

Tracking water through the National Archives of Australia
Just Add Water: Schemes and Dreams for a Sunburnt Country
National Archives of Australia Touring Exhibition

The National Archives of Australia is the archive of the records of the Australian Government. Over three hundred kilometres of files, hundreds of thousands of photographs and sound recordings, film, maps, plans and other items make up a collection that is a significant part of Australia's memory.

To tell some of the stories held in this remarkable collection, the Archives regularly mounts touring exhibitions that highlight different part of the collection; in this way taking the stories back to the people they belong to. In 2005 the Archives' exhibition 'Just Add Water' focused on the way Australian society has managed, or tried to manage, that most precious resource, water. Jay Arthur, the curator of the exhibition, recounts some of the processes involved in developing that exhibition.



Fig 1. Sign pointing to the Murray River, c1946.
National Archives of Australia.

On a shelf in the repository of the National Archives of Australia was a large brown paper parcel, nearly a metre long. Inside the parcel were rolled documents, carefully tied with string. I unwrapped the bundles, probably the first person to do so since a long-ago clerk tied those precise knots. The documents were a series of maps and graphs from the early twentieth century related to planned work of locks and weirs along the Murray River.

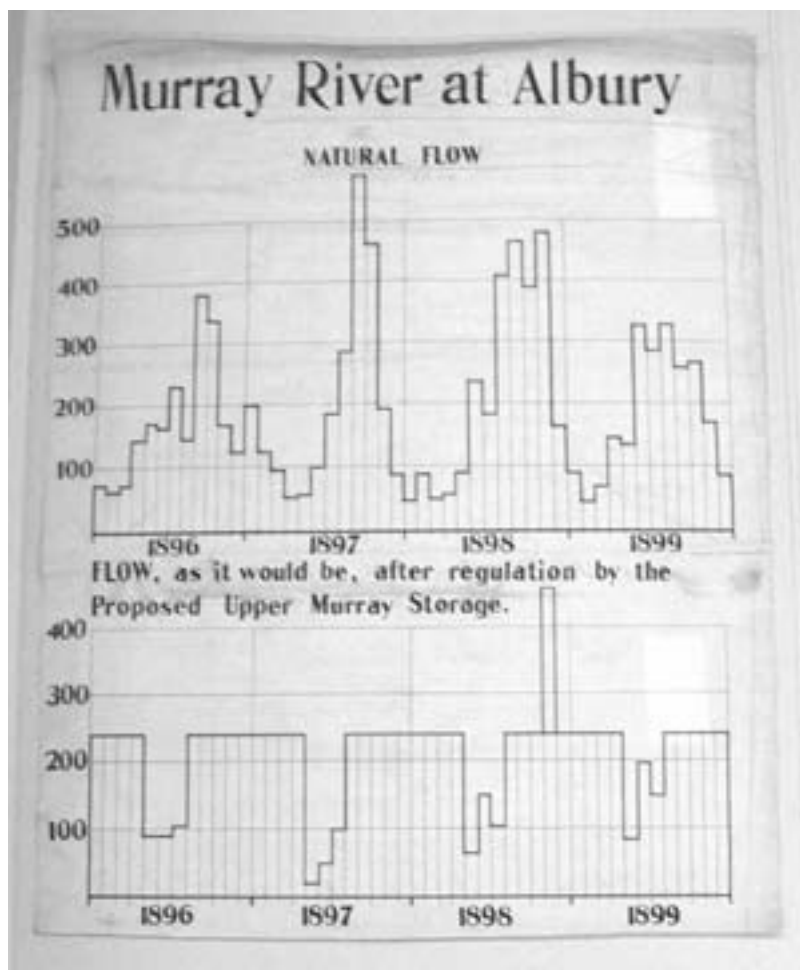


Fig 2. Graphs indicating the potential water levels of the Murray River before and after the dams and weirs building program had been completed. c 1920s. National Archives of Australia.

One of them was the graph I was particularly searching for. It looked fairly ordinary – just two bar graphs, one above the other. The first graph showed the heights of the Murray River in the first two decades of the twentieth century. It looked like a cross-section of the Himalayas – towering peaks and deep valleys. The other graph was one of an imagined future, showing the projected heights of the Murray River *after* the

planned series of weirs and locks had been built. . This time it looked like a picket fence – a neat row of bars all the same size, with a few missing pickets and only one very high point. When I started looking for it, I didn't know it existed – but I knew it *must* exist.

