

THE WATER WALK AT EMIGRANT CREEK DAM

**A Users Guide to the Far North Coast Water Cycle
and the Rous Water Walk at Emigrant Creek Dam**





WHY LEARN ABOUT WATER?

With climate change and greater population pressures, water is becoming a more important issue throughout the world and here on the north coast.

Water is a finite resource. It is the source of life.

We are a part of the water cycle. We depend on it, and everything we do affects it.

Complex interconnections link us with our environment.

It is not enough to know that we 'ought to' use less water and not pollute. It is much better to understand the 'bigger' picture, how we fit in, and why it is important to respect and take care of this precious resource.

To do this, we need a deeper understanding of water and its role in our lives and the environment.

We need to experience it and get a feeling for it.

We need to know how to make a difference.

This knowledge will help us to take action in our daily lives, to make informed contributions to management decisions about shared resources, to lobby government and to influence industry, to teach our families and friends.

We are all responsible.

We need to look after water for future generations – not only of humans but of whole ecosystems of plants and animals.

We need to look after the water. The water looks after us.

As the traditional custodians of our water catchment areas say
"Garima gala nyabay. Gala nyabay garima ngali ngih."

HOW TO USE THIS GUIDE

The first part of this guide tells a story about the Water Walks project, why it was created, who's been involved, and what's been achieved.

The second part of the guide contains a series of Information Sheets that are directly related to each sign on the Water Walk and individually address specific water-related topics.

The end of the guide contains some useful resources: a glossary, index and information about how to get further Water Walk materials.

There are two ways to use this guide:

- as a guidebook for the Water Walk at Emigrant Creek Dam; and
- as an educational resource to learn or teach about key water topics.



ON THE WATER WALK

This guide has been designed to accompany you on The Water Walk at Emigrant Creek Dam and maximise your learning experience!

The Water Walk is a short walking track dotted with a series of sculptured signs that tell a story about the water cycle and our place in it. It has been created for as wide a range of people as possible.

There is another Water Walk at Rocky Creek Dam, another major water source on the Far North Coast, near Dunoon. It has its own guide book.



So, as you stroll along the meandering pathway towards the dam lookout, you can find out more detail about each topic raised by the signs. The headings on the signs are the same as the headings on the 'Info Sheets'. In general, each section of the guide marked by a coloured 'tab' relates to a different group of signs along the pathway.

On some of the signs, there are learning exercises that invite you to use your head (thinking), heart (feeling) or hands (doing). Each 'Info Sheet' contains all three types of exercises so that you can more fully understand a topic, or choose the way that you learn the best.



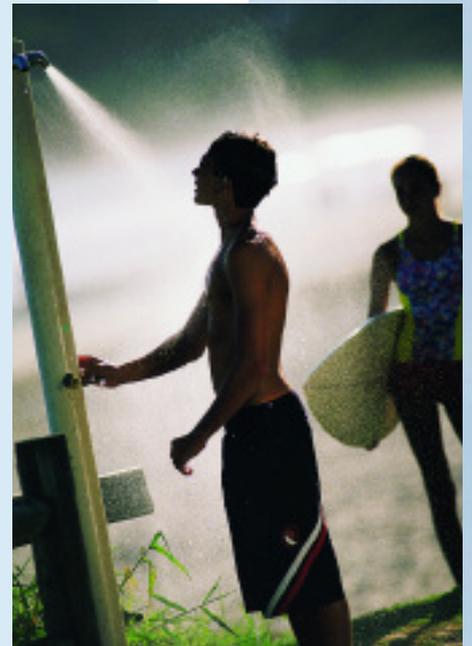
You might use this guide on your own, reading it on a quiet walk by yourself, or as part of an interactive group visiting Emigrant Creek Dam. The 'Info Sheets' can be used to create your own guided tour or educational program through the Water Walk by reading out more detailed information and learning exercises. Teachers, environmental educators, tour guides, and other group leaders should find this particularly useful. *The Water Walk: A Users Guide* is written for high-school level and above.

A USERS GUIDE TO THE WATER CYCLE

Even if you don't get to Emigrant Creek Dam, we all do our own 'water walk' every day because the way we behave, all our actions, everything we do, relates to water. We all use water. We drink, wash, and play in water. Our wastes are carried away by water. Most products we use or consume have used water to make them. Because our lungs are 90% water, simply breathing involves water! Just about everything we do involves using water and has an impact on the natural water cycle.

