central bodies;
- the need to improve awareness and public knowledge of the potential of water markets;
- the appropriate incentive mechanisms to encourage increased private and local involvement in the provision of environmental goods; and
- the existing capacity of local organisations and to what extent capacity building is necessary.

Second, management and co-ordination issues remain such as:

- what is the appropriate mix of co-ordinated action and localised responses?
- are local managers better placed to manage all inputs (including land) and how to do so if water is held centrally?
- how can the self-interested behaviour of jurisdictions and localities be minimised?
- what governance arrangements are most suitable to harnessing local knowledge and agility?

Finally, the implications of current water rights policies and frameworks needs further consideration. For example, discussion is needed on (1) the scope for broadening the specification of rights from volumetric terms to include other dimensions that promote local action and (2) can complementarity be enhanced through rights and markets? (e.g. can urban water users play a bigger part?).

² King, M. A. (2004). Getting our feet wet: An introduction to water trusts. *Harvard Environmental Law Review* (28): 495-534.

³ O'Neill, M. (1989). *The Third America: the emergence of the non-profit sector in the United States*. Jossey-Bass. 215 pp.

⁴ Productivity Commission 2010, *Market Mechanisms for Recovering Water in the Murray-Darling Basin*, Final Report, March.

3 WHAT ARE THE KEY ELEMENTS OF SUCCESS?

3.1 WETLAND WATERING ON PRIVATE LANDS: THE MURRAY WETLANDS WORKING GROUP

Dr Deborah Nias and Mr Howard Jones, Murray-Darling Wetlands Ltd.

The successes of the Murray Wetlands Working Group (MWWG), which have been recognised through the awarding of the National Thies Riverprize to MWWG, were attributed to an approach described as “LISM”, involving:

- Leadership - in local regions;
- Integrity - apolitical and independent;
- Support - local, political, financial; and
- Monitoring – outcomes reported.

This approach was used to underpin the development of a number of private wetland watering projects, the first of which began in 2001 using Murray Irrigation Ltd’s irrigation infrastructure. In 2003, the number of projects expanded to also involve private irrigators pumping water from the river. An example of the transformation of one of these sites is shown in Figure 1. The projects undertaken aimed to reduce weeds, increase aquatic biodiversity and improve tree health.

For the period 2000 to 2006 MWWG diverted 82,451 ML into 177 private wetlands and 24 public wetlands covering an area of 65,308 ha. The projects engaged 131 private landholders across 2 catchments (Murray and Lower Murray-Darling). Cooperation was a feature of these projects with numerous partnerships with State and Local Government agencies, Irrigation Companies, Indigenous communities and scientific research organisations formed.

Monitoring and communicating the outcomes of the projects undertaken proved important and included preparation of reports, presentations at conferences, writing journal and media articles, preparing landholder reports and running workshops.

The project received broad recognition amongst the local community and was widely reported in the media at the time. The response of landholders involved with the project included “Our wetland site was very unwell and it was amazing to see this area literally come to life after three weeks. After three months, just out of nowhere, this place came alive...”

In summary it was stated that NGOs involved with water management have a proven record and can gain much by adopting an approach based on Leadership, Integrity, Support and Monitoring, with the latter forming part of an adaptive management approach and helping to build community confidence.



*Figure 1. MWWG watering site during 2003, near Deniliquin NSW.
Source: Murray Wetlands Working Group Inc.*

3.2 ACF'S JUST ADD WATER INITIATIVE

Dr Paul Sinclair, Australian Conservation Foundation

The objective of the Australian Conservation Foundation's (ACF) Just Add Water Initiative was to get ACF supporters actively involved in a campaign to protect and restore the Murray-Darling and to recognise that change is necessary, possible and achievable.

The target wetland, the Hattah Lakes, was identified using the following criteria: it needed to be high profile, have an ongoing land and water management regime in place, a monitoring program to measure the benefits, be aligned to an existing environmental watering program and not open to duck shooting. To make the project work relationships had to be developed with the Mallee Catchment Management Authority (CMA), Parks Victoria and the Victorian Department of Sustainability and Environment (DSE). Money was raised from individual supporters and corporate donors and cameras were donated and installed by Observant and Telstra in key locations to send real time images of water delivery to the ACF website.

The project achieved the following outcomes:

- 400 megalitres (ML) of temporary water purchased by the ACF and donated to the Victorian Government;
- carbon offsets purchased to offset emissions from diesel pumping; and
- DSE and Mallee CMA delivered water to Hattah Lakes on the back of Australian and Victorian Government environmental watering program.

The initiative received 600 cash donations, with most being of more than \$15. Victoria accounted for the highest number of donations (approximately 60%), followed by New South Wales, Queensland, South Australia, ACT and WA.

While market research shows that Australians think it is the government's jobs to protect the river, the Just Add Water Initiative gave people living anywhere a chance to directly make a difference for the river system.

The primary lessons learned from the project were that:

- there is only one investor able to recover enough water to make a significant improvement to wetlands in the MDB (i.e. Commonwealth Environmental Water Holder);
- environmental NGOs, Governments, business and local catchment management groups can work together;
- good personal relationships are vital;
- the public will financially support niche projects that have a clear goal, make it easy to participate and show the benefit of the donation for the MDB;
- the public image benefits for business participation are substantial. Quantifying these benefits is important; and
- there are exciting and largely untapped visual and interactive communication tools for engaging local, metropolitan and international audiences in wetland protection and restoration.



*Figure 2. Water being pumped into the Hattah Lakes as a result of the ACF's Just Add Water Initiative.
Photo by: Mallee CMA.*

3.3 MARKETS AND MOGGIES

Mr Matthew Harding, Healthy Rivers Australia

Healthy Rivers Australia's (HRA) (formerly known as Waterfind Environment Fund) presentation focused on water delivery to Paiwalla Wetland to support the re-introduction of the Southern Purple Spotted Gudgeon (*Mogurnda adspersa*, also known as "moggies"), a fish once thought to have been extinct in the Lower Murray (Figure 3).

There were numerous pre-cursors to this project. First, HRA had previously worked with the South Australian Government to establish over 30 temporary refuges for native fish during the drought and helped gain funding for the Alberton Primary School to establish its native fish education program, which involved establishing captive breeding facilities for the Southern Purple Spotted Gudgeon (Figure 4). Second, HRA had been the recipient of a 48.4 ML water donation from a NSW irrigator. The donation ended up becoming the first ever in Australia to receive a tax concession.

The project sought to transfer the donated water from the HRA water licence onto the South Australian River Murray Environmental Manager's licence before it was then pumped into the dry wetland basin. Obtaining funds to pay for pumping was initially a concern, however, was addressed by the South Australian Department of Environment and Heritage who funded a two stage pumping process which delivered 30 ML in February 2010 and another 15 ML in May 2010.