The (Australian) journeys of water

Australia is the flattest inhabited continent and, after Antarctica, the driest. In the hinterland beyond the coastal fringing mountains, rivers wind serpent-like across the landscape. Onto that flat landscape falls one of the most variable rainfalls in the world and hence water bodies are extremely variable. Floods in such a flat country spread over vast areas. In dry times, rivers may lie around in waterholes or disappear entirely, flowing underground.



Fig 3. Adelaide River, NT, 1974.
National Archives of Australia.

But the cartography of water in Australia at beginning of the twenty-first century reveals major new water distributions. Water is likely to be contained in a dam (Australia holds more water per capita than any other country in the world) or travel

down the straight line of a water-supply pipe or an irrigation channel, as well as along a winding changeable river. Rivers like the Murray no longer regularly experience huge variations in volume but maintain a more reliable flow. The dream expressed in the graph is not quite realised but almost so. Over 70% of the water Australians use flows down those straight lines of irrigation channels and pipes.

Water is now a permanent and transforming presence in country where it was once an ephemeral occurrence; its presence betrayed by the windmills that mark the bores, pumping up underground water. And the millions of farm dams seen shining across the landscape from the viewpoint of the passenger in a plane are evidence of millions of local transformations of a water system.



Fig 4. Dam recreation, Queensland, 1970s. Many of the permanent water bodies named as 'lakes' in Australia are in fact dams. Natural lakes are less likely to be permanent.

National Archives of Australia.

These new water distributions have left a paper trail.

The story of water and the National Archives

Among those 300 km of government records in the Archives collection winds a paper trail of water works – policy documents, proposals and plans for dams and irrigation projects, reports, investigations, letters from the public, press cuttings, photographs and much more. Evidence of part of Australians' relation with their most precious resource, water. And among all these records was the graph of proposed works on the Murray River.

Why was I looking at that graph?

I was working on the Archives' most recent exhibition in its regular touring program, bringing the stories from the collection to the public. Some exhibitions have been on topics which have a 'timeless' appeal – for example, on lighthouses and their particular Australian history, or on animals like bullocks, horses and dogs used in the Government workforce. Others aim to show the relevance of the Archives' collection to current preoccupations – for example, *Between Two Worlds* which told the story of the 'stolen generations' and the focus of this paper, *Just Add Water: Schemes and Dreams for a Sunburnt Country*, which tells stories of national water management – the 'replumbing' of a continent. The topic was chosen because water and its management is becoming one of *the* issues of the twenty-first century and I wanted to show the relevance of the Archives' historic collection to arguments about water management today.

This exhibition followed up that paper trail of water management, to tell some of the stories of what Australians have done with water in this country. What I hoped I could do too was to look at the mindset behind the schemes and the dreams for water management.

The basis for the content was the Archives' collection, so the 'take' on water management was the Commonwealth's involvement in this central issue. And though water management is generally understood to be a state function, the Commonwealth has had its spanner in the waterworks since federation – big projects need Commonwealth funding and many waters cross state-jurisdictional divides. (In fact, the waters of the Murray were so important that they were included in federation arguments and in section 100 of the Constitution.) The giant infrastructure projects of the 20th century – the Snowy scheme, the Ord River scheme, the irrigation projects on the Murray and Murrumbidgee – all involved Commonwealth funding, as did other water-related projects such as the CSIRO'S cloud-seeding experiments and bores for government stock routes. And because it is the Australian Government, Commonwealth departments and ministers not only initiated water policies or reports, they also received countless suggestions, appeals, proposals and complaints from institutions, companies and the general public.

The exhibition content therefore revolved around those aspects of water management which most closely related to our collection. So I included material on rainmaking, looking at attempts to increase rain through faith or through science. (The Archives contains many desperate letters begging the Prime Minister of the day to hold a National Day of Prayer for Rain, as well as those CSIRO documents on cloud-seeding.) I looked at dams and dam building, an activity which the Government has been heavily involved in since Federation. One of the first major infrastructure projects of the Government was the funding contribution to the Hume Dam on the Murray. The Archives holds extensive materials on irrigation projects such as the Murray-Murrumbidgee and the Ord, and many documents on the use of groundwater, including water-use in the Great Artesian Basin.



**Fig 5. Irrigated orchard, Murrumbidgee Irrigation Area.
National Archives of Australia.**

Government files are closed for 30 years after their creation, so documents available for our research were those dated up to 1975. Thus the material from the collection that appeared in the exhibition was historic, apart from the photographic collection which is not subject to that restriction. What I could display then were the earlier sections of these ‘water tracks’ – the paths that led us to where Australia is now.

The presentation of the content

The way I wanted to present the material was complex. I wanted to demonstrate the relation between the historic material and the present day, not just by some contemporary examples of water management, but by allowing Archives' documents to show that water management is a question not just of engineering but of attitudes and emotions.