Therefore, this guide has also been written as a local 'Users Guide to the Water Cycle' for people living in the Far North Coast region. It is:

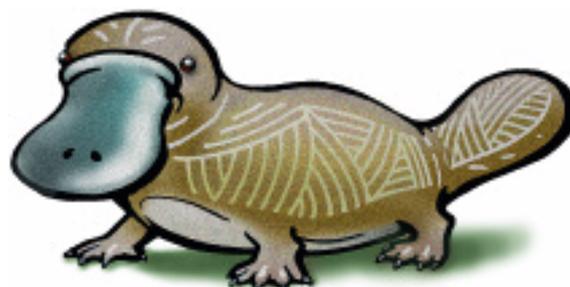
- a 'stand-alone' education kit, independent of The Water Walk at Emigrant Creek Dam.
- a resource for a wide range of educators (teachers of high-school, adult education classes, sustainability officers and educators in different organisations).
- useful for any individual, family or organisation in the region that is aiming to act more sustainably.
- organised in several meaningful and useful sections, so you can easily find what you are interested in.
- easy to photocopy as separate Information Sheets. You can also download them straight from the Rous Water web-site (www.rouswater.nsw.gov.au). (This reproduction must be for educational purposes only.) Each information sheet stands alone, telling a complete story in itself.
- an invaluable resource for local high-school, TAFE and primary-school teachers. Each information sheet identifies the learning outcomes it aims to meet, and so assists in linking with your curricula. It is directly based on the principles of 'environmental education for sustainability' (National Environmental Education Statement 2005). It is locally and regionally based, although it is part of a global sustainability context. It fits in well with the national and statewide Australian Sustainable Schools Initiatives (AuSSI) <http://www.deh.gov.au/education/sustainable-schools/index.html>. For more local water education programs, see *Part Three: More Resources*



The purpose of *The Water Walk: A Users Guide* is to enable all members of our community to make informed, effective contributions to the way water in our region is managed.

We also hope to encourage you to make the trip to Emigrant Creek Dam and experience first hand the place that is the source of the water you use every day!

“Look, listen and learn”.
Nyah la, gan ngah la, wadjeh la.



THE WATER WALK PROJECT

ROUS WATER

Rous Water is a special purpose local government authority – a county council – on the Far North Coast of New South Wales. It provides water supply services to more than 100,000 people in the local government areas of Ballina, Byron, Lismore and Richmond Valley.

Recent drought conditions experienced in this region between 2002 and 2004 focused community attention on water resources and the sustainability of our communities and our way of life. During these drought periods, more people visited the public reserve areas provided by Rous Water at Rocky Creek Dam and Emigrant Creek Dam. Local community members were interested to see how low the dams were getting!

Previously, visitors to these sites were provided with little information about our regional water supply or the operations of Rous Water. During the drought, it was realised that the public reserves at the dams provided an excellent opportunity for increasing community understanding of the water cycle; and the need to value and conserve our catchments and water resources.



A STORY OF TRANSFORMATION

The history of the Water Walk site is an amazing story of transformation that reflects very localised impacts of land-use as well as catchment-wide changes that have occurred within the Big Scrub landscape. This story of transformation demonstrates how the ‘ecological trajectory’ of a site can be altered and that it is never too late to start regeneration.

Destruction of the Big Scrub. Emigrant Creek Dam is within the area once covered by the ‘Big Scrub’ – the third largest area of rainforest in Australia at the time of European settlement – which originally covered approximately 100,000 hectares. Unfortunately since that time the Big Scrub rainforest has been reduced to less than 1% of its original size leaving only about 500 hectares in small remnants. One such fragment occurs next to the dam at Killen Falls covering a few hectares. The Big Scrub originally supported lowland subtropical rainforest of high species diversity which has now been recognised as an Endangered Ecological Community under the *NSW Threatened Species Conservation Act*.

Clearing the rainforest in this locality began in the second half of the nineteenth century and the area now occupied by the dam and the Water Walk was converted to pasture for dairy cattle. By 1947, no vegetation was left intact.

By 1968, Emigrant Creek Dam was constructed which also caused significant disturbance to what is now the Water Walk site. In 2002, in order to meet revised and upgraded dam safety standards, Rous Water also strengthened the dam wall and spillway. This involved major excavation and construction and large amounts of excavated material and construction debris were buried at the Water Walk site, creating a large mound at the end of the dam wall.

The Water Walk site is similar to many areas within Australia that have been damaged to provide for a growing population and development. As a result, this site which up until the mid-1850's was covered in sub-tropical rainforest has been logged, completely cleared for the establishment of pasture, compacted through intensive grazing activities, and disturbed through two phases of dam construction.

Ecosystem Recovery. This process of degradation was reversed in 2002 when Rous Water began a rehabilitation program by contouring the site, building a low gradient public access pathway, and planting a range of rainforest seedlings. The first stage of replanting included the hardy subtropical pioneer species of Blackwood Wattle (*Acacia melanoxylon*), Duboisia (*Dubosia myoporoides*), Celerywood (*Polyscias elegans*), Pencil Cedar (*Polyscias murrayi*) and Red Ash (*Alphitonia excelsa*). (See *Info Sheet 6: Regenerating Rainforest* and the pictures to the right of the Water Walk site in 2002 before planting seedlings and four years later in 2006.)