Key enablers for the project were having buy in from a wide range of stakeholders interested in management of the site, availability of donated water and a method for managing the threatened fish species in an appropriate manner. The organisations involved included:

- Native Fish Australia
- South Australian Department of Environment and Heritage
- South Australian Murray-Darling Basin Natural Resources Management Board
- Paiwalla Wetlands Habitat trust
- Mannum to Wellington LAP Group
- South Australian Department for Water, Land and Biodiversity Conservation

Other lessons learned from the experience of delivering water to Paiwalla and more generally delivering water to other sites during the drought were that:

- environmental water transfers are not a straightforward and require access to appropriate expertise;
- water trusts still require significant resources to operate, even though they are primarily not-for profit in terms of their financial operating structure; and
- water trusts can deliver water in an effective and collaborative fashion.



Figure 3. Southern Purple Spotted Gudgeon juvenile from Paiwalla Wetland. Photo: Kate Mason, South Australian Murray-Darling Basin Natural Resources Management Board.



Figure 4. Alberton Primary School students releasing Southern Purple Spotted Gudgeons into the Paiwalla wetland in March 2010. Photo: Alex Taylor, South Australian Murray-Darling Basin Natural Resources Management Board.

3.4 COMMUNITY RALLIES FOR REGENT PARROTS

Ms Jen St Jack, Water for Nature, Nature Foundation South Australia

“Community rallies for Regent Parrots” described a project that watered River Red Gums that were nesting trees for Regent Parrots at Hogwash Bend in South Australia. Regent Parrots are listed as vulnerable under the EPBC Act and there are less than 400 breeding pairs in South Australia. They nest in hollows of River Red Gums and prefer trees with good leaf cover. Hogwash Bend is the largest known Regent Parrot breeding site in South Australia and is owned by two private landholders. Prior to watering it had received no floodwaters since 1994.

The first step in the project was to spark the interest of donors to enable water purchase. This was done by publishing an article in the Nature Matters newsletter targeting Nature Foundation South Australia (NFSA) members, which led to seven city-based donors providing cash donations to purchase 1 ML of allocation each.

Engaging with Local Action Planning Associations was also important. These non government groups were established in the mid 1990’s in response to South Australia’s ‘Border to the Barrages’ report with support from the South Australian Government through the Natural Resource Management Board and the then Murray-Darling Basin Commission. They provide a link between community and natural resource managers and access to local knowledge and influence.

The project is part of the broader Regent Parrot Recovery Project that involves Riverland West Local Action Planning Inc., Mid Murray Local Action Planning Inc., Department of Environment and Natural Resources and Greening Australia. As part of this, monitoring is undertaken by University of South Australia Environmental Science students and revegetation is done by Ramco & Waikerie Primary Schools and local landholders.

The watering project conducted by NFSA involved four 1 hectare priority sites that contained trees regularly used for nesting. Spray irrigation was applied on 10 hour shifts. 7 ML was applied from March to May 2009 and then another 7 ML from December 2009 to April 2010.

The project had corporate involvement with the Waikerie Chocolate Café donating proceeds from chocolate sales and Fosters Pty Ltd providing access to irrigation equipment. The project also had community engagement with neighbouring landholders assisting with operation of the pump, moving equipment and monitoring.

It was believed essential to “prove the point” through monitoring of key factors like tree health and Regent Parrot nests. Monitoring was also assisted through establishment of photopoints. Responses attributed to watering at the site included:

- Tree health improvement - foliage density increased by 76% compared with control trees at 34%;
- Nest numbers increase:
 - Before: 22 trees, 29 nests
 - After: 38 trees, 47 nests

Key factors to success included:

- Celebrating the project – This was done through an event to launch each watering (Figure 5) and through involvement of media which generated stories in the local press, the Advertiser and radio .
- Acknowledgement - Every mention of the project acknowledges donors, partners and volunteers. Ongoing updates were sent to all involved and there was good press coverage in radio, local and state papers.

Key conclusions from the project were that while 14 ML was not a lot of water, the water trust developed by NFSA had provided the spark for a project that delivered significant, measurable environmental benefit. The project also demonstrated that localism gets the best results.



Figure 5. Launch event for the watering of River Red Gums at Hogwash Bend. Photo: Angela Hawdon, Nature Foundation South Australia.

4 WHAT ARE THE OPPORTUNITIES AND CAPACITIES OF WATER TRUSTS?

4.1 OPPORTUNITIES FOR WORKING WITH WATER TRUSTS

Dr Ben Docker, Director, Environmental Water Policy, Department of Sustainability, Environment, Water, Population and Communities

Background

Commonwealth Environmental Water (CEW) was established by the Water Act 2007 and is responsible for the management of Commonwealth environmental water holdings in order to protect or restore the environmental assets of the Murray-Darling Basin. CEW has stewardship of more than \$1.5 billion of water assets totalling 1025 GL of water (as at October 2011; Figure 6). Subject to the outcomes of the Basin Plan processes this will increase to up to \$5 billion in the years ahead as further water entitlements are recovered. The role of CEW is to manage efficiently and effectively the Commonwealth's water assets to maximise environmental benefit.

The context in which CEW operates has changed significantly in recent years. First, there has been a shift from a drought induced triage approach with small volumes aiming to protect habitat and species toward using larger volumes to restore habitat in the post drought period. Second, there has been a growth in water holdings with allocations increasing (with the recovery from drought) and entitlement acquisition continuing because of the 'bridging the gap' commitment. The function also continues to evolve through:

- new approaches such as multi-site connected use and shepherding of environmental water down the system;
- coordinating use with other environmental water managers;
- engagement with various local arrangements; and
- implementing an adaptive management approach.

Commonwealth environmental water holdings

Multi-site use is becoming an increasingly important feature of environmental watering with Basin wide coordination required. Active management of Commonwealth water also provides opportunities for additional efficiencies, for example, through:

- using infrastructure (e.g. regulators) and pumps to direct water to particular sites;
- calling water at a time that achieves the highest outcome such as to supplement natural flows or planned environmental water and achieving more natural seasonal flows (e.g. winter rather than summer flows) ;
- carrying over water to subsequent years to prepare for drier periods;
- transferring water between catchments in the southern connected system; and
- in the future, trading allocations and/or entitlements to support future purchase of other allocations and entitlements.

Current delivery arrangements include:

the development of water use proposals by catchment management authorities and local environmental reference groups, who bring these forward through state agencies;

- Basin-wide prioritisation, where proposals are assessed using a prioritisation framework with advice from the Scientific Advisory Committee and further consultation with the Murray-Darling Basin Authority and local delivery managers; and
- local delivery, monitoring and reporting, where on-site delivery and monitoring is managed by CMAs, state agencies, river managers, parks authorities and community groups.

The assessment framework considers different water availability circumstances from extreme dry, dry, median, wet to very wet and assesses proposals against five criteria:

1. Ecological significance of the asset;
2. Expected ecological outcome;
3. Potential risks (including water quality and flooding);
4. Long term sustainability of the asset (including management arrangements);
5. Cost effectiveness and operational feasibility.