For example, Australian society like all similar societies is totally dependent on secure access to large amounts of fresh water, so the building of large dams is an essential part of the infrastructure processes. But the Hon C R 'Bert' Kelly touched on the attitudinal or emotional relation to dams when he commented, speaking as Minister for Works that whenever he heard of an election, *I feel a dam coming on.*¹ The public response is sometimes almost as if having a dam will make more water. The exhibition included the emotional aspects of water-management. The files on the attempts to save the original Lake Pedder in south-west Tasmania from being flooded are a refutation for those who think government files could not contain passions such as grief or despair. And alongside the booklets advocating the development of new irrigation settlements I put the files containing evidence from those who were given unsustainable irrigation blocks to work. Again, the personal pain is there in the records.

¹ See www.wondu.com/Newsletter_2_2_2002.htm and many other sources. The original comment was not located.

LAKE PEDDER ACTION COMMITTEE

L.P.A.C. Hobart :
G.P.O. Box 1288N,
Hobart,
Tasmania. 7001

L.P.A.C. Northern Regional Committee :
P.O. Box 486,
Burnie,
Tasmania. 7230

L.P.A.C. Tamar :
P.O. Box 1116,
Ligonier,
Tasmania. 7256

L.P.A.C. Victoria :
28 Kintore Street,
Camberwell,
Victoria. 3124

also

The Colong Committee,
Third Floor,
18 Artyde Street,
Sydney,
N.S.W. 2000

The Conservation Movement,
P.O. Box 57,
The Union,
University of Queensland,
St Lucia,
Queensland. 4067

Ann Van der Doye (SSRS)
72 Bessely Street,
Parramatta,
A.C.T. 2007

Any reply to this letter should be directed to the L.P.A.C. Hobart.

127 Gaulburn Street,
WEST HOBART. 7000.

28th May, 1972.

To Her Majesty, Queen Elizabeth II.,
Buckingham Palace,
LONDON. S.W.1.

Your Royal Highness,

On behalf of the signatories of this petition, I ask
Your Majesty's support in saving "Australia's most
beautiful lake".

It is situated 900 feet above sea-level in a National
Park in the South-West wilderness area of Tasmania.
Its magnificent beach of white quartzite is two miles
long and in Summer is 700 yards wide. The uniqueness
of its beauty, which nature has spent thousands of years
in creating, is now threatened with extinction.

General petitions have been organised. One of 10,000
signatures was addressed to the State Government in 1967.
Others in recent months from other Australian States
amounted to a total of 250,000 signatures, these have
been addressed to Federal Parliament.

We would not appeal to Your Majesty if the issue were a
political one. But the preservation of our national
heritage, especially when it involves a lake whose
aesthetic and scientific values are of world importance,
cuts across party considerations.

We are therefore encouraged to hope that Your Majesty
will consider this petition and help to save this small
but invaluable part of Your Majesty's Commonwealth.

Yours faithfully,

Brenda Hean

(Mrs.) BRENDA HEAN.
FOR THE EXECUTIVE COMMITTEE.

Please, help us.



Fig 6. Plea for assistance to save Lake Pedder.
National Archives of Australia.

The dreaming and scheming for water projects that were not built – or at least so far – suggest another complexity. This is the attitude towards the land itself and the idea

that that very little was impossible, given a (bigger) dam, pump or pipe. A new land could be created if only the ideas were big enough. There is little sense in these plans of there being any 'dialogue' with the place, that there was anything to learn from this particular environment. The modifications were all to be to the place, not to us.

Audience

All National Archives exhibitions tour for three to four years and this tour includes both urban and regional Australia. This exhibition is as likely to find itself in Kalgoorlie or Gladstone as Perth or Brisbane. This means a very diverse audience. More importantly, it includes people for whom the irrigation industry, for example, was not just a topic in an exhibition, but their means of livelihood. I had to make sure that *all* the visitors to the exhibition felt that it was their exhibition; that neither urban nor regional/remote audiences felt the agenda belonged to the other group.

As part of the exhibition research, the Archives conducted a small number of focus groups; these groups included both these rural and urban audiences. The topic was already decided; the passion and enthusiasm of the participants reassured us that it had been a good of topic. The groups showed us not only the passion but also the sense of ownership of the issues around water, which the exhibition team was conscious of as we were working on the exhibition.

They also reminded me of the divisions between urban and regional responses. One of the images I wanted to use in the exhibition was this:



**Fig 7. Burrinjuck Dam in drought, 1968.
National Archives of Australia.**

The urban response was *Oh, there's another tragic picture of drought-stricken country. Makes you feel depressed.* The regional response was *Oh, what fantastic cracking clays. There's tons of life down in those cracks, just waiting for the rain to come so it can all burst out.*

Relations with visitors – the participatory visitor.