Since establishment of this rainforest planting, there have been many signs of ecosystem recovery. More birds and other wildlife have been observed and a number of late secondary and mature phase rainforest species have been found regenerating at the site. At the opening day in 2006, for example, we saw a beautiful butterfly called the Small Green Banded Blue (*Psychonotis caelius*) (pictured bottom right). The male is bright blue on the upperside and the female is black and white with some shining green on the upperside. The green caterpillars feed on the leaves of Red Ash (*Alphitonia excelsa*). Whilst this butterfly occurs commonly from New Guinea and the islands southward along the eastern coast to Sydney, it is evident that this revegetation work has transformed a degraded site into habitat suitable for this butterfly and a range of other species. This sighting provides an indication that we have reversed the 'biological trajectory' of this site, and the site is now being transformed back into a rainforest habitat.

Just as the Water Walk site is being regenerated, Rous Water is aiming to complete a similar transformation on all of the land that it owns around Emigrant Creek Dam. In addition, by working together with catchment landholders and by linking riparian zones and other habitat areas that would otherwise remain isolated on different properties, it becomes possible to transform the ecological character of the catchment as a whole.

Rous Water recognises the 'ecosystem services' provided by these catchment ecosystems. The natural processes that support biodiversity and ecosystem function work in many ways to improve catchment health and water quality, which are a key objectives of Rous Water



EDUCATION *IN* AND *FOR* THE ENVIRONMENT

The ecological rehabilitation of the site also created an educational opportunity. Not only could the Water Walk site demonstrate first hand the ability to restore catchment areas, but the regenerated site might provide an enjoyable experience for visitors to walk and picnic, including a wheel-chair accessible walkway and interpretive signage along the way. Rous Water recognises that education is an important part of water supply management. The Water Walk site therefore meant that Rous Water could provide not just education *about* the environment, but education *in* the environment and *for* the environment.

“Effective water supply management is not simply about finding technical solutions to the challenges we face, but about encouraging changes in attitude and behaviour.”

Paul Muldoon, General Manager, Rous Water



“Water education is a vital natural resource management tool and involves a range of important concepts and curriculum topics that meet the school learning outcomes from science to social studies. Rous Water aims to provide opportunities that enhance the values, knowledge and skills of our children and encourage and guide their actions towards a future generation of sustainable water users.”

Anthony Acret, Catchment Assets Manager, Rous Water

In November 2002, Rous Water therefore decided to develop an Interpretive Signage Program at Emigrant Creek Dam and Rocky Creek Dam. Together with 2003 being the United Nations International Year of Freshwater, and given the media focus on water resources, the timing provided an excellent opportunity for Rous Water to develop community understanding of these issues and of the role and functions of Rous Water.

Rous Water employed *Sustainable Futures Australia* to develop and deliver a wide range of key messages decided upon by Rous Water. Consultants from Sustainable Futures Australia wrote the text and created the graphic design and illustrations for the signs and information sheets. They achieved these outcomes working in close liaison with, and based on material provided by, Rous Water staff and the traditional custodians of the catchment areas.

“The Water Walk Project is an excellent opportunity to take education for sustainability to a deeper level, encouraging people to understand that we are not separate from the water and the land we need to protect.”

Elizabeth (Eshana) Bragg, Environmental Psychologist,
Sustainable Futures Australia



Another local firm, GeoLINK, were employed to design the pathway over the ‘tailings’ mound (quite an engineering feat!), new picnic areas, and the Water Walk’s landscape design and its sculptural signage.

THE WATER WALK PROJECT: PHILOSOPHY & APPROACH

The task was to develop a series of signs educating visitors about the importance of water, the water cycle and the management of its use by humans. An information sheet was to accompany each sign, providing extra details about the topic displayed. These signs and information sheets needed to each 'stand alone', but also weave together to create a meaningful story.

The signs, and the accompanying printed information, needed to appeal to a wide audience and be:

- educational and enjoyable
- creative and engaging
- simple to understand.

Sustainable Futures Australia suggested that the philosophy behind them be:

- sustainability (integration of social, environmental and economic values)
- deep ecology (the intrinsic value of nature, and the interconnectedness of humans and nature)
- Aboriginal values and culture.

The importance of communicating an 'integrated water cycle management' perspective - including the interconnected roles of community, government and industry - was also recognised.

THE MAIN MESSAGE: SUSTAINABLE WATER MANAGEMENT

The rationale behind, and indeed the main message of, the Water Walk Project is as follows.

- ***Water is limited, even on the North Coast.***



Australia is the driest of the world's inhabited continents and very little of the rain that does fall finds its way into flowing rivers. Many major agricultural and urban areas of Australia have a limited supply of water. Our rainfall and the flow of our streams are the most variable in the world and runoff is the lowest. Yet, despite these natural limits, Australians use more water per head of population than just about any other nation. Ineffective and inappropriate use of water can result in significant environmental problems.