Some of the main challenges identified to date in delivery of environmental water include:
scaling up to large events;

- constraints on overbank events due to the flood risk of private property;
- river operations and accounting rules designed for irrigation delivery to a single point;
- the need to develop new rules to achieve system wide benefits that:
 - permit allocations to be called at multiple points along the river;
 - 'shepherd' environmental water so it is not diverted or re-regulated; and
 - allow the re-use of return flows for environmental benefit.

Opportunities and challenges of working with water trusts

Some of the potential opportunities of working with water trusts in the future include:

- coordinated use of Commonwealth environmental water with water held by trusts;
- information/knowledge sharing amongst peers on how to manage entitlements for environmental benefit and how to address issues like water accounting;
- entering into arrangements for planning, delivery and monitoring of Commonwealth environmental water; and
- integrated land and water management.

There are also a range of challenges that need to be considered as the Commonwealth works more with water trusts, including:

- ensuring proposed projects support basin-scale connected system benefits;
- potentially high administrative costs around management of public assets when dealing with many smaller entities, such as through contract management, compliance and monitoring; and
- the inability of the CEWH to delegate its functions under the Water Act to other entities.

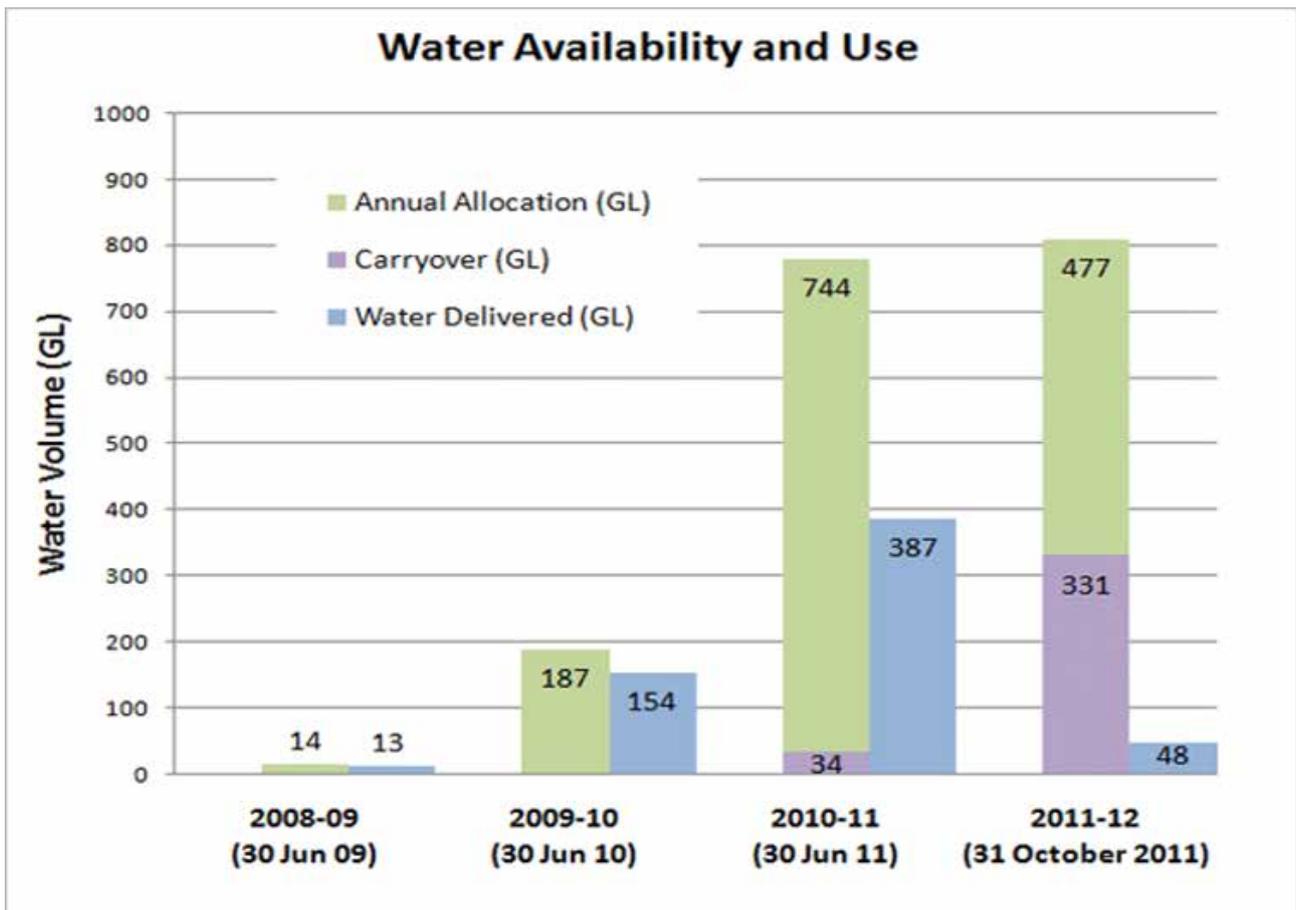


Figure 6. Volume of Commonwealth environmental water holdings allocated, carried over and delivered from 2008-09 to 31 October 2011. Note that current figures (updated monthly) are available at: <http://www.environment.gov.au/ewater/>.

4.2 THE ENVIRONMENTAL WATERING PLAN - WHAT OPPORTUNITIES ARE THERE FOR WATER TRUSTS TO GET INVOLVED?

Michael Peat, Assistant Director, Environmental Water Policy, Murray-Darling Basin Authority

The overall policy approach of the draft Basin Plan's Environmental Watering Plan is to provide a strategic, flexible and adaptive plan focussed on coordination of environmental watering. The aim of the plan is to achieve maximum environmental benefit from the management of environmental water. The timeline for implementing the plan is outlined in Figure 7.

There are a variety of misconceptions about the Environmental Watering Plan in terms of what it does and does not do. For example, it is not a prescriptive plan and does not mandate particular targets or specify flows that must be achieved. It does set overall environmental objectives for the water dependent ecosystems of the Basin and does set out a method for determining what assets require watering (Table 1).

Table 1. Common misconceptions of the draft Basin Plan's Environmental Watering Plan.

| Does not | Does |
|---|--|
| Mandate particular targets | Set overall environmental objectives for the water dependent ecosystems of the Basin |
| Specify flows that must be achieved | Set out method for determining what requires environmental watering |
| Direct the use of environmental water | Set out methods and principles for prioritisation and use of environmental watering |
| Fundamentally change the roles of existing water managers | Provide a framework that seeks local and regional input |

Localism is recognised as a central tenet of the overall policy approach and is about governments partnering with local and regional communities and organisations to:

- utilise local knowledge and skills;
- work collaboratively;
- devolve management, where appropriate;
- improve transparency; and
- enhance a sense of local ownership.

