

Symposium workshops

Transcription edited by Dr Peter Mitchell and Ann McGregor, Biolinks Alliance

In the afternoon of the Symposium, participants were divided into workshop groups. Two workshop sessions were held, with participants changing topics in the second session. Following the first workshop session, discussion leaders and others reported back to the symposium.

1. River frontage restoration

Leaders: Professor Peter Gell (Federation University), Ben Zeeman (Glenelg Hopkins CMA)

Broadly, both tables discussed restoring the whole of the riparian zone, which may have been up to several hundred metres wide 200 years ago, but has been reduced significantly due to the impacts of mining, vegetation loss and creation of impervious surfaces. Landholders were central to the discussion – how to get them to fence off their rivers. Issues raised included off-stream watering for stock, the risk that landholders would lose their access and water rights if they planted along the river, the concern about vermin sheltering in the riparian vegetation, and misconceptions about trees that fall into the river (or placed as snags) causing blockages to the water. The key solutions to these issues are building solid relationships with landholders and providing them with information about the benefits of the work. The CMAs can provide a lot of information. There are also a lot of examples from America where they have a lot of different approaches to riparian restoration.

2. Leaky landscapes

Leaders: Paul Foreman (Biolinks Alliance), Dr Greg Kerr (Nature Glenelg Trust)

Under the broad heading of “leaky landscapes”, two very different topics were discussed but with a common theme: putting back the “plug” to keep water in the landscape.

Paul Foreman’s group discussed the profound impact of mining in the goldfields of central Victoria. The vegetation we see now is very different from the past; it has regenerated with large numbers of spindly and poorly-structured stems competing for moisture. In addition, the ground surface is hardened so water runs straight off the surface and is lost to plants. In Victoria, tens of thousands of hectares have been affected. The key approach to replacing the “plug” has been thinning of the regeneration, as demonstrated by Mid-Loddon Landcare at Shelbourne Forest and Parks Victoria in the Rushworth forests. This helps to hold water in the environment and – importantly – restore the microbial activity and productivity of the soils. Actions proposed to address the issue include raising awareness with demonstration projects and local publicity to show people what can be done.

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Greg Kerr's workshop focussed on the wetlands of south-west Victoria's volcanic plains. Management in the past focussed on draining wetlands and more recent landscape-scale irrigation and plantations have further lowered groundwater levels. The extent of these changes is remarkable, with many wetlands filling up much later and emptying more frequently than in pre-European times. Restoring the natural cycles of wetting and drying has enabled many species to breed successfully again. This restoration is relatively straightforward and not too costly, often simply by plugging or filling in drains. Many landholders are getting interested in doing this work. And Deakin University's [Blue Carbon Lab](#) has been working on blue carbon habitats (i.e. carbon storage) in wetlands and saltmarshes. There are many places across central Victoria where wetlands could be plugged. If the Australian Government ticks off on these sites as good places to store carbon, they will attract carbon offset payments – and a dollar return for landholders. And banks and other institutions are already looking at ethical investments in landholders who are doing the right thing – a positive sign.

3. Managing wetlands, spring soaks, and bogs

Leaders: Helen Arundel (Glenelg Hopkins CMA), James Nelsson (Loddon Plains Landcare Network and GOANNA Project)

The Glenelg Hopkins region has many small seasonal herbaceous wetlands, and the GHCMA has a funding program to protect them. This program includes raising awareness as they are not easy to identify if you don't know what to look for. Landholders with wetlands are assisted to apply for funds and enter into long-term agreements with the CMA. The project provides a carrot for landholders, but landholders are also reminded that these wetlands are listed under national environmental laws. It is important to work with landholders to manage wetlands as a part of their farm and business. Inka Veltheim is studying Brolgas across the area. Although Brolgas are only one value of these wetlands, they are highly valued by landholders. Inka has found that Brolga chicks in the period before fledging use multiple wetlands – particularly in Victoria where there are many small wetlands dotting the landscape. This means that, to ensure Brolga chick survival and recruitment into the breeding population, we need to protect more than single wetlands. Many of the wetlands have been lost. We need to think about connectivity by fencing multiple wetlands. Type of fencing is important: ringlock and barbed wire will kill chicks, juveniles and adults.