Even on the Far North Coast of NSW, a region of relatively high rainfall by Australian standards, we face many challenges in making sure we have enough water for all of our needs. Although the proportion of rainfall generating runoff is high in our region compared to many other places in the state, the flow in many of our streams is not always sufficient to maintain healthy aquatic habitats, especially during drier times of the year (August to November).

Australians use more water per head of population than just about any other nation.

- *Many of our North Coast catchments are degraded.*

After just over two centuries of European settlement, many of Australia's waterways and water dependant ecosystems are now suffering extensive damage from land clearing, pollution and long-term water use. In the Richmond River catchment (where the water catchment areas of Rous Water are located), most of the original vegetation has been removed from the middle and lower parts of the catchment. Many of the streams in these areas are devoid of riparian vegetation, and much of what is left is in poor condition and/or dominated by exotic species.



However there is now widespread acceptance of the need to review the way water is extracted and to implement measures to protect the riverine environment from other disturbances such as pollution, river bank clearing, invasion of exotic species and in-channel obstructions.



- *There is only one water cycle...
and we are part of it.*

All water is connected. There is only 'one water'. What we do to the water, we do to ourselves. The way we treat the land affects water quality for the environment and our use. The amount we use affects the quality of the land, the ecosystems in and around our streams, and the amount of flow available for sustaining downstream ecosystems.

- *Therefore, we need to take action.*

A key challenge for our regional community is to address these problems by balancing the flows required to maintain and restore our local river systems with water allocation for consumptive uses, and by working together to prevent the natural water environment in our catchments from being degraded beyond repair.



- *We need to ensure 'holistic management of the water cycle'*



Water management in our region requires an integrated catchment approach. Everything that happens in a catchment has downstream effects. All communities must therefore work together, be they rural or urban populations, to correct the problems and address the important issues of water quality and water flow.

We all need to consider how we as individuals interact with water and to reduce our 'ecological footprint' (our impact on land and water resources). As a community we need to aim for sustainable water management which incorporates intergenerational equity, conservation of biodiversity and ecological integrity, the precautionary principle and improved valuation of the environment. Put simply, sustainable water management means using, conserving and enhancing our water resources so that ecological processes on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

- *This project aims to enhance this holistic understanding of water and to encourage behavioural change.*

In attempting to develop a holistic understanding, the Water Walks Project draws upon environmental science, engineering, ecophilosophy and psychology, environmental activism, and an understanding of Aboriginal cultural values. It explores the 'meaning' of water as well as the 'science' of water.



[Sources: This section quotes from and expands on material contained in the *We All Use Water* booklet published by the Australian Water Association (2002) and the *Stressed Rivers Assessment Report for the Tweed, Brunswick and Richmond Catchments* published by the then Department of Land and Water Conservation (1999).]

TRADITIONAL CUSTODIANSHIP AND SUSTAINABILITY

Aboriginal people have lived in this country for many thousands of years and developed a sustainable culture and relationship with the land and water. Local Aboriginal people developed cultural practices and understanding specific to their place, their geographic region, their climate, and their ecosystems. These cultures developed over a long period of time and were capable of continuing for a long time into the future. From the perspective of 'land management' and relationship between humans and nature, they were successful. They were sustainable.



With European invasion or 'settlement' much of this way of life changed. Traditional knowledge systems and ways of understanding and respecting the natural ecosystems, however, have survived throughout the country.

In this project, we believed that asking the local Aboriginal people about their custodianship of the land and their understanding of water, would be a good basis for improving community understanding of water cycle issues.

We found that, not only did the knowledge and understanding they share contribute to our preconceived ideas for the project, but that we went on a mutual journey of learning and sharing, creating something that none of us could have done alone. The mixture of cultures created something very special, without relinquishing that which was unique to our different cultures.

The personal journeys of those of us involved in the project gave us an experience of the sort of relationship that needs to be fostered at a broader community level. Focusing on our common goal, caring for water and the land, and creating something together to bring that about, became a process of reconciliation.



"Acknowledgement of Aboriginal cultural needs, working together, sharing and caring together as black and white. We shared why water is sacred. We will all feel it soon. Words like reconciliation don't mean nothing to anyone, but this project is going to show what reconciliation is all about. It's about reaching out and working together for the future. That's my idea of reconciliation. No black, no white, just a team working together doing what needs to be done and respecting each other."

Aunty June Gordon, Widjabul elder

Through our mutual concerns for water, and by working creatively and wholeheartedly together for the benefit of the environment, Rous Water, Sustainable Futures Australia, GeoLINK and the local Aboriginal elders and descendants have begun to develop a positive relationship with each other. The project, which began focusing on 'environmental sustainability', showed in very practical terms the importance of social justice, recognition and building relationships in achieving its aims. In other words, 'social sustainability' cannot be separated from 'environmental sustainability'.