Environmental management framework

The environmental management framework sets out the way environmental watering will be managed, including Basin- and regional-scale planning and Basin- and regional-scale annual prioritisation. The framework also sets out arrangements for consultation and coordination to ensure that the overall objectives for the Basin's water-dependent ecosystems can be achieved.

Long-term environmental watering plans are to be prepared by Basin States and consultation is required with holders of environmental water, managers of planned environmental water, local communities and any other parties materially affected by the management of environmental water. Plans must identify possible cooperative arrangements for the delivery of environmental water, which may include water trusts.

Annual watering priorities must be proposed by Basin States and should identify possible cooperative arrangements for the delivery of environmental water. Holders of environmental water, including water trusts, are to provide information to assist Basin states. This provides opportunities for water trusts as water holders to propose annual watering priorities for consideration.

Basin annual watering priorities are to be published by the MDBA and updated as required. An underlying principle is that parties carrying out environmental watering will have regard for these priorities. In developing Basin annual watering priorities the MDBA will take advice from an Environmental Watering Advisory Committee and also consider advice provided by other parties.

What opportunities are there for water trusts to get involved?

There are a number of ways that water trusts can get involved with informing the development and implementation of the Environmental Watering Plan. This includes the opportunity to engage with the MDBA during the consultation period on the Basin Plan and once the Basin Plan is finalised, there will be opportunity for water trusts to:

- play a constructive role in localism;
- collaborate under the new planning arrangements; and
- provide advice to the MDBA on Basin annual watering priorities.

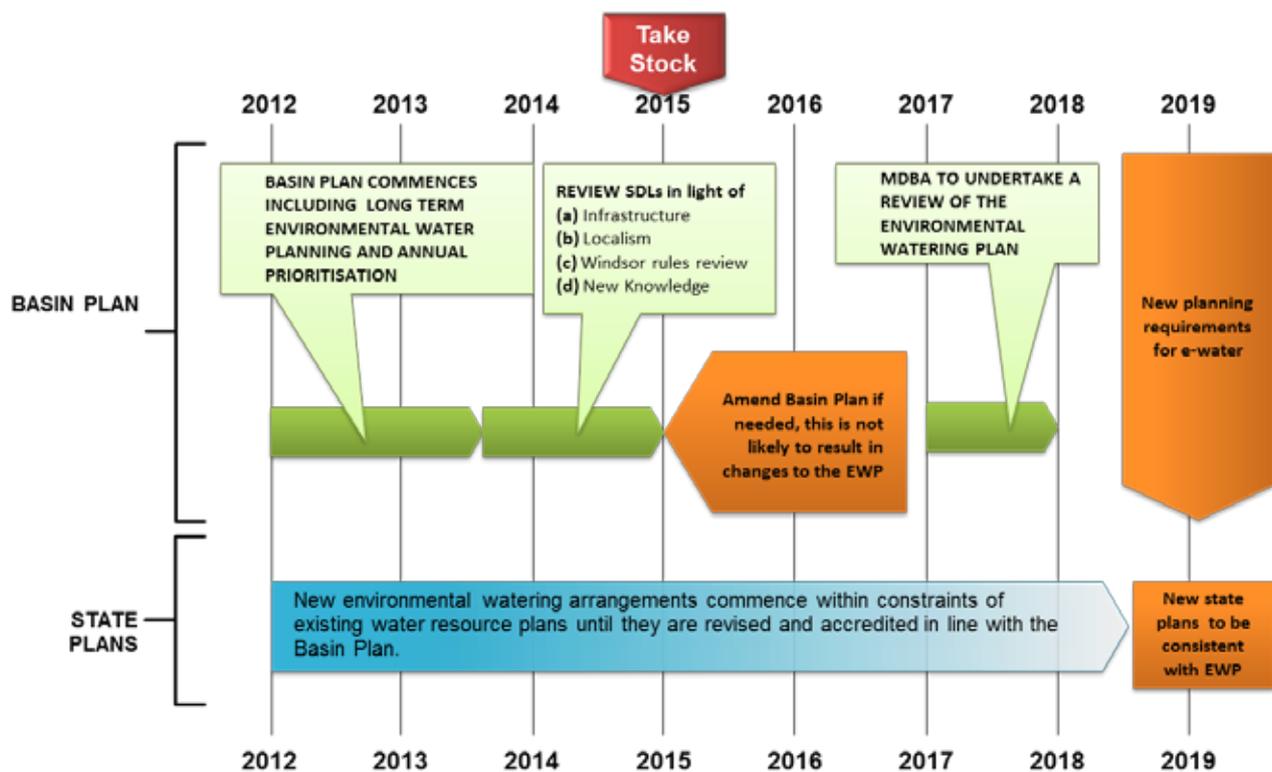


Figure 7. Timeline for implementation of the Environmental Watering Plan

4.3 SOUTH AUSTRALIAN ENVIRONMENTAL WATER MANAGEMENT AND ENVIRONMENTAL WATER TRUSTS

Ms Heather Hill, Department for Water



Figure 8. Boggy Creek, Hindmarsh Island, South Australia. Photo: Adrienne Frears, Department for Water.

The South Australian Department for Water's environmental water responsibilities include environmental water policy development, environmental water bids, trades, and accounting, program management for The Living Murray icon sites and supporting weir pool and river operations investigations.

There are a number of potential sources of environmental water available for use in South Australia, including:

- 2 major environmental water holders: The Living Murray and Commonwealth Environmental Water;
- return flows from upstream watering e.g. from rivers like the Goulburn and Campaspe;
- donations from individual irrigators and trusts;
- 200 GL of Water Allocation Plan Class 9 licence water for pool connected wetlands;
- the proposed South Australian Environmental Water Reserve, which will begin with 15 GL of held water in 2012-13 increasing to 30 GL by June 2014.

Working with water trusts in South Australia

The South Australian Government has worked with water trusts such as NFSA and Healthy Rivers Australia since 2008 on a number of joint projects (Table 2). There has been an agreement between the trusts and DFW to work together on site selection and to jointly acknowledge each other in media releases. A number of policies have been put in place, including the need to trade environmental water to the Minister for the River Murray's account prior to being put into a wetland to provide transparency and ensure accounting and reporting includes all environmental water used along River Murray in South Australia. A policy was also put in place giving fee exemptions for environmental water transfers in the state.

Benefits and opportunities of working with water trusts

There were a number of benefits identified by the Department for Water in working with water trusts. These included the ability to access water during the drought when government held water reserves were low and to achieve genuine outcomes through forming partnerships with state, other NGOs, irrigators and the CEW. There was also the potential to enhance environmental outcomes by combining multiple water sources.



Figure 9. Little Duck Lagoon, near Berri, South Australia. Photo: Mike Harper, Department of Environment and Natural Resources.