The second table talked about spring soaks and wetlands in northern Victoria. James described how the hydrology of wetlands differs with different substrates, as shown in the Kamarooka Wetland complex. In this harsh environment, many wetlands are ephemeral. There are issues with farmers doing works to protect these wetlands: they don't want to upset their neighbours and there is a cultural history in the current landscape (such as "grandfather dug those drains"). Again, the key is to establish relationships with landholders, work with neighbours and use the Landcare approach. The Landcare approach

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is less threatening because it is seen as a farmers' organisation, and many people do not want a bureaucratic approach from people who don't own land.

James gave an example where all the farmers came on side with a wetland restoration project driven by Landcare. Some 280ha of previously cropped wetland have been fenced and planted around the edge to reduce salinity and evaporation, provide shelter for sheep, and biodiversity benefits. There are a number of benefits in treating a cluster of wetlands, including establishing a corridor between small wetlands that could be widened with future planting, and efficiencies of scale e.g. direct seeding and planting by one contractor, bulk purchase of fencing materials.

Another project relates to spring soaks between Mt Kooyoora and Mt Korong. Spring soaks have recently been listed as Threatened under the Flora & Fauna Guarantee Act. The North West Goldfields Intermittent Soak Community Monitoring Programme (see [here](#) and [here](#)) aims to better understand the hydrology of the soaks, which are much more abundant and widely dispersed than indicated on maps. Participants use a tablet with an app and maps to load photos and data for sites as they walk, recording when the soak is active, its extent, and vegetation along a transect into fenced-off areas. [Editor's note: The North-West Goldfields Intermittent Soaks rely on the availability of a reliable supply of water, including the seasonal discharge of shallow groundwater on the boundaries of steep granitic and metamorphic ranges. When these occasional soaks run (approximately 2 – 3 years out of every ten), they become ephemeral wetland habitats which support unique vegetation communities.]

4. Environmental water

Leaders: Greg Fletcher (Wimmera CMA) and Stuart Lovejoy (DELWP)

Greg provided a case study where a small local wetland in poor condition received an environmental flow as a result of a community group promoting their particular cause. The wetland came back really well. This triggered discussions round the table on the governance of environmental water: who is responsible, where do the flows come from, and why do some areas get flows and others don't. Greg and Stuart explained that water was saved through the Wimmera Mallee Pipeline project, when the open channels were converted to pipes and water saved from evaporation and infiltration was earmarked for the environment. A sustainable water strategy was developed with input from many stakeholders including environmental spokespeople. That strategy more or less guides how the water is distributed for environmental flows. Stuart described how DELWP used science to look at whether the allocations provided a fair share to all stakeholders - farmers, towns and the environment. Discussion revolved around how it doesn't seem like a fair system with lots of good causes competing for water, and how it is worked out to get the best outcomes for the environment. The role of dams in taking water was also discussed. The final messages are that the CMA plays an advocacy role in getting flows to the right places

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and that community groups can have input into the decisions by talking to the CMA, but also making their voices heard about the best places for environmental water.

5. Cultural water

Leaders: Ben Muir, Wimmera CMA

Ben reported: Indigenous groups in central and western Victoria - the *Barengi Gadgin* Land Council and the *Barapa Barapa* and *Dja Dja Wurrung* - have similar wetlands and are doing similar projects looking after cultural sites and cultural flows. We need to look after our waterways to provide all the natural resources for our people. That is one reason why we have employed Cultural Water Officers around the state – to protect the cultural sites and help Traditional Owners out, and also help the rivers and waterways get back to what they used to be. There are a lot of cultural values around the wetlands and rivers. Part of our cultural water projects are about talking to farmers and landholders. Glenelg Hopkins CMA has a “Yarns on farms” project where Traditional Owners talk and negotiate with landholders who have properties on rivers and wetlands, and with CMAs. There are also opportunities for everyone – Aboriginal and non-Aboriginal - to work together on restoration of rivers and wetlands, and cultural surveys. Groups are also assisted by archaeologists. Archaeologists come out with Traditional Owners to help understand the cultural values out there - what a scar tree or artefact scatter or shell midden is about. That is where we are working – creating more opportunities for our next generations to move forward.