Aboriginal people
... developed a
sustainable
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relationship with
the land and
water.

THE WIDJABUL PEOPLE OF THE BUNDJALUNG NATION

The water supply area managed by Rous Water is set amongst a landscape that is part of the identity, spirituality, connection and resource base for the local Aboriginal community including tribes of the Bundjalung nation. The Bundjalung nation stretches up the coast to the Logan River, down the coast to the Clarence River, and inland as far as Stanthorpe (see bright green area of the map below). Many tribes make up the Bundjalung nation, just like many Aboriginal nations make up the continent of Australia.

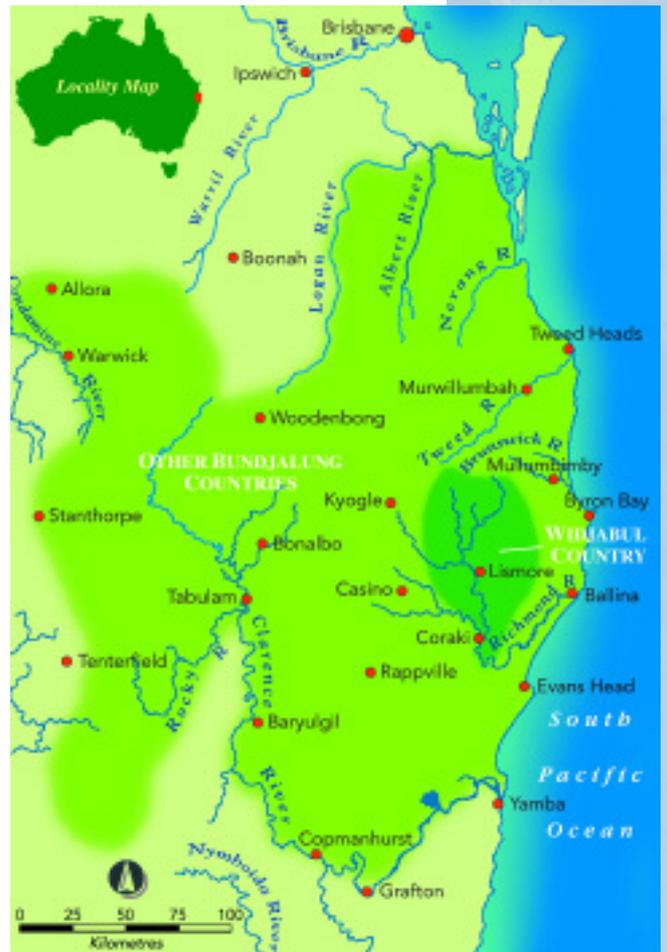
The Widjabul people are one of the tribes of the Bundjalung nation. Widjabul country extends from the lower Richmond River area around Coraki to the headwaters of the Richmond catchment in the north, and eastwards to the coastal escarpment areas (see darker green area of the map below). The catchment areas for Rocky Creek Dam and Emigrant Creek Dam both lie in Widjabul country.

Rous Water recognises that the people of the Widjabul country are the original custodians of the lands, waters, animals and plants of our water catchment areas. Despite the significant changes of the past 200 years, the Widjabul people still maintain a responsibility and deeply felt association with the water and the land of this area.



“The animals, the spirits, the trees, people, we all have our place here. But it’s understanding our place in the cycle and being responsible for that place in the cycle that keeps us going.”

Roy C. Gordon, Widjabul descendent and linguist



Source: Based on map provided by Roy C. Gordon called 'Approximate Location of Bundjalung-Yugam dialects'

Rous Water acknowledges and respects this relationship and the traditional laws, customs, beliefs and culture of the local Aboriginal community. The recognition and conservation of local Aboriginal culture in partnership with local Aboriginal people are important objectives of the Water Walks Project.

WORKING TOGETHER

It was important that correct protocol was followed in working together with the local Aboriginal people, and so a consultant was employed by Rous Water who understood protocol and could act as a liaison person. Tim Fitzroy had previously worked with Bundjalung people on a local stormwater education project called BUNSEP.



“Even though I thought I knew the local Aboriginal custodian of the Emigrant and Rocky Creek areas I followed the correct protocol by writing to the Chairperson of the Bundjalung Elders Council to ensure that I was referred to the correct person. This process takes time and you must be patient and wait for correct advice before making contact with the Aboriginal custodian.”

Tim Fitzroy, Environmental Educator, GeoLINK.

After this appropriate introduction, Aunty Irene Harrington, the official custodian of Widjabul country, and her sister Aunty June Gordon agreed to meet with us to discuss the project. A Widjabul project team was then formed with their sons Roy C Gordon (Widjabul linguist) and Sheldon Harrington (Widjabul artist) and we met regularly to develop the project. Our first meeting as a project team included travelling together through the water catchment areas and discussing the project and Widjabul culture in the landscape.