Based on recent experience, the potential challenges of working with water trusts include determining:

- who should partnership agreements include?
- how will the costs of pumping and monitoring be met?
- how to choose suitable sites?
- how to ensure media releases acknowledge all project partners? and
- what should be the minimum standards for monitoring and reporting.

The principle benefits will be the opportunities to develop partnerships between the state government and private landholders and irrigators, especially where landholders can use their own irrigation infrastructure to deliver water on private land.

Table 2. Overview of water trust projects in South Australia

| Site | Volume (ML) | To benefit | Year | Water source |
|-------------------------|----------------|-------------------------------------|---------------------------------|--------------------|
| Little Duck Lagoon | 4.16, 10, 3.64 | Wetland | 2008 | HRA, NFSA, private |
| Akuna wetland | 32+8 | Wetland | 2008-2009 | Private, HRA |
| Paiwalla wetland | 30, 6.75 | Purple spotted gudgeon introduction | 2009-2010 | HRA, NFSA |
| Hogwash Bend wetland | 6.8, 2.5, 3.4 | Orange bellied parrots | 2008-2009, 2009-2010, 2010-2011 | NFSA |
| Boggy Creek | 1.1 | Murray hardyhead | 2008-2009 | HRA |
| Berri Evaporation Basin | 300+600 | Murray hardyhead | 2011-2012 | NFSA, CEW |

4.4 OPPORTUNITIES FOR WATER TRUSTS TO WORK WITH GOVERNMENTS – A VICTORIAN GOVERNMENT PERSPECTIVE

Mr Mike Jensz, Senior Project Officer, Victorian Environmental Water Holder

The VEWH is an independent statutory body established on 1 July 2011 that makes decisions on the best use of water in Victoria and coordinates with other environmental water holders. It has three Commissioners and five staff and works with 10 waterway managers to manage and deliver environmental water entitlements.

VEWH holds environmental water entitlements across Victoria in 13 source systems for use across 17 receiving river systems (Figure 11). The water holdings form part of Victoria’s broader Environmental Water Reserve, which incorporates passing flows set aside for the environment as obligations on rural and urban consumptive entitlements, and unregulated flows and spills from storages, usually created by heavy rainfall. The combined water holdings will equate to a long-term average of about 600 GL per year once all water recovery commitments are complete, and this broadly represents about 5% of all environmental water.

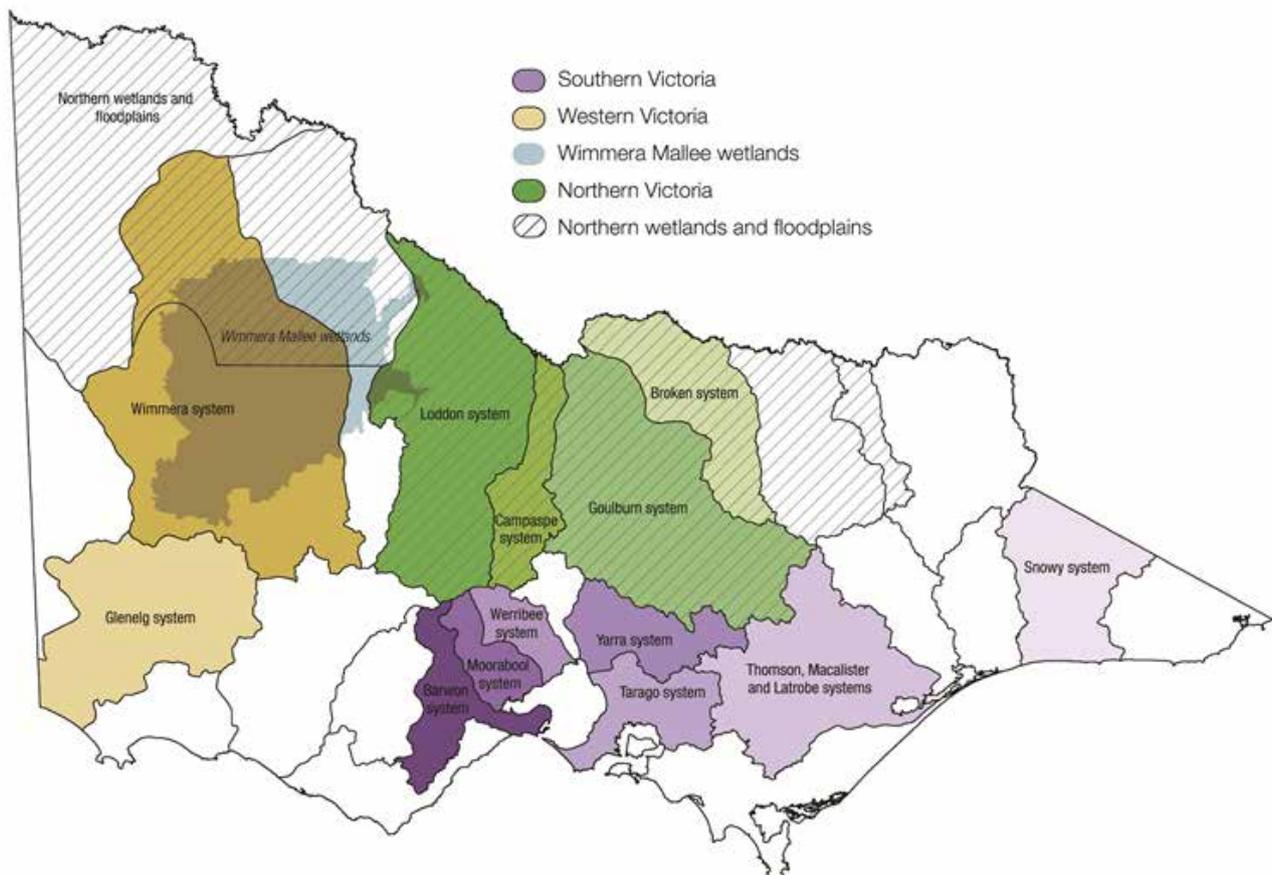


Figure 10. Location of environmental water holdings across Victoria.

Who the VEWH works with

Environmental watering in Victoria occurs through the collaboration of a range of agencies and individuals to ensure it is coordinated and effective (Figure 11). It operates within a framework of devolved decision making that is enshrined in the Water Act 1989. VEWH reports to the Victorian Minister for the Environment and has a key coordination role with the Commonwealth Environmental Water Holder and the Murray-Darling Basin Authority.

Responsibility for the local planning and delivery of environmental water lies with the 10 waterway managers. They engage their communities to identify priority waterways, environmental values and watering priorities and they manage the physical delivery of environmental water, monitoring and reporting. They also engage with relevant land managers and storage operators.