I wanted to encourage this sense of ownership of water management issues. One of the important messages of the exhibition was *If you turn on a tap, you are a water manager.* I could see how the topic of the exhibition encouraged this perception; at one point when I were discussing the exhibition content with one focus group, one member of the group exclaimed, “ Now I understand – the Murrumbidgee flows through my shower!”

Following on from this research, which indicated the sense of ownership expressed by many for this topic, I included in the exhibition several different avenues for people to express their views.

At each venue, I am asking the local water authority to pose a question based on a local water issue – in Canberra it was *Do we need another dam?* In Adelaide it was *What is healthier – bottled water or tap water?* Visitors recorded their answers on cards which at the end of the exhibition stay at that location were passed on to the authority posing the question. (It is crucial that people know that their answers are going to be read – they are not being used as ‘exhibition wallpaper’.) The cards being present in the gallery space also enabled visitors to respond to the answers left by other visitors.

The CSIRO is using the exhibition to assess people’s emotional and personal responses to water – how they value different uses of it. Visitors answer a screen-based questionnaire and the answers are being collected by researchers at CSIRO. Understanding community attitudes to various water uses will assist them in their communication strategies for their desired outcomes in their various water projects around Australia.

Other interactives use humour in cartoon-style interactive games to communicate contemporary messages about water management. Allowing visitors to experience emotions – either sorrowful or joyful – in an exhibition enables them to remember more intensely its messages.

I wanted to tell the national story – but make people feel they were part of that story. That exclamation from the focus-group member *The Murrumbidgee flows through my shower* tied the personal life of that man to the life of the river. It made his actions part of the management of that particular river. One of the messages I wanted to tell was that although the story was one of national water management, the story belonged to everyone. *If you turn on a tap you are a water manager. If you eat, you are part of the irrigation industry.* It is both a national story and a personal responsibility. As part of making that connection, I included an exhibit where visitors could record their memories of flood or drought – and fire. This gave people a personal connection to the material on display.

Communicating environmental issues

How does my experience with researching and exhibiting this story of Australian environmental history relate to communicating about other environmental issues such as climate change?

The Archives collection demonstrates the persistence of dreams. The Bradfield Scheme to relocate water from coastal to central Queensland for irrigation – a kind of tropical version of the Snowy Mountains Scheme – was first suggested at the end of the nineteenth century. It was still being mooted at the beginning of the twenty-first century. The scheme was so commonly put forward to the Government that a standardised letter was produced to be sent to proponents of the idea.

Flooding Lake Eyre is another very persistent Australian dream – sometimes the flooding is to be done from Queensland and sometimes from a pipeline from Spencer Gulf. The idea behind the flooding is often that having a large body of water in that desert area will change the climate. Pipelines in general are also an Australian pre-occupation. One such proposal suggested the building of a pipe from the Paroo River in New South Wales across to the Eighty-Mile Beach in Western Australia and on the way using the water to flush the gold from Lake Amadeus

Joseph Holibal
Hódmezővásárhely
N. Árpád u. 42.
Hungary, Europe

Budapest, End December 1933.



Dear Sir,

I have an idea to make a channel from the Spencer Bay to the Lake Eyre being with 12 meter under the surface of the Ocean. I think this channel would serve to the traffic of the land of the Eyre, by it the Lake would become a lake of permanent water and surface resulting there a milder climate and permanent ground water. It would be a big chance for the unemployments of the Commonwealth and of course a useful investment.

Because I have here no topographical map of this part of the world and if the idea would please you so I beg you to be so kind as to send me any map and I shall make the plan of this channel. If you had no map of this also I do gladly the surveying of the channel alone.



I am,
Sir,
Your obedient servant
Holibal József
Civil Engineer

Fig 8. Using Lake Eyre as a 'dam' has been a consistent preoccupation in ideas concerning Australian water management.
National Archives of Australia

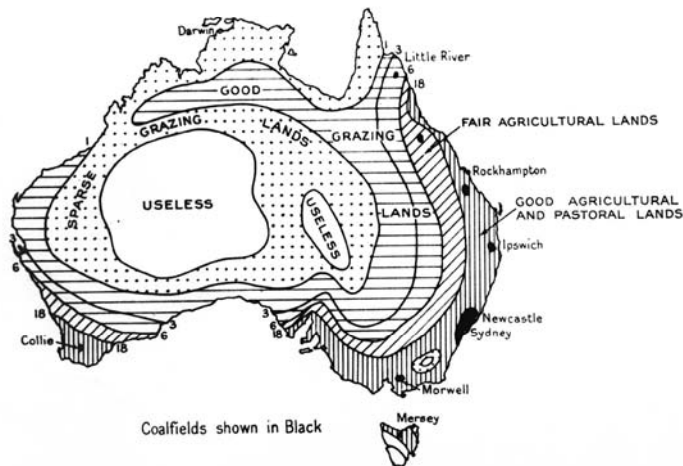
Bizarre those these schemes are, they are nevertheless an extreme form of the Snowy Scheme and the Ord Scheme and other major damming, piping and irrigation schemes