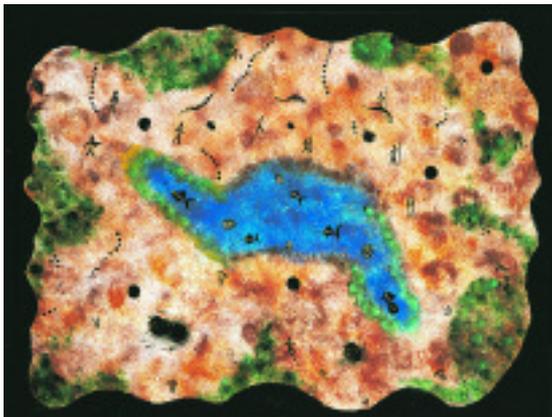
Our creative collaboration lasted about a year and was challenging and rewarding. A number of things helped us through this process.

- Firstly, taking the time to get to know each other and understand each other's perspectives (including lots of breaks for cups of tea and informal chats).
- Secondly, the wonderful sense of humour of the Widjabul team – especially when they were teaching us some of their *Wia-bul* language!

- Thirdly, we utilised technology to help us. We used a projector to make the computer screen visible to the whole team and changes were made to text as we progressed. We found that recording by cassette was the best way for large amounts of content to be written by the Widjabul team. (This also retained the cultural 'sound' of the text.)
- Fourthly, the Widjabul contributors to this project received recognition through appropriate payment for their services and by copyright agreements ensuring that Widjabul cultural material remained their intellectual property.
- Lastly, and possibly most importantly, spending time together in the water catchment areas and at the dams helped us ground the project in the country and share our perspectives in a really meaningful way. We also celebrated key project milestones together on-site, and were joined by the Chairperson and General Manager of Rous Water on these occasions.

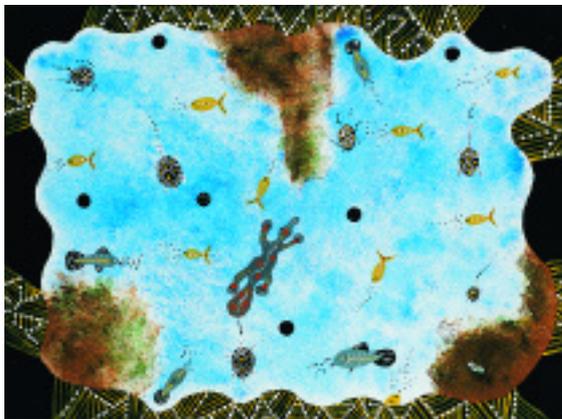


Some highlights of our work together were the creation of Widjabul paintings to illustrate shared messages of the Water Walk; the development of cartoon characters speaking the key Widjabul messages; and the Water Walk logo.



Gadje ba Jogun © Sheldon Harrington Snr.

Sheldon Harrington's paintings *Gadje ba Jogun* (The Hunting Ground) and *Burbang* (The Animals are Coming Together) were created for this project. *Gadje ba Jogun* represents the cultural significance of the waterhole to the Widjabul people (see Info Sheet 1). *Burbang* represents the ultimate goal of the Water Walk project: healthily functioning local aquatic ecosystems and fresh clean water (see Info Sheet 14).



Burbang © Sheldon Harrington Snr.



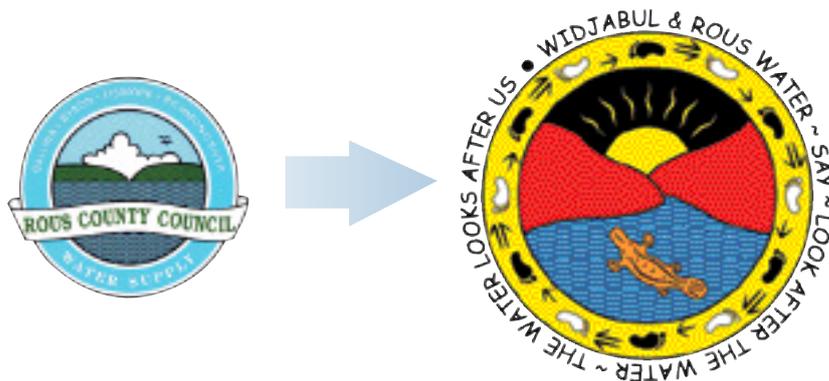
Sheldon Harrington Snr,
Widjabul descendent
and artist.

On the series of interpretive signs, the Widjabul team chose to tell their main messages through creatures from the catchment areas. They identified appropriate significant animals to speak these messages in *Wia-bul* language. The project team worked together to find the right messages, matching important ecological facts with messages Rous Water wanted to say, and with the key points made by the Widjabul team. Cartoon characters were then developed by a creative collaboration between Widjabul artist, Sheldon Harrington, and Sustainable Futures illustrator, Geoff Williams. The result is friendly creatures speaking important messages in *Wia-bul* language. They speak the message of the land, which is also the message of the Widjabul people. The messages of the people and the land are the same.