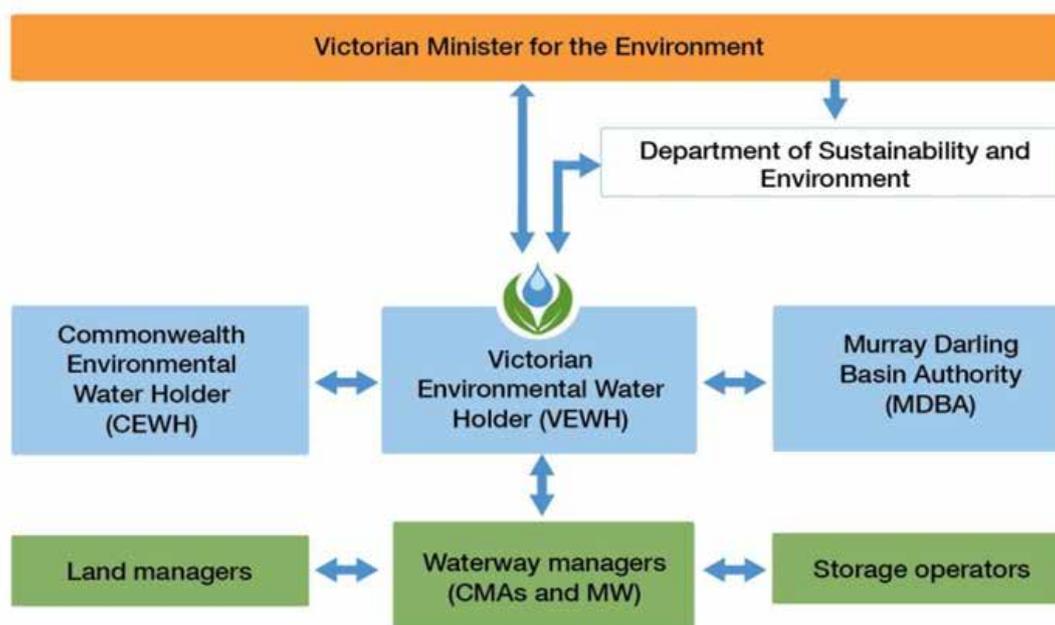


Figure 11. Governance structure for environmental water management in Victoria.

Planning framework

Decisions are based on scientific studies and local engagement done by the catchment management authorities and Melbourne Water. There are a number of points in the planning frameworks where water trusts can provide input.

- **Seasonal Watering Proposals** – waterway managers prepare Seasonal Watering Proposals for every regulated river system. This point in the planning framework provides an opportunity for water trust input via waterway managers.
- **Seasonal Watering Plan** – The VEWH prepares its Seasonal Watering Plan based on the proposals received from waterway managers. This point in the planning framework provides an opportunity for water trust input via waterway managers and the VEWH.

When opportunities arise the VEWH will work together with waterway managers to determine the most beneficial use of environmental water donations.

Examples of water donations in Victoria

There are a number of examples of water being donated to environmental projects in Victoria. These are summarised as follows:

| Year | Description |
|---------|--|
| 2004/05 | - 1,308 ML donated from irrigators and delivered to Mallee wetland sites |
| 2005/06 | - 5,078 ML donated from irrigators and delivered to Mallee wetland sites |
| 2006/07 | - 4 ML donated by a small block irrigator to Buxton's Bend near Karadoc in the Mallee - 1 ML donated by a member of the public to water an iconic River Red Gum ('Eagle Tree') in the Gunbower Forest |
| 2008/09 | - Local Boort community donated 100 ML for Little Lake Boort to maintain bird refuge |
| 2009/10 | - ACF provided 400 ML to Hattah lakes through the 'Just Add Water' initiative - A New South Wales water entitlement holder donated 16ML to the Hattah Lakes |

Conclusion

In Victoria, water planning and delivery is undertaken at the local level (including risk management). The VEWH coordinates water planning at the state level to ensure environmental water delivery in Victoria maximises state-wide environmental objectives. VEWH also has the legal approvals to apply water on public land in Victoria and is able to facilitate the delivery of environmental water. This delivery mechanism is the same as used with the Commonwealth Environmental Water Holder. CMAs or VEWH are the appropriate contacts for water donations and hence water trusts in Victoria.

5 SMALL GROUP DISCUSSIONS

After hearing from water trust representatives on the key success factors behind their work and then from government agencies on the challenges and opportunities of working with water trusts, the workshop was split into a series of small group discussions. These discussions aimed to identify what constitutes best practice for water trust operation and then determine the next steps to maturing the water trust model in Australia.

The summary of these discussions is presented below.

What is 'best practice' for water trusts?

- water trusts are able to successfully manage smaller, lower priority projects within the larger scale context of Basin/State environmental watering plans
- the water trusts offer the opportunity for local groups and individuals to make a difference – this can be scaled up when these projects are linked with others to add up to a bigger effect (leveraging)
- water trusts can develop local champions more effectively as a result of strong local links
- best practice for water trusts is to have clear governance frameworks, accounting and transparency of operations
- providing regular feedback to clients, be they community or government is vital to the success of water trusts
- for best practice to mature there is an ongoing need to learn and share knowledge through delivery trials and adaptive management
- best practice can be more easily implemented when there is flexibility in milestones and an understanding that 'the environment' does not always comply with artificially set deadlines – we cannot always anticipate the risks
- best practice for water trusts means SELLING THE STORY more effectively and letting people know what trusts can do.

What are the next steps to take in terms of maturing water trusts with respect to transaction management?

- recognition that trusts can manage environmental water in open and transparent ways
- trusts have the capacity to operate professionally
- need for trusts to define the boundaries of their operation
- trusts need to increase their maturity and capacity for commercial and legally recognised operations
- trusts can review their roles and responsibilities with regard to environmental water management, make clear statements about what they can and cannot do,
- possibly look at combining organisational administrative and financial functions so fewer coordinating bodies rather than each organisation doing their own thing. This would also reduce transaction costs as well as capitalising on using those organisations that have tax deductibility status (DGR)
- need to examine the carry-over capacity for NGOs
- need for trusts to work together to identify priority areas for action rather than responding adhoc to water and sites becoming available
- by working together the trusts could also make better use of water (multi-use) through linked and coordinated watering projects. This could also lead to a reduction in the costs associated with delivering water to sites
- trusts could 'pool' intelligence and contacts so that they are more knowledgeable about when opportunities may arise for purchase and use of environmental water
- a partnership model between all the trusts offers significant reduction in transaction costs in a range of areas (administrative, financial, technical etc.).

What are the next steps to take in maturing water trust governance arrangements?