– an engineering response to the aridity and variable rainfall of Australia. It is almost as if Australia is seen as a badly-plumbed structure and if only the flow can be re-arranged, it will be able to realise its right potential. The persistence of these dreams is the persistence of the belief that human intervention is able to fix perceived environmental problems.

Another constant thread in the proposed schemes is the idea of water running to ‘waste’ – as large amounts of water ending up in an estuary are seen to be. (There is no sense in these complaints of the role a seasonal flush of fresh water might have in these ecosystems.) The imperative is to use the water that was otherwise wasted by the ‘profligate’ natural system.

This sense of the rightness, amounting sometimes to an obligation, of making use of a ‘wasted’ resource is part of a moral thread running through many of these water project proposals – both the realised and the unrealised. Water-management is often seen not just as an economic activity but also as a moral one. Making the desert blossom, justifying the occupation of country such as northern Australia by developing it and populating it, are part of the driving forces behind proposals such as the Ord River Scheme and the Bradfield Scheme – sometimes acknowledged and sometimes not.

HABITABILITY MAP OF AUSTRALIA
After T. Griffith Taylor in "Limits of Land Settlement"



NB. The boundaries between regions represent lines of population density.

Fig 9. The geographer Griffith Taylor produced this map in the 1920s. His message about the nature of the Australian environment was unacceptable to opinion at the time and he continued his career overseas. His difficulties demonstrate the power of dreams over reality in the national imagination. National Archives of Australia.

It illustrated the power these dreams have over ordinary people – where were the protests for those valleys and communities drowned by the Snowy Scheme? The strength of the national dream of reconstruction was so strong that the grief was seen as ‘inappropriate’ and the few complaints are of personal economic loss, as if the complainants felt that was the only vocabulary available to them.

The Archives records show the continued pursuance of actions that had negative consequences noted and re-noted for years before they were addressed. The evidence in this exhibition constructs a people who live as much in the country they have imagined as in the physical country. That does not mean they do not receive

information from the physical country, but they might not take all or some of it in, for a variety of reasons, or they might interpret it in a particular way.

The stories in the exhibition reminded those of us working on the exhibition that when communities set up a relation with a place, it is difficult to change that relationship. There may be all kinds of reasons why that is so. Why was there the gap of over half a century between the letter in the Archives collection expressing concern at the continually-flowing bores and the Government's beginning a program of piping and capping flowing bores – was it political, social, economic, cultural? Or a mix of some of these? This lag between information and action is evidenced in many issues to do with water management.

Researching this exhibition also reminded us very sharply of the truth that attempting to work with environmental issues takes place not just in an economic or scientific or ecological context, but in one of inertia, habit, entrenched attitudes, fear, anxiety, misplaced confidence and the pursuit of long-held dreams.

In 2005, *Just Add Water: Schemes and Dreams for a Sunburnt Country* opened in the Archives' main office in Canberra and later that year began a three-year national tour. www.naa.gov.au/exhibitions

Relevant readings

J M Arthur *The default country: a lexical cartography of twentieth century Australia* Sydney: UNSW Press, 2003

Bradfield scheme for "watering the inland": meteorological aspects (a) possibilities of climate amelioration, and (b) rainfall characteristics of river basins proposed to be harnessed Commonwealth of Australia, Commonwealth Meteorological Bureau, [Melbourne] 1945

Idriess, Ion *The great boomerang* Sydney: Angus and Robertson, 1941

Powell, J M Griffith *Taylor and "Australia unlimited"* St Lucia, Qld. University of Queensland Press, 1993.

Plains of promise, rivers of destiny: water management and the development of Queensland 1824-1990 Brisbane: Boolarong, 1991.

Watering the garden state: water, land and community in Victoria, 1834-1988 Sydney: Allen & Unwin, 1989

Watering the western third: water, land and community in Western Australia, 1826-1998 Perth, W.A.: Water and Rivers Commission, 1998.

Seddon, George *Searching for the Snowy: an environmental history* St Leonards, N.S.W.: Allen & Unwin, 1994