‘Look after the water.
The water looks after us.’
*Garima gala nyabay. Gala
nyabay garima ngali ngih.*

The logo for the Water Walk Project was developed by the whole project team. Its basis is an old logo from Rous County Council (the old name for Rous Water). The Aboriginal flag is integrated into that. The human footprints represent black and white people walking together. The animal footprints represent kangaroos and emus, symbols for men and women. Black and white, men and women, humans and animals, walking together, working together to care for land and water. Djanbung the platypus is the ‘mascot’ or totem of the project. The logo has been used on t-shirts, calico bags and stickers to spread the message throughout the community.



We also found a common message and theme for the project that both Rous Water and the Widjabul people embraced: Look after the water – the water looks after us.

“Garima gala nyabay. Gala nyabay garima ngali ngih.”

OUTCOMES: THE WALK, OPENING DAY, AWARDS AND BEYOND

THE WALK

“Welcome to Widjabul Country!” says the first sign you see as you step into the rainforest regeneration area at Emigrant Creek Dam. Your next steps take you up a meandering pathway towards a lookout over the dam wall, towards the lake behind it and catching glimpses of its farmland catchment. Along the path are aluminium signs telling a complex and colourful story of the water cycle and our place in it. Since the Water Walk was officially opened in March 2006, it is visited regularly by tourists, school-groups and local walkers.



THE OPENING EVENT



Local primary school children, Ballina Shire Councillors, Rous Water staff and local residents all attended a ceremony at Emigrant Creek Dam to celebrate the opening of the Water Walk and the new water treatment plant. Aunty June Gordon conducted a traditional Welcome to Widjabul Country and officially opened the Water Walk with Chairperson of Rous Water, Councillor Phil Silver. Traditional Widjabul dancers and Roy C. Gordon sang and spoke in language in a powerful ceremony. The rest of the day was filled with educational games for the school children, guided tours through the water treatment

plant and along the Water Walk, water-testing in the creek and tree-planting in the catchment. At the opening ceremony, Phil Silver made a heartfelt thankyou to the Widjabul people for sharing their culture.



CULTURE AND TECHNOLOGY

The opening of the new water treatment plant at Emigrant Creek Dam was a particularly significant event as it saw the coming together of two components vital for a sustainable future: culture and technology.



The Importance of Ceremony. Public ceremonies mark events that are important to our society. Gatherings that are held in relation to water honour its importance and value to our society and in some senses its 'sacred' nature. When several generations gather together, there is a sense of an ongoing community - one where the future and past are both important. When the gathering also includes representatives of people who have inhabited the place for thousands of years, this takes on an even greater meaning. Cultural expressions such as dance, song and speeches can express deep feelings and a strong message or instruction of custodianship - to respect, take care of, and look after the water of Emigrant Creek - "Garrima!".



The Importance of Technology. The new water treatment plant at Emigrant Creek Dam is 'state of the art technology'. Sophisticated new technologies such as microfiltration and ozone treatment allow high level water purification and recycling which promote environmental protection and human health. The ability to process available water in this manner will become increasingly important with the effects of climate change.

A New Culture of Sustainability. While Aboriginal people lived a 'culture of sustainability' for thousands of years, conditions have changed since Europeans arrived. There are millions more people living in Australia now and the environment has been significantly altered. The global environment is also significantly different, having impacts on us from afar. While we may learn a great deal from Aboriginal cultures, including the Widjabul, it is important that we develop a contemporary culture of sustainability that integrates technology and other aspects of our global economic and social system. Future generations will need to understand and apply high-level technology informed by an ethic, understanding and culture of sustainability.

The stories we tell, the artwork we create, and what's reported in our media all need to support action towards a sustainable future - and that means applying appropriate technology, changing our behaviours so that water and the environment are protected, while at the same time ensuring social equity and quality of life.



AWARDS

The Local Government Excellence in the Environment Awards recognise outstanding achievements by NSW Local Government in managing and protecting the environment. At the awards ceremony held at the Australian Museum in Sydney in November 2004, the 'sister' walk to the Emigrant Creek Dam Water Walk (the Rocky Creek Dam Water Walk) received the Environmental Education Award for the best environmental education project. The award was made jointly to Rous Water, the Widjabul people of the Bundjalung nation and Sustainable Futures Australia.

The judging panel, which included State Government representation, said that:

"The judging panel were impressed by this project, feeling that it maximised the impact of the message while minimising the impact on the 'place'. Commendably, the project engaged the Aboriginal community around a 'place' that gets good visitation. The project delivers a consistent message that extends out into the community (ie. business & schools)."

The project was also short-listed for the Judith Wright Prize for Innovative Reconciliation Work.