- good governance is the key to increasing confidence of government and other clients in the capacity of water trusts to manage environmental water
- governance needs to acknowledge interactions between land and water management (not just in-stream)
- strong governance allows water trusts to work with many different public and private sector agencies and seek a diversity of funding approaches
- important to investigate 'sovereign risk' and implications for water trusts
- trusts must meet the public benefit test for DGR charitable organisation
- would be useful to examine the existing not for profit governance models and guidelines in developing a set of principles for water trusts
- it will be important for the water trust industry to self organise or suffer the move to becoming irrelevant
- important point of differentiation for water trusts is that they are public organisations serving the public, not the Minister – this allows a greater degree of flexibility to adapt to different conditions and arrangements as required
- might be possible to look at trading water to raise funds that can then advance the trust's objectives
- trusts might want to examine different 'process models' .

What are the next steps to take in maturing water trusts with respect to involving other parties and developing partnerships?

- trusts do not necessarily have the resources to deliver water so this is where partnerships with other organisations are crucial
- there needs to be more publicity about what water trusts do, who they are, where the trusts exist – increased public awareness may assist in accessing more public funding
- value of water trusts is that they enable local buy in and engagement
- people will often prefer to donate to a trust rather than a government agency, however, there are concerns about capacity to deliver given the smallness of the organisation
- worth examining what scale water trusts can best operate – local and small, or would an amalgamation of water trusts provide greater opportunities for large scale impact?
- CEWH and MDBA need to formulate a policy about how they will engage with water trusts in terms of co-funding, partnership with their water on local and regional projects
- local water trusts can feed knowledge up to more nationally based trusts which can then go into national planning processes through the CEWH and MDBA
- important to clarify roles and relationships between States, NRM, LAPS and trusts
- accountability of CEWH water through to States through to trusts and then back again – important these roles and responsibilities are clear
- CMAs/NRM regional bodies have local scientific knowledge, LAPS have local knowledge and influence, irrigators know about water, local businesses know about funding and universities and schools often do monitoring – many different interests, different organisations, but all can work together through the water trusts to achieve shared goals.

Other ideas:

- water trusts work with aboriginal groups to develop the potential of the model in covering both land and water management on aboriginal managed land.
- develop a set of operating principles for water trusts that are shared (some kind of membership so that clients can feel confident about the services being offered).
- water trusts continue to develop closer relationships and investigate possibility of merging some functions to reduce transaction costs (for example, could outsource that to an independent agency to manage finances, administration etc).
- water trust group continues to meet and form a community of practice so that knowledge can be shared and best practice develop
- water trust group consider working together to identify priority areas for environmental watering – scale up smaller actions to have bigger impact.

6 DISCUSSION

WATER TRUSTS – AN ESTABLISHED MODEL

The water trust model has now been operational in Australia for over a decade and in this time has achieved significant environmental outcomes through water it managed on behalf of government, or through facilitating delivery of water donations to government and community projects. There now stand over 16 projects since 2004/05 that have delivered over 8.8 GL of donated water to environmental projects in the southern MDB (Figure 12).

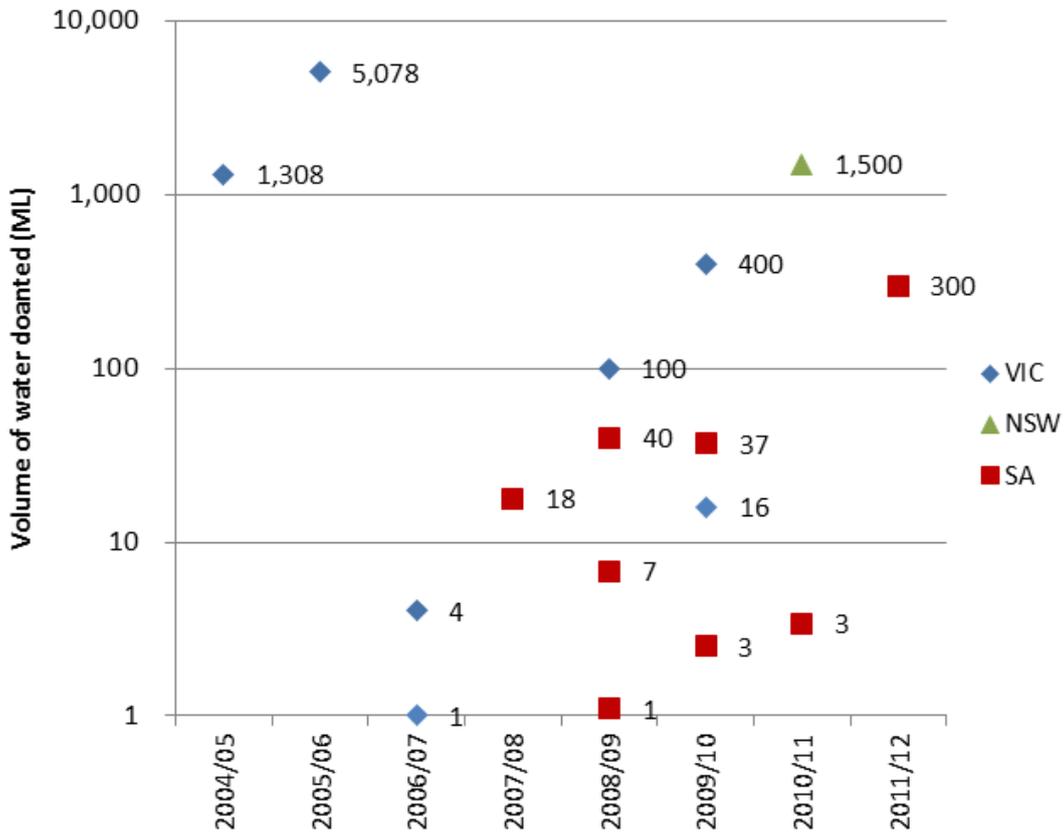


Figure 12. Summary of water donations made to environmental projects since 2004/05 in the southern Murray Darling Basin across NSW, Victoria and South Australia. This does not necessarily represent all of the donations made.

The water trust model has gained traction for a number of reasons. Trusts have been able to achieve real and substantial outcomes with relatively small volumes of water leading to a range of outcomes such as improved tree health and weed reduction to providing refuge habitat for threatened native fish. This ability to “do a lot with a little” was especially valuable during the Millennium Drought when Government’s were not able to meet all environmental water demands and trusts were able to source water donations or use financial donations to buy allocations from the water market.

Water trusts have proved very successfully at getting community buy in to projects from people living on the river and in the city. This has come through a focus on building relationships between community groups and members of the public and trusts and has helped to (a) generate funds to support projects largely from city based donors and (b) access volunteer time from those living close to target wetlands. Contributions are greatest where there is a clear goal for a project. These relationships have been built through time by monitoring the outcomes of projects and “proving the point” of watering, which helps build community confidence in the approach. Acknowledging project partners especially in the media has also been important to building relationships, which helps to share the success amongst those who support projects.

One of the lessons from the ability of water trusts to achieve community buy in has been recognition of the importance in the way people “experience” a project, which is much more than just the outcomes they observe and extends to recognition of their effort and an ability to share in the success.

Importantly, all government entities involved with the workshop – Commonwealth Environmental Water, Murray-Darling Basin Authority, South Australian Department for Water and the Victorian Environmental Water Holder – recognised a role for water trusts to play in future water management, provided this occurred through the correct points of contact and contributed to state or basin wide objectives.

CHALLENGES AND POTENTIAL FUTURE DIRECTIONS

Despite their successes, water trusts operating in Australia must also grapple with a number of challenges. They are often small and work in poorly defined patches meaning that they need to better define their boundaries of operation. They also need to adopt a more integrated approach to identifying priority areas for action rather than responding adhoc as water and sites become available.

The workshop participants recognised that trusts must start to self organise or suffer “becoming irrelevant”. As part of this they should focus on how to increase their maturity and capacity for commercial and legally recognised operations and consider combining organisational, administrative and financial functions rather than each organisation operating independently.

Building on the past success of water trusts and the challenges identified during the workshop, potential future directions should consider the following key issues:

Good governance - Good governance is recognised as the key to increasing confidence of government and other stakeholders in the capacity of water trusts to manage environmental water. Future work could include examining existing not for profit governance models and guidelines to develop a set of principles for water trust operation.

Consolidate resources – Despite their NGO structure, water trusts need to ensure sufficient resources are available to sustain operations such as campaigns for water or financial donations and to have people on the ground to build and maintain local relationships. Trusts could consider merging some organisational, administrative and financial functions as well as capitalising on those organisations that have tax deductibility status.

Site prioritisation – Trusts should consider working more closely together to identify priority areas for action rather than responding ad-hoc to water and sites becoming available. This process could also seek to identify options for scaling up smaller actions to have bigger, regional impacts.

Learn and share knowledge – To mature best practice, water trusts need to learn and share knowledge through delivery trials and adaptive management approaches.

Sell the story – The value and achievements of water trusts has been communicated to a narrow audience to date. Water trusts need to get better at “selling the story” and letting more people know what trusts can achieve.

Aboriginal water management - Water trusts can work with aboriginal groups to explore models for facilitating land and water management on aboriginal managed land.

Work with government to develop enabling policies – Water trusts could work with government agencies to formulate additional policies on how to engage with water trusts in terms of co-funding and roles and responsibilities in delivering and/or partnering in local and regional projects.

ATTACHMENT A - WORKSHOP AGENDA

The role of water trusts in Environmental Water Management

Workshop, 1 December 2011, Canberra - Hotel Kurrajong, 8 National Circuit, Barton

Facilitator – Dr Siwan Lovett, Australian River Restoration Centre

| Time | Topic |
|----------|--|
| 9.30 am | Tea and coffee |
| 10.00 am | Welcome - Mr Craig Knowles, Chair of the Murray-Darling Basin Authority |
| 10.10 am | Workshop context, purpose and overview - Dr Mark Siebentritt, Water Trust Alliance |
| 10.20 am | Session 1 – Current and potential roles of water trusts |
| | An overview of water trusts: The Australian and international experience– Dr. Sue O’Keefe, La Trobe University |
| | Panel session with Dr. Sue O’Keefe and Dr James Fitzsimmons – Discussing water trusts and lessons from land trusts – Chair, Gary Jones |
| 11.05 am | Session 2 – What are the key elements of success? |
| | Wetland watering on private lands: The Murray Wetlands Working Group – Dr Deborah Nias, Murray-Darling Wetlands |
| | ACF’s Just Add Water initiative - Dr Paul Sinclair, Australian Conservation Foundation |
| | Markets and moggies – Mr Matthew Harding, Healthy Rivers Australia |
| | Community rallies for Regent Parrots – Ms Jen St Jack, Water for Nature, Nature Foundation SA |
| | Panel session – Chair, Leith Bouilly |
| 12.15 pm | Lunch |
| 1.00 pm | Session 3 –What are the opportunities and capacities of water trusts? |
| | Opportunities and expectations of working with water trusts – Dr Benjamin Docker, Director, Environmental Water Policy, CEWH |
| | How could trusts help deliver on the Basin Plan’s vision for localism? - Mr Michael Peat, MDBA |
| | Opportunities for working with water trusts – A South Australian Government perspective. Ms Heather Hill, Department for Water |
| | Opportunities for working with water trusts – A Victorian Government perspective. Mr Mike Jenz, Victorian Environmental Water Holder |
| | Panel session – Chair, Prof. Lin Crase, La Trobe University |
| 2.10 pm | Session 4 – Small group discussions “Connecting success stories and emerging opportunities to define the role of water trusts over the next decade. “ |
| 3.10 pm | Afternoon tea |
| 3.30 pm | Session 5 – Bringing our thoughts together and considering future actions |
| | Small group reports from Session – Facilitator |
| | Actions and ongoing work |
| | Independent observations on key outcomes – Dr. Sue O’Keefe, La Trobe University |
| 3.55 pm | Closing remarks - Howard Jones and Mark Siebentritt |
| 4.00 pm | Close |

ATTACHMENT B - ATTENDANCE LIST

| Name | Organisation |
|-------------------|---|
| Rosalind Bark | CSIRO |
| David Bell | Murray-Darling Basin Authority |
| Leith Bouilly | Crossroads |
| Claudia Boyles | National Water Commission |
| Jeff Connor | CSIRO |
| Lin Crase | La Trobe University |
| Roger Davis | Murray-Darling Basin Authority |
| Ben Docker | Commonwealth Environmental Water |
| Bruce Donald | Nature Conservation Council of NSW |
| Phil Duncan | First Peoples Water Engagement Council |
| James Fitzsimmons | The Nature Conservancy |
| Rebecca Gee | Commonwealth Environmental Water |
| Roger Good | Murray-Darling Wetlands |
| Matthew Harding | Healthy Rivers Australia |
| Heather Hill | Department for Water |
| Anne Jensen | Nature Foundation SA |
| Mike Jenz | Victorian Environmental Water Holder |
| Gary Jones | e-Water CRC |
| Howard Jones | Murray-Darling Wetlands |
| Craig Knowles | Murray-Darling Basin Authority |
| Siwan Lovett | Australian River Restoration Centre |
| Ray Najar | Murray-Darling Basin Association |
| Deborah Nias | Murray-Darling Wetlands |
| Sue O'Keefe | La Trobe University |
| Michael Peat | Murray-Darling Basin Authority |
| Andrew Reilly | Nature Foundation SA |
| Michael Rhodes | Australian Agricultural Company Limited |
| Tom Rooney | Healthy Rivers Australia |
| Stephanie Secomb | Commonwealth Environmental Water |
| Mark Siebentritt | Healthy Rivers Australia |
| Paul Sinclair | Australian Conservation Foundation |
| Jen St-Jack | Nature Foundation SA |
| Rebecca Turner | Department for Water |
| Sandra Walpole | NSW Office of Environment and Heritage |