NEXT STEPS

A Living Document. To make sure that the materials developed through this project remain accurate and current, Rous Water will regularly review the *Users Guide*. We welcome feedback on the issues addressed in the guide which can then be incorporated into future revisions of this document.

More Water Walks. Rous Water plans to provide additional signage at Rocky Creek Dam along the Water Dragon Walk, the Platypus Walk, the Cedar Walk and the Scrub Turkey Walk to further extend the experiences offered by the Rous Water Rainforest Reserve. In addition, the amenities building at Rocky Creek Dam has recently been transformed into an outdoor classroom for environmental education which features a water tank and uses harvested rainwater for flushing toilets, and has a beautiful mural of the catchment.

Sustainability Planning & Consultation. Research conducted for this project has involved consultation with members of the community and different organisations. Continuing this consultation into the future will help Rous Water to refine and communicate policy in the areas of catchment management and sustainability. These initiatives will be formalised through the development of a 'corporate environmental management system' to ensure that sustainability principles are incorporated into all activities of Rous Water, and understood by Rous Water staff.

Reconciliation. This project marks the beginning of a commitment from both Rous Water and the Widjabul people to work together to promote reconciliation of our communities' activities with our natural environment, particularly our land and water resources.



A Message from the Widjabul People by Aunty Irene Harrington

I was first introduced to Anthony Acret (Rous Water) by Tim Fitzroy (GeoLINK), who I have worked with before on another local environmental project, called BUNSEP*. I was invited to help Anthony Acret and Rous Water develop signage at Rocky and Emigrant Creek Dams to improve visitors understanding of how to look after our land and water better. As one of the granddaughters of Lyle Roberts Senior, the last of the full-bloods to be fully initiated in Widjabul country, I feel honoured to have the privilege to carry on the work that was done before me.

As a Widjabul Elder, and with my sister, June; nephew and linguist Roy; son and artist Sheldon, we met with Anthony, and Eshana (Sustainable Futures Australia) to discuss the project. When we first met, it was the first time June and I had been to Rous Water or met with any of the staff. This first meeting of any project is always interesting, as we tried to work out what each person needs and wants from a project.

As we talked about the project needs, mainly about the importance of land and water I thought of my life as a child growing up on a local Aboriginal reserve. We were taught to respect the land and water. With no running water, we used to have to carry water from the creek, and Dad used to collect water in a rainwater tank. We were taught that water was precious and not to waste it.

As we met and discussed the ideas for the project as a group we gradually integrated our thoughts together to produce a series of signs and information sheets that tells of the past, current and future use of water to our people and to the wider community.

This process is not always easy, but things that are worthwhile take some time and effort.

The people involved in the project learnt and showed respect for each other and I believe that this resulted in the success that we have achieved.

I hope that this project is the start of a longer relationship with the Widjabul people and Rous Water to acknowledge and respect each other's perspectives on the management of water and land.



Irene Harrington
Widjabul elder

* BUNSEP = Bundjalung Nation Stormwater Education Project

A Message from Rous Water by Councillor Phillip Silver

The Water Walk Project has been fully funded by Rous Water and aims at giving readers of this User's Guide and visitors to the Water Walk a sound understanding of water in our environment. This understanding will ultimately help our local communities to work towards a sustainable future for our regional water resources.

As the Chairperson of Rous Water, I am pleased to be able to introduce the publication *The Water Walk: A Users Guide* as part of our ongoing commitment to achieve sustainable water management on the Far North Coast. The Guide is a valuable tool that is provided to all schools and environmental educational centres throughout the region and is available to other individuals and community organisations upon request.

The Users Guide aims to provide practical and consistent guidance to individuals, teachers and community groups in their day-to-day activities and development of educational programs. The Users Guide will undergo progressive reviews and updates to incorporate community feedback on specific issues, and will accommodate changes to reflect contemporary community expectations, best management practices, technology and design.

I would like to take this opportunity to acknowledge the work of the many people who have helped to develop the Water Walk and the Users Guide.

On behalf of Rous Water, I would particularly like to thank the Widjabul elders, Irene Harrington and June Gordon, for the generous contribution of their cultural knowledge to the Water Walk Project. It is my hope that this exemplary work towards reconciliation and improving understanding of the environment will be recognised and will continue.

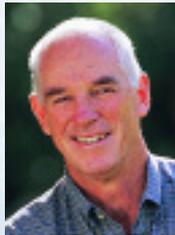


Councillor Phillip Silver
Chairperson of Rous Water



Councillor Phillip Silver and Aunty Irene Harrington.

THE PROJECT TEAM



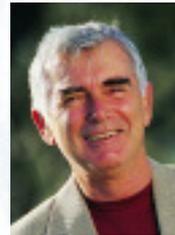
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Snr.



Widjabul Review,
Widjabul elder
Irene Harrington



Widjabul Review,
Widjabul elder
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